An investigation of pharmaceutical mental health care provision in a community setting

Thesis submitted in accordance with the requirements of the University of London for the degree of Doctor of Philosophy by

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To all who trusted me
Abstract

Medication represents a significant part of the care of people with severe mental health problems (clients) and is often complex, sometimes causing disturbing side effects. In the community, although a number of different professionals are involved in their care, clients have reported a lack of information about their medication, and other medication-related problems. Community pharmacists are easily accessible health care professionals with an in-depth medication-related knowledge and experience. Nonetheless, little is known about their possible contribution to the care of clients. The aim of this research was to develop and evaluate a novel medication management and drug-information service from community pharmacists to clients in cooperation with community mental health teams (CMHTs), the Link-Pharmacist Scheme.

Recruited link-community pharmacists, clients and key workers all participated in the data collection. Four different qualitative and quantitative research methods were triangulated. Comprehensive data analysis provided an in-depth evaluation of the service and justified the credibility of the findings. In addition to the evaluation of the service, factors significant to the development of community pharmacists' involvement were identified and used to propose a future model of a community pharmaceutical mental health service.

The quantitative data revealed limited utilization of the service by the clients and key workers. The qualitative data showed that the link-pharmacists positively contributed to the care of people with mental health problems by providing them with easy access to additional drug-related information and contributing to their drug treatments.

The findings suggested that successful wider implementation of a similar service would require a revision of current community pharmacy practice to allow pharmacists to develop extended services, and a formal acceptance of community pharmacists as members of multi-disciplinary teams. Drug-information needs of clients proved complex, and must be recognised and addressed in order to design an effective service. The results demonstrated that an evidence-based approach is appropriate for developing primary care pharmaceutical services.
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### Abbreviations

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<tr>
<td>CL</td>
<td>client</td>
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<tr>
<td>CMHC</td>
<td>community mental health care</td>
</tr>
<tr>
<td>CMHT</td>
<td>community mental health team</td>
</tr>
<tr>
<td>CP</td>
<td>community pharmacist</td>
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<tr>
<td>CPA</td>
<td>Care Programme Approach</td>
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<tr>
<td>CPN</td>
<td>community psychiatric nurse</td>
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<tr>
<td>KW</td>
<td>key worker</td>
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<tr>
<td>LP</td>
<td>link-pharmacist</td>
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<tr>
<td>LPS</td>
<td>Link-Pharmacist Scheme</td>
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<tr>
<td>MDS</td>
<td>monitored dosage system</td>
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<tr>
<td>OT</td>
<td>occupational therapist</td>
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<tr>
<td>PMHP</td>
<td>people with mental health problems</td>
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<td>PMR</td>
<td>patient medication record</td>
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<tr>
<td>RCT</td>
<td>randomised controlled trial</td>
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<tr>
<td>SW</td>
<td>social worker</td>
</tr>
<tr>
<td>RPSGB</td>
<td>Royal Pharmaceutical Society of Great Britain</td>
</tr>
<tr>
<td>UKPPG</td>
<td>United Kingdom Psychiatric Pharmacy Group</td>
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Preface

For more than 40 years, care has been developing for people with mental health problems to allow former long-stay hospital patients to resettle in the community and to provide them with comprehensive support so that their lives outside psychiatric hospitals are fulfilled. Although enormous efforts have been put to these developments, there are still many problems. Some of these problems are related to the fact that medication represents an important part of the care for people with mental health problems. Problems related to medication include non-compliance and a lack of understanding of medication by the clients. The purpose of this research was to investigate whether community pharmacists as medication experts can contribute to addressing these problems through the provision of client-specific drug-information and a medication management service to people with mental health problems and through cooperation with multidisciplinary community mental health teams.

Throughout the thesis, the terms ‘client’ and ‘people with mental health problems’ are used instead of ‘patient’ and ‘mentally ill’. These terms were preferred by the members of community mental health teams as less stigmatising and were used in any communication related to this research project.

The thesis is divided into four parts: Introduction, Methods, Results and Discussion. Within these four parts there are 11 chapters. The Introduction to the thesis includes Chapter 1 that provides a summary of the development of community mental health care and the current provision of mental health care services in the United Kingdom. Relevant studies are reviewed that evaluated the current system of care for people with mental health problems. Chapter 2 is an overview of the current developments in the community pharmacists’ roles, discussing the main concepts, and reviewing studies that evaluated the extent of the success of such developments. Consequently, the application of these extended pharmacists’ roles in the field of mental health is reviewed. The first part of the Methods section, Chapter 3, introduces the research proposal. Chapter 3 first describes the setting for the research project and summarises the processes that preceded commission of the research project. Then, this chapter presents the research aims.
and research questions, defines the participants and provides the definition of the proposed
drug-information and medication management service, the Link-Pharmacist Scheme (LPS).
The research project comprised an evaluation of the LPS and a Context study. The
evaluation of the LPS was in two parts: Part1 and Part2 - Consensus development panels.
Part1 was further divided into pre-intervention, intervention and post-intervention phases.
Chapter4 first describes the overall methods of the LPS research project, followed by a
description of the methods applied during each part of the research project, i.e. Part1, Part2
- Consensus development panels and the Context study.

The Results section opens with Chapter5, a summary of the recruitment of the participants
and all the complementary procedures undertaken. Chapter6 presents the data collected
during the pre-intervention phase of Part1, Chapter7 presents the data collected during the
Context study. Chapter8 summarises the intervention phase data and Chapter9 the post-
intervention phase data. The Results section is completed with Chapter10, which presents
the data from Part2 - Consensus development panels. This order corresponds with the
time-scale of the research project. Chapters7 and 8 also provide comparisons of the data.
The data obtained from the two groups of involved pharmacists are compared in Chapter7
and the intervention phase data are compared with the pre-intervention phase data within
Chapter 8.

Chapter 11, Discussion, closes the thesis debating the applied methodology, and findings
concerning the structure, processes and outcomes of the LPS and the LPS implementation
in context of other available literature. A model of a community pharmaceutical mental
health service and conclusions provide recommendations for the future development of
specialist pharmacy mental health services.
Introduction
The aim of the research project presented in this thesis was to design, implement and evaluate a pharmaceutical service that involved community pharmacists with the care of people with mental health problems. The introduction reviews the topics relevant to the design of the service and its implementation.

Chapter 1 Development and current provision of community mental health care

The project was set up within the existing community mental health care (CMHC) provision. Therefore, the first part of this introduction, reviews the historical background and the current provision of community mental health care.

1.1 Community mental health care policy - historical context

The attention to mental health care provision paid by the policy makers since the introduction of the National Health Service (NHS) in 1948 has been variable. It is notable that the requirements for the provision of mental health care finally stipulated in the 1990 'National Health Service and Community Care Act' had continuously been discussed by policy makers over the previous 40 years, demonstrating the complications and confusion which went along with establishing the community care for people with mental health problems.

1.1.1 1950s - 1960s

For years after the establishment of the NHS, mental health care was not a main topic of policy discussions, despite the fact that almost half of the hospital beds was for the mentally ill (Butler, 1993). Mental health care provision had no clear guidelines or strategy, was uncoordinated and based on different perspectives. This impeded the provision of comprehensive care and fragmentation remained one of the major problems of the community mental health care provision for many years. Despite this, during the late 1940s attempts were made to improve services and these pre-empted future developments in mental health policy, for example, an interest in the provision of day care for people with mental health problems.

An important change in the approach of society towards people with mental health
problems was reflected by the Mental Health Act of 1959. The Act replaced the so-called 'Lunacy Laws' and was the first legislation document to introduce the term 'mental disorder'. The Act defined four types of patients: mentally ill, subnormal, severely subnormal and psychopathic, and the ways in which patients could be admitted to hospital. The Mental Health Act 1959 also implemented the Mental Health Review Tribunal that was set to guarantee the patients' rights to appeal against their admission. Overall, the approach to mental illness was becoming more open and issues relating to mental illness more openly discussed.

Following the Act of 1959, the quality of care received by patients was questioned with the emphasis on overcrowding in psychiatric hospitals and isolation of the institutionalized patients. Alternative approaches to hospital care, which offered care from an outpatient setting, were being developed and brought about the concept that mental health services may and should be provided in the community. Mental health professionals proclaimed the need for multi-disciplinary mental health care and that mental health care was 'not reducible to psychiatry' (Butler, 1993).

Statistics on the current occupancy of psychiatric hospital beds and their calculated future use shown to the Ministry of Health formed the basis for new plans within mental health care (Tooth and Brook, 1961) expressed in the White Paper 'Hospital Plan for England and Wales' (Ministry of Health, 1962) that concentrated on reducing the number of beds in psychiatric hospitals. The reduction in hospital beds was supported by the development of new drugs that allowed clinicians greater confidence in managing psychotic conditions, resulting in earlier discharge. Subsequently, discharging patients from psychiatric hospitals has been accompanied with rehabilitation in the community with the involvement of different professions, for example occupational therapists and psychologists. By the early 1960s, Departments of Psychiatry within local District General Hospitals were developed as an alternative to specialised psychiatric hospital care (Johnson et al., 1997a; Butler, 1993).

Simultaneously, this effort to move care to the community resulted in the so called 'open door' and consequently the 'revolving door' practice, with people repeatedly entering and leaving hospital care depending on their mental health status. The 'revolving door' practice has remained a problematic feature of mental health care today.
Introduction

Chapter 1 - Development and current provision of community mental health care

1.1.2 1970s - mid 1980s

Between the 1970s and mid 1980s, discussions about care in the community continued, prompted by issues such as the costs associated with running old psychiatric hospitals, the changing public perceptions of mental illness, the development of doctor and nursing groups and other services outside the hospitals, and the publicised scandals connected to psychiatric hospitals.

Finally, general guidelines for community mental health care were provided in the White Paper 'Better Services for the Mentally Ill' (Department of Health and Social Security, 1975). Mental illness was referred to as "perhaps the major health problem of our time". The White Paper 'Better Services for the Mentally Ill' (Department of Health and Social Security, 1975) stated four main objectives for mental health care:

• an expansion of local authority personal social services,
• the relocation of specialist services to local settings,
• the establishment of good organisational links between settings and agencies,
• a significant improvement in staffing to enable multi-professional assessment of needs and earlier intervention and prevention.

The White Paper 'Better Services for the Mentally Ill' was followed by a revision of the Mental Health Act 1959 and enforcement of the Mental Health Act 1983. The Mental Health Act 1983 concentrated on hospital care and the legislative aspects of admission, compulsory admission, discharge and treatment. The Act fortified the rights of people with mental health problems but, nevertheless, it did not implement any of the 'appeals' of the White Paper 'Better Services for the Mentally Ill' concerning care in the community. The only part of the Act addressing care in the community was the requirement for provision of 'after-care' concerned with the patients' social security (Bluglass, 2000). The provision of care and treatments within community settings was not discussed or even mentioned.

1.1.3 Late 1980s - 1990s

The Griffiths' Report 'Community Care: Agenda for Action' (Griffiths, 1983) evaluated the management of the NHS and suggested a greater role for local government, with care that offered a wide range of quality services. These services would reach the 'consumer' in the form of 'packages of care'. Also, Griffiths emphasised the active involvement of an
individual in his or her care. According to Griffiths, at that time, the community care that was provided was fragmented and uncoordinated.

The government reacted to the Griffiths’ Report with two White Papers. The first, ‘Working for Patients’ (Department of Health, 1989a), formalized the separation of the purchaser’s and provider’s roles within health care. Purchasers were required to identify the health care needs of their population and to purchase the services for them from the range of services offered by service providers. ‘Working for Patients’ dealt mostly with hospital care and it was the following White Paper, ‘Caring for People’ (Department of Health, 1989b) that focused on community care, including both health and social services. Community care was identified as the service of choice:

“Community care means providing the right level of intervention and support to enable people to achieve maximum independence and control over their own lives. For this aim to become reality, the development of a wide range of services provided in a variety of settings is essential.”

(Department of Health, 1989b)

The proper assessment of needs and good case management were seen as the core of high quality care.

In 1986, The Audit Commission reviewed the provision of community care as it had been discussed in the 1975 White Paper ‘Better Services for the Mentally Ill’ (Department of Health and Social Security, 1975). As a result, in their report ‘Making reality of Community Care’ (Audit Commission, 1986) the Audit Commission suggested that a single agency should deal with the funds that were by then managed separately by social services and health services. The Audit Commission emphasised that the responsibility of the NHS for patient care should continue beyond discharge from hospital and encouraged the development of integrated services based on neighbourhoods, multi-disciplinary working and cooperation between statutory and voluntary sectors. ‘Making reality of Community Care’ (Audit Commission, 1986) preceded the White Paper ‘Promoting Better Health’ (Department of Health, 1987) that focused on primary health care and, among other recommendations, encouraged patients to take greater involvement in their care.

‘Better Services for the Mentally Ill’ (Department of Health and Social Security, 1975) and ‘Caring for People’ (Department of Health, 1989b) both paid special attention to people
with mental health problems. The main characteristics of community care proposed in ‘Caring for People’ were implemented through the National Health Service and Community Care Act in 1990 (figure 1.1).

**Figure 1.1: Community care - main characteristics**

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<tr>
<td>• as much as possible, enables people to live in their own homes, encourages their independence and involvement in care planning,</td>
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<tr>
<td>• is locally based, local authorities have the lead role in managing the changes,</td>
</tr>
<tr>
<td>• is based on multi-disciplinary, inter-agency cooperation between health and social services</td>
</tr>
<tr>
<td>• has needs assessment and care management as the main tools of quality care (offer the services relevant to a person's identified needs rather than fitting the person into services available),</td>
</tr>
<tr>
<td>• encourages patients to be involved in their care,</td>
</tr>
<tr>
<td>• gives support to carers,</td>
</tr>
<tr>
<td>• involves the voluntary sector.</td>
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(Compiled from Butler 1993; Johnson et al., 1997a)

The Community Care Act 1990 also gave special consideration to the ‘mentally ill’. The Act required the development of locally based community care services built on the recognized, individual needs of people with mental health problems. To give further guidance for its implementation, the government introduced the Care Programme Approach (CPA) as described in figure 1.3 (Barnet Health Agency & London Borough of Barnet, 1995).

**Figure 1.3: Care Programme Approach**

<table>
<thead>
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<th>Care Programme Approach - main objectives</th>
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<tr>
<td>• systematic assessment of health and social care needs of people accepted into specialised mental health services,</td>
</tr>
<tr>
<td>• the formation of a care plan which identifies the health and social care required from a variety of providers,</td>
</tr>
<tr>
<td>• the appointment of a key worker to monitor and coordinate care,</td>
</tr>
<tr>
<td>• regular review of the progress and needs and, where necessary, agreed changes to the care plan,</td>
</tr>
<tr>
<td>• discharge arrangements and supervision orders.</td>
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(Barnet Health Agency & London Borough of Barnet, 1995; Department of Health 1999a)

The CPA aimed to ensure that the care is planned before admission to, and followed after discharge from, hospital to secure continuous contact between people with severe mental illness and community services (Barnet Health Agency & London Borough of Barnet, 1995,
Introduction — Chapter 1 - Development and current provision of community mental health care

Department of Health 1999a). Consequently, further guidelines were produced to help to manage care in the community through the 'supervision register' and 'supervised discharge'. The important message of the Community Care Act and the Care Programme Approach was a requirement for the local authorities and the health authorities to plan together for the community care of people with severe mental health problems.

Interest in mental health care continued to increase throughout the 1990s (Department of Health, 1998a) in line with focus on high quality care expressed through evidence-based medicine, clinical excellence and clinical governance. The Government strategy 'Modernising Mental Health Services: Safe, Sound, Supportive' (Department of Health, 1998b) identified that an appropriate range of services was not available to patients and patients did not always remain in contact with services. These were stated as two of six causes of past failure of community mental health care. The strategy set the main priorities for the new 'safe, sound and supportive' approach to mental health care services. These included tackling stigma, cooperation of social and health services, cooperation of primary care and specialist services, involvement of service users and their carers, easy access to services, social support and public protection.

In the White Paper 'Saving Lives: Our Healthier Nation' (Department of Health, 1999b), mental health was identified as one of the four priority areas for health care. The Government stated that there was a need to modernise mental health services and that this would be achieved through

- the provision of further resources,
- the definition of national standards and
- the formulation of a modern legal framework (Department of Health, 1999c).

To provide the standards, a series of National Service Frameworks were produced to give guidance to the NHS as well as the private sector on the provision of services within the four priority areas for health care, with the aim to equate services and their provision across the whole country. Within mental health care, the National Service Framework: Mental Health: Modern Standards and Service Model was published in September 1999 (Department of Health, 1999d). The Framework incorporated the priorities set up in the strategy 'Modernising Mental Health Services: Safe, Sound, Supportive' and set standards in order to reach these priorities. Although the National Service Framework for Mental
Health aimed to remove variation in the services provided, it acknowledged that services may be locally customised and would evolve according to locally identified needs. The National Service Framework for Mental Health and the ‘Modernising Mental Health Services: Safe, Sound, Supportive’ acknowledged that various forms of mental health problems were common and that they did not always receive adequate attention. Both documents emphasised the need for accessible services and they encouraged again the interprofessional and inter-agency cooperation, particularly that between primary care groups (PCGs) and specialist mental health services (community mental health teams, CMHTs). The aims to empower patients and to involve them more closely in their care were evident in both documents. Both these documents also acknowledged and supported the role of carers. The documents required the identification of needs and continuous monitoring of the performance of services.

The third element of the Government strategy for modernising mental health services was a modern legal framework, which was executed through the revision of the Mental Health Act 1983. The Government appointed an Expert Committee in September 1998 to revise the Mental Health Act 1983 and to suggest amendments. The Committee submitted their report to the Government in July 1999 (Expert Committee, 1999). From the principles suggested by the Committee for inclusion in the Act, the following were accepted by the Government in the ‘Reform of the Mental Health Act: Proposals for Consultation’ (Department of Health, 1999c): informal care, the provision of the least restrictive alternative compatible with the delivery of safe and effective care, consensual care, reciprocity, respect for diversity and the recognition of the role of carers. It was emphasised that, as much as possible, care should be informal and use the least restrictive alternatives and that patients should be included in the planning and review of their own care defined in treatment plans. Safety for the patients and the public were stated to have key importance. Although the document emphasised a patient’s autonomy, this was not without controversy. Compulsory care and treatment orders remained the focus of the new law. However, for the first time, this would also include compulsory treatment orders within the community, a feature that has been highly criticised by different organisations and institutions. The critics pointed out that the law inappropriately emphasised public safety on expense of efficient care of those suffering mental health problems, forcing them to
receive treatment against their will, in their own homes (Yamey, 1999; Mental Health Foundation, 2000a).

The 1990s legislation continued to encourage inter-agency and interprofessional cooperation. The need for cooperation between social services and the NHS was discussed in a document ‘Partnership in Action, New Opportunities for Joint Working between Health and Social Services’ (Department of Health, 1999e) which criticised, as did the ‘Manifesto for Mental Health’ published by The Royal College of Psychiatrists (The Royal College of Psychiatrists, 1997) and the Green Paper ‘Developing Partnerships in Mental Health’ (Department of Health, 2000a), the lack of seamless cooperation between both agencies.

Two issues frequently appearing in recent Government documents were the stigma and social exclusion associated with mental illness (Department of Health, 1998b; Department of Health, 1999b; Department of Health, 1999d; Department of Health, 1999f) and the need to address these issues has been emphasised.

1.1.4 Community mental health care policy - European context

The international recognition of the importance of issues related to mental health and illness was recently demonstrated when it was set as one of the priority areas of the European Union’s health policy (Watson, 1999). The European Union claimed to recognise mental illness as a source of suffering, disability and social exclusion and that the mental component of health did not improve during the twentieth century. The European Union pronounced its aim to promote mental health and prevent mental illness. Jointly with the World Health Organisation (WHO), the European Union held a conference ‘Balancing mental health promotion and mental health care’ (April 1999), the purpose of which was to increase the awareness of Member States of the importance of this issue, its impact on society and the need for action. The conclusions of the conference were entitled: “There is no health without mental health”. A conference was also held by the European Union on 'Promotion of Mental Health and Social Inclusion' (October 1999). The Member States were invited to pay attention to mental health issues and to strengthen its promotion in their policies. They were also encouraged to support research in this field that would provide good quality data exchangeable between the Member States (Council of the European
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Union, 2000).

Such a policy gives international relevance and justifies the appropriateness of the United Kingdom's long-term efforts to modernise its mental health services and positions the United Kingdom a step ahead of other European countries with mental health being at the top of its health care agenda for several years.

1.2 Current structure and provision of community mental health care

Before an overview is given of the current structure of the provision of community mental health care, the context is provided in the form of a review of psychiatric morbidity in Britain.

1.2.1 Psychiatric morbidity of the non-institutionalised population of Britain

It has been claimed that there has been an increase in the psychiatric morbidity in the British population (Lewis and Wilkinson, 1993). The National Survey of Psychiatric Morbidity (Jenkins et al. 1997a; Jenkins et al. 1997b; Jenkins et al. 1998) commissioned by the Department of Health and carried out in 1993-94 included a household survey of 10,108 respondents aged 16 to 64 (response 79.4%), an institutional survey investigating a sample of 1,192 residents, and a survey among homeless people (N=1,166, non-random sample). For the household survey, the authors used small users Postcode Address File as a sampling frame, from which 200 postal sectors stratified by socio-economic group within regional health authority areas were selected. In each postal sector, 90 delivery points were chosen and one adult aged 16 to 64 from each household was selected, using the Kisch grid method, for an interview. The authors explained that the age of the respondents was limited to those aged between 16 and 64 because interviewing people from other age groups would require specific sampling and interviewing procedures that were beyond the remit of their survey. Psychiatric assessment was carried out by lay interviewers using the revised Clinical Interview Schedule (CIS-R) for identification of neurotic disorders and Psychosis Screening Questionnaire (PSQ) for identification of psychosis, or by a psychiatrist (if positive on PSQ) who used the Schedule for Clinical Assessment (SCAN). The prevalence of psychiatric disorders in Britain, as identified from the household survey, is presented in table 1.1.
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Table 1.1: Prevalence of psychiatric disorders in adults aged 16 - 64 in Britain (Jenkins et al. 1998)

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Prevalence per 1000 adults in the past week before measure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed anxiety and depressive disorder</td>
<td>77</td>
</tr>
<tr>
<td>Generalised anxiety disorder</td>
<td>31</td>
</tr>
<tr>
<td>Depressive episode</td>
<td>21</td>
</tr>
<tr>
<td>Phobias</td>
<td>11</td>
</tr>
<tr>
<td>Obsessive-compulsive disorder</td>
<td>12</td>
</tr>
<tr>
<td>Panic disorder</td>
<td>8</td>
</tr>
<tr>
<td>Any neurotic disorder</td>
<td>160</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Prevalence per 1000 adults over the last 12 months:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional psychosis</td>
<td>4</td>
</tr>
</tbody>
</table>

The results from the household part of the survey showed that psychiatric disorders were associated with unemployment, marital status (higher for single, separated, divorced and widowed) and living status (higher for single parents and persons living alone). The rates of neurotic disorders were also higher for urban settings and for women. Only one-fifth of those with suicidal ideas were receiving antidepressant medication. The prevalence of psychosis was 4/1000 and was twice as high in urban settings than in rural settings. The settings were considered urban or rural according to the population density. To provide information on the use of services by those with psychotic disorders, an additional sample of 350 (97% response) people with known psychosis living in households were surveyed. This sample was drawn at random from lists of everyone with known psychosis provided by GPs and CMHTs from the same 200 postal sectors as for the household survey. This process of sampling may, however, mean that people with psychotic disorders not known to the GPs or CMHTs or those omitted by them, would not be included in the sample. Two-thirds of the sample reported to be in touch with specialised services, 18% to be managed only by their GP and a further 18% had never sought professional help. It was not stated, whether the data sets from the two samples with psychotic disorders were combined to carry out this analysis.

The authors of the National Survey of Psychiatric Morbidity concluded that there was a high prevalence of neurotic disorders, some of which were serious and associated with suicidal risk and they suggested that more attention should be paid to: “the education and
training of primary care teams about mental health, to the primary/secondary care interface, to supporting primary care teams with good practice guidelines, agreed criteria for referral and with shared care where appropriate.” (Jenkins et al. 1998). They also emphasised that attention should be paid to regional variations in the prevalence of psychosis and the association of mental disorders with socio-demographic variables.

The survey among homeless people included those temporarily housed in private sector leased accommodation, hostels for homeless, night shelters and people sleeping rough identified via their contacts with day centres. Using non-random samples of respondents, the survey identified the prevalence of neurosis to be 35% among private sector leased accommodation residents, 38% among hostel residents, 60% among night shelter residents and 57% among homeless people sleeping rough. The prevalence of psychosis was 2% among private sector leased accommodation residents, 8% among hostel residents and was not estimated for those in night shelters and sleeping rough.

According to the statistics of the Department of Health on patients formally detained by NHS hospitals under the Mental Health Act 1983, 26,700 patients were formally detained in the period 1999-2000, which represents little change compared with the 26,900 patients formally admitted in 1998-1999. These numbers, nevertheless, represent an increase when compared with the 16,300 formally detained patients in 1989-1990 (Department of Health Statistics Division 2C, 2000). This difference could be even greater considering the authors’ comment that, due to the problems with the data collection forms, the data up to 1996-97 might have been counted twice.

The National Psychiatric Morbidity Survey identified a high prevalence of psychiatric morbidity among Britain’s population that was higher within the sample of homeless people, emphasising the need for provision of services to this population. The survey also showed inadequacies in the provision of treatment and care, with a number of people not being treated or not receiving specialised care adequate for their condition. The compulsory admissions’ statistics were high in recent years, suggesting potential unidentified problems.

1.2.2 Current structure of community mental health care

Within the current provision of mental health care, the majority of people with mental
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health problems who seek professional help in primary care, consult and are treated by their general practitioner (GP) (Department of Health, 1999d). Those who need more specialised care are referred from GP surgeries to secondary specialist mental health services which consist of community mental health teams (CMHTs). According to the National Service Framework for Mental Health (Department of Health, 1999d), 8-9% patients with mental health problems are referred from GP surgeries to these specialist services. General practitioners and CMHTs are the two main providers of community care for people with mental health problems. Members of a number of voluntary and other agencies contribute to community care by assisting with, for example, housing and social support for people with mental health problems.

CMHTs (figure 1.4) consist of various professionals, including community psychiatric (or mental health) nurses, social workers, occupational therapists, psychologists, psychiatrists and community support workers (Onyett and Ford, 1996; Wilkinson et al. 1997). Due to independent management of individual CMHTs, the composition of community mental health teams varies.

Figure 1.4: Community mental health team - main objectives

<table>
<thead>
<tr>
<th>Community Mental Health Teams - main objectives</th>
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<tbody>
<tr>
<td>• to provide care for a specific geographical patch,</td>
</tr>
<tr>
<td>• co-ordinated management of health and social services,</td>
</tr>
<tr>
<td>• to be a source of information to users, carers, GPs, others,</td>
</tr>
<tr>
<td>• to provide 24-hours crisis response,</td>
</tr>
<tr>
<td>• to secure assessment, non-inpatient treatment, care coordination and support of patients,</td>
</tr>
<tr>
<td>• to comprise staff with designated responsibility for people with long-term mental health problems.</td>
</tr>
</tbody>
</table>

(Barnet Health Agency & London Borough of Barnet, 1995; Department of Health 1999a)

The purpose of the multi-disciplinary character of CMHTs is to ensure medical treatment as well as help with various issues of everyday life such as housing and employment, and generally to provide a flexible response to the person’s needs by easy access to different professions.

CMHTs serve specific geographical areas, they are expected to concentrate on severe mental illness (SMI, figure 1.5) and their work should be based on the Care Programme.
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Approach (CPA, section 1.1.3). The National Service Framework for Mental Health (Department of Health, 1999d) introduces CPA on two levels - standard CPA and enhanced CPA for those with multiple needs and requiring more frequent contact with services.

Figure 1.5: Definition of severe mental illness

<table>
<thead>
<tr>
<th>Severe Mental Illness</th>
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<tbody>
<tr>
<td>• psychosis (e.g. schizophrenia, severe depression) and previous compulsory admissions to hospital, or</td>
</tr>
<tr>
<td>• a period of one year’s stay in hospital in the past five years, or</td>
</tr>
<tr>
<td>• three or more admissions in the past five years.</td>
</tr>
</tbody>
</table>

(Mackie A., 1996)

CPA applies to all people with mental health problems who are considered for discharge from hospital and/or accepted by the specialist mental health services via discharge or referral by a GP. According to Johnson and Lelliot (1997) who carried out a review of the provision of mental health services in London based on available statistical data: “By June 1996, all health authorities in the country reported that the Care Programme Approach had been fully implemented.”

All persons referred to the specialist mental health services from GPs or discharged from hospital should receive an initial assessment of the need for provision of mental health services (figures 1.1 and 1.3). If the person assessed does not need specialist mental health services, he or she is referred to another agency, for example community support workers and/or (back) to their GP. Where the client’s needs are complex and require specialist mental health services, further assessments should be performed and a care plan prepared. Whenever possible, the client should be involved in the assessment process him or herself and, where relevant, the client’s carer should also be involved. The care plan should also be provided to the client’s GP. The client then remains under the care of the CMHT as long as necessary. Regular reviews of the client’s needs should be carried out to assess whether the specialist services were still required. Based on these assessments, the person’s care remains unaltered, the care plan adjusted to meet the current needs or the person is discharged from the care of the CMHT.

Every person who receives care in the community should have an allocated key worker to...
co-ordinate the care of the individual. The National Service Framework for Mental Health (Department of Health, 1999d) uses the term ‘a named care co-ordinator’. The key worker/care co-ordinator can exist within the CMHT or outside, according to whether the person was assigned to the specialist (CMHT) or other services. Outside the CMHT, a general practitioner, housing project manager etc., can accept the role. Any professional within a CMHT, can be appointed as a key worker/care co-ordinator. The clients are assigned evenly to individual professionals, i.e. there is no arrangement that a client with a certain diagnosis should be assigned to a certain professional. A key worker/care coordinator supervises the individual’s care with all team members being involved and aware of each case.

The above description of current community mental health care is based mainly on the requirements stated in different policy documents. Their implementation in practice is still in process and has been achieved on different levels in different geographical areas. It is believed that the National Service Framework for Mental Health (Department of Health, 1999d) will help to level these differences.

1.2.3 Current views of community mental health care

Throughout its development, community mental health care has had its supporters as well as opponents.

The role and existence of CMHTs has been doubted. The policy documents have recommended multi-disciplinary work as far back as the 1950s. However, the evidence of the effectiveness of CMHTs that would justify their lead role in community mental health care is lacking. Critics of CMHTs have argued that the whole idea of multi-disciplinary working is disputable and problematic. Galvin and McCarthy (1994) argued that there was no evidence to explain and support the idea that multi-disciplinary work should be a core approach for mental health care. They added that many problems faced in community mental health care were caused by the fact that teams were multi-disciplinary which resulted in a failure in fulfilling the tasks set up for CMHTs. They emphasised that there was no integration of disciplines but a blurring of the roles and de-skilling, and there was no evidence to support the commonly seen composition of professions in CMHTs. The cooperation of social and health services was also perceived as problematic (Murphy, 1992;
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Galvin and McCarthy, 1994). Leff et al. (2000) emphasised that the service providers must at least be aware of interprofessional differences.

One of the issues that seems to contribute to the problems experienced within the provision of community mental health care are the problems with recruitment and retainment of the staff (The Royal College of Psychiatrists, 1997; Turnberg, 1997). In 1998 there were 5,000 CPNs for 250,000 people with mental health problems (The Royal College of Psychiatrists, 1997). High 'burnout' and high turnover of CMHT staff has been reported (Mackie, 1996; Wykes et al. 1997).

Studies evaluating community mental health care have usually concluded that there was no or little difference in clinical outcomes, social behaviour and costs between hospital and community care but improved daily living skills (Melzer et al. 1991; Anderson et al. 1993a; Goldberg, 1995; Goldberg et al. 1996; Sood et al. 1996; Tyrer et al. 1998; Trieman et al. 1999; Leff and Trieman, 2000) and patients’ satisfaction (Anderson et al. 1993a; Goldberg et al. 1996; Trieman et al. 1999; Leff and Trieman, 2000). These studies, although all area-bound (and the majority set in London), used different designs (randomised controlled trial, naturalistic longitudinal prospective cohort study, cross-sectional survey) and different measures (mostly standardised) deriving similar findings, thus corroborating each other. Jackson et al. (1993) evaluated a newly established community mental health team and demonstrated that the existence of such a team increased access to specialised care for people with mental health problems. The team included two CPNs, one social worker and one occupational therapist during the study period and it was evaluated by means of its effect on GPs’ use of psychiatric services in the area one year after it was founded. The evaluation was carried out prospectively with two groups of GPs that were randomly assigned to index or control group and were matched on the use of psychiatric services over the previous three years and the GPs’ opinions of the existing psychiatric services, identified from interviews carried out prior to the main study. The ‘index group’ (with a population of 11,961 in the target age group 17 to 64) could and the ‘control group’ (population of 13,537) could not, use the services of the CMHT. The ethical justification of such an arrangement could be questioned. The authors collected data on hospital referrals, number of emergency or out of hours contacts with GPs, use of inpatient, out-patient and day care facilities, referrals to the CMHT and patients’ diagnoses.
Validity of some of the data relied on other professionals keeping records and thus may not be precise if these professionals failed to record all events. However, the authors attempted, where possible to cross-check the data to secure reliability. The findings indicated a threefold increase in an inception to care, demonstrating that more people, who would previously have not received specialist care were enabled access to this care. Murray et al. (1996) assessed the social and clinical needs of a random sample of those who were seen at least once in the past five years by a health care professional because of their psychotic illness (DSM-III-R diagnostic criteria; n=263). The survey included 71 respondents (response 82%) aged between 18 and 65 years. The Cardinal Needs Schedule contained two standardised (REHAB, Manchester scale for rating psychiatric symptoms) and three originally designed measures (Client Opinion Questionnaire, Carer Stress Questionnaire and Information Schedule to obtain patients' medical/condition history information). The authors concluded that there was high morbidity among the interviewed sample with 42% having one or more clinical needs and 49% having one or more social needs. Characteristics and also needs of those community patients with or without the care of multidisciplinary mental health teams were comparable, placing doubts on the effectiveness of the community mental health teams. Trieman et al. (1999) used comprehensive data from different sources to study 670 former long stay patients discharged to the community with a follow-up period of 5 years. They studied continuity and quality of residential care for these patients, their readmission to hospital, mortality, crime and vagrancy and concluded that:

“Fears are unfounded that former hospital inmates are destined to neglect, high mortality, and homelessness, or that they pose a threat to the public.”

Melzer et al. (1991) approached all patients that were discharged from local psychiatric inpatient or crisis intervention care and that were identified with a diagnosis of schizophrenia (based on Research Diagnostic Criteria). The 140 patients were assigned either to newly developing (service A) or well established (service B) community mental health services. The authors assessed the subjects’ current mental state (Present State Examination), social functioning (WHO disability assessment, including behaviour, social
performance and modifying social advantages and disadvantages), as well as living situation, occupation, home activities etc., and receipt of services and their cost a year after discharge. For this follow-up, 90% (n=77) of survivors within the service A sample were available and 94% (n=47) from within the sample using the service B. The results were aggregated for both groups as there was no significant difference between the two studied services except the higher rate of hospital re-admissions for service B; the authors attributed this to the easier access of service B to hospital beds. Their results indicated that patients who were not previous long-stay patients and were discharged to the community from an acute admission ward experienced ‘revolving door’ patterns, frequently lived alone in unsupported accommodation, were unemployed and had impaired social functioning. These findings were in contrast with other studies of previous long-stay patients. For example Anderson et al. (1993a) concluded that “neglect was not evident in leavers of psychiatric hospital”. Anderson et al. (1993a) incorporated a number of standardised measures (Present State Examination, Social Behaviour Schedule, Social Network Schedule, Patient Attitude Questionnaire and Environmental Index and Physical Health Index) in their 5-year follow-up study with assessment at a baseline, one year and five years post-discharge. They assessed 278 long-stay patients discharged to community treatment (‘leavers’) and matched patients that remained in hospital (‘matches’). The matching variables included age, sex, hospital, total time in hospital and case-note diagnosis. The ‘leavers’ scored generally more favourably on the social adjustment scales than their matches. Anderson et al. (1993a) suggested that the ‘leavers’ were carefully chosen before they were discharged, for example, they had more favourable baseline scoring on Present State Examination and Physical Health Index. This might not apply for the participants of the study by Melzer et al. (1991) who were discharged from an acute care setting and such an assessment before discharge may not have been possible. Also, both studies used different measures for social adjustment and the measure used by Anderson et al. (1993a) appeared to contain more specific items that showed, for example that, although many of the study participants lived alone and were unemployed, it did not stop them from making new friends and increasing their autonomy. Finally, Melzer et al. (1991) did not explore the subjects’ satisfaction with or their perceptions of the received care, while Anderson et al. (1993a) found that ‘leavers’ wished to stay in their current
community placement and were more positive about their medication.

The following findings also illustrate the degree of success with the community mental health care, and its implementation. Wall et al. (1999) reviewed statistics on psychiatric admissions (Mental Health Enquiry for years 1984 to 1986 and Hospital Episodes Statistics for years 1989 to 1996, data for 1987 and 1988 were unavailable) and compulsory psychiatric admissions (Department of Health data on compulsory admissions provided by health authorities) and concluded that the move of care to the community resulted in a paradoxical and unexpected increase, in both absolute and proportionate numbers, in compulsory admissions (years 1984-96). The authors discussed the possible causes including alterations in the presentation of patients with psychiatric disorders (for example misuse of alcohol or drugs by mentally ill may lead to florid presentation of illness), and decrease in the availability of beds that could lead to delays in admissions, the illnesses becoming more severe and requiring compulsory admission. Furthermore, as described above, community care does not seem to improve clinical outcomes for patients. Therefore, the same number of patients require clinical attention if they deteriorate, which now shows as an admission to hospital but would not be so if the patient was already an in-patient.

Violence by former inpatients of psychiatric hospitals has been one of the major fears of the public with regard to community mental health care. Cases of violence by people with mental health problems have received great coverage by the media, creating the overall impression that community care has failed and that violent individuals are being discharged to the community. However, the criminal statistics for England and Wales between 1957 and 1995 have shown that homicides by people with mental health problems have not increased proportionately since 1957, thus contradicting this assumption (Taylor and Gunn, 1999). Hoggett (1993) argued that it is difficult to satisfy the idea of reintegration of former inpatients into the community when no such community exists.

Although the patients preferred community care to that in institutions, their acceptance of this care was not uncritical. An overview of the perceptions of people with mental health problems about care in the community is given in the next section.
1.2.4 Patients' perspectives of community mental health care

Service users' groups in the United Kingdom have suggested that people with mental health problems were not always satisfied with the services received that often were medication-focused, and they wished that their opinions were listened to. The need for creative and flexible services that would focus on humanity rather than solely rely on medication was emphasised (Service User Advisory Group, 1999; Faulkner and Layzell, 2000; London Regional Office, 2000). The Mental Health Foundation (2000b) carried out a survey of 556 persons who experienced or were interested in mental distress. The originally developed questionnaire was distributed to the members of the Foundation’s and the mental health charity MIND’s mailing lists and was made available on the Foundation’s website. The report did not provide the sample characteristics and response to the questionnaires sent through the mailing lists. Based on the findings, the Foundation emphasised that people with mental health problems experienced discrimination, often from within their own family, and they urged for the promotion of mental health issues among the general public as well as professionals. The Service User Advisory Group to the London Regional Office expressed in their report 'Core Values: Telling it as it is' (Service User Advisory Group, 1999) that service users would appreciate a move away from the medication-centred model of treatment. They asked for a wide range of easily accessible, responsive services provided in the community and urged for the provision of information and communication as means of allaying their distress (“someone to talk to”). They expressed feelings of isolation and challenged for their opinions to be followed. The Mental Health Foundation emphasised that community mental health care should be based on “working in partnership - expertise by profession with expertise by experience” (Faulkner and Layzell, 2000).

The ‘People who use services’ group at the conference launching the Strategy for Action in London’s mental health services in January 1999 agreed on the following three most important points for the future development of services:

- “listen to users’ experiences and actively involve them at every level,
- prevention should be an integrated part of the CPA,
- services need to move away from a purely medical model to one which offers a plurality of treatment approaches” (Department of Health, 2000a).

Some studies have shown generally positive evaluations by the users of services provided
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to those with mental health problems from community settings. Vicente et al. (1988) carried out a study seeking the users' perceptions of the community-based mental health care services in one urban area in three different countries (England, Chile and Italy). The findings of the part carried out in England will be appraised here. The authors used an originally developed 46-item questionnaire and argued that a good questionnaire has to be designed specifically to suit the study and the respondents. However, in their article they described one instrument and this would suggest that the same questionnaire was used for all three different countries. Such an arrangement would mean that the data were collected in a uniform manner, but, on the other hand, could jeopardise validity due to the use of the questionnaire in different languages and in areas that differ culturally and their populations may hold different values with regard to their care and treatments, or may differ in the structure of the provided services. The questionnaire was either self-completed by the respondents or took the form of a structured interview, while the respondents were waiting in an out-patient clinic. The authors aimed to include 20% of the patients and relatives attending the clinic in one calendar month. The authors did not explain whether this was the first 20% of attenders or whether any other method of sample selection was used. They stated that last-minute non-attenders were sometimes difficult to randomly replace, suggesting that the sample was drawn as random. They did not state a response to their survey. The final sample that completed the questionnaire were 172 patients and 72 relatives. It was concluded that most of the patients and relatives expected to receive helpful advice before the first contact with the service but that they actually received drug treatment. Thirty-eight percent perceived the care to be different from expected but only 44% of these patients and 18% relatives reported receiving better care than expected. Sixty-five percent of patients and 5% of relatives were quite or very satisfied with the provided service and 32% of patients and 76% of relatives expressed mixed feelings. Existing large psychiatric hospitals were the least preferred option by patients if they needed admission. Most frequently they suggested a hostel-like psychiatric unit as an alternative. When asked about other ways how they could be helped, the patients mainly asked for less traditional and non-institutionalised services, less medication and 'trust'. Relatives stressed better follow-up. MacDonald et al. (1990) carried out semi-structured interviews with service users: 103
patients (response 90%), 42 carers (response 98%), 28 GPs (response 93%) and 20 social workers (response 95%). The aim was to evaluate a community-based multidisciplinary service to people with mental health problems. The data obtained from the patients showed that people were familiar with the service and were satisfied with the relationships with most of the professionals within the service. They felt that they had received enough information about their treatments and were involved in decision making about it. They appreciated that the care was provided in the community. This study, however, could be criticised, particularly in relation to its presentation. The authors stated that the interviews they carried out were semi-structured. Semi-structured interviews, i.e. interviews that have a main structure but allow certain flexibility in prompting and probing, are considered as a qualitative method (Smith, 1998). However, the authors took a rather quantitative approach to presenting the data, supporting their claims by percentages. In doing so, however, they did not explain the survey instrument, particularly whether all the aspects presented as percentages were asked in a uniform way to all the participants. That this was not always the case is suggested by the fact that the authors presented some summary tables on aspects for which data were not available for all the respondents. Finally, the data were only gathered through semi-structured interviews and it would aid the credibility if other types of data had been obtained. For example, when the authors presented the users' satisfaction with the accessibility of the service, the data on the actual use of the service might have supported (or not) the findings.

Caan et al. (1996) analysed 77 structured interviews with 59 patients carried out as two audits, one year apart. All the attenders of the day hospital over five week-days in first year and one month in the second year, were defined as eligible. Twenty-three patients were interviewed during the first wave of interviewing (100% response) and 54 (93%, 19 patients from the original sample) one year later. The data showed that the patients mainly valued the social context that the day hospital provided, with the most often noted reason for attendance being “to meet friends”. The overall evaluation of the usefulness of the staff increased between the two audits but differed for different professionals and seemed related to the accessibility of the professionals. This study could have benefited from an improved methodology as relying solely on the patients’ reports to identify their contacts with services other than the studied day hospital, or the patients’ judgments as to whether their
"mental health was benefiting from the Day Hospital" does not justify the validity of some of the findings. The authors themselves acknowledged that the patients attending the day hospital were self-selected and therefore probably more favourable towards the service. Other studies that did not focus on the patients' perspectives but included them in their measures were reviewed above (Anderson et al. 1993a; Trieman et al. 1999) and suggested that people with mental health problems and their relatives preferred to receive treatment in their own homes rather than hospitals.

Despite the methodological inadequacies of the studies presented, the authors should be credited for attempting to emphasise the importance of the service users' views. The value of the studies exploring the service users' perspectives is in identification of problematic areas that thus can be addressed so that services may be made meaningful for users. Overall, the available data on patients' perceptions of community mental health services suggested that, although people with mental health problems found reasons for criticism, community care was a preferred alternative for them. Such a view corresponds with anecdotal evidence provided by individual people with mental health problems.

The research project reported in this thesis was carried out in one of London's health authority areas. Therefore, the following section focusses on the characteristics of London in relation to health care policy and community mental health care.

1.2.5 Socio-economic context of community mental health care in London

The document 'London's Mental Health - The report to the King's Fund London Commission' (Johnson et al., 1997a) aimed to provide an overview of mental health services in London. The research teams based the report on reviews of available literature as well on new studies that they conducted. The authors concluded that the need for mental health services in London and particularly in inner\(^1\) London was high, mainly in association with the specific socio-economic characteristics of London. It was claimed that inner London had high levels of social deprivation, high rates of unemployment, high numbers

\(^1\) Based on their findings, the authors of the King's Fund Report divided London into two parts according to the extent of the identified problems. Outer London was stated to be similar to other urban areas in Britain, while in inner London (boroughs of Camden, City of London, Greenwich, Hackney, Hammersmith and Fulham, Islington, Kensington and Chelsea, Lambeth, Lewisham, Southwark, Tower Hamlets, Wandsworth and Westminster) the problems appeared to be greater (Goldberg, 1997).
of people living alone, high numbers of people in the age groups with high risk of onset of mental illness (15-45 years of age) and a high concentration of ethnic minorities, refugees and homeless people (Goldberg, 1997). All these factors have been shown to be associated with mental health and mental illness (social deprivation: Jarman et al. 1992; Lewis et al. 1998; Weich and Lewis, 1998, unemployment: Kammerling and O'Connor, 1993; Mental Health Focus Group, 1994; Jenkins et al. 1998, people living alone: Mental Health Focus Group, 1994; Jenkins et al. 1998, homeless people: Jenkins et al. 1998, ethnic minorities: Bebbington et al. 1994, urban areas: Lewis and Booth, 1994; Jenkins et al. 1998) and so are predictors of greater need for mental health care.

Kisely (1998) argued that the data presented in the King’s Fund Report were often compared to national averages and therefore their results could overshadow the equally high levels of needs in other larger cities. Such an argument proved reasonable for example in light of the study by Johnson and Lelliott (1997). Their study was part of the King’s Fund Report and reviewed Hospital Episodes Statistics provided by the Department of Health Statistics Division. They reported that inner London had, for example, higher numbers of Finished Consultant Episodes, compulsory admission rates to NHS facilities, discharges to NHS facilities, than other larger cities (Birmingham, Bradford, Gateshead, Leeds, Liverpool, Manchester, Newcastle, North Tyneside, Salford and Sheffield). However, some differences were as small as 8% and the authors did not state for any of the data, whether the differences were statistically significant. Furthermore, the comparisons were made against totals from the listed cities. However, comparisons with individual cities could provide more precise data making the claimed differences between London and other cities more explicit. Lewis and Booth (1992) who carried out secondary data analysis of the data from the National Psychiatric Morbidity Survey (Jenkins et al. 1998), concluded that there were differences between Britain’s regions in the prevalence of psychiatric morbidity and that the northern regions of England including the areas of former Regional Health Authorities Northern, Mersey, North West, Yorkshire, Trent and West Midlands and greater London had higher prevalence of psychiatric morbidity than that of other regions. It is argued by Anderson et al. (1993b) that psychiatric morbidity depends on the population of which the individuals are members. Furthermore, Duncan et al. (1995) suggested that the regional differences are related to the individuals’ characteristics rather than the
characteristics of the areas. Therefore, considering the socio-economic characteristics of the population in London (as described above) and considering the arguments of Kisely (1998), even if the needs for mental health services in London may not be significantly higher than those in other larger cities in Britain, they still can be considered great and requiring adequate attention from health care policy makers.

The first indicator of high risk for psychiatric morbidity in London is the fact that London is a urban area. It was identified that urban areas present with higher psychiatric morbidity (Mental Health Focus Group, 1994; Jenkins et al. 1998). Johnson et al. (1997b) reviewed the socio-economic composition of London's population in relation to the factors predicting high psychiatric morbidity listed above. The review was part of the King's Fund Report. Some of the data were compared to national averages and the limitations identified above apply. However, the aim of the following section is not to prove higher need for services in London compared with other parts of Britain but to illustrate that the socio-economic characteristics of London may suggest a high demand for mental health services.

Tower Hamlets, City and Hackney and Newham (all three East London and The City Health Authority localities and the study areas for this thesis) were reported, based on Jarman's Under-Privileged Area (UPA) scores, to be the three most deprived districts among London's NHS Trusts. Jarman's UPAs scores were calculated for the 27 London's Trusts based on the Trust's stated catchment areas for acute mental health services and were 50.4, 43.3 and 40.6 respectively for the three ELCHA Trusts (Johnson et al. 1997c). These three localities were also among the six most deprived regions of England and it has been suggested that the level of deprivation may further increase (Johnson et al. 1997b). Studies have confirmed the positive association between social deprivation and prevalence of psychiatric disorders (Jarman et al. 1992; Lewis et al. 1998).

In 1995, Hackney, Tower Hamlets and Newham local authorities were among Britain's top seven authorities with the highest unemployment numbers (Johnson et al. 1997b). Unemployment has been shown to influence mental health that may result in depression, low self esteem, anxiety, substance abuse and a negative impact on relationships (Johnson et al. 1997b). Relationships between unemployment and increased admission rates to hospital has also been found (Kammerling and O'Connor, 1993; Mental Health Focus Group, 1994; Jenkins et al. 1998).
The overall composition of inner London's population is further complicated by the proportion of people living alone. This was estimated as 54% in inner London and 27% nationally (Johnson et al. 1997b). This, again, not only presents a higher risk of psychiatric morbidity (Mental Health Focus Group, 1994; Jenkins et al. 1998) but also has an impact on the required mental health services as there are few informal carers for those people who may need care. This means potentially less social support and hence potentially greater demands for health and social services.

It was estimated that 36% of the population of inner London in 1993 were people aged 15 to 45 years compared with 29% for the same year in England and Wales. People in this age group are considered most likely to present with an onset of mental illness. Many of these people, may also be homeless, which further impacts on the needs for mental health care: it was estimated that 30 - 50% of homeless people suffer a mental illness, they are difficult to contact and have multiple needs (Johnson et al. 1997b; Jenkins et al. 1998).

Forty-five percent of all the United Kingdom's ethnic minorities' population live in London (Johnson et al. 1997b). For example, and in relation to the research project presented in this thesis, 42% of Newham's population were stated to be of an ethnic minority origin (Bhui, 1997). It is estimated that 116,000 out of the 200,000 of the United Kingdom's refugees live in London (Johnson et al. 1997b). People from ethnic minorities often face additional problems such as poor housing and unemployment. It is also likely that refugees have been exposed to difficult life situations before they came to the United Kingdom. All these factors increase the possibility of members of London's population presenting with a mental illness. Language barriers and cultural and religious differences complicate the provision of mental health services to these patient groups (Johnson et al. 1997b).

A Mental Health Focus Group of North Thames Regional Health Authority (1994) reviewed data on the prevalence of mental illness in the North East Thames Region obtained from NHS statistics and compared them with the socio-economic characteristics available from the 1991 Census of the population in 25 regional districts including City and Hackney, Tower Hamlets and Newham. The report produced by the Group showed that high proportions of single parents, people living alone, unemployed, from ethnic minorities and people aged 16-39 years contributed to suicide rates and/or psychiatric hospital admissions in City and Hackney, Tower Hamlets and Newham areas, although the
statistical significance of the differences between districts was not stated.
In summary, the socio-economic context of London predicts a high prevalence of mental
health problems and therefore an important need for provision of mental health services.
The following section reviews the current situation in the provision of community mental
health care services in London.

1.2.6 Current provision of mental health services in London
It has been claimed that three main factors contributed to the formation of current
community mental health care service provision in London in the 1980s and 1990s (Smith
and Peck, 1997). First, it was concluded that the government's requirement for needs
assessment was performed inadequately; the assessments were not sensitive enough to give
an indication of the services needed. The health authorities as purchasers of the services
were either unable to consider the whole spectrum of needs that the population with mental
health problems may have had, or they assessed the needs of each individual separately
which led to an overwhelming list of needs that the authorities were unable to satisfy.
Secondly, the changes in the management of mental health services increased the
employment of non-clinicians and, in line with overall government strategy, increasingly
involved users in decision making. Thirdly, demonstration projects of community care
were not always transferable to routine practice as they were often sustained by the
commitment and enthusiasm of those who carried them out. Smith and Peck (1997)
suggested that these influences prevented the development of a satisfactory range of
services that would fully meet the needs of their users. They further proposed that the
situation is not made easier by the fact that few guidelines were produced on how such a
range of services should look. Thus, the authorities were left to struggle with the
complications surrounding community mental health care. The authors concluded that “no
London services are offering a range of appropriate service responses which meet all the
major needs identified through a stakeholder process.” The existence and function of
CMHTs were seen by the authors as unsettled and confused. It was claimed that a
consequence to this was the variation in the work of the CMHTs, even within a single
district. The authors additionally concluded that there is a need for long-term user-
determined development of the services matched with professional expertise.
In 1997, the Secretary of Health appointed an Independent Review Panel chaired by Sir Leslie Turnberg to review London’s health services. The report of the panel known as the Turnberg Report (Turnberg, 1997) suggested that there was a high demand for mental health services in London. They commented that there were a lack of mechanisms to support collaboration, particularly between the acute and community sector and a lack of overall strategic planning resulting in the high variability in levels of service. The report also identified difficulties with recruitment and a shortage of staff within the community. They recommended to increase the involvement of support workers, carers and service users themselves, in the care. The lack of communication with and support to carers was emphasised. The Department of Health’s London Regional Office announced their reaction to the Turnberg Report through the preparation of a specific mental health strategy for the capital (Department of Health, 2000a).

The recent general Government strategies in mental health were also reflected in the London Regional Office document ‘The modernisation plan for the NHS in London 1999-2002’ (Department of Health, 1999c), where mental health was stated as the first of five key areas, with planned investments in staffed beds and community teams.

These studies and policy documents indicate that there was an effort to set up satisfactory care for those suffering mental illness on a national level and in London. However, policymakers, service providers and service users have been struggling with this issue and satisfactory care provision has yet to be reached.

Despite the multiprofessional character of community mental health care and the importance of medication within this care, a specific role for pharmacists has not developed in this field of health care, except for initiatives from within the pharmacy profession itself. Furthermore, it was not until the 1996 White Paper ‘Primary Care: Delivering the Future’ (Department of Health, 1996) that the pharmacy profession appears in the general community care policy documents. In the United Kingdom, pharmacists are reforming their image from dispensers of medication into the image of professionals providing patient-centred medicines management roles. Since these developments represent a background also to the pharmacists’ roles within mental health care, the following chapter will begin.
Chapter 2  Pharmacists’ extended patient-oriented services

2.1  Pharmacists’ roles in primary health care

2.1.1  Main concepts

The Royal Pharmaceutical Society of Great Britain (1996a) described pharmacists as highly-trained healthcare professionals with expert knowledge of medicines that is highly accessible to members of the public. Two concepts were adopted by the Royal Pharmaceutical Society of Great Britain in order to enhance the pharmacy profession and to utilize these features. These were the concepts of managed and pharmaceutical care. Managed care (MC) originated as a concept in the United States of America and is now being adopted in the United Kingdom and other European countries. The aim of managed care is to “achieve maximum health outcomes at the lowest possible cost” (Royal Pharmaceutical Society of Great Britain, 1996a). It has been suggested that managed care may become either a threat or a great challenge for the profession. Implementation of managed care in the United States led to a decrease in the number of community pharmacies as the dispensing role lost its importance. Dispensing medicines can be substituted, for example through mail order, and consequently pharmacies may be perceived as an extra cost rather than a required service. It has been suggested that pharmacists in the United Kingdom could face the same development (Royal Pharmaceutical Society of Great Britain, 1996a). On the other hand, pharmacists can play an important role in medicines management within managed care. Community pharmacists may be challenged to offer services that will be sought by purchasers. For example community pharmacists in the United States were paid for services such as

• “counselling and monitoring patients on their drug therapy,

• provision of patient education and other management services to patients identified as high risk” (Royal Pharmaceutical Society of Great Britain, 1996a).

More specifically, these services may consist of

• “clinical services: consultation with the primary care provider, prescriber education, drug therapy monitoring, patient education (for the general practitioner) and home healthcare,
• patient education: medication counselling and outreach programmes,
• formulary involvement: development and enforcement of guidelines, and assistance
  with generic and therapeutic substitution,
• drug utilisation review: pharmacist review, analysis and interpretation of patterns
  (rates and cost) of drug usage against predetermined standards” (Royal

In the United Kingdom community pharmacists also adopted these roles while attempting
  to implement managed care (Anonymous, 1997a). The United Kingdom primary care
  pharmacists’ potential roles in managed care were described mainly as medicines
  management, for example adherence to treatment protocols, audit of prescribing,
  compliance with treatment and patient education, including explanations of the disease,
  recommendations on lifestyle changes and education on drug therapy (Panton et al.
  1995).

Even more pronounced than managed care is the challenge to implement clearly patient-
  oriented pharmaceutical care (PC). Unlike managed care, pharmaceutical care originated
  within the pharmacy profession. The professionals at the Peters Institute of Pharmaceutical
  Care (College of Pharmacy, University of Minnesota) defined pharmaceutical care as

  “a practice in which the practitioner takes responsibility for a patient’s drug related needs
  and holds him or herself accountable for meeting these needs”.

  (Hepler and Strand, 1990)

Pharmaceutical care consists of three stages a) assessing a patient’s needs, b) creating a
  personalised care plan to meet these needs and c) following up the outcomes. All stages
  must be recorded. According to Hepler and Strand, the pharmacist’s action should ensure
  that all medication taken by the patient has a proper indication, is most effective for the
  indication and is also the safest one (Hepler and Strand, 1990). Pharmaceutical care is
  shifting pharmacists’ foci from drug dispensing to the patient and to the outcomes that
  medication has on the patient’s health and quality of life. The overall aim of
  pharmaceutical care is to decrease drug-related mortality and morbidity. Nevertheless,
  pharmaceutical care has clear implications for enhancing pharmacists’ roles within health
  care. It increases the pharmacist’s share of responsibility for the patient’s care and makes
  the pharmacist directly responsible to the patient for the quality of care (Mason, 1998).
Penna (1990) referred to pharmaceutical care as 'pharmacy's mission' for the 1990s. Both concepts (MC and PC) lead the pharmacy profession beyond dispensing duties to provide services that are clinical, patient-oriented and that emphasise pharmacists as health care professionals. Unfortunately, so far, these concepts have not been implemented in routine practice and they remain as suggestions and isolated pilot projects depending on the individual pharmacists' willingness to make extra effort to enhance the profession's status. Recently, the government supported the provision of additional services from community pharmacists in the White Paper 'Primary Care Delivering the Future' (Department of Health, 1996) and in the document 'Pharmacy in the future - implementing the NHS plan' (Department of Health, 2000b).

2.1.2 Constraints to the provision of extended roles

As soon as the concepts of managed and pharmaceutical care started to be discussed, so were the constraints to their provision. Penna (1990) suggested a comprehensive list of constraints related to pharmacists' historical professional tendencies, to methods of compensation, to other professionals, including other professionals' attitudes towards pharmacists' new roles, lack of access to patient medical information but also pharmacists' ignorance to developments within the profession. Bell et al. (1997) used a semi-structured interview schedule to identify opinions concerning pharmaceutical care of 20 community pharmacists in a large urban area in the United Kingdom. They chose their sample so that it included pharmacists with a range of demographic characteristics (sex, years in practice, pharmacy ownership). They commented that the sample size proved appropriate as the later interviews ceased to bring forth new ideas. The results showed that community pharmacists welcomed the idea of pharmaceutical care, but they identified constraints to providing it, such as lack of time, a lack of remuneration and a need for further training. The constraints also included an ignorance from other professionals and the public of the pharmacists' roles and a lack of promotion of these roles by professional bodies. Lack of time, together with current legal requirements for supervision of dispensing, were also identified as constraints by six community pharmacists interviewed in-depth in a study by Anderson (1998b). The interviews were conducted before and after training programme associated with a health
authority-run project involving community pharmacists in health promotion. In a study by Kr ska et al. (2000), a purposeful sample of 16 pharmacists concerned with pharmaceutical care from a range of settings including policymaking organisations, were interviewed using a semi-structured interview schedule. The pharmacists, additionally to the constraints listed in the previous two presented studies, identified lack of space in community pharmacies and lack of access to patient-related information as constraints to the provision of pharmaceutical care in Scotland. Although these studies may be related by area, the identified themes are repeated and suggest validity of these findings. Although pharmacists from different geographical areas may add additional themes or pay more attention to some constraints than others, issues such as lack of time and remuneration related to the problematic structure of current community pharmacy practice, lack of education and interprofessional issues, including sharing of patient-related information, seem fundamental obstacles to implementation of pharmaceutical care in the United Kingdom’s pharmacy practice. The need for revision of the current remuneration system to allow pharmacists to move from dispensing-oriented practice towards patient-focused care has been discussed by the pharmacy profession (Anonymous, 1997b; Anonymous, 1997c; Thomas et al. 1997; Anonymous, 1998; Kr ska et al. 2000). The Government has made a significant step towards enabling pharmacists to engage in high-quality extended services through its 'Pharmacy in the future - implementing the NHS plan' (Department of Health, 2000b). This document encourages pharmacists, including community pharmacists, to engage in services that would guarantee high quality and convenience in relation to the patients obtaining and managing their medication. Special contracts would be created to enable remuneration for such activities. Even if pharmacists are to be provided with an infrastructure that will enable them to provide extended roles, the success of their establishment will also depend on other professionals’ willingness to accept these initiatives (Penna, 1990; Bell et al. 1997) and the demand for such services. With regard to interprofessional relationships, many researchers have concentrated on investigating the interactions between community pharmacists and general practitioners (GPs). The following section reviews this topic.
2.1.3 Community pharmacist - general practitioner interface

A study carried out by Sutters and Nathan (1993) showed that GPs in two chosen health authority areas were willing to accept only certain extended roles, such as pharmacists' involvement in improving patients' compliance and adverse drug reaction monitoring and were neutral towards drug deregulation and rejected other services such as the management of minor ailments. The authors aimed to capture a range of opinions by approaching practitioners from two health authority areas with different socio-economic characteristics. However, this was jeopardised by a low response from general practitioners: 42% in total and 24% for one of the health authorities. The authors did not explain why they approached only 50% of all non-responders and whether they approached equal numbers of non-responders from each group. Thus, their efforts to increase the number of responders is not clear. Nevertheless, it may be agreed with the authors that the low response, in itself, may suggest the GPs' lack of interest in this issue.

Another study carried out by Sheppard et al. (1995) investigated the perspectives of community pharmacists and members of Family Health Services Authorities (FHSAs) of pharmacists' extended services, including collaboration. Their work included a comparison of the extent of the respondents' acceptances of the 11 extended roles for community pharmacists suggested by the Department of Health and the Royal Pharmaceutical Society Joint Working Party (Joint Working Party, 1992). The results were put in context with the Royal College of General Practitioners' (RCGP) acceptance or rejections of these roles stated in another document (Bryden, 1992). The postal questionnaire received a 50% response from community pharmacists. Non-responders were not significantly different when compared to responders on geographical location or type of pharmacy, while other socio-demographic variables were not mentioned. Again, it may be considered, whether the low response indicates the importance that pharmacists attributed to the issue. An 80% response was achieved from FHSA members. Although the three parties disagreed on some issues, such as deregulation of medicines, diagnostic/screening services, choice of dose and medication within agreed protocols, most of the proposed additional services were favoured by all three parties, for example reimbursement for domiciliary visits, provision of health care advice and adverse drug reactions reporting. Although accepted by the RCGP, only 33% of pharmacists and 33% of FHSAs agreed to pharmacists providing
McDermott et al. (1997) carried out a survey of GPs' attitudes towards the provision of additional services by community pharmacists. The survey covered 81 GPs in one health authority with a 49% response. The GPs generally agreed that pharmacists should extend their roles beyond dispensing and the issue of the management of minor illnesses was specifically favoured by the GPs. The GPs were prepared to share information with community pharmacists. However, 40% of the GPs were undecided whether the community pharmacists should be involved in the monitoring of chronic disease (33% agreed, 27% disagreed) and 37% were undecided whether community pharmacists should be allowed to alter therapy within agreed guidelines (36% agreed, 27% disagreed).

Again, it may be summarised that, although the studies reviewed are related to particular geographical areas and suffer problems with low response, they show similar patterns and thus corroborate the findings. GPs' attitudes towards pharmacists' extended roles have been investigated. Studies have shown mixed results and indicated that GPs were very particular in their choice of service that they were willing to accept from community pharmacists. Despite the suggested 'softening' of GPs' attitudes during 1990s (McDermott et al. 1997), clinical roles such as limited prescribing seemed to remain the least acceptable.

2.1.4 Other health care professionals' approaches to the pharmacists' extended roles

Pilot studies where pharmacists have cooperated with other professionals, including GPs, consultant psychiatrists, nurses, occupational therapists and residential homes' staff, have indicated that other professionals favoured pharmacists' involvement in extended roles (Pratt and Dunnett, 1985; Roberts, 1987; Cochrane et al. 1995; Corbett, 1995; Rogers and Rees, 1995; Kettle et al. 1996; Schneider and Barber, 1996). None of these studies focused particularly on the other professionals' perceptions. However, the fact that all these projects were carried out, suggests that other professionals were willing to accept these roles.

If other health care professionals will accept extended roles of community pharmacists, the question remains whether patients will use such services. The next section reviews the studies that have investigated the public's perceptions of additional services from community pharmacies.
2.1.5 The public's views of the pharmacists' extended roles

Studies that have investigated whether members of the public required the provision of additional services from pharmacists offered positive, as well as reserved, results. For example, patients have been accepting of pharmacists' roles as advisors about minor ailments but not about prescribed medication and the related condition (John et al. 1997). The services discussed in these studies included information on prescribed and OTC medication, the treatment of minor ailments, consultation about symptoms, health promotion and keeping medical records.

Williamson et al. (1992) interviewed, using semi-structured interview schedule, members of the public in one urban area, thus with possible location bias, to explore their perceptions about the extended roles of community pharmacists. One hundred and thirty-three individuals were interviewed from four groups that were likely frequent users of community pharmacies: 33 active elderly people (a random sample from two GP surgeries with different socio-economic profiles with a response rate of 44%), 28 mothers of young children (a random sample identified the same way, response 37%), 37 carers (a non-random sample by invitation through a relevant local journal) and 35 people in full-time employment (a stratified random sample from a local employer, response 47%). To limit the effects of the low responses, the authors additionally carried out group interviews with representatives of all four types of respondents with one type of respondent in each group and concluded that these group interviews validated the findings from the one-to-one interviews. The majority of those interviewed reported that they would appreciate more information about medicines such as side effects, dosages, interactions, ways of action etc. and advice on ‘minor’ symptoms such as colds, stomach upsets or skin problems. The majority reported that they would read leaflets on healthy lifestyles but would not be very happy to discuss the issue with a pharmacist. Eighty-one percent of carers, 63% of mothers, 54% of workers and 53% of elderly respondents were in favour of the pharmacists keeping records of previous medication. The results suggested that elderly respondents tended to be least favourable to the pharmacists providing extended services.

John et al. (1997) analysed 315 questionnaires that were answered by a random sample of people with coeliac disease, drawn from Coeliac Society’s list of 35,000 members. The original response was 358 questionnaires, i.e. 71.6%. However, 43 questionnaires were
excluded because they were not completed by a person with coeliac disease. The authors have chosen this condition since coeliac patients were identified as frequent users of community pharmacies and therefore suitable respondents for the research on use of pharmacies for advice and obtaining medication. Although more than three-quarters of respondents believed that the pharmacists knew about minor illnesses, 55% responded that they never asked specifically about coeliac disease or anything related to it in a pharmacy.

The Community Pharmacists’ Group (1997) carried out a survey aiming to identify people’s views of community pharmacists’ extended roles. The responding patients were approached by a convenience sample of pharmacists. This presents potentially a twofold bias with a self-selecting group of pharmacists recruiting a non-random sample of respondents. The findings presented in the Group’s Bulletin were the findings of the first 1,000 returned questionnaires and did not provide characteristics of the sample. Therefore, it is not possible to judge the validity of the results that suggested the public had positive perceptions of pharmacists’ new roles. The majority of respondents supported the concept of pharmacists treating minor ailments, being involved with the care of people with chronic conditions, giving advice on healthy lifestyles and keeping medical records. The respondents’ answers differed as to the type of information that they thought should be recorded by the pharmacist. The majority supported access to information about medical allergies and prescribed medication; the least popular information to record were the results of medical tests that could suggest the public’s ignorance towards clinical roles that could be performed with knowledge of such information.

Again, although these studies suffered some methodological problems, the findings corroborate each other. However, it needs to be considered that, sometimes, these studies inquired about services that were not yet existing. It is questionable seeking people’s opinions about the services with which they are not familiar as the patients may not associate the services with community pharmacists. Once patients and pharmacy customers are convinced about the services that pharmacists may offer, the results of similar studies may provide a better indication of the type of services that are required by them.

The intention to offer valuable extended roles from community pharmacists also led to the identification of potential roles that pharmacists could play within community mental health
care. While hospital specialist psychiatric pharmacists are a fairly well established part of the system (Branford, 1991), rarely has the involvement of community pharmacists gone beyond dispensing and advice giving, or beyond isolated pilot projects. It was suggested by Maslen et al. (1996) and Rees et al. (1997) that there was a need and opportunity for community pharmacists to provide services in the field of mental health and in line with the concepts of managed care and pharmaceutical care. The ways of involvement of the pharmacists with the community mental health care are discussed below.

2.2 Pharmacists' involvement in mental health care

Most of the studies that will be presented below are evaluations of different models of pharmacists' involvement in the care for people with mental health problems. Since the project presented in this thesis is also an evaluation of a service, a theoretical background for evaluations of health care services is first provided.

2.2.1 Evaluation studies

St Leger (1992) defined evaluation in health services as

"the critical assessment, on as objective basis as possible, of the degree to which entire services or their component parts (e.g. diagnostic tests, treatments, caring procedures) fulfil stated goals".

An evaluation should be distinguished from an audit, which is a review of current practice compared to a predefined standard. Evaluations may include audit. With regard to service developments, the evaluation studies may aim to measure the efficacy of a service. This indicates whether the services can be carried out and usually evaluate a service implemented in a limited number of settings. Efficacy studies sometimes take the form of feasibility studies, evaluating aspects of a service or programme that are perceived essential for successful implementation. Evaluation of efficacy may be a first stage in the service development and effectiveness studies may follow in order to identify whether the service is applicable in a more routine way, in a broader range of settings, that are not self-selected as usually found in efficacy studies. The evaluation of a newly developed service may be completed by an evaluation of its economical efficiency that studies associations between
outcomes and economic aspects of the service (Smith, 1999b).

Evaluation studies in health care employ a number of various designs, including:

- randomised controlled trials and quasi-experimental studies,
- cohort studies and case and case-control studies,
- descriptive studies,
- before and after comparisons, or
- other approaches, such as comparison of the studied service with another, unaltered service elsewhere or a part of the same service for which the changes were not implemented (St Leger et al. 1992; Smith, 1999b).

Randomised control trials (RCTs) are the most recognised as evidence of the efficacy/effectiveness of services (St Leger et al. 1992; Smith, 1999b). The importance of objectivity in the evaluation is emphasised; the findings of evaluations should be, as much as possible, independent from the judgments and prejudices of the evaluator and other stakeholders. Difficulties with achieving appropriate objectivity are sometimes encountered (St Leger et al. 1992; Smith, 1999b). Through their designs, RCTs are perceived to secure a high level of objectivity. This objectivity is manifested through reproducibility of findings if the defined standard circumstances are provided. With regard to pharmacy practice research, it has been suggested that the objectivity of many evaluations is questionable (Smith, 1999b). Often, those commissioning or carrying out the studies, are interested in demonstrating positive findings. Also, there is a tendency to publish positive findings. On the other hand, the character of the studied topics, that often include the development of new services, means that the RCT design may not be applicable and may not be appropriate. In the case of service developments, the standard circumstances of RCTs and their defined samples may not always be achievable within the non-standardised circumstances of health service provision and within a non-standardised population. The ‘normal’ service users will not usually act as passive recipients of a service but will make conscious decisions that may influence the reproducibility of the results of a previously conducted RCT. Therefore, other designs may be used for evaluations of services. Quasi-experiments investigate an impact of the studied intervention on non-randomised but usually matched, samples (Bowling, 1997; Smith, 1999b). Cohort studies and case and case-control studies follow up those who were exposed to the intervention and
may involve studying extreme or critical cases (Patton, 1987). Descriptive studies employ a number of data collection techniques in order to provide a detailed description of various aspects of an intervention including its utilisation and, increasingly, service users’ perceptions. As these designs may include non-random, non-matched, self-selected samples and the evaluation may be carried out in natural, uncontrolled circumstances, the reliability and validity of data must be justified. However, as Patton (1987) summarises:

“There are no rigid rules that can be provided for making data collection and methods decision in evaluation. The art of evaluation involves creating a design and gathering information that is appropriate for a specific situation and particular policymaking context. ... Any given design is necessarily an interplay of resources, practicalities, methodological choices, creativity and personal judgments by the people involved.”

For studies other than a RCT, a combination of data collection methods may be used as the means of securing a valid, reliable and objective evaluation. Such an approach contributes to the elimination of weaknesses of individual methods (Bowling, 1997). For example, a combination of a self-completed instrument with observation may help to eliminate response bias of the respondents of the self-completed instrument. Data, methods or research approaches may be combined (Smith, 1999a) and the process is known as triangulation.

Although an evaluation may, traditionally, be understood as a predominantly quantitative process (St Leger et al. 1992), the appropriateness of the use of qualitative methods in evaluations is emphasised and should be encouraged (Patton, 1987). In evaluations, as well as in other studies combining the two approaches, the qualitative or quantitative methods should be used according to their appropriateness for provision of the required information to address the relevant objectives (Smith, 2000). Qualitative methods suit designs that focus on the processes within the evaluated programmes, often involving the participants’ perceptions (Patton, 1987; Bryman, 1988). In the case of health services, professionals or patients may be involved in the evaluation in order to explore the acceptability of the service as an important aspect of the success of the service implementation (Smith, 1999b). Quantitative approaches may be useful for obtaining data concerning structure of a service (Bryman, 1988), it may be used to map other aspects of process issues, for example utilisation of a service, and it may allow the measurement of quantifiable outcomes (Smith,
Quantitative methods provide data on aspects of the programme that were decided to be measured in advance. In contrast, qualitative methods, being concerned with answering 'what' and 'why', may enable the researchers to uncover aspects and positive and negative effects of the programme that were originally unforeseen (Smith, 2000).

There are three aspects of each service commonly recognised: **structure**, **process** and **outcome**. Structure represents 'the environment of the service', usually constant features of a service including distribution, qualifications and hierarchies of involved personnel and distribution of facilities. Process is represented by dynamics within the service, including interactions among providers and between providers and users (Donabedian, 1980). The structure and processes may be important determinants of outcomes of the service (Donabedian, 1980b; Smith, 1999b). The outcome represents the impact that a service has had on individuals or communities (St Leger et al. 1992). Evaluations may explore one or more of these impacts (St Leger et al. 1992; Smith, 1999b). Reviewing evaluations from a quantitative perspective suggests that information is often available about the structure and processes, and less frequently about outcomes of the service (St Leger et al. 1992). This is due to the difficulties that are related particularly to the routine measurement of outcomes. The desired outcomes may be difficult to clearly define. If the desired outcomes are defined, a long time may be required to follow-up those exposed to the service, that, for many researchers, may be impractical. Therefore, the intermittent processes that directly led to the efficacy/effectiveness or outcomes may be measured instead. Another issue to consider is that outcomes of health care services may be specific to an individual and may differ in quality between different service users. Thus, it may be difficult to identify one or few outcomes that would be valid indicators of the service impact. Health care services evaluations should not necessarily focus on a chosen quantifiable outcome but include various outcomes as appropriate in order to appreciate the context of the service provision and its general goals (Patton, 1987; Smith, 1999).

### 2.2.2 The United States of America

The first pilot projects involving pharmacists with outpatient mental health care were carried out mainly in the United States of America throughout the 1970s. Most of the studies provided descriptions or descriptive evaluations with no investigation of the service
outcomes. The services offered by the pharmacists were similar in all studies and to those later carried out in the United Kingdom.

Miller and Corcella (1972) suggested that "a properly trained pharmacist can provide a variety of pharmaceutical functions as part of the mental health centre team". The pharmacist's training consisted of the Doctor of Pharmacy course and included: advanced pharmacotherapeutics, drug-information services, drug communications, pathophysiology and clinical psychiatry, and two years of experience as a clinical pharmacist. The authors described a pharmacist who was providing various services such as drug dispensing, interviewing clients, determining clients' mental health status and reviewing their drug therapy, for example side effects, drug therapy effectiveness and issuing of repeat prescriptions confirmed and signed by a psychiatrist for the stable patients, making recommendations to the physician, keeping medication histories and offering drug counselling to the patients. The authors described in detail the pharmacist's services but further systematic evaluation was not included. The only calculated indicator of the service was a decrease in the number of patients seen by the psychiatrist and social workers and the authors concluded that this allowed these professionals to concentrate on patients who were in greater need of the care of these professionals.

Coleman et al. (1973) described extended services provided by pharmacists within hospital and community mental health facilities served by the University of Tenesee College of Pharmacy. In addition to their dispensing roles, the pharmacists assessed the stability of patients, and either referred the patient to the psychiatrist, changed dosage, discontinued drugs and/or added drugs. The pharmacists were also allowed to administer intramuscular injections and collect blood for testing lithium levels. The authors stated that the questionnaire survey of psychiatrists and nurses revealed a good acceptance of the programme which was based on the professionals' beliefs that the quality of service offered by pharmacists was at least equal to other experienced methods of care. Unfortunately, the author did not provide any details or reference to the survey and the validity of the information cannot, therefore, be justified.

Ivey (1973) described the clinical and dispensing roles of the pharmacist within a community mental health centre. The pharmacist, with a nurse, conducted day-treatment groups during which the patients' mental health statuses were evaluated and the treatment
changes were suggested jointly by the pharmacist and the nurse. The changes were reviewed by the centre physician. For the patients with more difficult problems, special groups were run where the physician was also present. The author described that the pharmacist's presence at the centre resulted in changing some of the physician's prescribing habits. Description of three prescribing habits that were changed were presented. It was also stated that the participating staff were positive towards the scheme. However, this claim seems to be based on anecdotal evidence of talking to the staff, and not on a structured appraisal. Evaluation of the impact of the pharmacist's service, for example on the clients' health, was not presented.

Evans et al. (1976) described a medication maintenance service in a community pharmacy. Medication maintenance functions included a review of the patient's medical notes, an interview with the patient and an assessment of his/her response to the medication, prescribing and dispensing the patient's medication or referring the patient to another professional. The pharmacist could alter the treatment and it was the pharmacist's responsibility to obtain and maintain the patient's drug history. This service was meant as an addition to daytime medication maintenance clinics which were held once a week by the pharmacist within a community mental health centre and took place in a nearby community pharmacy after the centre was closed. The pharmacist used the centre's patient medication notes. The authors offered a descriptive evaluation in terms of the service utilisation and the clients' perceptions of the pharmacists' services that were evaluated using an originally designed questionnaire. However, no information was available about the origins and any psychometric properties of the questionnaire which consisted of 17 items using a Likert scale. The clients expressed positive attitudes towards the programme and the pharmacist and the authors acknowledged that favourable evaluation could be associated with the fact that the clients volunteered their participation in the programme. However, they also proposed that this and the ease with which the volunteers were obtained, suggested the need for such a service. Seventeen out of the 22 participating patients had chosen this service for employment and transportation reasons. This was in line with the authors' suggestions that transport and job difficulties may be one of the reasons for irregular attendance at the daytime clinic and that the community pharmacy could help to overcome this problem by being easy to access, with long opening hours. The service was also evaluated in terms of
the patient’s clinical response; the patient’s status was evaluated subjectively by the psychiatrist familiar with each case. Reliability of such a measure may be questionable due to only one clinician reviewing the cases. According to the psychiatrist’s evaluation of patient status, 15 out of 22 patients were seen as better controlled. The psychiatrist used a scale from one (uncontrolled) to four (controlled). The authors also concluded that the programme was “well accepted by mental health centre professionals”, although no information was reported concerning how this evaluation had been carried out. In relation to the feasibility of such a role, the authors commented that access to the centre facilitated the pharmacist’s function. The authors suggested that there was a need for further investigations “for example, in instances where the pharmacy is far removed from the patient’s medical record and the physician”.

Rosen and Holmes (1978) evaluated medication monitoring services provided by a specially trained pharmacist within one of the area’s eight community mental health centres. The pharmacist had access to the patients’ medical information. The pharmacist interviewed patients, evaluated their drug therapy and monitored drug-related problems. The pharmacist had an opportunity to alter the drug therapy. The evaluation compared the service provided by the pharmacist with the one provided by the psychiatrist. The evaluation had two parts. During Part 1, the authors compared the direct patient care provided by eight evaluated clinics in terms of the number of patients seen, total number of outpatient contacts and the time spent on each aspect of direct care by either the pharmacist or the psychiatrist. The patients were assigned to clinics according to their county of residence. In the clinic with the pharmacist, the pharmacist was, for most of the clients, their case manager and the only professional seeing the patients. In the other seven clinics, the clients’ care was overseen by the psychiatrist (it is not clear from the article how many psychiatrists were involved). Part 2 was carried out as a section of a larger project evaluating the area’s mental health services. The respondents were, therefore, blind to the association of the evaluation with the pharmacist. The satisfaction and well-being of the patients were measured by means of a self-completed postal questionnaire sent to all the patients that attended the clinics for a medication review over a certain six-week period. The questionnaire contained Ellsworth’s PARS Scale of Community Adjustment which is an indicator of how effectively the patient is able to manage within his or her community
(Rosen and Holmes, 1978) and was used to measure the patients’ well-being, combined with originally designed items seeking the patients’ satisfaction with the provided mental health services. The questionnaire was completed by the patient and a family member. The authors concluded that the results of both parts of the evaluation indicated that there were no important differences between the pharmacist and psychiatrist providing the services and that the pharmacist in the study “successfully monitored large numbers of chronic psychiatric patients in the community setting”. The authors measured the clients’ well-being as one of the outcomes of the pharmacist’s services. However, clients’ well-being may have been influenced by many other factors. Furthermore, the data on Part 2 were presented in a manner that did not allow an evaluation of the validity of the presented findings, since sample size, response and characteristics of the sample were not reported.

All the studies described above, involved a specially trained, hospital-based pharmacist who worked closely with other professionals and within an institution. There is an obvious lack of any thorough evaluation of the outcomes of the pharmacist’s services for the users and their acceptance by other professionals. The pharmacists interviewed the patients to assess their health status, to review their drug therapy and check for any potential drug-related problems. They reviewed clients’ compliance and educated clients and professionals about medicine-related issues. The pharmacists were allowed to alter medication. This pattern of service development has been applied also in other countries, including the United Kingdom, and was, together with the United Kingdom-based studies, an inspiration for the research project presented in this thesis. All the pharmacists had access to the patients’ medical notes which was facilitated by the fact that the pharmacists were formal members of the institutions for which they provided the service. The pharmacists cooperated closely with other professionals and the pharmacists’ special education was emphasised.

A more recent study by Ellenor and Dishman (1995) described the health and medication review sessions carried out by a psychiatric pharmacist for outpatient psychiatric patients. The roles were similar to those described in earlier studies. The usefulness of the scheme was illustrated by the number of patients seen by the pharmacists, which increased by 128% over four years (from 918 to 2094). An evaluation of the outcomes was, again, not present. Stewart et al. (1992) presented three cases of patients admitted to a hospital during the first
three months of 1990. According to the authors, these cases illustrated the consequences of polypharmacy, defined as the “concomitant use of several drugs in excess of what is known to be therapeutically effective or appropriate”. By presenting these cases, the authors aimed to illustrate the scope for pharmacists’ and community pharmacists’ roles in managing polypharmacy with psychiatric patients. They suggested that the pharmacists could maintain up-to-date medication histories. These histories could be available to the prescribers in order to help them rationalise their prescribing. The pharmacists should inform the prescribers about any potential drug-related problems identified and assist them in simplifying the drug regimens. It was suggested that through regular monitoring of the patients responses to their therapy, the pharmacists could identify medications that were no longer necessary.

2.2.3 The United Kingdom
In this section, policy documents are first summarised that provided recommendations on pharmacists’ roles in community mental health care, followed by a review of research projects that aimed to define potential roles or evaluated newly implemented services from pharmacists to people with mental health problems.
In 1987, the Council of the Royal Pharmaceutical Society of Great Britain (RPSGB), discussed the care of people who “were not receiving full-time hospital care but who were not independent enough to be maintained in the community without additional support.” People with mental health problems were included in this discussion. In 1988, the Working Party established by the Council provided the proposals for domiciliary pharmaceutical care provided by community pharmacists (The Working Party of the Council of the Royal Pharmaceutical Society of Great Britain, 1988). One suggestion from the Working Party was that pharmaceutical services should include not only the “provision of supplies but also advice and counselling”. This was seen as a better service for patients, a further development of the professional role of pharmacists and augmenting pharmacists’ job satisfaction. Maintaining patient medication records was also mentioned “to assist in checking compliance and highlight changes in medication”. The Working Party also suggested that community services’ pharmacists or other pharmacists delegated by the district pharmaceutical officer should be members of, or work closely with, the community
teams caring for this vulnerable patient group, as defined above (The Working Party of the
Council of the Royal Pharmaceutical Society of Great Britain, 1988). No information is
available to date about the routine implementation of these suggestions in practice.
In 1995, the United Kingdom Psychiatric Pharmacy Group (UKPPG) in its consensus
statement on the pharmaceutical needs of people with long-term mental health problems,
emphasized again the roles of hospital and community pharmacists in community mental
health care (United Kingdom Psychiatric Pharmacy Group, 1995). This statement was
published seven years after the RPSGB Working Party suggestions. However, the roles of
the community pharmacists were described as offering advice on drug therapy, dispensing
medicines and, in addition, providing services to residential homes and hostels. The
extended roles suggested by the RPSGB Working Party eight years ago were clearly not
implemented in practice. The UKPPG listed the drug-related difficulties experienced by
people with mental health problems and their carers, which could be the basis for services
provided by the community pharmacists. These ‘difficulties’ included the complex nature
of the prescribed regimes, the lack of information, negative attitudes towards medication
as well as inadequacies in the supply and costs of medicines. They concluded that
community pharmacists were ideally placed to meet many of the needs associated with
these difficulties and gave suggestions on how to achieve this. The suggestions included
incorporation of community pharmacists into the community mental health teams with
particular stress on liaison with community psychiatric nurses, reviewing clients’
medication, following up the clients who were likely to default on medicine taking and
giving information to patients and carers. It was suggested that community pharmacists
should receive medical information about discharged patients to improve seamless care for
patients settling in the community (United Kingdom Psychiatric Pharmacy Group, 1995).
However, there is currently no evidence of routine implementation of such services by
community pharmacists.
Most recently, the RPSGB expressed their support for pharmacists’ involvement in mental
health care by publishing ‘Practice Guidance on the Care of People with Mental Health
Problems’ (RPSGB Mental Health Task Force, 2000a). The document contained a range
of roles that community pharmacists were advised to implement in order to contribute
efficiently to the care of this client group. Liaison with mental health teams was stressed
again.

The number of studies investigating the involvement of pharmacists with mental health care conducted in a primary setting in the United Kingdom is limited. In the following text, the studies aiming to identify pharmacists’ current and potential roles are presented first, followed by studies implementing particular service developments.

Based on his survey of 81 persons with mental health problems in an urban area (Liverpool), Donoghue (1993) offered recommendations on how community pharmacists could contribute to the care of people with mental health problems. The survey used an originally designed questionnaire administered in the form of an interview to people who “had at some time been admitted to hospital for treatment for a psychiatric illness and had at some time taken psychotropic medicines”. It is not clear how the participants were identified and the author only provided the respondents’ sex, in terms of characteristics of the sample. Furthermore, the author stated that not all the respondents were taking psychotropic medication at the time of the interview, making the relevance of interviewing these participants questionable. No details were made available about the questionnaire and the survey was carried out in a specific geographical area. Considering all these issues, the general relevance of the findings is debatable. However, due to the lack of other suitable data the study is included in this overview. The results suggested a lack of information about medication and a desire for such information provision among the sample studied. Also, it was reported that a number of respondents tended to abandon their medication due to its side effects. Problems related to the dispensing of medication from community pharmacies were also identified. Based on these findings Donoghue (1993) recommended that community pharmacists could be involved in the following areas:

* Information issues:
  * for pharmacists to become an independent source of information and advice,
  * to be flexible in the way the information is provided (patients seemed to appreciate receiving information not within a formal health care setting, including the pharmacy),
  * for pharmacists to help to improve patients’ compliance by also encouraging patients to discuss their medication with their prescriber and to participate actively in their treatment programme.
• Interprofessional cooperation:
For pharmacists to liaise with other professionals in order to individualise drug regimens and to assure regular medication review and rationalization of treatment.

• Pharmaceutical issues:
For pharmacists to ensure a continuous supply of medication and to help patients to handle their medication through compliance aids, advice on storing and administering of their medicines).

A study by Ewan et al. (1998) aimed to identify, through a focus group comprising 12 community pharmacists, areas in which the community pharmacists could contribute to the care of people with mental health problems. The roles identified by the focus group included monitoring the patients’ medication with the aim to assess compliance, provision of information in order for the patients to take their medication with confidence and the role of a care facilitator, linking the patients with services. The pharmacists were interested to participate in the clients’ medication reviews and other forms of interprofessional liaison. They also hoped that the provision of additional services for people with mental health problems and cooperation with professionals would inform the views of the patients and other professionals about the community pharmacists’ roles. The limitations of this study include the fact that it was carried out with one self-selected group of pharmacists from one area and with a possible bias due to their ‘enthusiasm’, as acknowledged by the authors. More research would have to be carried out to capture the United Kingdom’s community pharmacists’ views. However, this study indicated the direction of these pharmacists’ thinking in terms of their involvement in community mental health care. Furthermore, the identified roles corresponded with the recommendations from professional bodies described above (The Working Party of the Council of the Royal Pharmaceutical Society of Great Britain, 1988; United Kingdom Psychiatric Pharmacy Group, 1995) thus confirming validity - either that the roles recommended by professional bodies reflected the pharmacists’ opinions or that the pharmacists agreed with the recommended roles.

Maslen et al. (1996) investigated the level of involvement of community pharmacists in the United Kingdom with patients suffering from schizophrenia. They carried out a postal survey of 534 community pharmacists in the south of England using an originally designed questionnaire. Two hundred and thirty-six questionnaires were analysed. The authors
received a low response of 44% but did not provide any information about non-responders. When asked how often patients or their carers sought information from community pharmacists, 190 (81%) pharmacists stated that they were asked for advice either never or less frequently than once a month. The authors reported that the majority of the respondents were unsure or unaware of the role of community psychiatric nurses (CPNs). The majority of the pharmacists agreed that both pharmacists and CPNs were suitable to advise patients about medication. The pharmacists' judgment about CPNs' suitability can be disputed in view of the fact that they were unaware of the CPNs' roles. The results suggested that pharmacists from independent pharmacies were more likely to know the number of people with schizophrenia regularly visiting their pharmacies for medication supply. The authors also showed that pharmacists were less confident about advising patients with schizophrenia compared with other patient groups with chronic illnesses, for example, asthma, diabetes or hypertension.

The pharmacists from the same sample recorded interactions that they had with or about patients suffering from schizophrenia (Rees et al. 1997). Although diary methods are associated with the problem of inaccuracy of recording, the method appeared the most appropriate in the circumstances of this research project. The different types of recorded interactions were grouped into four domains. The majority of interactions (45%; n=426) were related to counselling about medication, for example side effects (domain A). However, the authors did not include a definition of what was meant by counselling. Slightly over a half of all interactions (52%) were initiated by pharmacists and these interactions were mostly from domains A and B. Domain B represented supply and administration of medicines. Patients were more likely to initiate interactions about symptoms, non-prescribed medication and non-medication related issues (domain C). Domain D represented issues related to the clients' behaviour. The data also suggested that the patients involved with the project were loyal to one pharmacy.

These studies, within which three different approaches were taken to the identification of pharmacists' current and potential roles, continued to concern supply of medication, provision of information, monitoring of patients on their medication and management of medication and interprofessional cooperation.

The text below discusses projects that have involved community pharmacists with mental
health care. Although these studies are descriptive and do not provide robust evidence about the effectiveness of the pharmacists’ involvement, they refer to some important issues that may inform those wishing to set up a community pharmacy mental health service.

Community pharmacists in a study by Hemmings et al. (1991) were paid for providing additional pharmaceutical services to community mental health residential units with 24-hour nursing cover. These included the dispensing of prescriptions, supply of medicines in emergencies or out of hours, keeping patient medication records and weekly visits to the unit by the pharmacist. Access to the clients’ medication records assisted the pharmacist “in monitoring, prescribing, identifying non-compliance, wastage and abuse of medication; in identifying drug interactions; and as background information needed for the development of a clinical role.” The aims of the pharmacist’s weekly visits, were to ensure safe and effective use of medication, and to provide staff and residents with the information they required. At the time of publication, the programme was ongoing and the article only contained a description of the service, no evaluation was presented. The authors concluded that the community pharmacist was “successful in providing two health authority units with a pharmaceutical supply service”, probably meaning that the service was functioning in accordance with how it was designed.

Cochrane et al. (1995) described group sessions held by a hospital-based pharmacist and nurse within a day hospital for people with acute mental health problems. Outpatients in contact with the clinic and their carers were invited to participate at the sessions. The aims of the sessions were to increase patients’ and carers’ understanding of medication and its role. An originally designed 4-item questionnaire was completed by the sessions’ participants at the end of each session. The questionnaire asked the respondents to evaluate the length of the session, level of presentation, clarity of information and whether they learned anything from the sessions, giving only a rough assessment of the patients’ perceptions through these four questions. Fifty-eight (97% response) questionnaires were collected. The majority of patients and carers were satisfied with the sessions and 57 stated that they had learned from the sessions. Consequently, as a result of the sessions, eight people were seen on an individual basis by the pharmacist. Based on their experience, the authors also emphasised the importance and value of teamwork; the nurse dealt with issues not related to medicines and an occupational therapist helped with the organization of the
Kettle et al. (1996) monitored and evaluated the potential roles of a pharmacist within a hospital-based community mental health team. The hospital-based pharmacist worked as a member of the team for two months and the roles included participation at the teams meetings, weekly two-hour sessions on an acute ward and irregular, but at least weekly, visits to continuing care wards where the pharmacist monitored the patients’ medication and their progress. The service was evaluated in terms of acceptance of the pharmacist’s recommendations by clinicians, impact on medicine therapy and significance of the pharmacists’ interventions to the patients’ care. Impact on medicine therapy represented an outcome measure; interventions were followed up and their impacts recorded and assigned to a category, for example: problem resolved, problem defined or improved drug supply. Significance of the pharmacists’ interventions to the patients’ care, as another outcome measure, was judged by a psychiatrist and the trust pharmacy manager. Justification of the composition of judges was not included in the study. After two months of the study, 185 interventions were available for analysis, 142 of which concerned drug treatment, including identification of over-dosage or drug without an indication and contribution to therapy. Out of these, 129 (91%) were actioned by other clinicians. Out of 122 interventions for which an impact on the therapy was available by the end of the study, 95 (77.9%) were categorised under ‘problem resolved or prevented’ and ‘improved therapy or supply’. These four categories of impact were considered to indicate interventions that had benefited patients’ care. Although the team was providing a service for all outpatients, acute admissions and the residents of two wards, only 24 out of the 185 interventions (7.7%) were made specifically for the outpatients. The authors did not comment whether this number of interventions for outpatients was expected. The consultant psychiatrist considered a third of the pharmacists’ interventions to be significant and 48% to be useful, the pharmacy manager rated 54% of interventions significant and 46% useful (n=185). Nevertheless, these results should be considered carefully, since the rating was done by only two professionals and no definition was given of the way these professionals rated the interventions. Furthermore, the pharmacy manager could be biased since s/he was making a judgment on the significance of a colleague’s work. The authors stated that “as the study progressed (over two months) there was an increasing number of
outpatient drug-related problems referred to the pharmacist by non-medical staff". This may be considered as an indicator that the non-medical staff were willing to accept and utilize the pharmacist in this role. The results also suggest that there is scope for pharmacists monitoring people with mental health problems on their medication. The pharmacist was hospital-based and the authors argued that the pharmaceutical care needs of this group could be expected to be provided by community pharmacists. However, they also argued that community pharmacists do not have access to the patient-related information on which their hospital counterparts base their interventions. Nevertheless, it has been suggested elsewhere, that access to patient information for community pharmacists is a resolvable problem (Miller and Corcella, 1972; Evans et al. 1976; Rosen and Holmes, 1978).

Pratt and Dunnett (1985) described a way of involving a pharmacist with mental health care within a hospital but with an obvious implication for community care. A hospital pharmacist cooperated directly on a rehabilitation project in which patients were given responsibility for their own medication while remaining within the hospital, with the aim of reducing the likelihood of medication problems causing a relapse after discharge. The pharmacist worked as a member of the programme team, together with a consultant psychiatrist and a nurse. The role of the team was to set up the scheme and ensure its safe implementation. The scheme was based on medication issues and the pharmacist was fully involved in every stage. This suggested that the other professionals involved in the project acknowledged the pharmacist’s medication expertise. No evaluation of the programme was carried out.

Ewan and Greene (2000) evaluated the information service that was provided by a community pharmacist to the attenders of two mental health resource centres. The consultations were carried out by one community pharmacist on a one-to-one basis. When needed, the pharmacist referred the patient to an appropriate other professional or a telephone advice line. The service was evaluated in terms of the number, length and content of consultations. This was complemented by a self-completed originally designed questionnaire seeking the patients’ (n=30) and staff’s (n=7) opinions about the service. The authors did not aim for any generalisation and the data gave them an indication of the acceptance of the service by the clients and the professionals, although a more robust
evaluation would have to be carried out to obtain a true picture. The service was reported as useful by the 27 patients who answered the evaluation questionnaire (n=30). It was reported by the authors that the one to three hour long sessions each week were well utilised (mean duration of a consultation was 14.9 minutes). The patients’ queries mostly concerned side effects of their medication and the choice of the prescribed medication. It was also identified from the sessions that 18 out of 30 patients were experiencing side effects of their medication. The pharmacist reported that some queries were difficult to answer and the authors suggested that it might be desirable that such a service was overseen by a specialist psychiatric hospital pharmacist.

One of perhaps the most extensive projects evaluating community pharmacists’ involvement in community mental health care in the United Kingdom, was supported by the Department of Health and evaluated by Watson (1997). The project evaluated newly developed services to former in-patients in Liverpool and Nottingham and consisted of a number of smaller schemes. Funds were made available to implement and evaluate various schemes involving community pharmacists with multidisciplinary community mental health care based on the local needs. Variation in the design of the individual schemes, which had different objectives, complicated the possibility for uniform evaluation. Instead, the schemes were evaluated separately and the summary of findings from individual schemes was provided. The author stated that the main purpose of the evaluations was to investigate the stakeholders’ views about whether the implemented services were achieving what they had expected them to achieve. The evaluations were conducted by the means of interviews with stakeholders, participant observations and pharmacists-held records. With regard to the design of the project, evaluation of outcomes could have provided invaluable evidence of the pharmacists’ contributions to community mental health care. However, the authors deliberately decided not to measure the outcomes. They claimed that, firstly none of the stakeholders were interested in such information and, secondly, the character of the project did not allow any standard quantifiable outcome measure. The services were provided to individual clients, a psychiatric day hospital, residential care facilities, community day centres or the pharmacists were linked with GPs. Some pharmacists were provided with a specifically designed training course.
The services to individual clients were provided from community pharmacies on an *ad hoc* basis and ranged from provision of leaflets to contacts with GPs and key workers. There were some instances of pharmacists contributing to the clients' medical treatments. Gaining information about their medication was highly valued by the clients. The service to the day hospital was concerned with tackling the problem of dual sources of prescribing. However, the author did not provide an evaluation of this part of the programme.

Services to residential care settings included advisory work on administration and use of medication, supply of medication and medication reviews in conjunction with GPs. Advisory services and supply of medication were either provided separately, or these two aspects of the service were integrated. It depended on each individual facility whether and to what extent clinical roles were performed. It was reported that, due to the lack of some residential homes' staff awareness of the potential value of the pharmacists' work, the pharmacists' contributions were not always welcomed. Attempts to link the pharmacists with GPs with the aim of performing joint medication reviews for patients in residential homes received little response from the GPs. However, direct linking of individual community pharmacists with GPs resulted in running a clinic for patients that aimed to reduce their use of benzodiazepines, revision of the surgery's formulary for anticonvulsives, drug therapy and home visits to patients with particular medication-related problems.

The day centres were provided with informal advisory and counselling sessions. These were carried out either by pre-arranged appointment between a particular client and the pharmacist, or through regular attendance of the pharmacist at the day centre and were highly valued by the clients and the centres' staff. The author emphasised that this service was not originally requested but the great appreciation with which it was received indicated unidentified need. The pharmacists were reported to be patient and persistent in addressing medication-related problems experienced by the clients. Two sources of dissatisfaction were identified by the staff. These included insufficient feedback from the sessions between the clients and pharmacists and the irregularity of the service that prevented its advertisement among the clients. The former issue would require careful consideration since it involves issues of confidentiality.

The authors emphasised the positive contribution of the project facilitators who coordinated
the schemes. They also stressed the essential role of the funding that enabled the pharmacists to take time away from their pharmacies to carry out the services. It was further concluded that the pharmacists were able to provide large part of the services using basic professional skills, without specific training.

This project also indicated potential problems associated with involving community pharmacists in mental health care related to the fact that the needs in different geographical areas may be different and a standard service would not be applicable. However, all services that have been reported in this study as well as in other literature, have comprised information-related and medication management features. Also, it was indicated in the study by Watson (1997) that the problematic relationships between professionals could possibly hinder implementation of the full scope of the pharmacists' services.

This review suggested, that although there were attempts to involve pharmacists in the community mental health care, there are no comprehensive data available on the effectiveness of these roles. The acceptance of the community pharmacists' services by people with mental health problems and by other professionals has not been established, although the preliminary findings are favourable. The following section summarises the potential constraints that have been identified to the provision of extended services in community mental health care.

**2.2.4 Constraints to the provision of extended roles in mental health care**

Constraints to the possible incorporation of community pharmacists into community mental health care were investigated by Maslen et al. (1996). The study included 236 community pharmacists from one South England regional health authority. The authors, within their structured postal questionnaire (page 71), asked participating pharmacists an open question about their perceived constraints to advice-giving to patients with schizophrenia. Pharmacists stated a range of one to seven constraints. Ninety five percent of respondents gave answers that authors grouped under 'lack of knowledge, training and experience'; unpredictability of patients’ behaviour and questionable reliability of information from patients were included in this category as was the inability to build any experience as there was a low number of clients with the studied diagnosis. About one-third of the respondents
stated reasons that were grouped by authors under ‘poor liaison with other health professionals’ that included inability to access patients’ medical background information. The answers of 31% of pharmacists formed the category ‘practical resource limitations’ such as lack of time, space or privacy or the need for a second pharmacist. The pharmacists’ ‘poor communication skills’ were also mentioned by 30% of pharmacists. In this category, the authors included issues such as fear of contradiction with what had already been said to the patients and saying the ‘wrong thing’ that could result in altering compliance. However, it may be argued that these could be more related to poor liaison with other professionals than the pharmacists’ poor communication skills. The study indicated that the pharmacists’ concerns regarding this specific condition differed to the constraints identified in association with general extended roles (section 2.1.2) and more attention was paid by pharmacists to knowledge and patient-related information than practical problems. The study indicated that there are important issues to overcome if community pharmacists are to formally provide specialised services to people with schizophrenia.

2.2.5 Need for pharmaceutical mental health services
It has been suggested that patients/users’ perceptions should be considered when designing services for them (Caan et al. 1996). Donoghue (1993) indicated the potential need among people with mental health problems for additional services; he concluded that there was a number of problems related to medicines and information about medicines. There are some methodological limitations to this study (page 70). However, due to the lack of other more robust data, this study is presented as an illustration of the potential need for medication-related services. According to the results, patients were lacking information about their medication and they were not aware why they were prescribed their medication. Sixty five percent (n=81) of patients sought information from their friends or other unqualified persons. The data suggested that the majority of patients (86%) never or sometimes discussed their medication with their doctor, although it was unclear whether they attempted to do so and if not, then why. The author stated that the patients were often frustrated when they attempted to gain access to information. However, again, more clarification is needed on this claim to enable the design of a service that would help the
patients to overcome their frustrations. Patients from this study also reported experiencing practical problems with medicine management such as the lack of availability of medicines from pharmacies, absence of dose instructions and lack of advice. A higher number of studies had been published that reported on implementation of pharmacists in mental health care than studies that have investigated the need for such a service.

2.3 Summary of the introduction

A review of the available literature has demonstrated the development of community mental health care but has highlighted that this is a long and difficult process. Fifty years after the first voices for change were raised, the situation remains dynamic. The effectiveness of the services provided in the community has not yet been established with problems often being attributed to the multiprofessional character of current mental health care provision. The available literature suggests that although the clinical state of community mental health care patients is not better than that of patients in institutions, neither is their mental health state worse. Importantly also, people with mental health problems reported that they prefer to stay and be treated in their own homes, in the community. Difficulties associated with the provision of mental health care in the community that were identified included a substantial number of people without contact with services, undetected clinical needs of those under the care of community mental health services and a lack of drug-related information for clients.

The potential roles for community pharmacists in the care for people with mental health problems were identified more than 10 years ago. However, formal routine involvement of community pharmacists does not take place although encouraged by the RPSGB. In line with the overall pharmacy profession’s strategy towards patient-oriented services, some projects in the field of mental health have been carried out. Due to the limited number of these projects and the limited evaluations that have been undertaken, the benefits of the community pharmacists’ roles in mental health care remain unclear. The lack of research investigating the roles of community pharmacists in CMHC may be attributed to several issues. The studies in community pharmaceutical mental health care have either involved local enthusiastic pharmacists or have resulted in low responses. This could be explained by pharmacists’ low interest in this field of health care despite its proclaimed importance.
by the government and the pharmacy profession. People with mental health problems may be perceived as a ‘difficult’ group of patients in relation to the perceptions that the mental state of those suffering mental health problems may be unstable and their behaviour unpredictable and potentially disturbing. Furthermore, their conditions and treatments are perceived as being of a complex nature and thus not easy to deal with. Difficulties related to research involving people with mental health problems have been discussed in the literature as were the constraints that prevented community pharmacists from providing extended services to this patient group. Also, it may be difficult to position community pharmacists within the already complex network of care. Finally, a range of different services offered on an ad hoc basis may mean that uniform measure of outcomes would be difficult to perform or would require an impractical length of time before sufficient data were gathered. The research project presented in this thesis aimed to overcome these issues and to contribute to the evidence concerned with community pharmaceutical mental health services by evaluating a service from community pharmacists to people with mental health problems.
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Chapter 3 Research proposal

The scope of the research project presented in this thesis encompasses an investigation of a pharmaceutical mental health service provided by community pharmacists - the Link-Pharmacist Scheme (LPS). This chapter first describes the setting for the research project and the background to its commission, followed by the aims and definitions of the LPS and its evaluation.

3.1 The structure of community mental health care in East London and The City Health Authority - the setting for the research project

The project presented in this thesis was initiated and financially supported by East London and The City Health Authority (ELCHA) and was carried out in its area. ELCHA faces a potentially high demand for mental health services due to the socio-economic composition of its population. ELCHA’s Tower Hamlets, City and Hackney and Newham localities were reported to be the three most deprived districts among London’s NHS Trusts, among Britain’s top seven boroughs with the highest unemployment numbers (Johnson et al. 1997b) and with high proportions of people from ethnic minorities: 42% Newham’s population were stated to be of an ethnic minority origin, Hackney has the highest proportion of black population in Britain (22%) and Tower Hamlets has a large Bangladeshi population (Balarajan, 1992). It has been shown that high proportions of single parents, people living alone, unemployed, from ethnic minorities and people aged 16-39 years contributed to suicide rates and/or psychiatric hospital admissions in City and Hackney, Tower Hamlets and Newham areas (Mental Health Focus Group of North Thames Regional Health Authority, 1994).

The structure of mental health services in ELCHA will now be described. Each of the ELCHA’s three localities (City and Hackney, Newham and Tower Hamlets) has four CMHTs. The first CMHTs established in the area were, in 1994, the health service only team in Bow & Poplar in Tower Hamlets and four integrated teams in Hackney. An ‘integrated’ CMHT means that health and social services work under one management, as stipulated in the Community Care Act in 1990 (figure 1.1). Other teams, three in Tower Hamlets and all four in Newham, developed gradually by 1997. Currently, all teams in Hackney and Newham are integrated. Each locality is managed separately and every team
Methods

within a single locality is managed independently of the others. As a consequence, differences exist in the composition of professionals within the individual teams. Each locality is linked with a hospital: Homerton Hospital for Hackney, St Clement’s Hospital in Tower Hamlets and East Ham Memorial Hospital in Newham. Usually two to three consultant psychiatrists for each team are based in these hospitals (Mackie, 1996; Wilkinson et al. 1997). In 1996-1997 each team had about 200 clients under their care at any one time and 50-60% of these clients had severe mental illness (Mackie, 1996). The process of establishment of CMHTs in ELCHA corresponds with the overall situation in London and the rest of the United Kingdom, and tends to be characterised by continuous change and development (Mackie, 1996; Wilkinson et al. 1997).

3.2 Initiation of the project and East London and The City Health Authority’s involvement

In order to improve their mental health services, ELCHA wanted a community pharmacy-based service for people with mental health problems (PMHP) to be implemented and evaluated in their area. To support their perception of the need for the service, before the research project was commissioned, the health authority carried out a local study investigating the problems with medication experienced by people with mental health problems (Duggan, 1996). The study included 179 clients who answered a structured questionnaire developed by the researchers. The sample was non-random, the clients were identified and approached by the 14 participating community pharmacists. The potential bias associated with such a design should be considered when reviewing the results. Within the questionnaire, the respondents were asked whether they were given enough information about their medicines. About half of the respondents were happy with the amount of drug-related information that they had received. One hundred and twenty-two respondents (68%) agreed that more information would make them feel more confident about taking their medicines. The majority of the respondents (77%) stated that they would use an information service if it was available. The service was specified as a service that “would provide you with information”. The data showed that clients taking antipsychotic medication were less satisfied with the drug-related information that they had received compared to those taking other medication.
Consequently, a group discussion was held between community pharmacists and community psychiatric nurses on the community pharmacists' potential roles in the ELCHA mental health care and possible ways of cooperation between the pharmacists and CMHTs, in order to address the problems identified in the study. (Any written records of these discussions were not available.) A number of community pharmacists that participated in the ELCHA's study and the group discussion were those who later accepted the role of a 'link-pharmacist' in the research project described in this thesis.

Based on these activities and data, the health authority suggested a framework for the intended service. The way in which this framework was adopted in the design of the new drug-information and management community pharmaceutical mental health service and the evaluation of this service are the subject of this thesis.
3.3 The research aim

The aim of the research project presented in this thesis was to design, implement and evaluate the Link-Pharmacist Scheme (LPS).

3.4 Link-Pharmacist Scheme

The LPS represents an extended information and medication management service from community pharmacists to people with mental health problems provided through liaison with community mental health teams (CMHTs). The preliminary framework suggested by ELCHA was detailed, implemented and evaluated by the researcher (DE). The LPS is defined below.

3.4.1 Aims of the Link-Pharmacist Scheme

The aims of the LPS were to:

1) increase the accessibility and availability of drug-related information to people with mental health problems by providing them with access to a link-community pharmacist,

2) enable the link-pharmacists to actively contribute to the medical treatment and general health of people with mental health problems,

3) enhance the link-pharmacists’ roles within community mental health care and their cooperation with the involved professionals.

3.4.2 Definition of the Link-Pharmacist Scheme

Based on the ELCHA’s framework and the available literature, the structure of the LPS and the main processes within the LPS were defined for each participant as described below.

The following terms are used to refer to the participants:

- **Link-pharmacist (LP)** - all participating community pharmacists.
- **Client (CL)** - a person with mental health problems under the care of a CMHT.
- **Key worker (KW)** - a professional within a CMHT supervising the client’s care.
3.4.2.1 Link-pharmacists

Each link-pharmacist had at least one client under their care. The LPs were provided with clients’ basic personal and medical information. The LPs agreed to the provision of the following activities:

a) to offer a client-specific drug-related information service, advice and support to the clients and their key workers/CMHTs,
b) to keep their clients’ updated medication histories,
c) to continuously review clients’ drug therapy and so to check for any potential interactions, side-effects or other medication-related problems,
d) to review the clients’ general health and inform the key workers of any change,
e) to update the key workers and consultant psychiatrists about the frequency and nature of contacts with the clients on a weekly basis.

The LPs were encouraged to

a) discuss individual cases with the clients’ key workers,
b) offer any other form of support to their clients, where possible and as agreed between the link-pharmacists, the clients and the key workers,
c) be in close contact with their clients’ key workers and cooperate with CMHTs via the key workers.

The link-pharmacists were asked to direct all communication with other professionals via the client’s key worker, so that it could be recorded. The LPs were also informed of the contact details of the client’s GP, psychiatrist and any significant others, if needed for an emergency.

The service was offered from community pharmacies, unless otherwise agreed between the link-pharmacists, clients and key workers.

3.4.2.2 Clients

The clients chose their link-pharmacist from a list of participating community pharmacists. They were invited to use their link-pharmacist as a source of drug-related information. The clients gave consent for the link-pharmacists to have access to their medical information so that the LPs could review their medication and provide them with relevant, specific information and to help optimize their medical treatment. No appointments were necessary
for the clients to meet with their link-pharmacist, unless otherwise suggested by a link-pharmacist. No specifications were made as to how often the clients could or should visit their link-pharmacist.

3.4.2.3 Key workers
The key workers were invited to use the link-pharmacists as a source of drug-related information. The key workers were asked to liaise with the link-pharmacists and other mental health and social care professionals to ensure that, when appropriate, the link-pharmacists’ recommendations concerning the clients were followed up.

3.5 The research questions
From the proposed aims of the LPS the researcher identified the following research questions.

1. How was the LPS used by the clients and key workers/CMHTs?
2. What were the views of the structure and delivery of the LPS from the clients’, link-pharmacists’ and key workers’ perspectives?
3. What effect did the LPS have on the clients’ perceptions of the level of drug-related information they received?
4. What influence did the LPS have on the link-pharmacist - key worker/CMHT cooperation and communication?
5. What effect did the LPS have on the LPs’ role within community mental health care?
6. What recommendations could be made for the future planning of community pharmaceutical mental health services?

More specific objectives of the LPS research project are presented in table 4.6, page 98 in context with the research methods used to address them.
Chapter 4 Methods

The project presented in this thesis comprised an evaluation of the LPS and a Context study. The aim of the evaluation of the LPS was to investigate structure, process and outcome of this novel primary health care service, and characteristics of implementation from the perspectives of all participants: link-pharmacists, clients and key workers. The Context study aimed to explore differences in the level of involvement in and perceptions of CMHC between link-pharmacists and non-LPS pharmacists. This was a local, single-investigator project with non-random samples of the involved populations. Given the range of perspectives and dimensions involved in this research project and the constraints of the study conditions, the application of multiple triangulation was deemed to be the most appropriate design.

The traditions of triangulation as a research approach are based in the social sciences (Webb et al. 1966; Denzin, 1970; Patton, 1987; Bryman, 1988; Fielding and Fielding, 1990; Mason, 1996; Bowling, 1997) and triangulation is now increasingly used in pharmacy practice research (Smith, 1999a). Originally, triangulation in research was referred to as the use of different instruments to address the same variable(s) with the aim to validate the findings (Webb et al. 1966). This definition of triangulation evolved to include all stages of the research process and research design. Triangulation may now include involvement of more than one investigator, application of different theoretical frameworks, different methods and/or different sources of data. Multiple triangulation may include all these methods of triangulation with the purpose of ensuring accuracy of the findings and confirming the results and conclusions (Denzin, 1970). Fielding and Fielding (1990) wrote:

"The role of triangulation is to increase the researcher's confidence so that findings may be better imparted to the audience and to lessen recourse to the assertion of privileged insight."

Methods and data source triangulations are used to fulfil two main purposes: convergent validation and data completeness. Convergent validation, i.e the original and traditional purpose for triangulation, is based on the assumption that using more than one research method to answer the researched phenomenon will ensure the collection of invariable data since such an approach will compensate for the weaknesses of individual methods if used alone. Enhancing completeness of the data implies that different methods and data sources
are used to broaden the knowledge about the studied phenomenon (Bowling, 1997; Smith, 1999a).

Although the application of triangulation has obvious merit, it also has potential complications. Often, methods and data triangulations involve combining qualitative and quantitative research approaches within one study. However, major discussions exist about whether it is at all possible to combine these two approaches since they are based on different underlying philosophies. The use of qualitative methodology is based on phenomenology and emphasises that reality is formed in a social context and has to be studied in this social context. Quantitative methods are based on positivism that uses principles from the natural sciences to investigate social phenomena. The positivist approach aims to study social reality from the researcher’s perspective, with certain standard circumstances, isolated from its social context; however, the focus of phenomenology is to study social reality from the participants’ perspective, in a naturalistic manner, without manipulating the social context. Deriving knowledge and evidence through qualitative methods is usually an inductive process, while quantitative methods lead the researcher to adopt deductive reasoning. Although from these perspectives the two approaches are in opposition, their informed and appropriate use may enhance the research by the very differences in the kind of evidence that these approaches offer (Mason, 1996): qualitative methods may be used to produce rich, insightful data about unknown and complex issues and quantitative methods to obtain objective, quantifiable and reliable data that provide facts concerning human behaviour.

The analytical strategies used in studies that apply triangulation will be determined by the individual methods used. If qualitative and quantitative methods are applied, the data sets will be analysed separately and the findings linked to fulfill the purpose of triangulation. When the methods from within one approach are applied, the data sets may be combined prior to the analysis and analysed as one set of data. Attention must be paid to the justification of comparing or linking data if they are based on the two opposite paradigms of positivism and phenomenology. Similarly, different methods within one of the approaches may use different units of analysis and the data may not be directly comparable. A decision must be made about how such issues would be addressed (Mason, 1996; Smith, 1999a).
Despite the potential dilemmas that triangulation may pose, its application is being encouraged. Various methods of triangulation were applied in the research project presented in this thesis. Data sources and methods were triangulated with the aim to enhance validity of the evaluation and to enhance the comprehensiveness of the data (table 4.7, page 100).

The following text will first explain the development of the research project design, followed by an explanation of the applied methods and their triangulations.

4.1 The development of the research design

4.1.1 Original design

Before recruitment of the clients could begin, it was necessary to obtain approvals from the ethics committee and from consultant psychiatrists cooperating with each participating CMHT. These preliminary procedures resulted in a review of and modifications to the design of the research project. The following text first presents the ‘original design’ of the evaluation of the LPS followed by a description of the preliminary procedures. Consequently, a description is given of the development of the ‘final design’ used to collect the data for the research project presented in this thesis.

The original design for the evaluation of the LPS was planned to use the methods summarised in table 4.1. The design would allow a longitudinal comparison of the data before and after the introduction of the LPS and identification of the significance of the link-pharmacists’ interventions for the clients’ health by an expert panel.

<table>
<thead>
<tr>
<th>Table 4.1: The original design for the evaluation of the LPS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Respondent</strong></td>
</tr>
<tr>
<td>Part1</td>
</tr>
<tr>
<td><em>Pre-intervention phase</em></td>
</tr>
<tr>
<td><em>Intervention phase</em></td>
</tr>
<tr>
<td><em>Post-intervention phase</em></td>
</tr>
<tr>
<td>Part2</td>
</tr>
</tbody>
</table>

* community psychiatric nurse
4.1.2 Ethics committee approval
Gaining the ethics committee approval took four months, during which all proceedings involving the clients were delayed.

4.1.3 Consultant psychiatrists’ approvals
All consultant psychiatrists involved in the participating CMHTs were approached by letter explaining the research project and asking the psychiatrist’s permission for including clients under their care. This process resulted in extended negotiations with consultant psychiatrists that led to a further delay of eight months in the recruitment and data collection. The main concerns raised by the consultants were related to the services and information that would be provided by the link-pharmacists and also the research project design, and contributed to the decision to review and alter the design of the project as discussed below. The consultant psychiatrists’ concerns were as follows.

Link-pharmacists’ roles
• The consultant psychiatrists suggested that there should be close communication between the link-pharmacists and CMHTs; it was suggested that rather than providing information directly to the clients, the link-pharmacists should discuss the matter with the relevant CMHTs. The psychiatrists suggested that the LPs should provide weekly log sheets to the relevant CMHT and the responsible medical officer to keep them informed about the LPs’ contacts with the clients. The form is described later in section 4.7.3.

• It was originally intended that the link-pharmacists would interview the clients using the LUNSERS, a scale for measuring the side effects of neuroleptic medication (Day et al. 1995). The consultant psychiatrists requested that the link-pharmacists did not use the scale; they considered the monitoring of side effects unsuitable for community pharmacists.

Research project design
• It was originally planned to administer a structured questionnaire to the clients twice and to interview them twice, before and after the introduction of the LPS. It was judged by the consultant psychiatrists that to do this within the planned 15 months period of the project was too demanding for the clients and it was strongly recommended to modify this design feature.
The research project design was revised twice in the course of the research project. The first revision took place before data collection started as a consequence of the delay obtaining the ethics committee approval and the discussions with the consultant psychiatrists, and resulted in modifications 'A' and 'B'. The second revision took place later in the course of implementation of the LPS as a logical consequence of the emergent data and resulted in modification 'C' and the decision to carry out an additional study. These modifications are described in more detail below.

4.1.4 Modifications of the research design

Modification A
The planned interviewing and administration of structured questionnaires in the pre- and post-intervention phases were replaced with structured questionnaires administered only during the pre-intervention phase and semi-structured interviews during the post-intervention phase. The reasons were as follows:

a) the modifications to the design would ease the completion of the data collection by the clients while not jeopardising the aims of the evaluation,
b) the extended process of gaining ethics committee approval and approvals from consultant psychiatrists delayed the project and shortened the time available in the pre-intervention phase.

Modification B
The original design considered only community psychiatric nurses (CPNs) as participants of the project. It was suggested by the CMHTs that all key workers should be involved as

a) it would broaden the number of clients available for recruitment,
b) the teams wished to keep their teamwork approach to all their activities and therefore it was required that the whole team was involved.

Consequently, all key workers within participating CMHTs were invited to participate. Instead of the words 'community psychiatric nurse' or the abbreviated CPN, the term 'key worker' was used within the research proposal and all documents.

Modification C
The number of recruited clients and the number of interventions made during the course of the intervention phase of Part 1 suggested that there would be few link-pharmacists'
interventions that could be presented to an expert panel for evaluation. Therefore, the aim and design of Part 2 was modified, to establish the relevance and significance of the LPS structural and processual characteristics identified from the Part 1 post-intervention interview data.

**Addition to the original design**

The reviewed design planned to obtain structured questionnaire data in the pre-intervention phase. It was decided that the data obtained from the link-pharmacists’ pre-intervention questionnaires could be complemented by more in-depth interview data on the link-pharmacists’ perspectives of community mental health care. Such data would inform future service providers about the current level of link-pharmacists’ involvement in, as well as their perceptions of, community mental health care. However, it was possible that the LPs’ answers in the questionnaire and the interviews could be biased due to their involvement in the preliminary planning of the LPS. Therefore, it was further decided that it would be informative and would enhance reliability of the data, to compare the data obtained from the self-selected sample of the link-pharmacists with data from a random sample of community pharmacists in the same area (non-LPS pharmacists). This would inform future service providers of the overall ‘climate’ within the ELCHA community pharmacists’ population in relation to community mental health care provision, and would identify issues that would have to be addressed in relation to the pharmacists’ involvement in this care, thus providing a context for the provision of the LPS. The Context study was designed in order to obtain such data.
4.2 Final design

The design that was used to evaluate the LPS and to obtain data for the Context study, is described in table 4.2. The ‘questionnaire’ refers to structured instruments that were either self-completed by the respondents (key workers, link-pharmacists, non-LPS pharmacists) or took the form of a structured interview (clients). The ‘interview’ refers to a semi-structured interview. These and all other instruments are further explained later in section 4.6.

| Table 4.2: The final design for the evaluation of the LPS and the Context study |
|-------------------------|-----------------------------|---------------------|-----------------------------|
| **Part1**               | **Evaluation of the LPS**   | **Context study**   |
| Phase                   | Clients                     | Key workers         | Link-Pharmacists            | Non-LPS PHs*               |
| **Pre-intervention**    | Questionnaire               | Questionnaire       | Questionnaire**             | Interview                  |
| **Intervention**        | Calendar                    | Logbook             | Logbook                     | Questionnaire**            |
| **Post-intervention**   | Interview                   | Interview           | Interview                   | Interview                  |
| **Part2**               | Clients                     | Key workers         | Pharmacists                 | Three consensus development panels |

*non-LPS pharmacists
**the same instrument

4.2.1 Evaluation of the LPS

The evaluation of the LPS consisted of Part1 and Part2 - Consensus development panels. Part1 was divided into three phases: pre-intervention, intervention and post-intervention. The pre-intervention phase represented the period before the clients were linked with the link-pharmacists. Baseline data on the provision of services from community pharmacists to people with mental health problems/clients and on the level of interprofessional cooperation between the link-pharmacists and community mental health care professionals were collected. The intervention phase was the period when the clients received the LPS services; the data on the utilization of the LPS were collected. The post-intervention phase represented the period when the participants’ perceptions of the LPS were collected. A combination of quantitative (structured questionnaires/interviews, logbooks, calendars) and
qualitative (semi-structured interviews) research methods was used with the involvement of three groups of respondents, including the link-pharmacists, clients and key workers, to collect comprehensive data on the service structure, processes and outcomes. The data were analysed within cases, for example within the sample of the link-pharmacists, and across cases, i.e. comparing the data obtained from the link-pharmacists, key workers and clients. Part1 methods are shown in table 4.3.

Table 4.3: Summary of methods used in Part1 of the research project

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Phase/ Method</th>
<th>Pre-intervention phase</th>
<th>Intervention phase</th>
<th>Post-intervention phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link-pharmacist</td>
<td>structured questionnaire logbook semi-structured interview</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key worker</td>
<td>structured questionnaire logbook semi-structured interview</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client</td>
<td>structured interview calendars semi-structured interview</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part2 - Consensus development panels
From the Part1 post-intervention one-to-one interview data the researcher identified a number of structural and processual issues relevant for the future planning of the community pharmacists’ involvement in community mental health care. However, it was realised that the validity and reliability of these issues could be questioned if they were identified solely by the researcher. To justify the validity and reliability as well as significance of these issues, Part2 of the project was conducted to obtain the participants’ consensus of the importance of the identified issues. Validation of the data was the main purpose of Part2 - Consensus development panels. Three consensus development panels were conducted as shown in table 4.4.

Table 4.4: Summary of methods used in Part2 of the research project

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link-pharmacist</td>
<td>consensus development panel 1 consensus development panel 2 consensus development panel 3</td>
</tr>
<tr>
<td>Key worker</td>
<td>consensus development panel 1</td>
</tr>
<tr>
<td>Client</td>
<td>consensus development panel 1</td>
</tr>
</tbody>
</table>
4.2.2 The Context study

The Context study sought to identify whether there were differences in the level of current involvement, knowledge and perceptions about CMHC between the participating (link-pharmacists) and non-participating (non-LPS pharmacists) community pharmacists practising in the same area (ELCHA). A combination of qualitative and quantitative methods was used, as described in table 4.5.

Table 4.5: Summary of methods used in the Context study

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link-pharmacist</td>
<td>(results from the Part 1 - pre-intervention questionnaire)</td>
</tr>
<tr>
<td></td>
<td>semi-structured interview</td>
</tr>
<tr>
<td>Non-LPS pharmacist</td>
<td>structured questionnaire*</td>
</tr>
<tr>
<td></td>
<td>semi-structured interview</td>
</tr>
</tbody>
</table>

* questionnaire identical with Part 1 - link-pharmacists

Table 4.6 lists the objectives of the LPS evaluation and the Context study in relation to the research methods and the aspects of the service that they measured (not applicable for the Context study objectives).
<table>
<thead>
<tr>
<th>Table 4.6: The research project's objectives and methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative methods</strong></td>
</tr>
<tr>
<td><strong>Structured questionnaires</strong></td>
</tr>
<tr>
<td>i. To identify the communication between the LPs and the key workers/CMHTs before the introduction of the scheme in terms of the frequency, reasons for and ways of contacts.</td>
</tr>
<tr>
<td>ii. To identify the nature of the clients' contacts with community pharmacists before the introduction of the LPS.</td>
</tr>
<tr>
<td>iii. To explore the pharmacists' recent involvement in community mental health care in terms of contacts with people with mental health problems and community mental health care professionals.</td>
</tr>
<tr>
<td><strong>Logbooks</strong></td>
</tr>
<tr>
<td>iv. To measure the contacts between the LPs and the clients in terms of the frequency and content of contacts.</td>
</tr>
<tr>
<td>v. To measure the number of suggestions made by the LP to the key worker/CMHT concerning the clients' medication and general health.</td>
</tr>
<tr>
<td>vi. To measure the number of suggestions followed-up.</td>
</tr>
<tr>
<td>vii. To identify and quantify the outcomes of the suggestions for the clients.</td>
</tr>
<tr>
<td>viii. To measure the contacts between the LPs and the key workers/CMHTs in terms of the frequency, content and ways of communicating after the introduction of the scheme.</td>
</tr>
<tr>
<td><strong>Qualitative methods</strong></td>
</tr>
<tr>
<td><strong>Semi-structured interviews</strong></td>
</tr>
<tr>
<td>ix. To explore the perspectives of the clients, the link-pharmacists and the key workers about implementation of the LPS.</td>
</tr>
<tr>
<td>x. To explore the perspectives of the clients, the link-pharmacists and the key workers about the design of the LPS.</td>
</tr>
<tr>
<td>xi. To explore the clients', LPs' and key workers' perspectives of the effects of the LPS for themselves.</td>
</tr>
<tr>
<td>xii. To explore the clients' perspectives of the drug-related information received.</td>
</tr>
<tr>
<td>xiii. To explore the LPs' and key workers' perspectives of the influence of the LPS on their working relationship.</td>
</tr>
<tr>
<td>xiv. To explore the LPs' and the key workers' perspectives of the effect of interprofessional communication on clients' care and health.</td>
</tr>
<tr>
<td>xvi. To explore the link-pharmacists' perspectives of their professional roles in community mental health care after the introduction of the scheme.</td>
</tr>
<tr>
<td>xvii. To explore the clients' perspectives of the community pharmacists' roles in community mental health care.</td>
</tr>
<tr>
<td>xvi. To explore the pharmacists' awareness of community mental health care services.</td>
</tr>
<tr>
<td>xviii. To explore the pharmacists' views of the potential opportunities for and constraints to their involvement in community mental health care.</td>
</tr>
<tr>
<td><strong>Consensus development panels</strong></td>
</tr>
<tr>
<td>xix. To gain consensus between the link-pharmacists, the key-workers and the clients on the issues involving clients identified during implementation of the LPS.</td>
</tr>
<tr>
<td>xx. To gain consensus between the link-pharmacists and the key-workers on the interprofessional issues identified during implementation of the LPS.</td>
</tr>
<tr>
<td>xxi. To gain consensus between the link-pharmacists on the pharmacist-related issues identified during implementation of the LPS.</td>
</tr>
</tbody>
</table>
4.3 Triangulation

Pharmacy practice and social pharmacy research, unlike any other pharmaceutical discipline, uses the principles of social sciences for its research inquiry with designs that are nearer to naturalistic inquiries of social science than traditional experimental designs. As discussed earlier, triangulation of research approaches and methods is desirable in social science research, within which standard circumstances of experimental designs are not always feasible. Multiple triangulation was used during the evaluation of the LPS and the Context study in order to gather a wider understanding of the studied aspects, for example through combining the data obtained from logbooks with that obtained from the semi-structured interviews, and to validate the data collected, for example comparing the data obtained from the link-pharmacists’ logbooks with that obtained through analysis of the clients’ calendars. Obtaining data from the three different types of respondents served both purposes. Including the three groups of participants in the data collection aimed to increase the credibility of the data and to avoid bias that could occur if only one type of respondent was involved. The three groups of respondents provided three different perspectives, those of the link-pharmacists as the service providers, the clients as the service users and the key workers as part service users (when seeking drug-related information from link-pharmacists) and part service providers (when communicating link-pharmacists’ recommendations). The key workers were directly involved with the clients’ care. This position allowed the key workers to give an inside view of the scheme and its impact on the clients and also to observe the success of link-pharmacists as service providers. Within this thesis, data were combined before analysis or analysed separately and the findings combined. A method of conceptual analysis was applied that sought identification of relationships and explanations of the concepts that emerged from the data.

Table 4.7 summarises the data and methods that were triangulated, the research approaches and types of triangulations that this represents, processes of data analysis and purposes for triangulations.
Table 4.7: Methods of triangulation applied to evaluate the LPS

<table>
<thead>
<tr>
<th>Compared methods or data</th>
<th>Triangulation</th>
<th>Research approach</th>
<th>Data analysis</th>
<th>Purpose of triangulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-intervention questionnaires and logbooks</td>
<td>data findings</td>
<td>quantitative</td>
<td>separate</td>
<td>Data enhancement: Identification of an influence of the LPS implementation on the services provided to PMHP from community pharmacies and the level of communication between the involved professionals</td>
</tr>
<tr>
<td>Data from three different types of respondents</td>
<td>data source</td>
<td>quantitative, qualitative (used separately)</td>
<td>separate</td>
<td>Validation and data enhancement: Obtaining three different perspectives on all dimensions of the LPS evaluation</td>
</tr>
<tr>
<td>LPs’ logbooks and LPs’ computer records</td>
<td>methods</td>
<td>quantitative</td>
<td>data sets for each type of professionals combined before analysis</td>
<td>Validation and data enhancement: Validating the accuracy of the records and obtaining data that were not recorded in the logbooks</td>
</tr>
<tr>
<td>KWs’ logbooks and KWs’ written case notes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logbooks LPs and KWs and client-held calendars</td>
<td>data source</td>
<td>quantitative</td>
<td>separate and combined</td>
<td>Validation: Validating the accuracy of the logbook records</td>
</tr>
<tr>
<td>Post-intervention interviews and logbooks</td>
<td>methods</td>
<td>quantitative/qualitative (used in combination)</td>
<td>separate</td>
<td>Validation: Confirmation of the content of the logbook records</td>
</tr>
<tr>
<td>Post-intervention interviews and logbooks</td>
<td></td>
<td></td>
<td></td>
<td>Data enhancement: The interviews provided participants’ perceptions of the contacts recorded in the logbooks, provided illustrations for the logbook data and assisted with interpretation of the logbook findings</td>
</tr>
<tr>
<td>Part I data and consensus development panels</td>
<td>methods</td>
<td>quantitative/qualitative (used in combination)</td>
<td>separate</td>
<td>Validation: Validating the individuals’ perspective and the data analysis through the perspective of a group</td>
</tr>
<tr>
<td>Context study structured questionnaires and semi-structured interviews</td>
<td>methods</td>
<td>quantitative/qualitative (used in combination)</td>
<td>separate</td>
<td>Data enhancement: Qualitative interviews provided the participants perspectives in relation to the data provided in the structured questionnaires</td>
</tr>
<tr>
<td>LPs and non-LPS pharmacists data</td>
<td>data source</td>
<td>quantitative, qualitative (used separately)</td>
<td>separate</td>
<td>Data enhancement: Obtaining different perspectives</td>
</tr>
</tbody>
</table>
The following section provides a brief introduction to some of the methods within the quantitative and qualitative research approaches that were applied during the LPS research project presented in this thesis.

4.4 Quantitative methods

4.4.1 Structured questionnaires and interviews

If the purpose of the research is to gather data on pre-defined variables, and frequencies or associations between these variables are in question, structured tools may be used. These usually consist of standardised questions or batteries of questions or scales and can have the form of a structured questionnaire or a structured interview. The structured questionnaires are self-completed by the respondents. During structured interviews the interviewer administers the questions from the structured questionnaire, exactly following the designed schedule, including pre-defined answers, and records the respondents' answers. In both cases the questions are presented to the respondents in a uniform manner and do not provide an opportunity for any additional inquiring. The philosophy behind the structured tools is that the questions can be constructed so that they can be understood by all the respondents and thus all the subjects answer the same questions. Therefore, the findings can be representative of the sample or, if the sample is representative, of the population. The questions can be closed, inquiring about topics that are well explored and suitable simple codes can be derived, or open if the answers are unknown or complex. The closed questions will be more frequent in a typical structured tool. Structured tools are helpful if there is a need to obtain information about large samples in a short period of time. However, this is at the expense of the depth of the data obtained, which is limited by the use of predefined answers.

It is advantageous that, during structured interviews, the interviewer may clarify any ambiguous questions. On the other hand, structured interview data may be subject to interviewer bias. Also, the research designs that involve interviewers are more demanding of resources, while responses to self-completion questionnaires may be found to be low.

During the research project presented in this thesis, the originally designed structured questionnaires were applied at the pre-intervention phase of Part I and during the Context study to estimate the level of the ELCHA community pharmacists' involvement in
community mental health care from the perspectives of the link-pharmacists, key workers and clients (before the introduction of the LPS), and non-LPS pharmacists (in general). The pharmacists' and the key workers' questionnaires were self-completing, the clients' questionnaire was administered by the researcher in the form of a structured interview.

4.4.2 Logbooks and calendars

Logbooks and calendars are examples of diary methods. Diary techniques are used to record the respondents' activities over a certain period of time. It is suggested to use diaries only if no other methods can be applied to gather the data. The use of diaries is justified if timing of the recorded activities is required, for example hourly recording, if the studied activities are unobservable or if the purpose is to obtain the sum of certain activities by the same respondent over a period of a week or longer. Furthermore, the diaries are appropriate if the activities under investigation are unlikely to be remembered over a period of time and have to be recorded immediately.

The reliability of data recorded in diaries can be problematic as the respondents may change the investigated behaviour in response to it being recorded. Also, motivation of the respondents to complete the diaries can be difficult to sustain. Therefore, research designs using diaries should allow for missing data due to non-completion.

During the research project presented in this thesis, the logbooks were used to monitor number and content of contacts between the link-pharmacists, clients and key workers throughout the intervention phase. The logbooks were used by the link-pharmacists and key workers. The calendars were included to monitor the frequency of the clients' visits to the link-pharmacist, as a check of the reliability of the link-pharmacists' logbook records and also as a reminder for the clients about their participation in the project.

4.5 Qualitative methods

4.5.1 Semi-structured interviews

If exploratory research is conducted and in-depth data are required, semi-structured or unstructured interviews may be used. Interview schedules for semi-structured interviews are used to guide the interview and usually consist of the main question or questions, complemented with prompting and probing questions. Such schedules are administered by the interviewer. Unlike structured interviews, semi and unstructured interviews allow
flexibility for exploration. The reliability of semi-structured and unstructured interviews may be subject to interviewer bias during data collection as well as analysis. During the LPS evaluation, the semi-structured interviews were used to explore the participants’ perceptions of various aspects of the LPS and its implementation. During the Context study, the semi-structured interviews were used to explore the link-pharmacists’ and non-LPS pharmacists’ perceptions of community mental health care and their involvement in this care. The researcher used originally designed interview schedules. The schedules were used as a guideline only, to ensure that all required topics were covered. The exact wording and sequence of questions were modified during each interview as required to maintain a good flow during the interview.

### 4.5.2 Consensus methods

Consensus methods in health research are used if there is insufficient evidence either due to the required evidence not being explicit in the available data or a lack of relevant data. Typically, the aim of consensus methods is to develop guidelines or standards through a consensus reached by an expert, lay or a mixed (expert and lay) group of respondents. The Delphi technique, the nominal group technique (NGT) and consensus development panel or conference (CDP) are all consensus methods. The Delphi technique aims to measure the consensus while NGT and CDP are used to develop and measure consensus. These methods are increasingly being used in health care research although it is emphasised that their weaknesses, such as participant selection bias, should be considered in order not to overestimate the reliability and validity of these methods. The purpose of the three consensus development panels within the LPS evaluation was to develop consensus of the involved participants (link-pharmacists, key workers and clients) concerning the important features of a newly developed service, with the aim to apply the identified features to the future development of the service.

### 4.6 Instruments

The instruments used within the described methods during the individual parts and phases of the LPS evaluation and the Context study are summarised in the table 4.8 and the subsequent text. All Part 1 - pre-intervention questionnaires were subject to modifications in association with the development of the project design described in section 4.1.4. Only final versions of the questionnaires are presented in table 4.8.
Table 4.8: Instruments used to gather the data for the evaluation of the LPS and the Context study

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Instrument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 1</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Link-pharmacist | Structured questionnaire (final version) | 28 items, 12 pages  
Services provided to PMHP**  
Drug-related information currently provided to PMHP  
Communication/cooperation with other professionals  
Training needs  
Background information |
| Key worker | Structured questionnaire (final version) | 26 items, 10 pages  
Communication and cooperation with CPs*  
Services provided to clients by CPs  
Background information |
| Client | Structured questionnaire (final version) | 9 items, 1 page  
CP as a source of information, services provided from a CP |
| **Intervention phase** | | |
| Link-pharmacist | Logbook | Client form - client’s personal details, other persons in care  
Client medication record - medication history, current medication  
Pharmacist-client consultation record  
Interprofessional communication record |
| Key worker | Logbook | Client form - client’s name, LP’s, physicians’ details  
Interprofessional communication record |
| Client | Calendar | Computer generated three-monthly calendars printed in colour on an A4 paper |
| **Post-intervention phase** | | |
| Link-pharmacist | Semi-structured interview schedule | Perceptions of the LPS, suggestions for improvements and related issues such as perceptions of community pharmacists, provision of information to clients etc. |
| Key worker | Semi-structured interview schedule | | |
| Client | Semi-structured interview schedule | | |
| **Part 2 - Consensus development panels** | | |
| CLs, KWs LPs | Table of topics | 44 topics |
| KWs, LPs | Table of topics | 51 topics |
| LPs | Table of topics | 33 topics |
| **Context study** | | |
| Non-LPS pharmacist | Structured questionnaire | As in Part 1 - pre-intervention - link-pharmacists |
| Link-pharmacist | Semi-structured interview schedule | Perceptions of community mental health care |
| **Other** | | |
| Key worker | Recruitment sheet | Sex, age, ethnicity, reasons for refusal to participate for approached clients |

* community pharmacist, ** people with mental health problems
Structured questionnaires/interview
The structured questionnaires (appendices 1, 2 and 3) were piloted. The majority of questions were closed, offering pre-coded answers with, where relevant, blank spaces for descriptions or comments. Some questions were open. The questionnaires were delivered to the respondents by the researcher. The questionnaires were returned by the respondents by post (key workers, non-LPS pharmacists) or collected by the researcher (link-pharmacists). The questionnaires were analysed with the support of Statistical Package for Social Sciences (SPSS) version 7.5.1 for Windows (1996).

Logbooks

Logbook - Link-pharmacist (appendix 4)
The link-pharmacists’ logbook comprised of:
Client form - clients’ medical information, names, addresses and contact numbers of other health care professionals and significant others involved with the clients’ care,
Client medication record - medication history and space for continuous records of changed, discontinued or added medication,
Pharmacist-client consultation record - sheets for recording consultations with a client,
Interprofessional communication record - sheets for recording communication with other health care professionals.
The logbook for each client was sent by post to the link-pharmacist after the client’s recruitment. Logbooks were collected during the consensus development panels (Part2) or soon after by the researcher.

Logbook - Key worker (appendix 5)
The key workers’ logbook included:
Client form - client’s name, link-pharmacist’s, psychiatrist’s and GPs’ details,
Interprofessional communication record - sheets for recording communication with the link-pharmacist and other professionals.
The logbook for each recruited client was given to the key worker after a successful joint recruitment meeting with the client (page 113). The logbooks were collected by the researcher after the consensus development panels (Part2). Both key workers and link-
pharmacists were informed about the collection of the logbooks approximately one week in advance and were asked to have the logbooks prepared for collection. The logbooks were analysed with the support of SPSS version 7.5.1 for Windows (1996).

**Calendars**
The three-monthly calendars were computer-generated and printed in colour on A4 paper (appendix 6). The first calendar was sent with the ‘welcome letter’ (page 115) shortly after the clients’ recruitment, further calendars were sent by post every three months thereafter. A letter of explanation was sent with each calendar. The clients were asked to tick the calendar on each day that they visited their link-pharmacist. The clients were asked to keep all calendars until the next meeting with the researcher. The calendars were collected by the researcher at the end of the post-intervention interview. The logbooks were analysed with the support of SPSS version 7.5.1 for Windows (1996).

**Semi-structured interview schedules**
The semi-structured interview schedules are presented in appendices 7, 8 and 9. The interviews were, with the respondents’ consent, tape-recorded, otherwise detailed notes were made by the researcher. The interviews were analysed with the support of the qualitative analysis software QSR NUD*IST version 4.0 for Windows (1998).

**Tables of topics**
Three tables of topics (appendices 10, 11 and 12) were used as a basis for each consensus development panel discussion (Part2) and were created by the researcher based on the analysis of Part1, post-intervention semi-structured interviews.

**Recruitment sheet**
The recruitment sheet was designed to gather information about the clients who declined to participate (appendix 13). The sheet was completed by the key workers and aimed to collect information about sex, age, ethnicity and reasons for the non-participation of all clients who were approached and refused participation.

The following sections present the methodological issues exclusive to each part of the evaluation of the LPS and the Context study.
4.7 Methods - Part 1

4.7.1 Pilot work

The aim of the pilot work for Part 1 was to test the face validity of the pre-intervention structured questionnaires and logbooks.

4.7.1.1 Piloting of the pre-intervention structured questionnaires

The piloting of the questionnaires was carried out in two waves. During the first wave of pilot work, original versions of each of the three (link-pharmacists, key workers, clients) pre-intervention questionnaires were piloted. Due to the subsequent modifications in the research design, a second wave of pilot work was conducted, focussing on the final versions which were created through deleting unsuitable items and modification of the wording of some items of the original versions.

Piloting of the original versions of the structured questionnaire

After a peer review that led to initial amendments, the original versions of the questionnaires were tested with respondents from the respective respondent groups: link-pharmacists, key workers and clients.

Piloting of the original versions of the structured questionnaire for the link-pharmacists

To pilot the original version of the link-pharmacists’ questionnaire the researcher approached eight community pharmacists not participating in the LPS that were suggested by a pharmaceutical adviser from ELCHA, and two community pharmacists in South London. The aim of the project was explained during the initial telephone conversation. The pilot work included completing the link-pharmacists’ questionnaire and revising and commenting on the ‘Logbook - Link-pharmacist’. The questionnaires were sent together with a cover letter, general information about the project, a copy of the link-pharmacists’ logbook and a pre-paid envelope.

Eight of the ten pharmacists agreed to participate and were provided with the questionnaires. Four questionnaires and one logbook were returned within four months, after the non-responders were reminded by telephone. The pharmacists’ answers were reviewed and the questionnaires altered accordingly. Questionnaires were distributed to five research pharmacists for final revisions. Further modifications were made based on their comments.
Methods

Chapter 4 - Methods

Piloting of the original versions of the structured questionnaire for community psychiatric nurses/key workers

• CMHT-A

A CMHT from the ELCHA area not participating in the project was approached. The CPNs were asked to complete the ‘Questionnaire - CPN’ and to review the ‘Questionnaire - Client’. They were asked to provide any comments on the content and the length of the clients’ questionnaire. Six copies of the CPNs’ questionnaire were given to the team which equalled the number of CPNs in the team, together with six clients’ questionnaires. The team was reminded twice by telephone. This resulted in one ‘Questionnaire - CPN’ being returned and no clients’ questionnaires.

• CMHT-B

Another CMHT from the ELCHA area not participating in the main project was contacted. The team was provided with six copies of the CPNs’ questionnaire. Five questionnaires were returned. The CPNs’ answers were reviewed and minor modifications made to the questionnaire.

Piloting of the original versions of the structured questionnaire for the clients

The questionnaire was piloted by interviewing eight clients of a non-participating ELCHA CMHT after their appointment with a CPN in a depot clinic.

Piloting of the final versions of the structured questionnaire

Following modifications to the design of the project, the questionnaires were revised, adjusted accordingly and piloted.

Piloting of the final version of the structured questionnaire for link-pharmacists

The final version of the structured questionnaire for the link-pharmacists was tested with two community pharmacists. One of the pharmacists suggested modifications in the wording of some items and some of the pre-coded responses, which were implemented.

Piloting of the final version of the structured questionnaire for key workers

To pilot the final version of the key workers’ questionnaire, the researcher approached a
team in the ELCHA area, not participating in the main project to pilot the final version of the questionnaire. Ten questionnaires with a cover letter, outline of the project and pre-paid envelope were provided to the team. Two questionnaires were returned within a week and another two within the next fortnight after the team was reminded. Minor amendments were made to the wording of one item and some of the introductory paragraphs.

**Piloting of the final version of the structured questionnaire for clients**

The final version of the clients' questionnaire was piloted with six attenders at a depot clinic in cooperation with a non-participating CMHT. The researcher found the questionnaire easy to administer. It was intended that the questionnaire would be used during the joint recruitment meeting that was itself demanding of the clients' concentration and, therefore, it was the researcher's aim to create an instrument that would be easy for the clients to complete. The final version of the questionnaire fulfilled this aim. There were no further amendments made to the questionnaire after this pilot work.

**4.7.1.2 Logbooks - piloting and procedures to ensure correct use**

The researcher intended to pilot the 'Logbook - Link-pharmacist' and the 'Logbook - Key worker' jointly with the questionnaires. The link-pharmacists' logbook was sent, together with the questionnaires, to all community pharmacists participating in the pilot work. All CPNs from the first piloting group (CMHT A) were supplied with the 'Logbook - Key worker'. One community pharmacist returned the logbook with his comments and none of the CPNs. Therefore, additional pilot work was arranged.

**Logbook - Link-pharmacist - piloting and procedures to ensure correct use**

The logbook was presented to one community pharmacist and two research pharmacists. They were also provided with a fictitious client case and asked to complete the logbook and then to comment on it. The layout and wording of the logbook were modified according to the pharmacists' suggestions.

The final version was presented to the participating community pharmacists on their training day. They were asked to fill in an example logbook using the same fictitious case and to give any comments. Generally, there were no problems identified with completing
the logbook. A page designed specifically for recording the first consultation with the client was added in response to the link-pharmacists’ comments. The three link-pharmacists that were not present on the training day were visited by the researcher and the use of the logbook was explained.

The researcher also produced a completed specimen of the logbook using the fictitious case. The specimen was sent to the link-pharmacists with the first logbook (the logbook sent to the link-pharmacists for their first client). A flowchart was produced later and distributed to the link-pharmacists to assist them when completing the logbook (figure 8.2, page 194).

**Logbook - Key worker - piloting and procedures to ensure correct use**

A CMHT from an ELCHA area not participating in the project was contacted in order to pilot the 'Logbook - Key worker'. The project was presented and piloting was explained during the team’s meeting. Ten envelopes comprising the logbook, a fictitious case, a letter of explanation, and a pre-paid envelope were provided to the team. Two weeks later the team was reminded about the piloting exercise. This resulted in one logbook been returned. The researcher was informed that two key workers reviewed the logbook together. The key workers did not express any problem with using the logbook. The only concern was the length of the ‘Interprofessional communication record’ sheet. It was perceived by the researcher that shortening the sheet would not allow enough space to record all details of the communication and the ‘Interprofessional communication record’ was left divided into two pages.
4.7.2 Participants for Part 1: sampling and recruitment procedures

The process of recruiting the participants for the research project is described below. The three groups of participants - link-pharmacists, key workers and clients were all self-selected and are described in Table 4.9.

<table>
<thead>
<tr>
<th>Population</th>
<th>Link-pharmacists</th>
<th>Key workers</th>
<th>Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Community pharmacists</td>
<td>Members of CMHTs working as community key workers</td>
<td>People with mental health problems under the care of community mental health teams</td>
</tr>
<tr>
<td>Sampling frame</td>
<td>Community pharmacists of the ELCHA area with an interest in mental healthcare as identified by the HA</td>
<td>61 key workers of the four participating ELCHA CMHTs</td>
<td>Clients of the four ELCHA CMHTs</td>
</tr>
<tr>
<td>Sample determined by:</td>
<td>11 ELCHA community pharmacists</td>
<td>23 key workers from the four CMHTs</td>
<td>27 clients from the four ELCHA CMHTs</td>
</tr>
<tr>
<td></td>
<td>- willingness to participate</td>
<td>- inclusion criterion - availability of clients for the project - willingness to participate</td>
<td>- location of the link-pharmacists - inclusion and exclusion criteria - key workers' willingness to participate - willingness to participate</td>
</tr>
</tbody>
</table>

The samples of the key workers and clients were determined by the location of the link-pharmacists.

4.7.2.1 Sampling and recruitment procedure for the link-pharmacists

ELCHA pharmaceutical advisors outlined the health authority’s intentions to investigate the possibility of providing a pharmaceutical service to PMHP with a group of community pharmacists who gathered regularly as a ‘working group’ and invited them to participate. The list of 10 interested pharmacists was provided to the researcher. The number of pharmacists (10) was perceived manageable and suitable for the research project.

The researcher visited each of the ten pharmacists from the ELCHA list at their pharmacies to discuss the project and the pharmacist’s participation. All ten pharmacists confirmed their participation.
4.7.2.2 Sampling and recruitment procedures for community mental health teams/key workers

The location of the pharmacies of the ten recruited link-pharmacists determined which community mental health teams were approached for participation. The teams had to satisfy the following inclusion criterion:
- the place of residence of the clients under the CMHT’s care was required to be a convenient distance from a link-pharmacy.

The CMHTs served clients living in a known geographical area and it was therefore possible to identify the teams that met the criterion. All key workers in the recruited CMHTs were asked to recruit clients. Only those that recruited clients participated in the project.

Twelve CMHTs operated in the ELCHA area. As it was possible to identify the areas that the teams served only through direct communication with the teams, all 12 CMHTs were approached. The teams were approached initially by a letter to the team manager/team leader asking permission for the researcher to present the project to the team. The letter comprised the link-pharmacists’ addresses to allow the teams to decide whether they were eligible to participate. Consequently, the researcher was invited to present the project to the nine teams that identified themselves as eligible for participation.

4.7.2.3 Sampling and recruitment procedures for clients

The inclusion criteria for the clients’ participation were:
- diagnosed mental illness,
- clients being cared for by the CMHT service,
- aged over 18 years.

The exclusion criteria were:
- clients with recent episodes of aggressive or hostile behaviour (safety reasons),
- clients prescribed clozapine (required continuous contact with a hospital),
- clients with confusion or dementia were to be included or excluded, based on the key workers’ own discretion,
- clients who were unable to complete the interview or the questionnaire due to English language difficulties.
Three different methods of client recruitment were used:

- recruitment via the clients’ key workers,
- recruitment by the researcher from a depot clinic,
- recruitment by a link-pharmacist.

**Recruitment of clients via key workers**

During recruitment of clients by the key workers, the procedures were as follows. Clients were provided with the ‘client information leaflet’ (appendix 14) and invited to take part in the project by the key worker. For those clients who were interested to participate, the key worker arranged a joint recruitment meeting with the client, key worker and researcher. The joint recruitment meeting was part of the recruitment process but also had other important functions. The researcher explained the project using the ‘client information leaflet’ to the clients. The clients were encouraged to ask any questions in relation to the project. Issues of confidentiality and withdrawing consent for the project were discussed. If the clients decided to participate, they were asked to sign the written consent form (appendix 15) confirming their participation in the project and to choose a link-pharmacist from the list of all participating community pharmacists. It was also decided during the joint recruitment meeting, how the initial visit to the link-pharmacist would be made. Three ways were suggested:

- the client to make the visit by him or herself or with a carer,
- the client to be accompanied by his or her key worker,
- the client to be accompanied by the researcher.

The researcher interviewed the client using the ‘*Questionnaire - Client*’. At the end of the joint recruitment meeting, the key workers were given ‘*Questionnaire - Key worker*’ for completion and the ‘*Logbook - Key worker*’ to be kept for the recruited client. On any subsequent joint recruitment meeting they were given another logbook for the newly recruited client.

At the beginning of recruitment period, the key workers were provided with the ‘Recruitment sheet’ (appendix 13) and asked to record the sex, age, ethnicity and reasons
for non-participation for all clients whom they approached and who refused participation.

Recruitment of clients by the researcher from a depot clinic
During recruitment of clients by the researcher from a depot clinic, the researcher was introduced to clients waiting for an appointment with their CPN. The researcher provided the clients with the ‘client information leaflet’ and the list of link-pharmacists. She explained the project to the clients and invited them to participate. The clients who were interested were invited to a separate room and the procedures of the joint recruitment meeting were followed. In addition, the researcher recorded clients’ personal details (address, telephone number), list of current medication and the name of their key worker. Consequently, the researcher contacted the clients’ key workers, informed them about the clients’ decisions to participate and invited them to the project.

Recruitment of clients by a link-pharmacist
One of the link-pharmacists created a list of five persons, with their consent, whom he had identified as having mental health problems based on his computerised records. The link-pharmacist also provided information about the GP surgery where the clients were receiving care and pre-arranged a meeting for the researcher with one of the GPs. They agreed that the surgery would provide, where available, details of the clients’ CMHTs. The recruitment of clients took place in the pharmacy and was carried out by the researcher the same way as in a depot clinic.

4.7.3 Procedures after recruitment
The procedures that followed a successful recruitment of a client are described below.

Provision of client-related information and forms to the link-pharmacists
After each successful recruitment of a client, the researcher gathered the client’s general and medical information from the clients’ key workers and GPs. The ‘Client form’ and ‘Medication history list’ sheets from the link-pharmacists’ logbook were used to collect the information from the key workers. The GPs were approached by a letter requesting a list of clients’ current medication. The information was sent to the link-pharmacist together
Methods

with the client’s logbook. The link-pharmacists were also provided with ‘Contact with the clients’ sheets (appendix 16). This sheet was designed to be used by the link-pharmacists to report their contacts with the clients and to be sent regularly to the clients’ key worker and the psychiatrist. The LPs were asked to complete and post the sheets every week, even if the link-pharmacists had not been in contact with the clients. If the link-pharmacists made any form of contact with their clients during the week, the sheet should be accompanied with a copy of the ‘Pharmacist - client consultation record’. This would enable both professionals - the key worker and the psychiatrist - to be aware of all issues discussed between the link-pharmacists and the clients.

**General practitioners**
With the clients’ consent, their GPs were informed about their participation in the project by letter. This included an explanation of the project, the client’s key worker’s name and the link-pharmacist’s name, address and telephone number. The GP was also asked for information concerning the client’s medication and provided with a prepaid envelope to send back the information. The ‘client information leaflet’ was also included in the letter to the GP.

**Psychiatrists**
Recruited clients’ psychiatrists were contacted by letter informing them about the client’s participation. The clients’ link-pharmacist’s details were provided to the psychiatrists.

‘Welcome letter’
The clients were sent a letter welcoming them to the project and confirming their link-pharmacist’s details (appendix 17).

**Calendars**
Together with the ‘welcome letter’, the clients were sent the first three-months calendar.

The following text describes the process of data collection during each phase of Part1.
4.7.4 Pre-intervention phase

Pre-intervention data collection - link-pharmacists

The 'Questionnaire - Link-pharmacist' was delivered to and collected from the individual link-pharmacists personally by the researcher, allowing the link-pharmacists to ask any questions concerning the questionnaire. A one-week period was specified for the link-pharmacists to complete the questionnaire. On the day of delivering the questionnaire, a date was arranged for the researcher to collect the questionnaire.

When all the questionnaires were completed, a training day for the link-pharmacists took place that marked the beginning of the recruitment of the clients.

Training day

The link-pharmacists' training needs were identified in advance using the pre-intervention questionnaire. The training day (appendix 18) was organised by the researcher and comprised lectures on

- medicines currently used in psychiatry (by a hospital pharmacist),
- pharmacology of these medicines (a pharmacologist),
- general communication skills (a senior lecturer in pharmacy practice),
- communication skills when dealing with people with mental health problems (a CPN),

presentations on

- the current structure of community mental health care in the ELCHA area,
- the detailed definition of the LPS,
- the method of completion of the logbooks followed by test completion of a copy of the logbook by each link-pharmacist,
- the timetable of the project (all by the researcher), and

an informal meeting between the link-pharmacists and members of CMHTs.

The link-pharmacists were provided with handouts from the lectures and reference articles on psychiatric medication offered by the presenting hospital pharmacist. At the end of the training day the link-pharmacists completed an evaluation form.
Methods

Recruitment of clients
The key workers of the participating CMHTs were informed that the clients may be recruited and enter the scheme as soon as the link-pharmacists’ training day was completed. The key workers were informed of the date of the training day and asked to start the recruitment.

Pre-intervention data collection - clients
The ‘Questionnaire - Client’ was administered to the clients during the joint recruitment meeting, after the clients signed the written consent form.

Pre-intervention data collection - key workers
Each key worker that recruited a client was given the ‘Questionnaire - Key worker’ at the end of the joint recruitment meeting and asked to return it using the pre-paid envelope provided. The key workers were informed that it would be helpful if they completed the questionnaire within one week.

4.7.5 Intervention phase
During the intervention phase the LPs provided the activities described in the description of the LPS in section 3.4.2, page 86, to their clients.

The intervention phase began at different times for individual participants, depending on when the clients were recruited to the LPS. The intervention phase for the clients began when they completed the joint recruitment meeting. The link-pharmacists entered the intervention phase after the first client was recruited for them. The key workers joined the intervention phase with their first recruited client.

During the intervention, the data were collected by the link-pharmacists and key workers in their respective logbooks and by the clients in the calendars.

4.7.6 Post-intervention phase
The intervention phase for individual participants started at various times. Consequently, the beginning of the post-intervention phase took place at different times for different participants, as described below. The participants were interviewed using the semi-structured interview schedules.
**Post-intervention data collection - Clients**

It was decided by the researcher that the clients would be interviewed if they either had five contacts with their link-pharmacist or they had been six months in the intervention phase (six months after signing the written consent). This was perceived to offer an acceptable number of contacts between the clients and link-pharmacists for analysis and was achievable in the time available. The interviews were arranged via the clients’ key workers who agreed the interview date with the clients and then informed the researcher. The interviews took place in the clients’ home, day centres or CMHT premises. The interviews were either tape-recorded or the researcher recorded the answers verbatim.

**Post-intervention data collection - Key workers**

The key workers were interviewed after all their clients had completed the post-intervention interview. The date was agreed in advance. The interviews were tape-recorded.

**Post-intervention data collection - Link-pharmacists**

The link-pharmacists were interviewed after all their clients had been interviewed. It was explained that the interview would take about an hour and that it was necessary that the interviews were carried out without interruption. The interviews were tape-recorded.

Methodological issues relevant to Part 2 of the evaluation of the LPS are now presented.
4.8 Methods - Part 2 - Consensus development panels

Three consensus development panels were carried out:

**Clients and Interprofessional Panel**

The Clients and Interprofessional Panel comprised representatives of clients, key workers and link-pharmacists. Issues identified during Part 1 post-intervention interviews that concerned clients were discussed.

**Interprofessional Panel**

The Interprofessional Panel consisted of the link-pharmacists and key workers. It discussed interprofessional issues and any other pertinent issues where this group may have had different and/or additional views to those generated by the Clients and Interprofessional Panel.

**Pharmacist Panel**

Only the link-pharmacists participated in the Pharmacist Panel. The group dealt with the issues that were only pharmacist-related. The group discussed options for, and constraints to the potential involvement of community pharmacists in community mental health care based on the link-pharmacists’ experience with the LPS and from their perspectives.

4.8.1 Procedures before the panels

**Generation of tables of topics**

The topics identified from the Part 1 post-intervention semi-structured interviews were formed into three tables of topics used as a basis for the three panels’ discussions. The procedure described below was used to generate the tables of topics.

1) All the Part 1 post-intervention interview data were analysed and any issues that were identified as relating to the provision of care by a community pharmacist to people with mental health problems and therefore relevant for the planning of future community pharmacists’ involvement in community mental health care provision were extracted for use in the panel discussions.

2) The issues were converted into one-sentence topics.

3) The topics were grouped by the researcher into three different lists according to the topics’ relevance to the individual panels. Although many topics would have been
relevant for more than one panel, they were assigned to the most appropriate one: the panels were set up so that representatives of all three types of participants were able to contribute to the discussion. This setup allowed the relevant points of view from all three types of participants (clients, key workers, link-pharmacists) to be gathered but not to repeat the topics in two or more panels. Only topics that were believed to bring additional information if discussed in both the Clients and Interprofessional Panel and the Interprofessional Panel, were included in both tables of topics.

4) The lists of topics were converted into three tables. An example is in table 4.10, complete tables are in appendices 10, 11 and 12.

Table 4.10: An example of a table of topics for consensus development panels

<table>
<thead>
<tr>
<th>Topic</th>
<th>Important</th>
<th>Useful</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The service and the individual professionals' roles to be well defined.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 The pharmacist to have access to all important client-related information.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use of the tables of topics

Next to the individual statements, the tables contained three columns expressing different levels of importance using the terms ‘Important’, ‘Useful’ and ‘Unimportant’. The aim was for the participants to place each topic into one agreed category. They were asked first to do so individually in advance of the panel meeting, based on their personal views. This would enable the researcher to identify whether the views after the group discussion differed from the participants’ original opinions. Consequently, during the panels, each topic’s final categorisation was based on the joint discussion.

The key for applying the terms by the participants was as follows:

‘Important’ - a topic to be a necessary component of a future service similar to the LPS and/or a component of the service definition

‘Useful’ - useful but not necessary for the provision of the service

‘Unimportant’ - not needed for the provision of the service

For example:

By placing topic 1 from the table 4.10 into the category ‘Important’, the participants would
express that it would be necessary that the service and the individual professionals' roles were well defined. By placing topic 2 (table 4.10) in the ‘Useful’ category, they would express that having access to all important clients' information would be useful for the provision of the service but not necessary. By placing the topic 2 into ‘Unimportant’, the participants would be stating, that pharmacists do not need to have access to important clients' information.

Some words within the tables of topics were underlined. The purpose was to emphasise the focus of the topic and avoid misunderstandings and digression from the issue in question. For example:

Information about medication to be provided to the client and/or the client’s family/carers on the onset of the illness.

(Topic 32, CIP)

The word ‘onset’ is underlined to emphasise that the panel should discuss relevance of provision of drug-related information at this particular point of the client’s treatment, not provision of information concerning medication or provision of information to the clients and their families.

Provision of the tables of topics to the participants
The tables of topics were sent to the relevant panel participants in advance of the panels by post, allowing them time for individual categorising.

4.8.2 Participants and recruitment procedures
The participants of the three panels were chosen by the researcher from the lists of all participants of Part1 of the research project. The choice was based on the criteria explained below.

4.8.2.1 Participants of the Clients and Interprofessional Panel
Sample of the clients and key workers for the Clients and Interprofessional Panel
The researcher reviewed a list of all clients participating in Part1 of the research project.
Four clients were identified as likely participants of the Clients and Interprofessional Panel, based on the researcher’s perception of their ability to cope in an environment of group discussion with health care professionals. The clients were invited and asked to respond using a ‘Reply Card’. One client experienced a relapse of his illness and was unable to participate. Three clients agreed to their participation. The letter of explanation informed the clients that their link-pharmacist may or may not be present. They did not express any comments or concerns about this. Within the explanatory letter, the clients were also asked about their preference regarding their own key worker’s presence in the panel. The aim was to allow the clients to be accompanied by a familiar person. All three clients wished for their key workers to be present. The three key workers were invited and they all agreed to participate. The key workers were invited by telephone. Following their agreement, they were sent a letter of explanation.

**Sample of the link-pharmacists for the Clients and Interprofessional Panel**

The link-pharmacists for the Clients and Interprofessional Panel were chosen in conjunction with the Interprofessional Panel as they took place on the same day. The three link-pharmacists (the number equal to the number of invited clients and key workers) of those identified for participation in the Interprofessional Panel with the greatest experience with the LPS (highest number of contacts with clients and/or key workers) and/or who were willing to attend, were invited to the Clients and Interprofessional Panel. The link-pharmacists were invited by telephone and consequently were sent a letter of explanation.

**4.8.2.2 Participants of the Interprofessional Panel**

The researcher aimed to include five link-pharmacists and five key workers in the Interprofessional Panel in order to have a manageable group, and a similar number of members as the other two panels (Clients and Interprofessional Panel n=9, Pharmacist Panel n=9).

**Sample of the link-pharmacists for the Interprofessional Panel**

All the link-pharmacists were informed about the panel over the telephone and asked whether they would be interested to participate. All were willing to attend. Two of them had concerns about whether they would be able to arrange locum pharmacists for their pharmacies but did not refuse. Therefore, the researcher considered a full list of nine link-
pharmacists as a sampling frame. The link-pharmacists with greater experience with the LPS, based upon a number of clients and known contacts or attempted contacts with the key workers/CMHTs, were invited.

**Sample of the key workers for the Interprofessional Panel**

A list of 19 available participating key workers (four were no longer available) was used as a sampling frame. Two key workers (associated with the participating clients) were offered participation and accepted in both the Clients and Interprofessional Panel, and the Interprofessional Panel. Therefore, three more key workers had to be identified for the Interprofessional Panel. The key workers were chosen according to the following criteria:

- one key worker from each participating CMHT,
- key worker's experience within the LPS (known contacts or attempted contacts with a link-pharmacist, number of their clients participating in the LPS).

The chosen key workers were invited by telephone. Following their agreement, the key workers were sent a letter of explanation.

**4.8.2.3 Participants of the Pharmacist Panel**

All the link-pharmacists participating in Part 1 of the research project (except the one link-pharmacist who was not linked with any clients: LP10) were invited to the Pharmacist Panel (n=9). The invitation was made over the telephone at the same time as the invitation to the Clients and Interprofessional, and Interprofessional Panels. The link-pharmacists were informed that the Pharmacist Panel would take place after the closing hours of their pharmacies, to avoid any problems with arranging locum pharmacists. All the link-pharmacists agreed to participate.

The invitations to the panels had been made three months in advance of the panels meetings to accommodate all participants’ diaries. All the participants were sent a written reminder approximately one month before the panels and a second reminder accompanied by the tables of topics a week before the panel. All the participants were also contacted by telephone a few days before the panels took place and their participation was confirmed.
4.8.3 Schedule of the panels

Each consensus development panel session had four main parts.

1) Opening
The session was opened by the researcher who explained the purpose of the panel, its importance and schedule.

2) Individual categorising
Time was available at the beginning of each panel to complete the table of topics if the participants had not yet done so. The primary individual categorization allowed the participants to think about individual topics and their reasons for assigning the topics to a certain category, before they discussed it within the group. The completed tables were collected at the end of the session to identify if the opinions of individual participants had differed from the opinions of the group.

3) Discussions and consensus
The main body of the sessions comprised discussion with the aim of obtaining consensus. An overhead projector was used to display the table of topics throughout the sessions. Individual topics were read out loud by the researcher. The panel was asked to consider and discuss each topic. The panel was informed that they could alter the wording of the topics to best express their opinion. When the panel had agreed on each topic’s wording and the level of importance, this was marked on an overhead slide by the researcher. With the participants’ consents, all sessions were tape-recorded.

4) Closing
The researcher made a short summary at the end of each session thanking the participants for their efforts.

The Clients and Interprofessional Panel, and the Interprofessional Panel were carried out on the same day. The day most suitable to carry out the panels was discussed with the link-pharmacists while inviting them to the panels (the pharmacists were asked as they were the least flexible in this matter). Based on the suggestion of one of the link-pharmacists, the Pharmacist Panel was carried out two weeks after the Clients and Interprofessional Panel, and the Interprofessional Panel.
4.8.4 Roles of the researcher

The researcher had the role of panel leader. This role included

- to open and close the sessions,
- to lead the participants through the topics,
- to mark their decisions on an overhead slide,
- to explain the meaning of the topics should the discussion digress from the original meaning,
- to facilitate the discussion, if required,
- to add any arguments from the one-to-one interviews that had not been mentioned by the participants of the consensus development panels.

Sometimes, the group’s opinion differed completely from those mentioned during the one-to-one interviews, or the panel did not raise arguments reported during the one-to-one interviews. In such situations the researcher would introduce these to the debate through an explanation of why the topic was included in the topic list. Therefore, all different known opinions would be considered.

Finally, the methodological issues related to the Context study are presented below.
4.9 Methods - The Context study

4.9.1 The aims of the Context study

The aims of the Context study were:

1) To compare the current involvement in community mental health care between the link-pharmacists, as reported by them during the pre-intervention phase in Part 1 of the research project, and a random sample of non-participating pharmacists from the same health authority area (non-LPS pharmacists).

2) To explore and compare the perspectives of community mental health care between the link-pharmacists and the non-LPS pharmacists.

4.9.2 The objectives of the Context study

The Context study had four objectives:

i) To explore the pharmacists’ recent involvement in community mental health care in terms of contacts with people with mental health problems and community mental health care professionals.

ii) To explore the pharmacists’ awareness of community mental health care services.

iii) To explore the pharmacists’ views of the potential opportunities for and constraints to their involvement in community mental health care.

iv) To compare the data between the link- and non-LPS pharmacists.

4.9.3 Methods

The methods used during the Context study are summarised in the table 4.11.

<table>
<thead>
<tr>
<th>Context study</th>
<th>Link-pharmacists</th>
<th>Non-LPS pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaire</td>
<td>(as for the pre-intervention phase of Part 1 of the</td>
<td>Questionnaire</td>
</tr>
<tr>
<td></td>
<td>research project)</td>
<td>(as for the pre-intervention phase of Part 1 of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the research project)</td>
</tr>
<tr>
<td>Interview</td>
<td></td>
<td>Interview</td>
</tr>
</tbody>
</table>

The pharmacists completed the structured questionnaires and were interviewed. The same structured questionnaire was used with the non-LPS pharmacists as that used during the
pre-intervention phase of Part 1 of the research project with the link-pharmacists as described in section 4.6. The questionnaire was delivered to the non-LPS pharmacists by the researcher. The non-LPS pharmacists were asked to complete the questionnaire within one week, and to return it by post using the pre-paid envelope provided. The data obtained during the pre-intervention phase of Part 1 were re-used within the Context study as the quantitative part of the data for the link-pharmacists.

The interview schedule for the semi-structured interviews with the link- and non-LPS pharmacists comprised two questions:

1. From the perspective of a community pharmacist, your perspective, what are your views of community mental health care in this locality?
2. What is your involvement in community mental health care?

All pharmacists were asked these two questions and their answers were further explored using prompts and probes. The interviews took place in pharmacies during pharmacists' normal working hours. This arrangement limited the time available to perform the interviews but was the most suitable arrangement for the respondents. After the pharmacists consented, the interviews were tape-recorded, and their transcripts coded and analysed. The semi-structured interviews with the non-LPS pharmacists were conducted by an assistant researcher (CA) who was trained by the principal researcher (DE). All the coding and analyses of the data were performed by the principal researcher herself.

4.9.3.1 Participants for the Context study and sampling procedures

Link-pharmacists
The link-pharmacists participating in the Context study were those who had self-identified for the LPS as described in section 4.7.2.

Non-LPS pharmacists
The Context study was designed to involve a random sample of twenty non-LPS pharmacists. This number was identified as appropriate for the aims of the Context study. A list of all community pharmacies in the ELCHA area was used as a sampling population.
Methods

All link-pharmacists were excluded from the list as well as, in line with Part I, all multiple chain pharmacies. The rest of the list served as a sampling frame. To identify the sample, the researcher blindly picked a card from a pile of cards with names and addresses of community pharmacies within the sampling frame. A pharmacist in each drawn pharmacy was approached by telephone. It was explained to the pharmacists that the researchers sought community pharmacists’ views of primary care and it was not emphasised that the focus was mental health. It was perceived that such information could bias the data if the respondents, for example, decided to review the topic. If the pharmacists agreed to participate, an interview date was scheduled. If they declined participation, their reasons were recorded and another pharmacy was randomly selected with the declining pharmacist’s pharmacy details removed from the sampling frame. This procedure was repeated until twenty community pharmacists agreed to participate.

The final part of this chapter provides an overview of the data handling before the analyses and describes the applied approaches to the analyses.
4.10 Processing the data and approaches to data analysis

4.10.1 Ensuring the accuracy of the analysed data

The following procedures were undertaken to prepare the data for analysis and to minimise errors within the data, prior to its analysis.

The missing data from the questionnaires were, when possible, obtained by approaching the individual respondents. Also, unclear answers to open questions were clarified with the respondents. The open questions were reviewed and coded. The number of cases in each set of data allowed repeated application of the created coding frames to the data sets to ensure that the coding frames were accurate. All codes from closed and open questions were transferred to a coding transfer sheet and then to SPSS. Range and internal consistency checks were carried out to identify inaccuracies of the entered data. Due to the low number of cases in each set of data, such a revision was carried out for all cases. The logbook data were processed the same way.

To minimise error while transcribing the semi-structured interviews, the tape-records were compared to the completed transcripts. The transcripts were imported into QSR NUD*IST. The consensus development panels' decisions as well as the individually categorised tables of topics were transferred from the hand-written tables of topics into SPSS. Accuracy of the transfer was checked against the original tables.

4.10.2 Approaches to analyses

Since the approaches to the data collection were fundamentally different, so were approaches to the data analysis.

The purpose of the structured questionnaires used during the pre-intervention phase of Part 1 of the research project and the Context study was to describe the issues studied. Therefore, simple univariate (frequencies) and bivariate (cross-tabulations) statistics were calculated to investigate the individual aspects of the description. Coded textual data were included in the analysis. The same approach was applied to analysis of the logbook data. The logbooks were analysed using a record and a client as a unit of analysis. The dates from the calendars were entered into SPSS and cross-tabulated with the dates in the link-pharmacists' logbooks.

Two different approaches were adopted to the content analysis of the qualitative data.
Firstly, the individual interview transcripts were searched for parts of the text relevant to the pre-defined categories such as ‘Assessment of the link-pharmacist’, ‘Potential roles for community pharmacists’, etc. The pertinent parts of the text were coded into these categories. At the same time, a grounded approach was applied and newly emerging unanticipated themes were assigned a category, for example ‘Assumptions about the level of information’, ‘Pharmacist as an independent source of information’, etc.

In some cases, the two approaches were combined. Information on problems related to implementation of the LPS were sought during the interviews and a category entitled ‘Problems’ was created to capture these. Because a number of obviously distinctive sub-categories within the ‘Problems’ category were emerging, new codes were added to the coding frame as subcategories of ‘Problems’, including ‘Different client group’, ‘Change, new aspect of care’, ‘Pharmacy setting’, etc. The interviews that were coded prior to the introduction of new codes, were reviewed after the coding frame was finished and any relevant parts of the text were added to the later created codes.

After all the individual interview data had been coded, the categories were analysed and themes and patterns were identified within these categories that formed summaries of the participants’ perceptions about, and explanations of, the phenomenon represented by the category. The categories represented aspects of the evaluation of the LPS and were analysed exclusively of each other, although space was allowed for, and attention was paid to, any emerging relationships between the categories. The data are presented in sections 9.2, 9.3 and 9.4 in correspondence with the categories.

Frequencies were run to compare the consensus development panels’ decisions with the individually categorised tables of topics in order to identify changes to the participants’ opinions as a result of the group discussions. The panels’ discussions were transcribed and analysed the same way as the one-to-one interview data.

Comparisons of the data gathered through different methods were conducted by qualitative coding and analysis or using cross-tabulations within the SPSS data sets. In case of the pre-intervention data and logbooks, the findings were combined rather than data sets, since the units of analysis were different.
Results
Chapter 5  Results of recruitment and preliminary procedures

This chapter opens with the results of the recruitment of the LPS participants and provides their background characteristics. Since not all the participants, for different reasons, participated in all parts of the data collection, an indication is provided of the data collection procedures with which the individual participants were involved. Chapter 5 also summarises completion of the preliminary procedures that were carried out before the intervention phase (link-pharmacists’ training day) and the procedures additional to the main data collection (clients’ initial visit to the link-pharmacists, use of the ‘Contact with the clients’ sheet and response from general practitioners approached for provision of the client-related information). The subsequent chapters then provide summaries of the data collected during Part1, Part2 - Consensus development panels and the Context study. To follow the time sequence of the data collection, the Context study results will be presented between Part1, pre-intervention phase data and the intervention phase data. Therefore, the data will be presented in the following order:

- Part1 - Pre-intervention phase
- Context study
- Part1 - Intervention phase
- Part1 - Post-intervention phase
- Part2 - Consensus development panels

Each of these parts comprises, at the end, a summary of the data and/or a comparison with another relevant set of data. The results obtained from each group of participants are presented in the same order for each data collection phase: link-pharmacists, key workers and clients.

5.1 Recruitment results

5.1.1 Recruitment of the link-pharmacists

Eleven community pharmacists agreed to participate in the LPS. However, two of them (LP10, LP11) did not participate in the intervention and post-intervention data collection phases as the respective CMHTs were unable to recruit clients to the study. This was due to the inconvenient location of these pharmacies for the clients.

Of the remaining eight link-pharmacists, one link-pharmacist (LP7) decided to withdraw
from the project during the pre-intervention phase due to an extensive workload. He re­
joined the project during the sixth month of the intervention phase.

During the post-intervention phase interview, one of the clients expressed that she would
like to continue her participation in the LPS and she suggested to the researcher to contact
the community pharmacist in her local pharmacy, where she regularly collected her
medication. The contacted pharmacist agreed to participate (LP3).

Nine link-pharmacists completed the pre-intervention data collection phase, eight link-
pharmacists entered the intervention phase, nine link-pharmacists (with one different to the
pre-intervention sample) participated in the intervention and completed the post­
intervention data collection phase as shown in table 5.1.

Eight link-pharmacists of the 10 who participated in data collection were male, 2 were
female. This does not differ significantly from the proportion of male and female
community pharmacists in the United Kingdom (55% of male community pharmacists,
Royal Pharmaceutical Society of Great Britain, 1996c). The median number of years
practised for these 10 link-pharmacists was 22 years. Six link-pharmacies were
independent and 4 pharmacies belonged to small chains (chain of up to 5 pharmacies). This
proportion did not differ significantly from the proportion of independent community
pharmacies and small chains in ELCHA area. Although, the ownership structure of ELCHA
community pharmacists differed significantly from that of the register of community
pharmacies in Britain (Blenkinsopp, 1997). ELCHA had a higher proportion of
independent pharmacies and small chains and a smaller proportion of large chain
community pharmacies (p=0.01). The median number of employees per pharmacy was six
(including the participating link-pharmacist). All pharmacies employed one full-time
pharmacist and this was the participant in each case.

Table 5.1 illustrates the background characteristics of the link-pharmacists. The link-
pharmacists’ participation in individual parts of the data collection is indicated.
Chapter 5 - Results of recruitment and preliminary procedures

Table 5.1: Background characteristics of the link-pharmacists (n=11) and their involvement in data collection

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Sex</th>
<th>Registered (years)</th>
<th>Years in practice</th>
<th>Number of employees</th>
<th>Q</th>
<th>I</th>
<th>CDP-CI</th>
<th>CDP-I</th>
<th>CDP-P</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP1</td>
<td>M</td>
<td>23</td>
<td>21</td>
<td>5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>LP2</td>
<td>M</td>
<td>22</td>
<td>22</td>
<td>10</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LP3</td>
<td>M</td>
<td>unknown*</td>
<td>unknown*</td>
<td>unknown*</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LP4</td>
<td>F</td>
<td>12</td>
<td>12</td>
<td>9</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LP5</td>
<td>F</td>
<td>27</td>
<td>27</td>
<td>8</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LP6</td>
<td>M</td>
<td>14</td>
<td>14</td>
<td>5</td>
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<td>✓</td>
</tr>
<tr>
<td>LP7</td>
<td>M</td>
<td>10</td>
<td>10</td>
<td>5</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LP8</td>
<td>M</td>
<td>40</td>
<td>40</td>
<td>8</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>LP9</td>
<td>M</td>
<td>25</td>
<td>25</td>
<td>3</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LP10</td>
<td>M</td>
<td>30</td>
<td>30</td>
<td>6</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP11</td>
<td>M</td>
<td>unknown*</td>
<td>unknown*</td>
<td>unknown*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Median Total

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

Q - completed pre-intervention questionnaire, I - participated in the post-intervention interview, CDP - participated in the consensus development panel: CI - Clients and Interprofessional, I - Interprofessional, P - Pharmacist, *pharmacist did not complete pre-intervention questionnaire where this information was collected

5.1.2 Recruitment of CMHTs and the key workers

Table 5.2 summarizes the process of recruitment of the CMHTs. All 12 CMHTs in the ELCHA area were contacted. Three teams informed the researcher that the team did not match the inclusion criterion (CMHT1-3). The LPS was presented to the remaining nine CMHTs (CMHT4-12). Four teams identified themselves ineligible during or after the presentation, as they did not match the inclusion criterion (CMHT4-7). One team failed to recruit clients and was therefore not involved in the data collection (CMHT8). The recruitment of CMHTs resulted in four teams participating (CMHT 9-12).

The proceedings involving CMHT8 and the late recruitment of CMHT12 are described in more detail below.
Table 5.2: The process of recruitment of CMHTs

<table>
<thead>
<tr>
<th>CMHT</th>
<th>Contacted</th>
<th>Presentation</th>
<th>Inclusion criterion satisfied</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMHT1</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMHT2</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMHT3</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMHT4</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMHT5</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMHT6</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMHT7</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>CMHT8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>withdrew</td>
</tr>
<tr>
<td>CMHT9</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CMHT10</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CMHT11</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CMHT12</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Since the members of CMHT8 did not present any activity during the first two months of the clients' recruitment, all nine key workers were approached by letter to confirm their participation. A brief questionnaire was included that asked about their participation and reasons for non-participation (appendix 19). Eight key workers replied and they all decided not to participate. Their reasons are summarised in table 5.3.

Table 5.3: CMHT8 key workers' reason for non-participation (n=8)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of key workers reporting*</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am too busy in my work and/or the project would add more work</td>
<td>5</td>
</tr>
<tr>
<td>I don't have any client suitable for the project in my caseload</td>
<td>5</td>
</tr>
<tr>
<td>My clients are not interested in participation in this project</td>
<td>3</td>
</tr>
<tr>
<td>I am leaving the team soon</td>
<td>2</td>
</tr>
<tr>
<td>I am participating in/carrying out a different research project</td>
<td>1</td>
</tr>
<tr>
<td>I am only shortly/temporarily with the team</td>
<td>1</td>
</tr>
</tbody>
</table>

*The numbers exceed the number of respondents as some key workers reported more than one reason

Four key workers commented that their clients were "not suitable" or "not interested" because the participating pharmacies were not conveniently located, with one key worker adding that the approached clients were not willing to "change their usual pharmacy". Two
key workers commented that participation in the LPS appeared too time-consuming. One key worker, who was a clinical psychologist, commented:

"I have concerns about the potential for the intervention of the community pharmacist to conflict with that of the patient's consultant psychiatrist, and as a non-medical clinician, I would not want to be caught in a conflict over medication, which could arise."

(CMHT8 Recruitment Questionnaire, KW TB)

The CMHT8 suggested contacting another team in the area (CMHT12), which subsequently agreed to participate.

The four recruited teams had a total of 61 key workers (KW), 23 of whom were involved with the project, as presented in table 5.4. Sixteen of the 23 were female. Fifteen key workers were CPNs, 6 were social workers (SW) and 2 occupational therapists (OT).

Although the median number of years qualified was 7, the median number of years practised was two in total and 1 year in the current CMHT. Of the 23 key workers, 14 participated in both Part 1 pre-intervention and post-intervention data collection phases. The remaining nine key workers participated either in one (KW5, 9, 13, 14, 18, 19, 20 and 23) or none (KW10) of these data collection procedures. KW23 recruited a client and completed the pre-intervention questionnaire. However, the client withdrew from the project shortly after the joint recruitment meeting and the key worker was therefore not invited to participate in any later data collection. KW13 left her CMHT and was replaced by KW14. Therefore, KW13 only completed the pre-intervention questionnaire and KW14 completed the post-intervention interview. The same situation applied to KW18 and KW19 (KW18 replaced KW19). KW10 joined her CMHT and the project shortly before the consensus development panels and was therefore not involved in any other data collection. KW9 was for a period of one year replaced by KW8. KW9 passed her pre-intervention questionnaire to KW9 who completed it. However, both key workers had experienced the LPS and therefore both were interviewed.

The background characteristics of the involved key workers and their participation in data collection is presented in table 5.4.
**Results**

**Chapter 5 - Results of recruitment and preliminary procedures**

Table 5.4: Background characteristics of the participating key workers (n=23) and their involvement in data collection

<table>
<thead>
<tr>
<th>Key worker</th>
<th>Sex</th>
<th>Profession</th>
<th>Qualified (years)</th>
<th>Years of practice</th>
<th>Years in team</th>
<th>Q</th>
<th>I</th>
<th>CDP-CI</th>
<th>CDP-I</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW1</td>
<td>M</td>
<td>CPN</td>
<td>16</td>
<td>11</td>
<td>11</td>
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<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KW2</td>
<td>M</td>
<td>CPN</td>
<td>13</td>
<td>3</td>
<td>2</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KW3</td>
<td>F</td>
<td>CPN</td>
<td>21</td>
<td>17</td>
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<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KW4</td>
<td>F</td>
<td>SW</td>
<td>3</td>
<td>2</td>
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<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>CPN</td>
<td>unknown*</td>
<td>unknown*</td>
<td>unknown*</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KW6</td>
<td>F</td>
<td>CPN</td>
<td>8</td>
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<td>5</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
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<tr>
<td>KW7</td>
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<td>CPN</td>
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<td>10</td>
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<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KW8</td>
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<td>CPN</td>
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<td>0</td>
<td>0</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
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<tr>
<td>KW9</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>KW10</td>
<td>F</td>
<td>CPN</td>
<td>unknown*</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KW11</td>
<td>M</td>
<td>CPN</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>KW12</td>
<td>F</td>
<td>CPN</td>
<td>9</td>
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<td>2</td>
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<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>KW13</td>
<td>F</td>
<td>OT</td>
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<td>3</td>
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<td></td>
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<td>SW</td>
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<td>4</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
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<td>SW</td>
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<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>M</td>
<td>CPN</td>
<td>10</td>
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<td></td>
<td></td>
</tr>
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<td>SW</td>
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<td>unknown*</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>F</td>
<td>SW</td>
<td>7</td>
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<td>0</td>
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</tr>
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<td>SW</td>
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</tr>
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<td>1</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Median**

|     | 7 | 2 | 1 | 17 | 19 | 3 | 4 |

Q - completed pre-intervention questionnaire, I - participated in the post-intervention interview, CDP - participated in the consensus development panel: CI - Clients and Interprofessional, I - Interprofessional

*Key worker did not complete pre-intervention questionnaire where this information was collected

137
5.1.3 Recruitment of the clients by the key workers
Eight link-pharmacists entered the intervention phase (LP3 was not yet recruited, LP7 had withdrawn, no eligible CMHT was identified for LP11). It was originally planned that each link-pharmacist would have ten clients under their care. Therefore, 80 clients would be recruited for the eight link-pharmacists. In the process of recruitment, it became evident that it was difficult to obtain the sample of 80 clients. Therefore, it was estimated that a minimum sample of 30 clients would be acceptable to achieve the study objectives. This number was perceived achievable and appropriate for the proposed methods of data collection and analysis. It was also decided that individual link-pharmacists did not need to have equal numbers of clients, although the number of clients for individual link-pharmacists remained limited to a maximum of ten. CMHTs were asked to recruit as many clients as possible. Six months of the recruitment process resulted in 27 participating clients. Twenty-one clients were recruited via their key workers, 5 clients by the researcher from a depot clinic and one client by the link-pharmacist.

5.1.4 Recruitment of the clients by the researcher from the depot clinic
The researcher attended three depot clinics. Each clinic was attended by about 15 clients. The LPS was explained to these clients and they were offered participation. One client was recruited on each of the first two clinics and three clients were recruited during the third clinic.

5.1.5 Recruitment of the clients by the link-pharmacist
The LP7 provided a list of five clients that he had identified as suitable for the research project and the details of the clients’ GP (which was the same GP for all five clients). The GP was contacted by the researcher in order to identify these clients’ key workers. The key workers of two clients were unknown. The link-pharmacist attempted to identify the key workers’ details from the clients themselves but was not successful. These two clients were not recruited. The key workers of the other three clients were contacted. Two of them decided that their clients were not suitable for the project due to their current mental health status. The third agreed to her client’s participation but refused participation herself since she perceived involvement in the LPS too time consuming. The client was recruited.
In the sample of 27 clients 18 were males. The majority identified themselves as 'white', four as 'black' and six as 'Asian'. The clients' ages ranged from 21 to 65 years (median=34 years). The most frequent diagnosis attributed to the clients (as recorded in their notes) was schizophrenia (n=15), followed by depression (n=5) and manic-depressive disorder (n=5). One client was diagnosed with eating disorder and one client's diagnosis was unclear (the professionals suggested diagnosis of personality disorder). Twelve clients lived alone, 2 became alone during the LPS, 11 lived with someone, and 2 lived in residential homes. Clients' background characteristics and their participation in data collection are summarised in table 5.5.
Table 5.5: Background characteristics of the participating clients (n=27) and their involvement in data collection

<table>
<thead>
<tr>
<th>Client</th>
<th>Sex</th>
<th>Ethnic*</th>
<th>Diagnosis</th>
<th>Accommodation</th>
<th>Age</th>
<th>Q</th>
<th>C</th>
<th>I</th>
<th>CDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL1</td>
<td>F</td>
<td>white</td>
<td>manic-depressive disorder</td>
<td>with someone</td>
<td>43</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL2</td>
<td>M</td>
<td>black</td>
<td>schizophrenia</td>
<td>with someone/alone</td>
<td>43</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL3</td>
<td>M</td>
<td>black</td>
<td>schizophrenia</td>
<td>with someone/alone</td>
<td>21</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>CL4</td>
<td>M</td>
<td>white</td>
<td>schizophrenia</td>
<td>alone</td>
<td>34</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL5</td>
<td>M</td>
<td>Asian</td>
<td>manic-depressive disorder</td>
<td>with someone</td>
<td>21</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>CL6</td>
<td>F</td>
<td>black</td>
<td>schizophrenia</td>
<td>alone</td>
<td>38</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL7</td>
<td>F</td>
<td>white</td>
<td>depression</td>
<td>alone</td>
<td>29</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL8</td>
<td>M</td>
<td>white</td>
<td>schizophrenia</td>
<td>with someone</td>
<td>34</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL9</td>
<td>M</td>
<td>white</td>
<td>psychotic depression</td>
<td>alone</td>
<td>49</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
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<td>CL10</td>
<td>F</td>
<td>white</td>
<td>depression</td>
<td>with someone</td>
<td>59</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL11</td>
<td>M</td>
<td>black</td>
<td>schizophrenia</td>
<td>alone</td>
<td>65</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>CL12</td>
<td>F</td>
<td>white</td>
<td>eating disorder</td>
<td>alone</td>
<td>32</td>
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<td>✓</td>
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<td>M</td>
<td>white</td>
<td>depression</td>
<td>alone</td>
<td>60</td>
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<td>✓</td>
</tr>
<tr>
<td>CL14</td>
<td>F</td>
<td>Asian</td>
<td>schizophrenia</td>
<td>alone</td>
<td>34</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
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<td>M</td>
<td>white</td>
<td>depression</td>
<td>alone</td>
<td>41</td>
<td>✓</td>
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<td>CL16</td>
<td>F</td>
<td>white</td>
<td>schizophrenia</td>
<td>with someone</td>
<td>30</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
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<td>CL17</td>
<td>F</td>
<td>white</td>
<td>schizophrenia</td>
<td>with someone</td>
<td>25</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
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<td>manic-depressive disorder</td>
<td>alone</td>
<td>42</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL19</td>
<td>F</td>
<td>white</td>
<td>schizophrenia</td>
<td>with someone</td>
<td>34</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL20</td>
<td>M</td>
<td>white</td>
<td>manic-depressive disorder</td>
<td>with someone</td>
<td>32</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL21</td>
<td>M</td>
<td>white</td>
<td>unclear - personality disorder?</td>
<td>residential home</td>
<td>34</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>CL22</td>
<td>M</td>
<td>white</td>
<td>schizophrenia</td>
<td>residential home</td>
<td>33</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL23</td>
<td>M</td>
<td>Asian</td>
<td>schizophrenia</td>
<td>with someone</td>
<td>58</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL24</td>
<td>M</td>
<td>Asian</td>
<td>schizophrenia</td>
<td>alone</td>
<td>31</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL25</td>
<td>M</td>
<td>Asian</td>
<td>schizophrenia</td>
<td>with someone</td>
<td>39</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL26</td>
<td>M</td>
<td>white</td>
<td>manic-depressive disorder</td>
<td>alone</td>
<td>48</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL27</td>
<td>M</td>
<td>Asian</td>
<td>schizophrenia</td>
<td>with someone</td>
<td>50</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

| Median Total | 34 26 6 22 3 |

Q - completed pre-intervention interview, C - provided calendar, I - participated in the post-intervention interview, CDP - participated in the Clients and Interprofessional consensus development panel

*ethnicity

* started to live alone during the LPS
5.1.6 Refusals to participate

None of the key workers maintained the ‘Recruitment sheet’ where they were asked to record details of the clients who refused to participate and their reasons for non-participation. Therefore, at the end of the project, the available key workers that were involved in recruitment (n=10) and 2 team managers were provided with the ‘Recruitment sheet’ again and asked to recall (or approach the team members to do so) the number and details of the clients that had refused participation in the LPS. Four key workers provided the details individually, in two cases the teams provided the details as a whole. The numbers are presented in table 5.6. Details were available on six clients who refused, four of whom were female, four of them were of black ethnicity (as determined by the key workers), four were diagnosed with schizophrenia and the median age was 31 years. The reasons for refusal included: the clients not being interested (n=3) or not wanting to change pharmacy (n=2), one client did not like the project. The joint recruitment meeting with the researcher and the key workers had taken place with two of the clients included in table 5.6 who had subsequently decided not to participate.

Table 5.6: Clients’ refusals to participate in the LPS.

<table>
<thead>
<tr>
<th>CMHT/key worker</th>
<th>Approached</th>
<th>Refused</th>
<th>Participated</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMHT9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KW1</td>
<td>3</td>
<td>0 (0%)</td>
<td>3</td>
</tr>
<tr>
<td>KW2</td>
<td>1</td>
<td>0 (0%)</td>
<td>1</td>
</tr>
<tr>
<td>KW3</td>
<td>3</td>
<td>1 (33%)</td>
<td>2</td>
</tr>
<tr>
<td>CMHT10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>all team’s key workers</td>
<td>24</td>
<td>18 (75%)</td>
<td>6</td>
</tr>
<tr>
<td>CMHT11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KW16</td>
<td>3</td>
<td>2 (66%)</td>
<td>1</td>
</tr>
<tr>
<td>all other team’s key workers</td>
<td>unknown</td>
<td>3 *</td>
<td>5</td>
</tr>
<tr>
<td>CMHT12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KW11</td>
<td>4</td>
<td>2 (50%)</td>
<td>2</td>
</tr>
<tr>
<td>KW15</td>
<td>12</td>
<td>11 (92%)</td>
<td>1</td>
</tr>
</tbody>
</table>

* further details about the clients available
Chapter 6  Part I - Pre-intervention phase results

The unit of analysis for the pre-intervention phase data was a respondent. Therefore, when, for example, link-pharmacists reported on the services provided to the clients, the number represents the number of link-pharmacists that reported such an activity, not the number of occurrences of such activities. The tables that present frequencies of the link-pharmacists’ contacts with other professionals, however, show the total of all the link-pharmacists’ favourable answers to any of the stated frequencies for any of the listed professionals, to illustrate the overall frequency of the link-pharmacists’ contacts with other community mental health care professionals, without specification for individual professionals.

6.1 Link-pharmacists

All the link-pharmacists who participated in the pre-intervention phase (n=9) completed the questionnaire. The results first summarise the services reported to be provided by the link-pharmacists to people with mental health problems (PMHP), followed by data on interprofessional communication.

6.1.1 Services to people with mental health problems

6.1.1.1 Pharmaceutical services

The services currently provided to PMHP as reported by the link-pharmacists are summarised in table 6.1. ‘Other’ services included provision of monitored dosage systems (n=6), collection of prescriptions from a surgery for the client (n=1), urgent medication delivery (n=1), disposal of medication (n=1), dispensing of preferred brand of medication (n=1) and keeping computerised records (n=1). One of the link-pharmacists organised, in cooperation with a voluntary group, an afternoon session on antidepressant medication for attenders of a day centre.
Table 6.1: Services provided by the link-pharmacists to people with mental health problems before the introduction of the LPS (n=9)

<table>
<thead>
<tr>
<th>Current services</th>
<th>Number of link-pharmacists reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug dispensing (including OTC)</td>
<td>9</td>
</tr>
<tr>
<td>Consultation about dispensed drugs</td>
<td>9</td>
</tr>
<tr>
<td>Provision of information leaflets</td>
<td>8</td>
</tr>
<tr>
<td>Non drug-related consultations</td>
<td>7</td>
</tr>
<tr>
<td>Other services</td>
<td>7</td>
</tr>
</tbody>
</table>

6.1.1.2 Information-related services

The information that the link-pharmacists provided to PMHP is summarised in the table 6.2.

Table 6.2: Information provided by the link-pharmacists to people with mental health problems before the introduction of the LPS (n=9)

<table>
<thead>
<tr>
<th>Information provided</th>
<th>Number of link-pharmacists reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on medicines for psychiatric diagnosis</td>
<td>9</td>
</tr>
<tr>
<td>Information on medicines for non-psychiatric diagnosis</td>
<td>9</td>
</tr>
<tr>
<td>Minor ailments</td>
<td>9</td>
</tr>
<tr>
<td>Topics not directly related to medicines</td>
<td>5</td>
</tr>
</tbody>
</table>

Non-drug related consultations (table 6.1) and non-medication related topics (table 6.2) included issues related to the person’s condition and general health (for example coping with stress caused by bereavement) and general health promotion including diet and exercise, smoking, and topics such as household, leisure and discussions with the partner if the medication’s side effects influenced their relationship.

Drug-related information

Drug-related information provided by the link-pharmacists before the introduction of the LPS are listed in table 6.3. ‘Other’ information included explanation of the condition, dose regimens, explanations of appearance of drugs if different than the usual brand product was supplied.
Table 6.3: Drug-related information provided by the link-pharmacists to people with mental health problems before the introduction of the LPS (n=9)

<table>
<thead>
<tr>
<th>Drug-related information</th>
<th>Number of link-pharmacists reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side-effects</td>
<td>9</td>
</tr>
<tr>
<td>Drug-drug interactions</td>
<td>8</td>
</tr>
<tr>
<td>Other interactions</td>
<td>8</td>
</tr>
<tr>
<td>Doses</td>
<td>8</td>
</tr>
<tr>
<td>Indications</td>
<td>8</td>
</tr>
<tr>
<td>Dosage</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
</tr>
</tbody>
</table>

6.1.1.3 Additional consultation

Four link-pharmacists reported to repeatedly provide consultations to between 1 to 4 people with mental health problems, in addition to their dispensing consultations. There was no indication in the data of the regularity of such contacts. Comments that the link-pharmacists provided in relation to these additional consultations are summarised in table 6.4.

Table 6.4: Details of the additional consultations provided by the link-pharmacists to people with mental health problems before the introduction of the LPS

<table>
<thead>
<tr>
<th>Pharmacist</th>
<th>Pharmacists' comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP2</td>
<td>Invited one person with mental health problems to phone the pharmacy anytime to discuss any medication-related problem</td>
</tr>
<tr>
<td>LP5</td>
<td>Consultations with two persons with mental health problems were on an ad hoc basis</td>
</tr>
<tr>
<td>LP6</td>
<td>Consulted four clients and/or their carers about diagnosed condition and its treatment</td>
</tr>
<tr>
<td>LP9</td>
<td>Rather than persons with mental health problems themselves, the link-pharmacist consulted their family/carers about the person’s condition; he stated three cases</td>
</tr>
</tbody>
</table>

6.1.1.4 Initiation of the contact between the link-pharmacists and PMHP

When asked about who tended to initiate contacts/consultations between the link-pharmacist and PMHP in their pharmacies, 5 link-pharmacists stated that both, PMHP and themselves tended to initiate the contacts, 2 link-pharmacists answered that PMHP tended to do so and 2 responded that the link-pharmacists tended to initiate the contacts.
6.1.2 Interprofessional issues

6.1.2.1 Contacts with other professionals

Pharmacists were asked to indicate on a given list of seven community mental health care professionals those whom they contacted and how frequent was the contact. They were also asked whether and how often they were contacted by members of CMHTs. Results are in table 6.5. The third column of the table 6.5 shows how many link-pharmacists reported that contacts were reciprocal. The ‘other’ professional reported was in all cases a GP. The GPs were not members of CMHTs. However, they were closely involved in community mental health care. Therefore, the answers referring to this professional group were included in the analysis.

Two link-pharmacists had never contacted any member of a CMHT. Two link-pharmacists had never been contacted by any member of a CMHT. One of these pharmacists had never contacted another professional and was never contacted by one.

<table>
<thead>
<tr>
<th>Professional</th>
<th>Number of pharmacists initiating contact with</th>
<th>Number of pharmacists receiving contact from</th>
<th>Number of pharmacists in reciprocal contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community psychiatric nurse</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Community support worker</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>GP</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Social worker</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Consultant psychiatrist</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Clinical psychologist</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

6.1.2.2 Frequency of contacts

The contacts were in most cases occasional. One link-pharmacist stated that he regularly contacted a GP and had regularly been contacted by a GP (it was not clear whether this was the same GP). The pharmacist did not state an exact frequency of these contacts. One link-pharmacist reported that he contacted an occupational therapist monthly. Another link-pharmacist was contacted by an occupational therapist every three months and by a community support worker three times a month. The summary of frequencies of the
contacts are presented in table 6.6. The table summarizes the frequencies of contacts between the 9 link-pharmacists and the members of any of the 7 professions listed in table 6.5.

Table 6.6: Frequency of contacts between the link-pharmacists and other professionals before the introduction of the LPS (n=63^)*

<table>
<thead>
<tr>
<th>Frequency of contact</th>
<th>Contacts initiated by link-pharmacists</th>
<th>Contacts initiated by other professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occasional*</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>Regular **</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Monthly</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Three-monthly</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Three-times a month</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Never</td>
<td>43</td>
<td>46</td>
</tr>
</tbody>
</table>

^ each link-pharmacist gave an answer for each of the seven different professionals; * unable to specify frequency; ** asked to specify the frequency but did not do so

6.1.2.3 Methods of communication

Table 6.7 summarises the methods used by the link-pharmacists to communicate with the CMHT professionals and the methods of contact used by other professionals to contact the link-pharmacists.

Table 6.7: Methods of contacting other professionals as reported by the link-pharmacists before the introduction of the LPS (number of link-pharmacists reporting, n=9)

<table>
<thead>
<tr>
<th>Professional being contacted/initiating the contact</th>
<th>Contacts initiated by link-pharmacists</th>
<th>Contacts initiated by other professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Telephone</td>
<td>In person</td>
</tr>
<tr>
<td>Community psychiatric nurse</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Community support worker</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>GP</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Social worker</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Consultant psychiatrist</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Clinical psychologist</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
6.1.2.4 Reasons for contacts
The reasons for contacting other professionals and for being contacted by them stated by the link-pharmacists are summarised in table 6.8. The categories in the second column were created by the researcher to summarise the link-pharmacists’ answers.

Three link-pharmacists had contacted at least 1 member of 3 or more different professions. These link-pharmacists were those that reported contacting other professionals for ‘additional reasons’ such as arranging an appointment with a psychiatrist or a psychologist for the client, to discuss opportunities for enhancing the working relationship or reasons such as a client’s compliance with their medicines.
### Table 6.8: The link-pharmacists' reasons for contacting other professionals and for being contacted by them before the introduction of the LFS (number of link-pharmacists reporting, n=9)

#### Link-pharmacists' reasons to contact other professionals

<table>
<thead>
<tr>
<th>Contact directed to</th>
<th>Category</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatrist</td>
<td>Clinical</td>
<td>queries on dose and dosage of medication, informing about interactions</td>
</tr>
<tr>
<td></td>
<td>Care facilitator</td>
<td>to arrange a consultation for the CL</td>
</tr>
<tr>
<td>CPN</td>
<td>Monitoring of clients</td>
<td>client's compliance</td>
</tr>
<tr>
<td></td>
<td>Supply of medication</td>
<td>problems with depot medication, medication available for collection</td>
</tr>
<tr>
<td></td>
<td>Clinical</td>
<td>discuss dose and care plan</td>
</tr>
<tr>
<td></td>
<td>Interprofessional cooperation</td>
<td>discuss working relationships</td>
</tr>
<tr>
<td>Social worker</td>
<td>Care facilitator</td>
<td>problems related to drug abusers</td>
</tr>
<tr>
<td>Psychologist</td>
<td>Care facilitator</td>
<td>to arrange a consultation for a client</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>Supply of medication</td>
<td>problems with collection of medication, requesting repeats</td>
</tr>
<tr>
<td></td>
<td>Monitoring of clients</td>
<td>client's general improvement</td>
</tr>
<tr>
<td>Community support worker</td>
<td>Supply of medication</td>
<td>to arrange collection of medication for a client, delivery of medication (carer)</td>
</tr>
<tr>
<td></td>
<td>Care facilitator</td>
<td>disturbance caused by patients</td>
</tr>
<tr>
<td></td>
<td>Information provision</td>
<td>discussing side effects, patient need clarification or have a query about medication</td>
</tr>
<tr>
<td>GP</td>
<td>Monitoring of clients</td>
<td>client's compliance</td>
</tr>
<tr>
<td></td>
<td>Clinical</td>
<td>repeat prescription error (dose)</td>
</tr>
</tbody>
</table>

#### Other professionals' reasons to contact the link-pharmacists

<table>
<thead>
<tr>
<th>Contact initiated by</th>
<th>Category</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatrist</td>
<td>Shared care</td>
<td>introduce a patient</td>
</tr>
<tr>
<td>CPN</td>
<td>Monitoring of clients</td>
<td>compliance issues</td>
</tr>
<tr>
<td></td>
<td>Supply of medication</td>
<td>emergency supply, collection of medication for a client, availability of a medicine</td>
</tr>
<tr>
<td></td>
<td>Clinical</td>
<td>confirm dosage, discuss dose and care plan</td>
</tr>
<tr>
<td>Social worker</td>
<td>Shared care</td>
<td>attendance with a patient</td>
</tr>
<tr>
<td>Community support worker</td>
<td>Supply of medication</td>
<td>medication supply problem, collecting medication for a client</td>
</tr>
<tr>
<td></td>
<td>Shared care</td>
<td>attendance with a patient</td>
</tr>
<tr>
<td></td>
<td>Information provision</td>
<td>patient needs clarification or have a query about medication</td>
</tr>
<tr>
<td>GP</td>
<td>Care facilitator</td>
<td>drug abuse</td>
</tr>
<tr>
<td></td>
<td>Monitoring of clients</td>
<td>compliance issues</td>
</tr>
<tr>
<td></td>
<td>Information provision</td>
<td>new treatments available, adverse drug reaction</td>
</tr>
<tr>
<td>Carer, health advocate</td>
<td>Information provision</td>
<td>to advise on questions raised by patient, eg side effects, drug interactions</td>
</tr>
</tbody>
</table>
6.1.2.5 Perception of current communication with mental health care professionals

Table 6.9 summarizes the positive and negative aspects of communication with other professionals that were identified by the link-pharmacists in the pre-intervention questionnaire (Pharmacists' comments) and summarised by the researcher (Main theme).

Table 6.9: Positive and negative aspects of the communication with other professionals identified by the link-pharmacists before the introduction of the LPS.

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Pharmacists' comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive aspects</td>
<td></td>
</tr>
<tr>
<td>Promotion of the profession</td>
<td>Pharmacists are being approached</td>
</tr>
<tr>
<td>Enables pharmacist's input; sharing information</td>
<td>Shared care approach to patient care, can get an overall picture of the patient concerned - better understanding of patient's need and awareness of problems - very helpful when giving information; quick resolution of difficult situations; aware of who to contact when problems occur, can confirm with hospital staff that GP prescription is correct</td>
</tr>
<tr>
<td>Holistic care</td>
<td>Would be giving total care</td>
</tr>
<tr>
<td>Improvement of the clients' care</td>
<td>Benefit to the client and the family</td>
</tr>
<tr>
<td>Negative aspects</td>
<td></td>
</tr>
<tr>
<td>Exclusion of pharmacists</td>
<td>Information on wider issues is not requested</td>
</tr>
<tr>
<td>Not remunerated extended workload</td>
<td>Time: no fee but extra work</td>
</tr>
<tr>
<td>Current lack of interprofessional communication, no consistency</td>
<td>Not enough cooperation and communication, not enough contacts are made which can monitor the patient's progress, usually meetings are one off - no follow-ups and no further consultations</td>
</tr>
</tbody>
</table>

Pharmacists were also asked to generally assess the communication between themselves and members of CMHTs on a 10cm visual analogue scale. Zero point was marked 'poor' and 10 point was marked 'very good'. The link-pharmacists’ median score was 0.9 (range = 0.2 - 2.0).
6.2 Key workers
A total of 23 key workers participated in the research project. Some of these joined the project at a later stage as they took over the clients' cases from their colleagues. These key workers did not participate at the pre-intervention data collection. Nineteen questionnaires were given to the key workers and seventeen were returned. The two key workers who had not responded, were reminded but the questionnaires were not returned. The data from seventeen questionnaires were analysed.

6.2.1 Services provided to clients by community pharmacists
The key workers were asked whether they were aware if their clients repeatedly received a consultation with a community pharmacist, in addition to the advice given by the pharmacists when dispensing medication. Nine key workers did not know and eight stated that they were not aware of such consultations being provided for their clients. They were also asked whether their clients were receiving any other 'special' services from community pharmacists. One of the key workers stated that her clients were using a special service from a community pharmacy but she did not know how many clients and did not give any description of the service. Two other key workers reported a total of 8 cases in which clients were using monitored dosage systems.

6.2.2 Interprofessional issues
6.2.2.1 Individual key workers' contacts with community pharmacists
Table 6.10 summarises the data obtained about contacts that the key workers had with community pharmacists.

<table>
<thead>
<tr>
<th>Contact with a community pharmacist</th>
<th>Frequency</th>
<th>Number of community pharmacists</th>
<th>Ways of contact*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Occasionally*</td>
<td>5 1 or 2</td>
<td>Telephone 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>In person 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Missing</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>Regularly**</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

* if unable to specify frequency; ** asked to specify; # exceeds 4 as more than one method of communication might have been used.

150
The reasons for contacts were all related to supply of medication and were described as deliveries or emergency supply of medication and issues associated with the provision of the monitored dosage systems (provision, education about use).

Two key workers stated that they had received contact from community pharmacists. In both cases the contacts were occasional, with 1 and 2 community pharmacists respectively and in both cases the pharmacists had telephoned the key workers. In one case the reason was delivery of medication to the client, and in the second case confirmation of the dose of medication.

6.2.2.2 CMHTs' contacts with community pharmacists

Four key workers reported that their CMHTs were in contact with community pharmacists. Two stated that there were 2 community pharmacists, and 1 stated that there was 1 community pharmacist cooperating with the team. One key worker was not sure about the number of community pharmacists with whom the team was in contact.

6.2.2.3 Key workers' perceptions of community pharmacists' contributions to community mental health care

Six key workers believed that community pharmacists contributed to community mental health care, 8 did not believe so and 3 were unsure.

Comments of those giving positive answers were related to community pharmacists' knowledge about medication, the usefulness of the provision of drug-related information to clients, pharmacists being an additional support to clients and the good accessibility of community pharmacists. Comments of those who did not believe that community pharmacists were contributing were mainly related to no communication being present between professionals or community pharmacists and clients.

6.2.2.4 Key workers' perceptions of their contacts with community pharmacists

The key workers were asked about the positive and negative aspects of their contacts with community pharmacists. The answers are summarised in table 6.11. Although the key workers were requested to state these only if applicable (i.e. if they had or had had any contacts with community pharmacists), many key workers answered the question even if they had not previously reported contacts with community pharmacists. Therefore, the
answers appear to be the key workers’ beliefs on what the positive aspects would or could be, rather than actual experience. Furthermore, the answers suggest that the key workers had identified the positive or negative aspects of linking community pharmacists with clients and community mental health teams, which was also the aim of the LPS.

**Table 6.11:** Positive and negative aspects of key workers’ contacts with community pharmacists as reported by the key workers before the introduction of the LPS

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Key workers’ comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive aspects</strong></td>
<td></td>
</tr>
<tr>
<td>Information/education</td>
<td>Answering questions regarding over-dose and drug interactions, more expertise offered in the area and knowledge of drugs</td>
</tr>
<tr>
<td>Information/education for clients</td>
<td>Better education for client about medication, good to offer clients support with medication outside of the CMHT, able to give a more objective account and information to the client</td>
</tr>
<tr>
<td>Interprofessional cooperation</td>
<td>Better relationship with community pharmacist, multi-professional care</td>
</tr>
<tr>
<td>Improvement of care</td>
<td>Good communication, smooth package of care for clients</td>
</tr>
<tr>
<td>Supply of medication</td>
<td>Medication is delivered, monitored dosage system arranged, being able to get medication for a client</td>
</tr>
<tr>
<td>Independent of CMHTs</td>
<td>Independent from mental health team</td>
</tr>
<tr>
<td><strong>Negative aspects</strong></td>
<td></td>
</tr>
<tr>
<td>Insufficient knowledge</td>
<td>May be rigid with regards to medical model</td>
</tr>
<tr>
<td>Bureaucracy</td>
<td>More paper work for key worker</td>
</tr>
<tr>
<td>Inexplicit role</td>
<td>Duplication of roles with doctors. What do they know about medication that psychiatrists don’t?</td>
</tr>
<tr>
<td>Inappropriate advice</td>
<td>May not be fully aware of the clients’ mental health history and precipitants and may make recommendations which are not particular to the person</td>
</tr>
</tbody>
</table>

**Key workers’ perceptions of their CMHTs’ contacts with community pharmacists**

The same question was asked with regard to the key worker’s community mental health team, the answers are presented in table 6.12.

**Table 6.12:** Positive and negative aspects of CMHTs’ contacts with community pharmacists as reported by the key workers before the introduction of the LPS

<table>
<thead>
<tr>
<th>Main theme</th>
<th>Key workers’ comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive aspects</strong></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>Up-to-date advice and information to staff and clients</td>
</tr>
<tr>
<td>Improvement of clients’ care</td>
<td>Good communication, smooth package of care for clients, extra support for the client</td>
</tr>
<tr>
<td>Interprofessional cooperation</td>
<td>Multiprofessional input, multiprofessional care</td>
</tr>
<tr>
<td><strong>Negative aspect</strong></td>
<td></td>
</tr>
<tr>
<td>Infrequent</td>
<td>Very limited - needs to be weekly rather than monthly</td>
</tr>
</tbody>
</table>
Key workers’ perceptions of their and their CMHTs’ current communication with community pharmacists

The key workers were also asked to assess the frequency and quality of their, and their team’s, current communication with community pharmacists using a 10cm visual analogue scale, where zero point was marked ‘worst possible’ and 10 point was marked ‘best possible’. Four key workers found the question applicable to themselves and 3 found it applicable to their teams. The summary of their assessments is presented in table 6.13.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of contacts - key worker</td>
<td>4</td>
<td>0.1</td>
<td>10</td>
<td>5.8</td>
</tr>
<tr>
<td>Quality of contacts - key worker</td>
<td>4</td>
<td>3.9</td>
<td>8.9</td>
<td>7.9</td>
</tr>
<tr>
<td>Frequency of contacts - CMHT</td>
<td>3</td>
<td>2</td>
<td>10</td>
<td>8.9</td>
</tr>
<tr>
<td>Quality of contacts - CMHT</td>
<td>3</td>
<td>3.2</td>
<td>8.9</td>
<td>8.8</td>
</tr>
</tbody>
</table>
6.3 Clients

The health status of client 6 at the point of recruitment did not allow the administration of the pre-intervention questionnaire. Therefore, 26 questionnaires were available for analysis.

6.3.1 Need for drug-related information

Twenty-three clients (n=26) reported that they were interested to receive information about their medication.

6.3.2 Community pharmacists as a source of drug-related information

The 23 respondents who were interested to receive information concerning their medication were asked if they went to a community pharmacist for information. Three did so and 19 did not (one answer was missing). One of the 3 explained that she sought information from a community pharmacist as a convenient and easily accessible source of drug-related information. Another said that she asked a community pharmacist because she believed that pharmacists were capable of giving advice on medication; her local community pharmacist was interactive and kept records of her medication while her GP kept forgetting what medication she was taking. The third client did not give any reasons.

Two clients always went to the same community pharmacy for information, one of them always used one of three regular pharmacies.

Eleven out of the 19 clients who did not seek drug-related information from community pharmacists reported their reasons. Nine of these said that they had never thought of asking a community pharmacist or did not know that a community pharmacist could help them in that way or they thought that a community pharmacist would not know about prescribed medicines. One of the clients said that the community pharmacist never talked to him and another of the clients did not want to stay long in a pharmacy because of his agoraphobia.

For 8 clients no reason was recorded.

6.3.3 Visits to a community pharmacy

Table 6.14 presents information on the clients' visits to community pharmacies other than for drug-related information.
### Table 6.14: Clients’ visits to a community pharmacy before the introduction of the LPS (n=26)

<table>
<thead>
<tr>
<th>Visits to a community pharmacy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>23</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Reasons (n=23)
- Collect medication: 12
- Collect medication and buy OTC/goods: 9
- Missing: 2

### 6.3.4 Other services from community pharmacists

Three clients reported receiving ‘special’ services from community pharmacists in addition to the collection of medication, or receiving of drug-related information. Two clients were using a monitored dosage system. The third client valued a service within which the pharmacy collected repeat prescriptions for him from the surgery and the client came directly to the pharmacy to collect his medication.

### 6.3.5 Loyalty to a community pharmacy

Twenty-two of the 23 clients who visited community pharmacies said that they always or mostly used the same pharmacy. Two of these respondents used 3 different pharmacies but always one of these three. Three stated that they used 1 pharmacy and rarely went to another one (only if ‘their’ pharmacy was closed or if they could get the goods cheaper in another ‘shop’). One respondent was not attached to any particular pharmacy.
6.4 Summary of the pre-intervention data

The following text provides a summary of the data obtained from the three types of questionnaire giving an overview of the link-pharmacists' involvement in services to people with mental health problems, the level of interprofessional communication experienced by the professional respondents and the clients' reports about services that they received from community pharmacists.

6.4.1 Services to clients

6.4.1.1 Pharmaceutical services

All link-pharmacists dispensed medication to PMHP and also all but 3 clients reported collecting their medication from pharmacies. When asked about special services, the most frequent response by all three types of respondents was the provision of a monitored dosage system.

6.4.1.2 Drug-related information

The majority of the link-pharmacists reported providing of drug-related information to PMHP. However, only 3 clients reported that they sought drug-related information from community pharmacists. Few link-pharmacists mentioned providing consultations in addition to those normally provided while dispensing medication to PMHP. None of the key workers was aware of such consultations being provided to their clients.

6.4.2 Interprofessional issues

The professionals reported very limited communication currently existing between the community pharmacists and CMHT professionals. There were isolated instances of regular contacts and a few occasional contacts between the professionals. Various issues relating to the supply of medication were stated by the key workers as reasons why they contacted or were contacted by community pharmacists. The link-pharmacists listed, in addition to the supply of medication, issues relating to correcting prescriptions and prescribing (dose, dosage, interactions of medication; their reports included contacts with GPs), facilitating contact with services for clients, informing other professionals about clients disturbed behaviour or initiation of interprofessional cooperation.
The community pharmacists' drug-related knowledge and provision of drug-related information to clients as well as their accessibility and the fact that they represented an additional support to clients were valued by the key workers who perceived the community pharmacists as contributors to CMHC. The lack of community pharmacists' involvement in CMHC and the lack of CMHT professionals' awareness of community pharmacists' roles were the reasons stated by those who did not perceive community pharmacists as contributing to the care of people with mental health problems.

Pharmacists believed that cooperation with other professionals enabled (or would enable) them to contribute to clients' care mainly through the sharing the client-related information with other professionals. Having a role as a provider of drug-related information and educator for clients, being independent from CMHTs and being an additional support for clients as well as being a positive addition to multiprofessional community care, were (or would be) the positive aspects of contacts with community pharmacists, stated by the key workers. Current lack of cooperation between professionals was the main negative aspect stated by the link-pharmacists. The negative aspects that were listed by the key workers suggested their limited awareness of the community pharmacists' abilities and roles.
Chapter 7 The Context study results

The aim of the Context study was to identify whether there were differences in the level of current involvement, knowledge and perceptions about CMHC between the link-pharmacists and non-LPS pharmacists.

7.1 Link-pharmacists

The recruitment and background characteristics of the link-pharmacists were presented in section 5.1.1.

7.1.1 Structured questionnaire

The results from the structured questionnaires completed by the link-pharmacists were presented in chapter 6.1.

7.1.2 Semi-structured interviews

The Context study interviews with the link-pharmacists were approximately 20 minutes long. Nine interviews were conducted and analysed.

7.1.2.1 Introductory issues

Analysis of the interview data indicated that the link-pharmacists were unfamiliar with the structure and delivery of community mental health care. This needs to be considered when reviewing their responses because:

1) the link-pharmacists’ perceptions of community mental health care in general, seemed to be based on their experiences with GPs and occasional contacts with CPNs,

2) the link-pharmacists seemed unable to distinguish between those clients being, and not being, cared for by CMHTs. It was unclear from the interview data whether the clients, whom the link-pharmacists had discussed, were or were not under the care of a CMHT,

3) occasionally, the link-pharmacists had well-established contacts with some of their clients. Although this applied to a very low number of clients (one or two), it seemed that the link-pharmacists’ opinions about community mental health care were based on these occasional closer professional relationships with clients.
7.1.2.2 Assessment of quality

Some link-pharmacists were generally negative about the current provision of community mental health care.

“So, I think that, in some respects, the system does fail [people with mental health problems]. I'm not saying that without community care they wouldn't fail them, but there is still a great deal to be done.”

(LP1, 218)

“...over the last couple of years, since the community mental health programme has changed, getting the mental health patient back into the community and this has only been resolved as a government policy because they can't be bothered to have hospitalisation for them.”

(LP10, 68-69)

The link-pharmacists’ views of clients’ experiences also had a negative tone. They talked about clients being solitary in the community, that nobody cared for the clients, and that it was difficult for clients to approach health care professionals. One link-pharmacist felt that the clients were not understood by health care professionals, that they were ‘ignored’.

“... and they're at their own wits, at their own mercy, until their next interview, ... “

(LP8, 12-13)

“...'bad' because nobody appears to care about them. All they appear to do is give them a prescription and that's it, end of problem, they have their prescription...”

(LP5, 101-3)

7.1.2.3 Awareness of the involved professionals

The link-pharmacists' limited knowledge of the provision of CMHC seemed to be mainly based on their professional experience. If the link-pharmacists mentioned the involvement of other health care professionals, this was most likely a GP. Some link-pharmacists also talked about CPNs and psychiatrists. One link-pharmacist mentioned occupational therapists. There seemed to be no thorough awareness of the existence, roles, nor composition of a CMHT and the range or roles of individual professionals involved.

7.1.2.4 Current involvement in CMHC

The link-pharmacists characterised their current involvement in community mental health care as ‘very limited’. The main kind of contact between link-pharmacists and people with
mental health problems reported was dispensing of medication. In some cases, the dispensing was complemented by the provision of drug-related information.

7.1.2.5 People with mental health problems and drug-related information

An important aim of the LPS was the provision of drug-related information to people with mental health problems. The link-pharmacists provided the following views on the perceived level of need for drug-related information about medication among people with mental health problems and other issues relating to the provision of drug-related information to these clients.

Generally, the link-pharmacists believed that there was a lack of explanation provided to clients concerning their condition and their medication and a lack of understanding of their condition and medication.

According to the link-pharmacists, few clients were pro-active in seeking drug-related information concerning their medication. The link-pharmacists were infrequently approached by the clients. Some believed that the clients were not forthcoming because of their condition. The problem was also seen in terms of the clients not wanting to acknowledge their illness and being secretive about it, not wanting other people in the pharmacy to overhear their problems should these be discussed with the link-pharmacist.

“But the problem is, mental health patients are not very communicative, are they? One, they don’t want to acknowledge that they’ve got a problem. And two, by the nature of their illness, are not able to talk about it. I think it’s very hard.”

(LP4, 120-4)

It was also highlighted that, although clients did not actively seek drug-related information, they were grateful when information was offered by the link-pharmacist. The link-pharmacists believed there was a need to establish rapport with the clients before the clients were happy to talk about their medication and to approach the link-pharmacists with their problems.

“Oh, they’ve always come back, yes. But I counsel almost every patient, and I found that the mental health patient is quite happy, most of them, quite happy to talk about their medication. The initial approach is the most difficult one. The initial, first conversation, it’s like climbing a ladder, to get onto the first rung is the most difficult one, but once you’re on the ladder it’s easier, because they know that you care. Or, that you are interested, so that’s the most difficult part.”

(LP10, 188 - 97)
Once the clients were talking to the link-pharmacists, they tended to be open about their medication, compliance with it and their condition. The clients utilised the time offered by the link-pharmacists.

The link-pharmacists identified that the clients sought drug-related information if

- a new medication was prescribed for them,
- the clients were unhappy with the medication (for example due to the side effect profile about which they had read).

Verbal communication, spending time with and showing empathy were approaches perceived by the link-pharmacists as lacking but needed by the clients; it was reported that provision of information leaflets was not enough unless the link-pharmacist also spoke to the client.

7.1.2.6 Potential roles

If the link-pharmacists talked about their potential involvement, it was related to monitoring clients on their medication, ensuring compliance with medication and the provision of information about medication and condition.

The link-pharmacists perceived their own accessibility as an advantage that should be better utilized. They perceived themselves as a health professional who could bridge the gap between the clients and other health care professionals. The link-pharmacists viewed themselves as a potential first port of call for clients experiencing problems with their medication or condition, or those needing access to a health care professional (it was believed by the link-pharmacists that the clients were experiencing problems contacting community health care professionals and that there were long periods between two visits to the clients’ physicians).

It was also suggested that the link-pharmacists should try to understand clients’ problems that were not directly medication-related; if they were unable to help directly, it was believed that they should be able to guide the clients to an appropriate source of help.

"Even though we can't resolve them, hopefully we can point them in the right direction."

(LP2, 216 - 26)
Some link-pharmacists were not specific about their current or potential involvement saying:

"I think there is a lot that can be done but isn't."

(LP1, 32)

or

"I think we've a lot to offer..."

(LP10, 122)

or

"As a pharmacist, I feel probably that we are underused ..."

(LP6, 8)

7.1.2.7 Constraints

During the interviews, the link-pharmacists identified constraints to their provision of extended services to people with mental health problems. These included:

- lack of contact with other professionals,
- lack of background information about the clients,
- lack of time,
- lack of remuneration,
- lack of training.

According to the link-pharmacists, the two main constraints to the provision of any specialised service at present were the lack of background information about the clients and the lack of contacts with other health care professionals. One link-pharmacist commented:

"But at the moment there seems to be a barrier between a GP and a pharmacist, a barrier between hospital and community pharmacists. Wherever you go there seem to be barriers."

(LP7, 142 - 5)
The link-pharmacists also discussed the problem of finding enough time to provide specialised pharmaceutical services and a lack of remuneration. One link-pharmacist admitted that he would not be confident in dealing with people with mental health problems unless he received specialised training.

7.1.2.8 Patient-related information and interprofessional issues

When talking about their current position and involvement in CMHC, the link-pharmacists repeatedly discussed two themes: patient-related information and communication with other health care professionals. Information was mentioned in two ways: first, information about the clients that the link-pharmacists were lacking (required information) and second, information that they possessed and would like to share with other professionals and the clients (offered information). Closely connected to these themes on information were comments about communication with other professionals.

Required information

The link-pharmacists’ abilities to provide pharmaceutical services to people with mental health problems were perceived to be limited by a lack of background information, for example personality characteristics, medical and drug histories. If the link-pharmacists were approached by a person with mental health problems, they could only offer limited help based on incomplete information obtained from their current or previous contact(s) with the client.

The link-pharmacists believed that having background information would enable them to offer information to clients that would be specific to them and in line with information provided by other health care professionals.

"...and you have to be very, very careful that you don't, sort of, undo a lot of good work that somebody has been doing... because we don't know the whole picture, then it's very easy to say the wrong thing at the wrong time. You have to be very careful.”

(LP4, 81 - 7)

"Because we haven't got contacts we can't, actually, check with the GP first or CPN or psychiatric team before we can, actually, give them further information."

(LP7, 44 - 7)
The link-pharmacists’ genuine sense of responsibility towards the clients and for their own professional actions was evident throughout the interview data. The conflicting urge to resolve a client’s problem on one side but not to jeopardise the work of other health care professionals on the other was prominent, influencing the link-pharmacists’ approach to clients.

"... they try to get information from us, but because we don't know the full background we have to be very, very strict about how much information we can give them. If you give them too much information, they may actually not comply with the treatment. Because we haven't got the background information, it is very, very awkward and difficult."

(LP7, 78 - 84)

Offered information

The link-pharmacists reported that, by talking to the clients or by observing them, they were able to gather medication and condition-related information about the clients that they wanted to share with other professionals and so contribute to monitoring the clients.

"They want to talk about the condition, anything they've been prescribed, they want to go into detail about ... this type of information should be shared between the professions"

(LP6, 20 - 4)

The link-pharmacists believed that they could observe problems, for example with clients’ compliance with medication, but the information remained with them without a mechanism in place for it to be passed to an appropriate professional and so be utilised in the overall clients’ care.

"And considering that the pharmacist is probably someone who sees them on a very regular basis. And you know from them, collecting their prescriptions and, whether or not they're taking their medication. And they tend to tell you, you know, if they've had it before and if they're taking it and what have you. We're probably in quite a good position to be able to inform people on whether or not they are following the tablets they are meant to be doing, and there's nobody who ever asks you that."

(LP4, 160 - 70)

One link-pharmacist talked about the potential problems related to the confidentiality of shared information. He suggested that changes in legislation may be required to make it possible for all professionals to share the information.
Results

Chapter 7 - The Context study results

“We might be getting involved in data protection but then once again, the rules might have to be changed, so that all the professions can look at it collectively, as a group, instead of as individuals. And assess the information for the benefit of the patient.”

(LP9, 109 - 13)

Interprofessional issues

Generally, the link-pharmacists felt professionally isolated in the provision of community mental health care.

“There is no two-way communication, it's just what the GP says you have to try to follow.”

(LP7, 156)

“But we, at the moment, are very much on the outskirts of it all.”

(LP4, 171 - 2)

They reported that, currently, they had no links with other mental health care professionals and, when dealing with clients, they did not feel comfortable to act in isolation.

“Not knowing their history, I'm also slightly blind, not knowing what they have done before or what their approach to the medication is. So I don't have a full history of their condition, so I'm also playing blind in many ways. I don't know what they've been told. So they may get different vibes or different messages. All these affect patient care at the end.”

(LP6, 51 - 6)

The link-pharmacists would use improved contacts with other professionals for an exchange of information and, for example, for referrals of clients.

“...if you think it's an emergency then you will refer the patient straight to the doctor or you might ring up the doctor...”

(LP9, 126 - 9)

Through creating links between health care professionals and teamwork, the sharing of patient-related information could be achieved.

“And it'll be better if pharmacists, doctors, psychiatric nurses, occupational therapists, if there is a session, even if it means once every three months or four months, get together at least to know what each other's views are, the way they are thinking, how they are approaching. So it will be much more clearer, it will make more accessible service to the people when they need it...”

(LP9, 38 - 46)
The need for improving interprofessional communication and establishing teamwork was prominent. One link-pharmacist expressed his belief that all professionals should be collectively responsible for the clients.

"... the relapse started. And this can easily be prevented if there was teamwork available, communication lines open, and, ..., the patient is looked not just as individual isolated profession's responsibility, but collective responsibility ...”

(LP9, 104 - 8)

7.1.2.9 General approach

Some link-pharmacists viewed people with mental health problems, compared with all other patients coming to their pharmacies, as a group with special needs and requirements.

“I think these patients are special, they have special requirements. It's not the same for physical disability as it is for mental health.”

(LP1, 199 - 201)

“But they do need extra care and attention, in my opinion.”

(LP8, 27 - 8)

Empathy and motivation to help people with mental health problems were prominent to the link-pharmacists’ approaches to this client group.
7.2 Non-LPS Pharmacists

The following section presents the data gathered from the non-LPS pharmacists. Their background characteristics are presented first, followed by the structured questionnaire and then interview data.

7.2.1 Recruitment and data collection

A total of 46 community pharmacists were approached to recruit 20 participants (43% response). Reasons for refusal to participate are summarised in table 7.1.

<table>
<thead>
<tr>
<th>Reasons for non-participation</th>
<th>Number of pharmacists giving the reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too busy/inconvenient</td>
<td>11</td>
</tr>
<tr>
<td>Not interested</td>
<td>4</td>
</tr>
<tr>
<td>Pharmacist unobtainable</td>
<td>2</td>
</tr>
<tr>
<td>Ineligible (self-determined)</td>
<td>2</td>
</tr>
<tr>
<td>Leaving current position</td>
<td>1</td>
</tr>
<tr>
<td>Reason not reported</td>
<td>6</td>
</tr>
</tbody>
</table>

Nineteen semi-structured interviews were conducted as one of the non-LPS pharmacists was later unavailable for interviewing. During one interview the respondent felt uncomfortable being recorded. Therefore, recording was stopped and detailed notes taken. Three recordings were subsequently found inaudible. A total of 16 interviews were analysed. The same sample of 19 non-LPS pharmacists were also provided with the structured questionnaire. Ten questionnaires were returned within four weeks. The rest of the respondents were sent reminder letters together with another copy of the questionnaire and a pre-paid envelope. No more questionnaires were obtained.

7.2.2 Background characteristics

The non-LPS pharmacists' background characteristics are summarised in table 7.2. There were 15 male pharmacists in the sample, the median length of their practice was 14 years and the pharmacies where the respondents were based employed two to six employees (median=4, including the responding non-LPS pharmacist).
### Table 7.2: Background characteristics of the non-LPS pharmacists and their participation in data collection (n=19)

<table>
<thead>
<tr>
<th>Non-LPS pharmacist</th>
<th>Sex</th>
<th>Years of practice</th>
<th>Number of employees</th>
<th>Interview</th>
<th>Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLP1</td>
<td>F</td>
<td>7</td>
<td>6</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>NLP2</td>
<td>M</td>
<td>10</td>
<td>2</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NLP3</td>
<td>M</td>
<td>15</td>
<td>4</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>NLP4</td>
<td>M</td>
<td>unknown</td>
<td>3</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>NLP5</td>
<td>M</td>
<td>6</td>
<td>3</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NLP6</td>
<td>M</td>
<td>unknown</td>
<td>2</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NLP7</td>
<td>F</td>
<td>18</td>
<td>5</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NLP8</td>
<td>M</td>
<td>18</td>
<td>2</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NLP9</td>
<td>M</td>
<td>30</td>
<td>5</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NLP10</td>
<td>M</td>
<td>9</td>
<td>unknown</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>NLP11</td>
<td>M</td>
<td>15</td>
<td>4</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NLP12</td>
<td>M</td>
<td>10</td>
<td>4</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>NLP13</td>
<td>F</td>
<td>13</td>
<td>5</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>NLP14</td>
<td>M</td>
<td>7</td>
<td>6</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>NLP15</td>
<td>F</td>
<td>2</td>
<td>2</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NLP16</td>
<td>M</td>
<td>23</td>
<td>4</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>NLP17</td>
<td>M</td>
<td>19</td>
<td>3</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>NLP18</td>
<td>M</td>
<td>16</td>
<td>6</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>NLP19</td>
<td>M</td>
<td>unknown</td>
<td>4</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Median</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

* the interview records of poor quality or misplaced

#### 7.2.3 Structured questionnaires

#### 7.2.3.1 Services to people with mental health problems

**Pharmaceutical services**

The services that the sample of non-LPS pharmacists currently provided to people with mental health problems are summarised in table 7.3. 'Other' provided services were in all 3 cases the provision of monitored dosage systems to PMHP. The 2 non-LPS pharmacists who provided non-drug-related consultations did not provide any description of these consultations.
Table 7.3: Services provided by the non-LPS pharmacists to people with mental health problems (n=10)

<table>
<thead>
<tr>
<th>Current services</th>
<th>Number of non-LPS pharmacists reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug dispensing (including OTC)</td>
<td>10</td>
</tr>
<tr>
<td>Consultation about dispensed drugs (including OTC)</td>
<td>9</td>
</tr>
<tr>
<td>Provision of information leaflets</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
<tr>
<td>Non drug-related consultation</td>
<td>2</td>
</tr>
</tbody>
</table>

Information-related services

The types of information provided to people with mental health problems are summarised in the table 7.4.

Table 7.4: Information provided by the non-LPS pharmacists to people with mental health problems (n=10)

<table>
<thead>
<tr>
<th>Information provided</th>
<th>Number of non-LPS pharmacists reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on medicines for psychiatric diagnosis</td>
<td>9</td>
</tr>
<tr>
<td>Information on medicines for non-psychiatric diagnosis</td>
<td>8</td>
</tr>
<tr>
<td>Minor ailments</td>
<td>8</td>
</tr>
<tr>
<td>Topics not directly related to medicines</td>
<td>0</td>
</tr>
</tbody>
</table>

Drug-related information

The non-LPS pharmacists were further asked to specify the drug-related information that they provided to people with mental health problems as presented in table 7.5. The ‘other’ drug-related information was specified as information about any specific food or diet-related requirements that applied to a particular person.
Table 7.5: Drug-related information provided by the non-LPS pharmacists to PMHP (n=10)

<table>
<thead>
<tr>
<th>Drug-related information</th>
<th>Number of non-LPS pharmacists reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side-effects</td>
<td>10</td>
</tr>
<tr>
<td>Drug-drug interactions</td>
<td>8</td>
</tr>
<tr>
<td>Other interactions</td>
<td>8</td>
</tr>
<tr>
<td>Doses</td>
<td>8</td>
</tr>
<tr>
<td>Indications</td>
<td>5</td>
</tr>
<tr>
<td>Dosage</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
</tbody>
</table>

Additional consultation

One non-LPS pharmacist stated that he *repeatedly* provided consultations (in addition to drug-related information provided while dispensing medication) to one person with mental health problems. The pharmacist commented that the consultation was to a person who seemed in need of emotional support and general discussion about her problems.

Initiation of contact between the non-LPS pharmacists and PMHP

When asked about who tends to initiate the contacts/consultations between the non-LPS pharmacist and PMHP, 5 non-LPS pharmacists answered that they tended to initiate the contacts, 3 believed that PMHP did so and 2 non-LPS pharmacists stated that both they and PMHP tended to initiate the contacts. Two non-LPS pharmacists explained that the consultations were initiated by the non-LPS pharmacist if, for example, there was an apparent or potential interaction with the client’s medication or if the client was prescribed a new medication.

7.2.3.2 Interprofessional issues

Contacts with other professionals

Table 7.6 presents the number of non-LPS pharmacists who reported that they had contacted (first column) or had been contacted by (second column) community mental health care professionals. The third column of the same table states in how many cases the communication was shared.
Table 7.6: Contacts with community mental health care professionals as reported by the non-LPS pharmacists (n=10)

<table>
<thead>
<tr>
<th>Professional</th>
<th>Number of pharmacists initiating contact with:</th>
<th>Number of pharmacists receiving contact from:</th>
<th>Number of pharmacists in reciprocal contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social worker</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Community psychiatric nurse</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Consultant psychiatrist</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>GP</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Community support worker</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Clinical psychologist</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Frequency of contact

As shown in the tables 7.6 and 7.7, the contacts between the non-LPS pharmacists and other health care professionals were infrequent and irregular. One non-LPS pharmacist stated that he contacted a social worker regularly every month. The pharmacist was, in return, occasionally contacted by a social worker. One non-LPS pharmacist who stated that he occasionally contacted a CPN also reported to be contacted by a CPN (it was not stated whether it was the same CPN). Other contacts were occasional and were not reciprocal (table 7.6). Table 7.7 shows the frequencies indicated by the non-LPS pharmacists for their contacts with any of the professionals listed in the table 7.6.

Table 7.7: Frequency of contacts between the non-LPS pharmacists and other professionals (n=70*)

<table>
<thead>
<tr>
<th>Frequency of contact</th>
<th>Number of reports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contacts initiated by LPs</td>
</tr>
<tr>
<td>Occasionally*</td>
<td>3</td>
</tr>
<tr>
<td>Monthly</td>
<td>1</td>
</tr>
<tr>
<td>Never</td>
<td>58</td>
</tr>
</tbody>
</table>

* each non-LPS pharmacist gave answer for each of the seven different professionals, three non-LPS pharmacists did not answer or did not indicate frequency for all the professionals, therefore the totals in the table are lower; * unable to specify frequency

Method of communication

If there was a contact initiated by the non-LPS pharmacist, it was done by telephone (n=3).
Other professionals contacted the non-LPS pharmacists by telephone (n=6) or in person (n=5).

**Reasons for contacts**
Although asked, few non-LPS pharmacists stated any reasons for contacting other professionals or for being contacted by them. The reasons that were given are presented in table 7.8. The categories in the second column were created by the researcher to summarise the non-LPS pharmacists’ answers.

<table>
<thead>
<tr>
<th>Table 7.8: Reasons to contact or for being contacted by community mental health care professionals as reported by the non-LPS pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-LPS pharmacists’ reasons to contact other professionals</strong></td>
</tr>
<tr>
<td>Contact directed to</td>
</tr>
<tr>
<td>Social worker</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Psychiatrist</td>
</tr>
<tr>
<td>Prescriber</td>
</tr>
<tr>
<td><strong>Other professionals’ reasons to contact the non-LPS pharmacists</strong></td>
</tr>
<tr>
<td>Contact initiated by</td>
</tr>
<tr>
<td>Social worker</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Community support worker</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>CPN</td>
</tr>
</tbody>
</table>

**Perception of current communication with mental health care professionals**
The non-LPS pharmacists were asked to state positive and negative aspects of their communication with other mental health care professionals. Five non-LPS pharmacists found the question not applicable to them. Answers of 3 non-LPS pharmacists were
missing. One non-LPS pharmacist gave answers that appear to be comments concerning the non-LPS pharmacist’s contacts with clients rather than professionals. The answers are presented below.

Positive aspect:

"They appreciate my advice and find it comforting that there is someone who is there to listen and give advice without being critical to their needs."

Negative aspect:

"Some patients do not follow through on the advice given."

The non-LPS pharmacists were asked to express their opinion on a 10cm visual analogue scale, where a zero point was marked ‘poor’ and 10 point was marked ‘very good’. The minimum assessment was 0 and maximum 6.9, with median 1.2. One non-LPS pharmacist added to his 1.4 assessment that “there is hardly any communication at all”.

7.2.4 Semi-structured interviews

The interviews with the non-LPS pharmacists took about 20 to 40 minutes.

7.2.4.1 Awareness of the structure and provision of community mental health care

When it was revealed to the respondents that the interviews would focus on community mental health care (CMHC), the non-LPS pharmacists provided mixed reactions. Some seemed to be uncomfortable with the topic area and perhaps, based on their comments and reactions, would not have agreed to the interview if they had known the focus of the interview. In many cases the first reaction was hesitant and uncertain. Some non-LPS pharmacists had difficulties understanding the term ‘community mental health care’.

"Ehm, it would have been good to have some time to think about that.”

(NLP4, 7)

"That's a difficult question!"

(NLP7, 13)

Some of the non-LPS pharmacists did not appear to have any formed opinion about community mental health care. They seemed to be developing their thoughts about
community mental health care for the first time during the interview. Other non-LPS pharmacists were able to express their understanding in their own ‘definition’. The first of these definitions focused on the fact that the care was provided outside institutions.

“Presumably means looking after people suffering with mental health in the community rather than putting them in asylums or hospitals.”
(NLP9, 6-8)

The second of these definitions focused on the fact that the care involved medication.

“What comes in my mind is that these are those who have a little bit of psychiatric problems, or, yeah, probably left the hospital and they are on drugs.”
(NLP15, 15-19)

The non-LPS pharmacists’ awareness of the structure and delivery of CMHC was limited. The knowledge varied from those who did not, throughout the interview, show any apparent awareness to a non-LPS pharmacist with an informed view about the development of CMHC. However, it was not possible to conclude that any of the interviewed non-LPS pharmacists were fully knowledgeable about CMHC. There was no evidence (although the question was not directly asked) that any of the non-LPS pharmacists had voluntarily studied the topic or had in any other way familiarised themselves with the provision of CMHC. All knowledge was fragmented and appeared to be based on what the non-LPS pharmacists had ‘picked-up’ during their practice and what they had experienced in their pharmacies. For example, one non-LPS pharmacist was not aware which professionals were involved in community mental health care but she knew that the clients were reviewed every three to six months.

Some non-LPS pharmacists openly admitted that they were unaware of the provision of CMHC.

“Structured? Very little I know.”
(NLP16, 458)

They explained their not knowing by lack of contact/involvement and/or interest.
"No, not really, like I said earlier, we haven't really had a lot of contact with these people so, you know, I've had a lot of contact with methadone addicts which is a different part …, I'd be able to speak more on that because the experience is totally different, so I'd be able to tell you more along those lines, but when it comes to this kind of people I've had very minimal contact with them."

(NLP1, 145-152)

Some non-LPS pharmacists were aware of local activities in the field of mental health care. However, they were unable to discuss any national strategies. One non-LPS pharmacist mentioned that he was aware that there was a “vast number of requirements” for the provision of CMHC at a governmental level, but he was not more specific. Overall, the non-LPS pharmacists’ awareness seemed more intuitive than knowledgeable.

7.2.4.2 Assessment of quality
Some of the non-LPS pharmacists had formed opinions about the quality of care provided to people with mental health problems. The opinions were both complementary and critical.

“I think it's not that brilliant. In terms that, you know, when someone's got mental problems, what people tend to do is to palm them off with tablets and things, you know. There's not a lot of counselling done.”

(NLP2, 24-30)

“I think their needs are catered for, everything is available.”

(NLP12, 446-447)

7.2.4.3 Awareness of the involved professionals
The non-LPS pharmacists’ commentaries about the professionals involved in community mental health care were very general. Non-LPS pharmacists were talking about ‘organizations’ and ‘people’ caring for people with mental health problems.

“Ehm, we sometimes get calls from these organisations that look after certain patients (...) from a home or people who actually go to the patients’ homes...”

(NLP4, 29-32)

Often the main providers of the care were perceived to be ‘doctors’ that in some cases were specified as GPs or consultants. The respondents also mentioned ‘nurses’ that only in one case was specified as a psychiatric nurse. In the other case, the non-LPS pharmacist was
aware that the nurses were specific for the field but was not aware of the specialization title (CPN). One non-LPS pharmacist mentioned district nurses in relation to CMHC. Two non-LPS pharmacists mentioned social workers. Often, the non-LPS pharmacists mentioned 'carers'. ‘Health workers’ were also used to describe persons involved in the clients’ care.

“... they are kept an eye on by social workers and health workers.”
(NLP11, 15-16)

Some non-LPS pharmacists openly admitted that they were not aware of the professionals involved in community mental health care.

Different forms of ‘homes’ were often mentioned, sometimes specified as nursing homes. When asked about community mental health care, non-LPS pharmacists spoke more frequently about these ‘homes’ than individual clients. It appeared that, for some non-LPS pharmacists, community mental health care equalled care provided in these ‘homes’.

“Ehm, I myself, we don't service any homes as such and I think if we did, then I think almost certainly there might be some patients there who would be having certain medications...”
(NLP4, 48-52)

“Well, if there is any problem, they call their GPs. If they're too mentally ill, there are homes that they go to.”
(NLP8, 15-17)

“... they've got a lot of mental health homes or projects in the borough. So these are small little projects with three or four residents in each one, in a normal house, ...”
(NLP10, 80-83)

During the interviews, there was a complete lack of acknowledgment of the existence of CMHTs by the non-LPS pharmacists. One non-LPS pharmacist believed that the nurses with whom he was in contact, were grouped in a 'unit' and this unit was in constant contact with consultant psychiatrists.

“... so I normally tell them to check with the consultant whom they liaise with quite regularly, because they're all from the same block, so the consultants and nurses mix with each other on a day to day basis. ... I think they've got their own unit so it's easy for them to liaise ... There's quite a nice team, they're quite happy with each other, they come in and buy things for each other if one's popping in, so it's a nice sort of atmosphere for them, it makes it nice for me. ... It's a nice close team I don't have to ring the doctor direct, I just stick a little note...”
(NLP12, 159-192)
7.2.4.4 Current involvement in CMHC

The interviews provided data on the self-perceived level and nature of the non-LPS pharmacists’ current involvement in CMHC. The respondents were also directly asked whether they thought that they currently had a role in community mental health care and if so, to describe this role. The data on these topics are summarised in table 7.9 and discussed below.

Table 7.9: Reported involvement of the non-LPS pharmacists in community mental health care

<table>
<thead>
<tr>
<th>Supply of medication</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispensing of medication to clients, carers, nurses and nursing homes, sometimes in the form of a home delivery. Customised dispensing using personalised medication records</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information-related (to clients)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of information about medication</td>
<td></td>
</tr>
<tr>
<td>Explanations of side effects and interactions, dosage</td>
<td></td>
</tr>
<tr>
<td>Reassurance of benefits of medication</td>
<td></td>
</tr>
<tr>
<td>Other prescription-related queries</td>
<td></td>
</tr>
<tr>
<td>Mostly when asked by clients, sometimes volunteered by the non-LPS pharmacist</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clinical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring of clients</td>
<td>Medication, general health, side effects, interactions, preventing suicide should be continuous and centrally organised</td>
</tr>
<tr>
<td>Facilitating care for clients</td>
<td>Directing to further support</td>
</tr>
<tr>
<td>Referral (back) to doctor</td>
<td></td>
</tr>
<tr>
<td>Medication management through provision of monitored dosage system</td>
<td></td>
</tr>
<tr>
<td>Services to residential homes</td>
<td>Medication supervision specified by two non-LPS pharmacists (checking prescriptions and medication including its dispensing, advice on medication including its storage)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interprofessional cooperation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses, 'community workers', social workers</td>
<td>Supply of medication</td>
</tr>
</tbody>
</table>

Many non-LPS pharmacists perceived their current role as insignificant.

"Ehm, I don't think we have, I have, a big role quite honestly."

(NLP4, 190)

"I don't see much of a role as such, apart from just the straightforward dispensing. I haven't got involved in anything where I do play an active part, apart from the dispensing side. I'm not aware of any such roles available."

(NLP12, 220-225)

The perceived roles were mainly dispensing-related services including deliveries of
medication, and ensuring that prescriptions were correct and correctly dispensed. Other roles were information-related and included provision of information about the medication and explanations of side effects and interactions and reassurance of the benefits of medication for the patient. The non-LPS pharmacists also reported roles in the monitoring of side effects and interactions, and referring or directing people to other sources of support. Although some viewed these as minor, for others these were the main roles of a community pharmacist in CMHC.

**Interactions with people with mental health problems**

Although the non-LPS pharmacists reported some activity in terms of the provision of services to people with mental health problems, there was no sign of consistency or regularity. Some non-LPS pharmacists reported that they had minimal or hardly any, contact with persons with mental health problems and no contacts with other health care professionals. They reported that they were not asked drug-related questions either by people with mental health problems nor their carers or other professionals. Generally, the non-LPS pharmacists’ contacts with people with mental health problems were limited to dispensing medication and providing related information.

"Contact? When they come and brought prescription."

(NLP15, 46-47)

Non-LPS pharmacists reported that some clients came regularly. For some non-LPS pharmacists this allowed the creation of closer relationships with these people. It was reported by some, that clients were not willing to speak to the non-LPS pharmacist. One non-LPS pharmacist reported that clients wished to collect their medication and leave the pharmacy and were not interested in any further contacts. On the contrary, one non-LPS pharmacist believed that PMHP were more likely to confide in a pharmacist than any other professional and that the pharmacists may be in contact with the clients more often than other health care professionals. One non-LPS pharmacist believed that cultural and language barriers could influence the relationship with the client.
7.2.4.5 Potential roles

During the interviews the non-LPS pharmacists mentioned a number of potential roles for the community pharmacists in community mental health care. These are summarised in table 7.10.

Table 7.10: Potential roles for community pharmacists as identified by the non-LPS pharmacists

<table>
<thead>
<tr>
<th>Information-related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug-related advice to people with mental health problems, residential homes staff and general practitioners</td>
</tr>
<tr>
<td>Clinical</td>
</tr>
<tr>
<td>Increasing clients’ compliance to medication through drug-related advice to PMHP, drug monitoring and alternative dispensing daily, weekly, in the form of monitored dosage system (only possible if local clients)</td>
</tr>
<tr>
<td>Symptoms recognition followed by advice and/or referral</td>
</tr>
<tr>
<td>Cooperation with physicians through drug-related advice and reporting back important information about specific clients</td>
</tr>
<tr>
<td>Repeat prescribing (if patients stable)</td>
</tr>
<tr>
<td>Additional support for PMHP</td>
</tr>
<tr>
<td>Emotional support to PMHP</td>
</tr>
</tbody>
</table>

It was suggested that there should be ‘psychiatric pharmacists’ to deal with specialised issues of community mental health care.

7.2.4.6 Constraints

The non-LPS pharmacists were asked whether they identified any constraints or potential constraints to their current or potential future involvement in CMHC. These included:

- lack of remuneration,
- lack of time,
- extensive workload,
- lack of knowledge,
- lack of motivation,
- lack of space for private consultation,
- not adequate professional status amongst other professionals,
- lack of definition of community pharmacists’ roles,
- inadequate communication with other professionals,
• lack of information about patients,
• unwillingness of people with mental health problems to speak to a pharmacist.

Remuneration was perceived as a necessary requirement for the extra work that would be required of pharmacists but also as a means of enabling the pharmacists to provide the services as shown in the figure 7.1. Registration of patients with a single pharmacy was perceived to be helpful.

**Figure 7.1:** Utilisation of remuneration as suggested by the non-LPS pharmacists

7.2.4.7 **Interest in involvement in CMHC**

The non-LPS pharmacists were asked about their interest in the care of people with mental health problems. The majority of respondents said that they would not be interested to be further involved. The stated reasons included:

• other professional interests,
• lack of time and remuneration,
• not having patients with mental health problems.

It was perceived that the non-LPS pharmacists who were interested in advancing the pharmacy profession were those interested in extended services.

"I think most pharmacists prefer to move away from commercialism and become more professional, but it's a question of economics."

(NLP9, 92-94)
One non-LPS pharmacist felt that he was unable to answer the question unless he had a clear definition of the role.

### 7.2.4.8 People with mental health problems and drug-related information

The non-LPS pharmacists provided their opinions with regard to drug-related information provision to people with mental health problems. Some of them believed that people with mental health problems were well informed about their medication either in hospitals or by general practitioners. The non-LPS pharmacists' opinions about whether or not they were questioned by people with mental health problems or their carers ranged from those who reported being asked questions, through those sometimes asked, to those who were not or very rarely asked.

One non-LPS pharmacist commented that

"... patients are more willing to ask questions nowadays ..."

(NLP7, 155-156)

The same non-LPS pharmacist believed that people with mental health problems should be encouraged to ask questions and professionals should allow time to provide the information. Another non-LPS pharmacist thought that, considering how complex their treatments were, few clients asked questions.

The non-LPS pharmacists reported that the clients did not ask questions about medication because

- they did not have any problems with their medication,
- they accepted that they had to take their medication,
- they were well informed.

One non-LPS pharmacist believed that his affluent and literate clientele meant that questions were not often asked.
One non-LPS pharmacist offered the following contradicting answers:

1) "*Researcher
... does [a person with mental health problems] ever ask questions about medication?
*NLP13
No he's too sedated."

(NLP13, 62-65)

2) "They don't have any problems with it, they just take the medication. There's no need to ask them anything."

(NLP13, 122-125)

Thus, he stated that the PMHP did not have problems with their medication while mentioning one himself.

Drug-related information was required by people or volunteered by the non-LPS pharmacists particularly if:

• a new medication was prescribed,
• there was a change in the person’s medication,
• the non-LPS pharmacists knew, based on knowing the person, that the person required repetition of information (mostly in terms of dosage of prescribed medication).

“Oh yes, you know if we see that clarification is required, if somebody's dosage is particularly ehm, not complicated, but is needing clarity then we make sure that they understand ... we have customers that we know that we need to just, you know, make sure that they, at the time of picking up the repeat order, are in a capacity to understand their dosage.”

(NLP4, 151-162)

Often the non-LPS pharmacists perceived that people with mental health problems asked questions only if they were prescribed a new medication.

One non-LPS pharmacist believed that there was no need to provide drug-related information if the client had a repeat prescription. However, he would educate the client, if he or she was prescribed a new medication.

“... because it's regular, there’s no need to go in-depth with the explanation of it, but if it's new, then, obviously we go through it. In case the medication is changed either from the hospital or a GP, then we go through it, what is this and that's it.”

(NLP16, 180-187)
Drug-related information that had been required by people with mental health problems or their carers included:

- side effects,
- dosage of medication,
- length of treatment,
- potential interactions,
- reassurance that the medication is ‘good’ medication,
- reassurance if different brand of medication dispensed.

The non-LPS pharmacists emphasised some problems associated with providing drug-related information to people with mental health problems. Generally, the non-LPS pharmacists were

- unaware of what had been previously said to the person by other professionals and did not want to provide conflicting information,
- unaware of the physician’s intentions (for example an indication) in relation to a chosen medication and were wary of interfering with the physician’s intentions,
- they did not have any background information about the person and did not want to jeopardise the clients’ approach to taking their medication (compliance) by providing drug-related information.

The non-LPS pharmacists perceived it to be their duty to ensure that clients were taking their medication as intended by the prescriber. Therefore, they were of the view that a pharmacist needed to be careful when providing drug-related information particularly about side effects. Some non-LPS pharmacists believed that being aware of too many side effects might have a negative effect on the client’s compliance.

“Because, obviously, the doctor’s prescribed the medicine, and I can’t say, while I would like to give her accurate information, I don’t want her not to give the medicine to the patient [information required by a carer] just because of the side effects and all that, or not to, not necessarily give, but not to influence the patient.”

(NLP7, 58-63)
The non-LPS pharmacists’ approach to these issues seemed thoughtful. They were not routinely provided with any information about the patients or their treatments by any other professional or authority. However, they were keen to fill this gap by eliciting information from the clients’ themselves before giving any further drug-related information to a client or a carer.

For the same aim, the non-LPS pharmacists tended to ‘filter’ the drug-related information and to provide only some information to PMHP. The idea of providing only limited drug-related information was prominent and aimed mainly not to jeopardise (from the non-LPS pharmacist’s point of view) the person’s compliance with medication.

"The way I do it is that if [PMHP] ask you a question, you would actually find out what they know first before you tell them a whole load of stuff that perhaps they weren't expecting to hear, or perhaps the clinicians have decided that they are better off not knowing. I mean, if somebody asks you a question about a side effect, now you know as I do that certain drugs will have side effects, but the benefits of the medication will probably outweigh them. But some people will get very alarmed. And, obviously, if somebody says: ‘Well, what are the side effects of this drug?’, and then, if you churn off twenty side effects, you won’t be doing the actual patient any favours. So, often it is a good idea, what we tend to do is find out how knowledgeable the patient is about their own medication, how much they’ve understood...”

(NLP4, 200-218)

One non-LPS pharmacist emphasised the need to liaise with other professionals, mainly in order to prevent the problem of conflicting drug-related information.

"I think it would be better to liaise with the actual team whose dealing with those patients, so we're not giving the patient too much confusing advice.”

(NLP12, 388-392)

7.2.4.9 General issues

General approach
The non-LPS pharmacists seemed sympathetic to PMHP even if they were not particularly interested in issues of mental health. The non-LPS pharmacists’ opinions varied as to whether the needs of those with mental health problems were different to other people. Some believed that people with mental health problems differed to other patients and had special needs while others did not think so. The existence of special needs was mainly expressed in the way the non-LPS pharmacists believed that PMHP should be approached.
“They're quite agitated people, some of them don't like waiting long for their prescriptions. ... Yes, like I said we have to be more gentle with them, and more explanatory to them. We have to handle them delicately.”

(NLP11, 69-71, 113-115)

“... if there's a slight change in medication and whatever, they might be confused. ... if there is a difference people with mental health problems are reluctant, if there is a difference in appearance, reluctant to take them.”

(NLP7, 110-120)

“Obviously, the fact that mental health problem that they have, they need a special care than a normal patients that come along. Probably they are lonely, the fact that they are suffering from mental health problem, whatever the cause may be, need a little bit of attention, comfort, guidance, whatever they may require. It's got to come from all sources.”

(NLP16, 547-56)

One non-LPS pharmacist argued that people with mental health problems should be treated as all other patients in order to make them feel less isolated.

“They are OK, really...to make them feel as if they are, treated like normal people, when they are coming, when they ask questions. So that they would not feel so isolated.”

(NLP15, 331, 349-353)

The non-LPS pharmacists complained about the perceived approach of some physicians who did not spend enough time with clients and/or their treatment was medication-centred. It was argued that pharmacists were willing to talk and were easily accessible at any time, even via a telephone.

One non-LPS pharmacist was willing to acknowledge the benefits of community mental health care providing that the safety of all involved was secured.

“If they can live in the community without endangering the public and lead a life which has greater quality, then it's beneficial.”

(NLP9, 12-17)

One non-LPS pharmacist admitted that only her personal experience made her realize all the difficulties associated with living with mental health problems.
7.3 Summary and comparison of the data obtained from the link-pharmacists and the non-LPS pharmacists

7.3.1 Participants
The sample of non-LPS pharmacists had spent a shorter time in practice than the link-pharmacists’ sample (medians were 14 and 22 years respectively). The link-pharmacies were larger with a median number of employees being 6, compared to 4 employees in the non-LPS pharmacies.

7.3.2 Summary and comparison of the structured questionnaire data
When comparing the data obtained from the structured questionnaires completed by the link-pharmacists and non-LPS pharmacists, generally, the non-LPS pharmacists reported less participation on all aspects of the structured questionnaire, i.e. services and information provided to people with mental health problems and communication with other health care professionals. This suggested that the non-LPS pharmacists provided a narrower spectrum of services and information to people with mental health problems and had a lower level of interprofessional communication. This was especially noticeable with regards to ‘other services’ and non-medication-related consultations, suggesting that the provision of extended services from non-LPS pharmacists was limited.

In both groups high proportions of pharmacists reported that they provided information on side-effects, drug interactions, doses, dosages and indications to people with mental health problems. However, the semi-structured interviews revealed that both groups had many concerns about providing such information to people with mental health problems. During the interviews, the pharmacists reported that they did not want to provide conflicting information to that provided by other professionals and therefore they aimed to elicit as much information as possible from the clients before providing them with further drug-related information. Undergoing such a procedure could help to explain the high proportion of pharmacists providing information about side effects despite their prudence towards doing so. The second possible explanation would be that the pharmacists over-reported their activities.

Within the limited level of contacts with other professionals, reported by both groups, more
link-pharmacists reported having contacts with other health care professionals. More link-pharmacists reported initiating contact with other professionals, whereas more non-LPS pharmacists reported being contacted by other professionals. This corresponds with the overall 'climate' of both groups of interview data, within which link-pharmacists gave the impression that interprofessional contacts were left to them to initiate and the non-LPS pharmacists talked about being approached by other professionals. Also, in-line with the interview data, was the irregularity of the majority of contacts with other professionals. In both groups of data, practical drug-related issues such as collection of medication, delivery of medication or prescription clarification were frequent reasons for contacts between professionals. Additional activities such as discussions on their working relationships and issues related to clients' behaviour, were lacking in the non-LPS interview data.

On the visual analogue scale, communication with other professionals was assessed low by both groups of pharmacists (median score 0.9 for the link-pharmacists and 1.2 for the non-LPS pharmacists, no statistically significant difference). The range of scores was wider for the non-LPS pharmacists (0 - 6.9; range of the link-pharmacists’ scores was 0.2 - 2), reflecting greater variation of opinions among the non-LPS pharmacists.

**7.3.3 Summary and comparison of the semi-structured interview data**

The data obtained from the semi-structured interviews with the link-pharmacists and non-LPS pharmacists suggested that the interviewed community pharmacists from the ELCHA area had limited knowledge about CMHC provision. Even if pharmacists were directly involved in mental health care, for example, servicing nursing homes, their knowledge was limited to that experience. Although the knowledge of link-pharmacists was not greater, their opinions seemed to be better developed than those of the non-LPS pharmacists. The pharmacists had limited contact with PMHP and minimal contact with community mental health care professionals. Although similar themes emerged from both groups of interview data, the themes within the link-pharmacists' interviews appeared repeatedly or were mentioned with a greater emphasis. The link-pharmacists appeared more confident in expressing their opinions about CMHC and some of their opinions were shared by more than one link-pharmacist. Link-pharmacists appeared more interested in community mental.
health care when compared with a number of non-LPS pharmacists who stated that they would not be interested in further involvement in CMHC. The link-pharmacists' interest might have resulted from an inherent interest in mental health care that led to their awareness of related problems and/or could also be due to the link-pharmacists’ participation in the preliminary planning of and/or agreed participation in the LPS.

### 7.3.3.1 Common features

Both groups of pharmacists generally lacked knowledge about the current structure and delivery of community mental health care. Their opinions were limited to their experience. Furthermore, unless the non-LPS pharmacists were directly involved in CMHC, they had very little to report.

Except ‘obvious’ professionals such as general practitioners and psychiatrists, the pharmacists in both groups had limited knowledge about which professionals were involved in CMHC, unless, again, they had prior experience cooperating with them. The pharmacists did not express any knowledge of community mental health teams and the specific client group that these teams supported. Both groups had very limited or no contact with other community mental health care professionals.

Both groups of pharmacists perceived their current roles as limited. The services currently provided within CMHC, as reported by the pharmacists, were very similar between the two groups and it was not possible to conclude that either group was more or less intensively involved. For the majority of cases in both groups, there was a lack of consistency, regularity and structure in the services to PMHP, which appeared to be provided on an *ad hoc* basis. Both groups of pharmacists reported to be infrequently approached for drug-related information by PMHP.

The recognition for a need for an empathic approach when dealing with PMHP was common to both groups of respondents. However, the link-pharmacists appeared to draw more attention to the view that PMHP had special needs or were a special group of patients. Furthermore, the link-pharmacists emphasised the need to establish rapport with individual persons with mental health problems as a basic requirement when providing services to this patient group.

High professional responsibility for the clients’ care, with special reference to side effects
and compliance with medication, was also shared by both groups of pharmacists. This was mainly illustrated by the pharmacists’ approaches to the provision of drug-related information. Pharmacists from both groups were reluctant to provide any drug-related information unless they were sure that their information would not be in conflict with other information or the general approach to the patient’s care. Both groups emphasised the positive aspects of community pharmacists such as good accessibility and specialised medication-related knowledge.

7.3.3.2 Discriminating features

The pharmacists had different opinions about the quality of current CMHC. While non-LPS pharmacists’ opinions varied and included both positive and negative assessments, link-pharmacists were more critical, suggesting that there was an insufficient network of care and not enough drug-related information was provided to PMHP. The pharmacists differed in their opinions about the level of knowledge about medication among PMHP. While the non-LPS pharmacists reported that some PMHP were and some were not informed/knowledgeable about their medication, the link-pharmacists believed that PMHP were not well informed.

Within both groups of pharmacists, the opinions varied between individual respondents about the frequency with which clients approached pharmacists for information about their medication. In both groups, there were pharmacists who were rarely or had not been approached for drug-related information. However, the non-LPS pharmacists were more likely to state that they had no or minimal contact with PMHP. Five link-pharmacists believed that the consultations between the pharmacists and people with mental health problems tended to be initiated by both the pharmacist and the individual. Half of the non-LPS pharmacists were of the view that the pharmacists were more likely to initiate the consultation. The pharmacists agreed that PMHP required drug-related information if they were prescribed new medication.

The lists summarising potential roles identified by each group of pharmacists were very similar. Furthermore, the non-LPS pharmacists’ list could be perceived as more comprehensive. However, the link-pharmacists had more defined opinions about what they could potentially offer to PMHP and they appeared to be more keen to provide further
services. They seemed to have greater confidence in identifying roles for themselves in community mental health care. This was also reflected in the fact that the potential roles identified by them often appeared in more than one interview, whereas the potential roles mentioned by the non-LPS pharmacists were sometimes mentioned by one respondent only. The idea of providing general health and drug-related information about clients to other professionals was specific to the link-pharmacists.

Constraints to the provision of extended services reported by pharmacists were very similar. However, the pharmacists differed in the emphasis that they paid to individual constraints. The lack of background information about individual clients and the lack of contact with other professionals was prominent among link-pharmacists. This could also be due to the fact that the link-pharmacists were aware of the type of service that was going to be provided through the LPS and emphasised the constraints that related to it. Lack of patient-related information was present but not as obvious in the non-LPS pharmacists’ interview data. Lack of communication with other professionals was briefly mentioned by only one non-LPS pharmacist. Non-LPS pharmacists reported a lack of time and a high workload as the main constraints. The need for teamwork and professional isolation were less obvious in non-LPS pharmacists’ interview data.

From the non-LPS pharmacists’ general approach to the topic and their answers, also in combination with their low interest in potential roles, it appears, that routine provision of an LPS-like service will depend on each individual community pharmacist and their interest in provision of such a service. Within each population of community pharmacists there will be a group of those interested in the provision of such a service either for their interest to enhance the pharmacy profession and/or for the special interest in mental health. The rest of the pharmacists will be less or not interested. The link-pharmacists were the ‘interested group’ and their answers were biased towards a higher criticism of CMHC and therefore a greater need for the new service, more positive and defined perceptions of their potential roles in CMHC, and a higher interest in the service provision. The non-LPS pharmacists’ sample comprised both interested and not-interested pharmacists. Therefore, in comparison to the link-pharmacists, their responses were more diverse.
Chapter 8  Part1 - Intervention phase results

The following text summarises data obtained during the intervention phase of Part1. Data on the link-pharmacists' training day, the clients' initial visit to the link-pharmacy, GPs' response to the request for the information on clients' current prescribed medication and the link-pharmacists' use of the 'Contact with the clients' sheet are presented first, followed by the data from the link-pharmacists' and key workers' logbooks and the data from the clients' calendars. Within this, the data on how the logbooks were used are presented first, to illustrate the type of data available for analysis and to illustrate the use of the logbooks and calendars as methods for data collection. The second part of the chapter presents a summary of the content analysis of the logbooks.

8.1 Link-pharmacists' training day and procedures after recruitment

8.1.1 Link-pharmacists' training day

8.1.1.1 Link-pharmacists

Six out of the eight currently participating link-pharmacists attended the training day. In the pre-intervention questionnaire the link-pharmacists were asked about their training needs. Two link-pharmacists did not feel the need for any training. From the remaining six, five link-pharmacists asked for an update on drugs used in psychiatry. The training programme was arranged accordingly (appendix 18).

A review of the evaluation forms showed that the link-pharmacists thought that the day had covered all the important topics. They were happy with the venue and the schedule of the training day and felt prepared to start the intervention phase of the project. One link-pharmacist commented that he needed to further familiarise himself with the logbook (subsequently, he did not participate in the intervention phase because no clients were recruited for attendance in his pharmacy).

8.1.1.2 Key workers

All 61 potentially participating key workers were invited to the training day, two CPNs and one social worker attended.

8.1.2 Clients' initial visit to the link-pharmacists

Eleven of the 22 clients who contacted their link-pharmacist during the LPS made the
initial visit to the link-pharmacist themselves or accompanied by a carer, 5 clients were accompanied by the researcher and 4 clients were accompanied by their key worker. Two clients only used a telephone to contact their link-pharmacist. Five clients who agreed participation in the LPS did not visit or contact their link-pharmacists.

8.1.3 General practitioners
The GPs of 25 clients were approached to provide a list of clients' current medication. The participation of CL8 was arranged by KW2 directly with LP7, without the joint recruitment meeting due to the client's condition. Therefore, the researcher did not have the GP's details and the GP was not approached. The GP of CL27 was approached directly by LP7. GPs provided information about 9 clients' medication that was then supplied to the appropriate link-pharmacist. GPs did not provide a medication history for the remaining 18 clients. Therefore, the link-pharmacists of these clients had to establish the clients' medication histories from other sources.

8.1.4 'Contact with the clients' sheet
It was suggested by the link-pharmacists and agreed at the training day that the 'Contact with the clients' sheet designed to inform the client's key worker and the consultant psychiatrist about the contacts between the link-pharmacist and the client(s), would be sent every four weeks to the clients' key worker and psychiatrist, instead of weekly reporting, as originally planned. This was aimed to ease the link-pharmacists' LPS-related workload. Although the use of the sheet was explained to the link-pharmacists and they were reminded about its use, none of the link-pharmacists reported using it and none of them reported the sheet being requested by the consultant psychiatrists or key workers.
8.2 Calendars and logbooks

8.2.1 Use of the calendars by the clients

CL6 was not provided with a calendar as his health status at the beginning of the project did not allow this. Twenty-six clients were asked to keep the calendars. Six clients (23%) had the calendars available at the end of the post-intervention interviews, when they were collected. Two calendars did not contain any data. Four calendars were used for validation of the respective link-pharmacists’ logbooks (section 8.2.4.2, page 199). The clients’ use of the calendars is summarised in table 8.2, page 197.

8.2.2 Use of the logbooks by the link-pharmacists

8.2.2.1 Procedures after the two-month review of the process

When the researcher approached link-pharmacists two months after the beginning of the intervention phase, it was realized that there had been little contact between the link-pharmacists and their clients, and if there had been contact, it had not always been logged in a logbook.

A laminated sheet was prepared for the link-pharmacists with bullet points on how to proceed after each of their clients was recruited (figure 8.1) together with a flow chart on what the consultation with the client should comprise and how this should be recorded in the logbook (figure 8.2). A meeting was arranged between the researcher and the link-pharmacists to summarise the intervention to date. During the meeting the link-pharmacists were encouraged to be more pro-active, to contact the clients and the key workers in order to establish a rapport between all parties as a base for cooperation. The use of the logbooks was emphasized and their importance as evidence for evaluation of the scheme explained again.

Furthermore, the link-pharmacists suggested that it would be helpful to arrange an informal meeting with the key workers in order to discuss the intervention phase. During the course of the intervention phase two such meetings took place.
Figure 8.1: Bullet sheet to explain to the link-pharmacists how to proceed after the recruitment of a client

Community Mental Health Research Project

Get started!

- FILL IN known patient information in a logbook
- REVIEW the patient’s drug therapy
  (and contact the key worker if necessary)
- COMPLETE the Initial Review of Drug Therapy sheet in the logbook

And then:
- KEEP THE LOGBOOKS!!!
  All information and communications must be recorded!
- BE PRO-ACTIVE! Contact the patient and/or the key workers!
  We need to break the barriers, not to wait in front of them!

Figure 8.2: Consultation with a client and the logbook record chart

PROCESS → RECORD !!! → LOGBOOK sheets

CLIENT'S VISIT

1. REVIEW → RECORD !!!

2. CONSULTATION → RECORD !!!

3. CLIENT BOUGHT OTC
   - NO
   - YES

END OF THE VISIT

KEY WORKER CONTACTED?
   - NO
   - YES

Pharmacist - Client Consultation Record
Follow up

amendments to Medical History List

Pharmacist - Client Consultation Record
Recent

Medical History List - OTC drugs

Interprofessional Communication Record

OUTCOME FROM KW
   - 1st part
   - 2nd part
Twenty-seven logbooks were given to the link-pharmacists, who returned 24 logbooks (table 8.2). Three logbooks were lost but the link-pharmacists reported that they did not comprise any data. Ten of the 24 returned logbooks did not comprise any data, in 5 cases this was because there was no contact between the client and the link-pharmacist.

8.2.2.2 Pharmacist-client consultation record
Fourteen logbooks contained a total of 60 records. One link-pharmacist kept part of the data in his computer, comprising a further 10 records. All the link-pharmacists were approached by the researcher to identify whether their computer records contained any data regarding the clients whose logbooks were returned blank or were not returned, or any additional data to those in the completed logbooks. Seventy-four records were retrieved through this procedure. In total, the researcher obtained information on 144 contacts or potential contacts with clients (the occasions when the link-pharmacists recorded an attempt to contact the clients but were not successful were also included). The logbooks comprised between 1 and 8 records (median=4). Within the total of 144 records, there were between 1 to 44 records concerning 20 different clients.

8.2.2.3 Interprofessional communication record
The ‘Interprofessional communication records’ contained 13 records. Four additional records were retrieved from the link-pharmacists’ computer records providing a total of 17 records for analysis. The contacts were related to 5 different clients with 1 to 6 records for each client (median=3).

8.2.3 Use of the logbooks by the key workers
Out of 26 logbooks provided to the clients’ key workers (the key worker of CL27 refused to keep the logbook), 11 logbooks were returned. If a logbook was not available but the key worker was accessible (n=10), the researcher inquired about whether the missing logbook(s) comprised any data. In all cases the logbook(s) did not comprise any data. In all cases where the key worker was not accessible (n=5), there was no known contact between the key worker and the link-pharmacist (no reports of any contacts by the link-pharmacists or clients). Therefore, it was assumed that the logbooks did not comprise any
data. Out of the 11 returned logbooks, 4 comprised a total of 11 records. The researcher approached individual key workers to inquire whether their clients’ notes contained any or further (in addition to the data recorded in the logbooks) information concerning contacts with the link-pharmacists. Eleven records were obtained through this procedure. In total, the key workers provided information on 22 contacts or potential contacts (the occasions when the key worker made an attempt to contact the link-pharmacist but was not successful were also included) with the link-pharmacists regarding 8 different clients. The logbooks comprised in 3 cases 1 record, and in 1 case 8 records. Within the total number of 22 records there were 1 to 8 records (median=2) related to 8 different clients. Table 8.1 provides a summary of the use of the logbooks and table 8.2 shows what intervention data were available for each client.

**Table 8.1: Use of the logbooks by the link-pharmacists and the key workers**

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Logbooks</th>
<th>Number of records recorded by</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Provided</td>
<td>Returned</td>
<td>Completed</td>
<td>Respondent in logbook</td>
<td>Respondent on computer</td>
<td>Researcher from respondents’ notes</td>
</tr>
<tr>
<td>Link-pharmacists</td>
<td>27</td>
<td>24</td>
<td>14</td>
<td>60</td>
<td>10</td>
<td>74</td>
</tr>
<tr>
<td>Key workers</td>
<td>26</td>
<td>11</td>
<td>4</td>
<td>11</td>
<td>0</td>
<td>11</td>
</tr>
</tbody>
</table>
### Table 8.2: Intervention data available on each client

<table>
<thead>
<tr>
<th>Client in contact with LP</th>
<th>Calendar</th>
<th>Link-pharmacist</th>
<th>Key worker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Logbook</td>
<td>Computer notes</td>
<td>Logbook</td>
</tr>
<tr>
<td>CL1 Yes</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CL2 Yes</td>
<td>✓</td>
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<tr>
<td>CL3 No</td>
<td>✓</td>
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<td>CL5 Yes</td>
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<td>CL22 No</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CL23 No</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CL24 Yes</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL25 No</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CL26 Yes</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CL27 Yes</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*calendar/logbook empty

the KW refused to keep the logbook
8.2.4 Validation of the logbook data before the analysis

The records from the link-pharmacists' and the key-workers' logbooks, and the clients' calendars and the link-pharmacists' logbooks were compared for agreement.

8.2.4.1 Comparison of the link-pharmacists' with the key workers' logbooks

Some discrepancies were identified in the recorded dates of contacts in the link-pharmacists' and key workers' logbooks. The reasons were understood by the researcher as follows:

- In 3 cases the discrepancy appeared due to the fact that one of the professionals did not record the contact. In all occasions these contacts were later confirmed by the professionals during the post-intervention interviews or when inquired by the researcher.

- In 3 cases the recorded contact had the form of a message left on an answering machine. None of these contacts were recorded by the contacted professional. However, the contacted professionals' logbooks contained a record of their returning the telephone call.

- In 3 cases the contacts were clearly identical but recorded on different dates in different professionals' logbooks, the time difference being 3 or 5 days.

- In 3 cases the link-pharmacists contacted a GP or a manufacturer. Therefore, the contacts could not be included in the key workers' logbooks. The contact with the manufacturer was confirmed by the client during the Part1 post-intervention interview.

In one case a key worker recorded 3 occasions of telephoning a link-pharmacist. These contacts were not found in the link-pharmacist's logbook and the link-pharmacist did not confirm any of the three contacts. Therefore, any data obtained from key workers' logbooks presented in section 8.2.6.1, page 205 that related to these three contacts are shown using two numbers - first, a total number including the three contacts and second, in brackets, excluding the three contacts.

Other issues, such as initiation or the method of contact did match when the two sources were compared.

There was a total of 39 records of interprofessional contacts in both types of logbooks. Six
of these records were contacts between the link-pharmacists and professionals other than key workers. From the remaining 33 records, 16 were records of the same contact recorded in both the link-pharmacist’s and the key worker’s logbooks, representing 8 reciprocal contacts. This means that the 33 records represented 25 contacts or intended contacts (if a professional attempted to contact other professional but was not successful) between the key workers and link-pharmacists.

8.2.4.2 Comparison of the link-pharmacists’ logbooks with the clients’ calendars

The clients who held the 2 calendars containing no data, verbally confirmed their visits to the link-pharmacist during the Part1 post-intervention interviews. The data from the other 4 obtained calendars were compared to the data in the link-pharmacists’ logbooks.

In two cases (CL22 and 26) the dates of visits to the link-pharmacist agreed. In one case (CL18) the dates were different but 2 of the contacts were independently confirmed by both the link-pharmacist and the client. The third contact recorded by the client was not recorded by the link-pharmacist. In 1 case (CL02) the link-pharmacist recorded in his logbook 13 records by the time of the client’s post-intervention interview. Eight of them corresponded with the client’s calendar. On the first occasion of contact recorded by the link-pharmacist the client did not yet have the calendar. Another 3 disputable contacts were recorded in the link-pharmacist’s logbook in good detail. The link-pharmacist and the client were in frequent contact and it is likely that these contacts happened but were not recorded by the client. On one occasion, there was a one day difference in the link-pharmacist’s and the client’s record. Therefore, it only appears as a mistake by one of the respondents. The client’s calendar contained records of a further 10 contacts, made in 9 cases by telephone. Therefore, it is possible that these were not recorded by the link-pharmacist.

This review led to including all the records from the link-pharmacists’ and the key workers’ logbooks in the analysis. This comparison also confirmed that the records were in most cases completed correctly and enhanced the reliability of the data.

During the analysis of the logbooks’ data, one record was used as the unit of analysis. Not all the records represented a contact between the link-pharmacist and the client or the key
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worker. Records of the clients’ collection of medication, link-pharmacists’ comments on the client’s health and the professionals’ attempts to contact a client or the other professional were also included in order to investigate all the processes within the LPS. All records were divided into ‘actual contacts’ that represented contacts between the link-pharmacist and the client or between the professionals, and ‘intended contacts’ defining the link-pharmacists’ attempts to contact the client, or the professionals’ attempts to contact each other without success. The analysis of the link-pharmacists’ logbooks additionally generated the term ‘potential consultations’, that refers to those occasions when the client collected his or her medication from the link-pharmacy but this was not utilized for performing ‘advanced contact’ between the link-pharmacist and the client. ‘Advanced contact’ is defined as any contact between the link-pharmacist and the client that involved further issues than the routine dispensing of medication (recorded as dispensing only in the link-pharmacist’s logbook or computerised record).

8.2.5 Link-pharmacists’ logbooks

The logbooks contained:

- Client form
- Client medication record
- Pharmacist-client consultation record
- Interprofessional communication record.

The data from the ‘Pharmacist-client consultation record’ and ‘Interprofessional communication record’ were analysed and are summarised below.

8.2.5.1 Pharmacist-client consultation record

Seventy-nine records (n=144; 55%) represented dispensing of medication or monitored dosage system (potential consultations). Sixty-five (45%) records were related to issues other than solely dispensing (advanced contacts). Fifteen of these were intended contacts (table 8.3).
Table 8.3: Character of the link-pharmacists - clients contacts recorded by the link-pharmacists (n=144)

<table>
<thead>
<tr>
<th>Actual contact</th>
<th>Dispensing (potential consultations)</th>
<th>79</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-dispensing issues</td>
<td>50</td>
</tr>
<tr>
<td>Intended contact</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

The contacts were initiated by the link-pharmacists, clients or they took place when the clients came to collect their medication. Data concerning the initiation of the contacts and the ways of communication are summarised in table 8.4.

Table 8.4: Initiation of contact between a link-pharmacist and a client (n=144)

<table>
<thead>
<tr>
<th>Contact Initiation</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client came to collect prescription</td>
<td>46</td>
</tr>
<tr>
<td>monitored dosage system</td>
<td>43</td>
</tr>
<tr>
<td>Client in person</td>
<td>15</td>
</tr>
<tr>
<td>Client by telephone</td>
<td>6</td>
</tr>
<tr>
<td>Link-pharmacist in person</td>
<td>1</td>
</tr>
<tr>
<td>Link-pharmacist by telephone</td>
<td>14</td>
</tr>
<tr>
<td>Appointment arranged by the link-pharmacist and client</td>
<td>7</td>
</tr>
<tr>
<td>Unknown</td>
<td>6</td>
</tr>
<tr>
<td>Key worker</td>
<td>3</td>
</tr>
<tr>
<td>Not applicable (record of the link-pharmacist's comment, no contact)</td>
<td>3</td>
</tr>
</tbody>
</table>

In 10 cases the link-pharmacists recorded that, since the last visit to the link-pharmacy, the clients had visited their physician (a GP or a psychiatrist). The visits to the physicians were in 9 cases related to the clients’ mental health and, in 1 case, to a physical health condition. In 4 cases the link-pharmacists recorded that the visit to the physician had resulted from their previous consultation with the client. In 3 of these 4 cases the visit to the physician had resulted in a change to the client’s medication. In all 3 cases the link-pharmacists reported that this was as a result of their consultation.

The topics of contacts between link-pharmacists and clients are summarised in the table 8.5.
Table 8.5: Topics of the contacts between the link-pharmacists and clients as recorded by the link-pharmacists, in relation to initiation of the contact (n=144)

<table>
<thead>
<tr>
<th>Topic</th>
<th>The contact initiated by/through</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Link-pharmacist in person</td>
</tr>
<tr>
<td></td>
<td>Link-pharmacist by telephone</td>
</tr>
<tr>
<td></td>
<td>Client in person</td>
</tr>
<tr>
<td></td>
<td>Client by telephone</td>
</tr>
<tr>
<td></td>
<td>Key worker</td>
</tr>
<tr>
<td></td>
<td>Arrangement between CL and LP</td>
</tr>
<tr>
<td></td>
<td>Collection of prescription/AIDS</td>
</tr>
<tr>
<td></td>
<td>Unknowns/not-applicable</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Information/discussion about mental health medication (including side effects)</td>
<td>10 4 3 6 3 1 27</td>
</tr>
<tr>
<td>The client to update the link-pharmacist on health and/or medication</td>
<td>2 4 2 1 5 14</td>
</tr>
<tr>
<td>Client’s general health/physical health problem</td>
<td>5 2 2 3 12</td>
</tr>
<tr>
<td>The link-pharmacist attempted to contact the client (intended contact)</td>
<td>12</td>
</tr>
<tr>
<td>Information/discussion on non-mental health medication</td>
<td>3 1 3 7</td>
</tr>
<tr>
<td>The contact did not happen (intended contact)</td>
<td>3 3</td>
</tr>
<tr>
<td>Client’s mental health</td>
<td>1 1 2</td>
</tr>
<tr>
<td>LP’s observation of the client’s health</td>
<td>1 1 2</td>
</tr>
<tr>
<td>Prescription correction</td>
<td>2 2</td>
</tr>
<tr>
<td>No consultation (potential contact)</td>
<td>79 79</td>
</tr>
<tr>
<td>Total</td>
<td>2 12 23 6 3 10 91 13</td>
</tr>
</tbody>
</table>

Note: Total numbers exceed the total number of contacts as some contacts concerned more than one topic

**The link-pharmacists’ solutions to raised problems**

In 31 cases the link-pharmacists had recorded that they had provided explanations and advice in response to the raised issue. In 11 of these cases, the link-pharmacists also suggested to the client to visit a relevant other professional. Other, more specific link-pharmacists’ solutions to the raised problems are summarized in table 8.6.

Table 8.6: Link-pharmacists’ records of their solutions to the raised issues (n=144)

<table>
<thead>
<tr>
<th>Solution</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion, explanations, advice</td>
<td>20</td>
</tr>
<tr>
<td>Explanation and referral to another professional</td>
<td>11</td>
</tr>
<tr>
<td>Doses of medication adjusted</td>
<td>2</td>
</tr>
<tr>
<td>The LP left a message on the client’s answering machine to inform him about her attempt to contact him</td>
<td>1</td>
</tr>
<tr>
<td>The link-pharmacist set himself an aim to monitor the client’s progress</td>
<td>1</td>
</tr>
<tr>
<td>Spoke to a GP practice manager</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacists did not record solution or there was no solution as there was no problem raised</td>
<td>108</td>
</tr>
</tbody>
</table>

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**Length of the contacts between the clients and link-pharmacists**

The length of the consultation was recorded in 33 cases and ranged from 2 to 45 minutes (median=10 minutes).

**Appointment for the next visit**

In 8 cases the link-pharmacist and the client set up an appointment for the next consultation that in 7 cases took place.

**8.2.5.2 Interprofessional communication record**

Table 8.7 presents initiation of contacts between the link-pharmacists and other professionals. The 10 cases of the link-pharmacist-initiated contacts to various professionals are summarized in table 8.8.

<table>
<thead>
<tr>
<th>Contact Initiation</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link-pharmacist</td>
<td>10</td>
</tr>
<tr>
<td>Key worker</td>
<td>5</td>
</tr>
<tr>
<td>General practitioner</td>
<td>1</td>
</tr>
<tr>
<td>Arranged meeting between the link-pharmacist and key worker</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key worker</td>
<td>5</td>
</tr>
<tr>
<td>District nurse</td>
<td>2</td>
</tr>
<tr>
<td>General practitioner</td>
<td>2</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>1</td>
</tr>
</tbody>
</table>

**Methods of contact between the link-pharmacist and other professionals**

Eleven contacts were made by telephone, 5 in person and 1 by telephone and, subsequently, in writing.

**Topics of contacts between the link-pharmacist and other professionals**

The topics of contacts were grouped into more general categories. These were identified as ‘clinical’ and ‘organisational’. The summary is presented in table 8.9.
Table 8.9: Topics of the contacts between the link-pharmacists and other professionals as recorded by the link-pharmacists (n=17)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Category</th>
<th>Contact between*</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To discuss side effects of mental health medication that the client was experiencing</td>
<td>Clinical</td>
<td>a LP/KW</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b LP/manufacturer</td>
<td></td>
</tr>
<tr>
<td>2. To discuss the client's general and mental health</td>
<td>Clinical</td>
<td>GP/LP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LP/KW</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LP/GP</td>
<td></td>
</tr>
<tr>
<td>3. To correct a dose of mental health medication</td>
<td>Clinical</td>
<td>LP/GP</td>
<td>1</td>
</tr>
<tr>
<td>4. To arrange an update on the client's medication</td>
<td>Organisational</td>
<td>LP/district nurse</td>
<td>1</td>
</tr>
<tr>
<td>5. To discuss the client's medication and mental health - joint meeting with the client</td>
<td>Clinical</td>
<td>Previously arranged by the KW and LP</td>
<td>1</td>
</tr>
<tr>
<td>6. Returned telephone call - update on the client's case</td>
<td>Clinical</td>
<td>KW/LP</td>
<td>1</td>
</tr>
<tr>
<td>7. Introduction of the LP to the key worker, discussion on client's non-mental health condition</td>
<td>Organisational, clinical</td>
<td>a LP/KW</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b KW/LP</td>
<td></td>
</tr>
<tr>
<td>8. Introduction to a district nurse, suggested meeting</td>
<td>Organisational</td>
<td>LP/district nurse</td>
<td>1</td>
</tr>
<tr>
<td>9. Key worker introduced the client and was present to the discussion on the client's mental health and/or side effects of the client's medication</td>
<td>Organisational, clinical</td>
<td>KW/LP</td>
<td>1</td>
</tr>
<tr>
<td>10. Returned telephone call - discussion on the client's general and mental health and side effects of his mental health medication</td>
<td>Clinical</td>
<td>KW/LP</td>
<td>1</td>
</tr>
<tr>
<td>11. Introduction between the client and the key worker, introduction of the client's case, home visit to the client arranged</td>
<td>Organisational, clinical</td>
<td>KW/LP</td>
<td>1</td>
</tr>
<tr>
<td>12. LP informed the KW about his observations on the client's mental health, update on the client's medication</td>
<td>Clinical, organisational</td>
<td>LP/KW</td>
<td>1</td>
</tr>
<tr>
<td>13. Intended contact: Update on medication and clients' non-attendance to the LP</td>
<td>Clinical</td>
<td>LP/KW</td>
<td>1</td>
</tr>
</tbody>
</table>

* the professional who initiated the contact is stated first

In 4 cases the link-pharmacists recorded their suggestions to other professionals. In 2 cases the link-pharmacist suggested a meeting with the district nurse to update their records of the client's medication. In another case, the link-pharmacist informed the key worker about his suggestion for the client to visit the prescriber to discuss side effects that were being experienced by the client. Another link-pharmacist suggested that he would monitor the client’s progress regarding a physical health condition.

In 5 cases the link-pharmacists were aware of actions taken as a result of the contact between the professionals. These are summarised in table 8.10.
Table 8.10: Action taken by a professional as a result of a contact with a link-pharmacist as recorded by the link-pharmacists (n=5)

<table>
<thead>
<tr>
<th>Action taken</th>
<th>Contact*</th>
<th>Contact between</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arranged medication review by psychiatrist with the client in attendance</td>
<td>1a</td>
<td>LP/KW</td>
<td>1</td>
</tr>
<tr>
<td>Key worker suggested to contact other responsible professional and provided her details</td>
<td>7a</td>
<td>LP/KW</td>
<td>1</td>
</tr>
<tr>
<td>Key worker provided additional data on the client’s condition and medication</td>
<td>7b</td>
<td>LP/KW</td>
<td>1</td>
</tr>
<tr>
<td>A home-visit was arranged with the client for the link-pharmacist and the key worker</td>
<td>12</td>
<td>LP/KW</td>
<td>1</td>
</tr>
<tr>
<td>Link-pharmacist was updated on client’s general health and care</td>
<td>13</td>
<td>LP/KW</td>
<td>1</td>
</tr>
</tbody>
</table>

* table 8.9

In 5 cases the link-pharmacists recorded an outcome of their contact with another professional for the client. These are summarised in the table 8.11.

Table 8.11: Outcomes of the contacts between the link-pharmacists and key workers for the clients as recorded by the link-pharmacists (n=5)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Contact*</th>
<th>Contact between</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>The client’s problematic medication discontinued and new medication prescribed</td>
<td>1a</td>
<td>KW/LP</td>
<td>1</td>
</tr>
<tr>
<td>Allayed the client’s fears in relation to side effects experienced</td>
<td>1b</td>
<td>LP/manufacturer</td>
<td>1</td>
</tr>
<tr>
<td>Correct dose of medication dispensed</td>
<td>3</td>
<td>LP/GP</td>
<td>1</td>
</tr>
<tr>
<td>A client established contact with the LP</td>
<td>8b</td>
<td>KW/LP</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>KW/LP</td>
<td></td>
</tr>
</tbody>
</table>

* table 8.9

8.2.6 Key workers’ logbooks

Key workers’ logbooks comprised
- Client form
- Interprofessional communication record.

The ‘Interprofessional communication record’ was analysed and the results are presented below.

8.2.6.1 Interprofessional communication record

Twenty-two records were analysed. Three records made by a key worker were not confirmed by the respective LP and are disputable (section 8.2.4.1, page 198). Therefore,
any numbers related to these records are presented as two numbers, first number including, and the number in brackets excluding, the three disputable contacts.

Of the 22 records analysed, there were 19(16) actual contacts and 3 intended contacts. These contacts were in 19(16) cases initiated by the key worker and in 3 cases by the link-pharmacist. The contacts were in 14 (11) cases made by telephone and in 8 cases in person. The reasons for the contacts are summarised in table 8.12 and grouped according to categories created by the researcher.

Table 8.12: Reasons for the contacts between key workers and link-pharmacists (n=22)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Category</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>To check the client's attendance at the link-pharmacy</td>
<td>Organisational</td>
<td>7 (4)</td>
</tr>
<tr>
<td>To arrange a meeting between the key worker and link-pharmacist</td>
<td>Organisational</td>
<td>2</td>
</tr>
<tr>
<td>To discuss the client’s medication</td>
<td>Clinical</td>
<td>2</td>
</tr>
<tr>
<td>Introduction of the client and/or the key worker</td>
<td>Organisational</td>
<td>2</td>
</tr>
<tr>
<td>To check the client’s attendance at the link-pharmacy, client’s general and mental health</td>
<td>Organisational, clinical</td>
<td>2</td>
</tr>
<tr>
<td>Information about the client in relation to the client’s mental health medication</td>
<td>Clinical</td>
<td>1</td>
</tr>
<tr>
<td>To discuss the client’s education about his medication and condition</td>
<td>Organisational, clinical</td>
<td>1</td>
</tr>
<tr>
<td>To inquire about suitability of a monitored dosage system for the client and the process of obtaining it</td>
<td>Clinical</td>
<td>1</td>
</tr>
<tr>
<td>To introduce the client, discuss the client’s medication</td>
<td>Organisational clinical</td>
<td>1</td>
</tr>
<tr>
<td><strong>Intended contact:</strong> to arrange a meeting between the key worker and the link-pharmacist</td>
<td>Organisational</td>
<td>2</td>
</tr>
<tr>
<td><strong>Intended contact</strong> (the link-pharmacist unavailable): the key worker unable to contact the client - therefore aimed to check with the link-pharmacist the client’s attendance at the link-pharmacy</td>
<td>Clinical</td>
<td>1</td>
</tr>
</tbody>
</table>

Actions taken by the key workers as results of the contacts with the link-pharmacists and the outcomes for the clients are summarised in the table 8.13.
Table 8.13: Actions taken following the KW’s contact with the LP and outcomes for the clients as recorded by the key workers

<table>
<thead>
<tr>
<th>Content of contact/LP’s suggestion</th>
<th>Action taken by the key worker</th>
<th>Outcome for the client</th>
</tr>
</thead>
<tbody>
<tr>
<td>The LP informed the KW** about the client’s incontinence.</td>
<td>For the KW to visit the client and get more information about his incontinence.</td>
<td>not stated</td>
</tr>
<tr>
<td></td>
<td>The key worker suggested to the LP how to deal with the client. Client encouraged to attend.</td>
<td>not stated</td>
</tr>
<tr>
<td></td>
<td>Client encouraged to attend.</td>
<td>not stated</td>
</tr>
<tr>
<td></td>
<td>Client encouraged to attend. Client agreed to attend.</td>
<td>not stated</td>
</tr>
<tr>
<td></td>
<td>To visit the client and encourage him to visit the link-pharmacist. Explained to the client</td>
<td>not stated</td>
</tr>
<tr>
<td></td>
<td>A visit to the link-pharmacist arranged with the client</td>
<td>Medication and its side effects explained.</td>
</tr>
<tr>
<td></td>
<td>A home visit of the LP and KW arranged with the client</td>
<td>Received drug-related information.</td>
</tr>
<tr>
<td></td>
<td>The KW recorded that “a further meeting will be arranged” (there was no meeting according to</td>
<td>Received information about medication and</td>
</tr>
<tr>
<td></td>
<td>the interview data obtained from the key worker during Part1 post-intervention interview)</td>
<td>its side effects.</td>
</tr>
<tr>
<td></td>
<td>Client’s GP contacted to discuss further the provision of monitored dosage system.</td>
<td>Monitored dosage system arranged.</td>
</tr>
<tr>
<td></td>
<td>Procyclidine discontinued.</td>
<td>Client off the medication, feeling well.</td>
</tr>
<tr>
<td></td>
<td>The link-pharmacist confirmed frequent contact with the client - collection of prescriptions</td>
<td>not stated</td>
</tr>
<tr>
<td></td>
<td>and informal discussions.</td>
<td>not stated</td>
</tr>
</tbody>
</table>

*LP = link-pharmacist; **KW = key worker

The summary of the data obtained from both types of logbooks is presented below.
8.2.7 Summary of the logbook data

8.2.7.1 Approaching the link-pharmacists for information
The contacts between the link-pharmacists and clients during the LPS were, in the majority of cases, infrequent and irregular. Regular contacts were with those clients who also collected medication in the link-pharmacy. Seven contacts were recorded as previously arranged. Two of these concerned 1 client, otherwise they were contacts with different clients. Therefore, with 6 clients the contacts were arranged but only once.

8.2.7.2 Content of contacts between the link-pharmacists and clients
Over half (55%) of contacts between the link-pharmacists and the clients was solely dispensing of medication, although mostly in the form of monitored dosage systems, i.e. an enhanced customised form of dispensing. This suggests that there is opportunity for regular contact that could be used for monitoring the clients on their medication. However, this was not always utilised by the link-pharmacists during the LPS.
There were 50 ‘advanced contacts’ (involved further issues than only medication supply). A greater proportion of ‘advanced contacts’ were initiated by the clients than the link-pharmacists. Discussions about medication were the most frequent content of these contacts. Median length of the consultations was 10 minutes. Discussion, explanation or advice were most frequently recorded by the link-pharmacists as a solution to the raised problem.

8.2.7.3 Interprofessional contacts
The communication between professionals was inconsistent and the professionals themselves reported that the frequency of communication did not improve compared to the pre-intervention level. Two categories emerged from the data on the content of the interprofessional communication and these were ‘clinical’ and ‘organisational’. ‘Clinical’ issues mainly represented discussions on the clients’ general and mental health and medication, and ‘organisational’ issues often meant introduction of the client and/or the key worker to the link-pharmacist, arranging the meetings between the professionals or with a client, or a review of the clients’ attendance to the link pharmacy.
Results  Chapter 8 - Part 1 - Intervention phase results

8.2.7.4 Suggestions made by the link-pharmacists

The link-pharmacists’ suggestions in response to the issues raised are presented below separately as recorded by the link-pharmacists and by the key workers. This is because not all the contacts recorded by the link-pharmacists were directed to key workers and were not recorded by them. Also, not all the suggestions were recorded by the link-pharmacists themselves. The one suggestion that was mentioned in both key worker’s and link-pharmacist’s logbooks is indicated in the text.

Suggestions to other professionals made by the link-pharmacists were infrequent. Within the 17 records of the interprofessional contacts in the link-pharmacists’ logbooks, the link-pharmacists recorded 6 suggestions that had been made to the key workers. These included suggestions for regular contact between the link-pharmacist and district nurses (n=2), suggestions that the client’s case should be reviewed (n=2), a suggestion that the client’s physical health problem should be monitored (n=1) and a suggestion that the prescriber should be contacted to revise the client’s medication (n=1; client experiencing side effects).

Out of 22 interprofessional contacts recorded by the key workers, the key workers recorded 4 suggestions made by the link-pharmacists. These were related to the client’s physical health condition that should be monitored (n=2; one of these cases also recorded by the LP, as above), the link-pharmacist advised on how to arrange the monitored dosage system (n=1) and the link-pharmacist suggested that the client’s medication could be reduced (the suggestion was made to the client and reported by him to the key worker; n=1).

Advice was given to the clients on 31 occasions and during 15 of these occasions the link-pharmacists also made a suggestion for further action to their clients. These mostly represented the suggestion to contact the relevant professional (n=11), twice the link-pharmacist suggested that the client should continue to take his or her medication and twice they invited the client to contact the link-pharmacist if they experienced any problems. One link-pharmacist suggested a review of medication as one of the medicines was no longer required (see also the record made by a key worker above). (Note: one case contained two different suggestions.). Eight of these suggestions were made by one link-pharmacist to one client.
8.2.7.5 Follow-up of the link-pharmacists’ suggestions

According to the link-pharmacists’ logbooks, their advice was in 4 cases (n=50 ‘advanced contacts’) followed up by the clients who visited their doctors and 3 of these cases further resulted in a change to the clients’ medication (cases 1-3 below). One link-pharmacist recorded that the key worker followed the link-pharmacist’s suggestion (case 1).

According to the key worker’s logbooks, in 2 cases the advice given to them by the link-pharmacists was followed (cases 4 and 5).

8.2.7.6 Outcomes for the clients

Five records were made by the key workers concerning the outcomes associated with the clients’ contact with the link-pharmacist. In 3 cases the records implied that the clients received information about medication, in 1 case the client started to receive a monitored dosage system (case 4) and in 1 case an unnecessary medication was stopped (case 5).

Some outcomes of the contacts with clients that did not involve key workers were identified from the post-intervention interviews and are presented in the relevant part of the thesis (chapter 9).

Five exemplars of contacts during which issues other than the provision of drug-related information were involved are presented below.

Case 1 (CL2, LP9, KW1)

The link-pharmacist was the first port of call for a client acutely experiencing side effects of his newly prescribed medication, olanzapine 10mg once a day. The link-pharmacist contacted the client’s key worker and suggested review by the psychiatrist. As a result, the client was seen by the key worker and a review was arranged with the consultant psychiatrist. This resulted in olanzapine being discontinued and the client being prescribed trifluoperazine 15mg once a day. The link-pharmacist also suggested a gradual increase of the dose if olanzapine was started again. It was recommended by the link-pharmacist that the patient should be started on a dose of 2.5mg of olanzapine once a day for a week and then the dose should be increased by 2.5mg every week up to the desired level. This advice was accepted and used a few months later when olanzapine was prescribed again. The client did not experience side effects on this occasion and became stable on olanzapine.
Case 2 (CL2, LP9)
The same link-pharmacist advised the same client regarding the constipation he was experiencing as a side effect of his medication. This resulted in the client visiting his GP and receiving a prescription for a laxative (Fybogel).

Case 3 (CL5, LP2)
In another case the link-pharmacist recorded that the client’s medication was changed as a result of his consultation. However, there was nearly a 6-month delay between the link-pharmacist’s observation of the client being lethargic and suggesting the client to have his medication reviewed, and the change to the client’s medication. During the interviews, neither the client nor the key worker related the change to the link-pharmacist. Furthermore, the link-pharmacist did not record undertaking any action after his observation, except advising the client to have his medication reviewed.

Case 4 (CL26, LP4, KW8)
The key worker consulted the link-pharmacist about the provision of a monitored dosage system. This resulted in the key worker contacting the client’s GP and arranging the monitored dosage system.

Case 5 (CL22, LP8, KW15)
The link-pharmacist suggested that procyclidine that the client was taking long term may be gradually withdrawn as it was no longer required. The client discussed this advice with the consultant psychiatrist and procyclidine was discontinued.

Case 1 emphasised the importance of the link-pharmacists’ accessibility. The potential for monitoring the clients on their medication and making possible contributions to their treatment was illustrated by cases 1, 2 and 5. Case 4 illustrated the link-pharmacists’ potential involvement in the clients’ medication management. Although the occurrence of such examples was limited, it indicated that the community pharmacists could have a unique position in community mental health care.
8.3 Comparison of the pre-intervention structured questionnaire/interview data and intervention logbook data

This section presents a comparison of the pre-intervention questionnaire/interview data with the link-pharmacists’ and the key workers’ logbooks revealing the issues that changed after the introduction of the LPS. The issues included the frequency, character and ways of contacts between the link-pharmacists, clients and key workers.

**Increasing awareness of community pharmacists**

The pre-intervention questionnaire data indicated that no key worker was aware of the consultations being regularly provided by community pharmacists to their clients. The LPS involved 27 clients and 23 key workers who were, by participating in the LPS, all made aware that the option was available, 16 clients and 9 key workers were personally in contact with the link-pharmacist during the LPS.

**Infrequent contacts but more clients engaged in contact with community pharmacists**

Three out of 26 clients stated in the pre-intervention phase interview that they approached a community pharmacist for information about their mental health medication. The logbooks revealed that, during the LPS, 10 clients actively sought information from link-pharmacists. This included the 3 ‘pre-intervention’ clients. Therefore, 7 new clients also approached the community pharmacist for drug-related information and a further 17 were made aware of the option by participating in the LPS. This is particularly important considering that the main reason for not approaching a community pharmacist for drug-related information, reported by clients in the pre-intervention phase interview, was lack of awareness of the possibility of doing so.

**Frequency of communication between professionals did not increase and the communication remained irregular, key workers more often initiated the contact**

During the pre-intervention and intervention phases, the reported contacts between professionals were infrequent and irregular. Although the link-pharmacists reported, during the pre-intervention phase, some regular contacts with community mental health professionals, none of the contacts within the LPS developed into a regular occurrence.
During the 17 months of the LPS (the period from when the first client was recruited till the collection of the logbooks), there were 21 contacts (+ 4 intended) between 6 link-pharmacists (n=9) and 9 key workers (n=23). Nineteen of these 25 actual and intended contacts were initiated by key workers, 5 by the link-pharmacists and one contact was previously arranged by the two professionals. This appears different to the pre-intervention link-pharmacists’ questionnaire data: more link-pharmacists then reported that they initiated contacts with other professionals.

More key workers in contact with LPs
Five key workers reported in the pre-intervention phase questionnaire that, in the past, they were in contact with community pharmacists. Two of these were in contact with a link-pharmacist post-intervention (KW23 left the team and was unable to make a contact). Therefore, despite the lack of frequency and regularity of contacts, 6 new key workers initiated contact with or were contacted by the link-pharmacists in the course of the LPS and so were made aware of the possibility to contact a community pharmacist for assistance.

First contact with mental health professionals for the link-pharmacist with no previous experience
One link-pharmacist reported in the pre-intervention phase questionnaire that he never contacted and was never contacted by any CMHT professional. Although this pharmacist was not in contact with his clients’ key workers during the LPS, he met them at the two informal meetings where he discussed one of his clients with the key worker (KW15 logbook, the interview with the LP8).

The LPS did not improve the link-pharmacists’ contact with psychiatrists and CMHTs
Although 3 link-pharmacists reported, in the pre-intervention phase questionnaires, that contacts with psychiatrists occurred during their community pharmacy practice, there was no such contact recorded during the intervention phase in relation to any of the participating clients.

The lack of contact between the link-pharmacists and CMHTs identified from the pre-
intervention questionnaire data, was not improved during the LPS. There was no evidence in the logbooks or the post-intervention interviews of any formal or informal contacts between any of the link-pharmacists and any of the four CMHTs (except via key workers).

No change in the content of contacts with clients, contacts mainly related to psychiatric and non-psychiatric medication and condition

The information that the clients required during the LPS (as recorded in the logbooks) included information on psychiatric as well as non-psychiatric medication and issues relating to their mental and general health. Similarly, in the pre-intervention phase questionnaire, all the link-pharmacists reported that they provided people with mental health problems with medication and condition-related information. Only some reported that they provided other information such as advice and support with various issues of general health. This pattern did not change during the LPS; the clients did not seem to utilise the link-pharmacists for non-medication or non-condition-related consultations. Even in the case of a well-developed relationship between LP9 and CL2, the main topic of the meetings remained the client’s medication and general and mental health.

It is possible to conclude that the content of contacts between clients and community pharmacists remained the same after implementation of the LPS and confirmed that provision of medication and condition-related information could form the major part of the community pharmacists’ client advisory role.

Change in content of contacts between the professionals

The content of contacts between professionals shifted from dispensing-related to having more of a clinical context, including suggestions on dose regimes, discussions on side effects and the client’s general and mental health. However, a large part of the contacts was also concerned with organizational issues such as introducing the client or arranging a meeting between professionals or with a client. Dispensing-related issues were completely missing from the link-pharmacists - key workers’ contacts during the LPS.

Telephone remained most likely way of communication between the professionals

The most common method of communication between professionals remained a telephone
conversation (16/25). Nine out of 25 contacts between the link-pharmacists and key workers during the LPS were in person. These contacts involved 6 key workers, compared with 2 key workers reporting contact in person with a community pharmacist prior to the introduction of the LPS. As well as during the pre-intervention phase, 6 link-pharmacists were in contact with key workers in person. However, this included 2 link-pharmacists who were not in contact in person with community mental health care professionals before the introduction of the LPS.

Dispensing as a basis for regular contact
The dispensing of medication, together with the related consultation, were reported in the pre-intervention phase as services provided by all the link-pharmacists. In the majority of cases the clients reported before the introduction of the LPS that they visited the same pharmacy. Before the introduction of the LPS this regular contact was not utilised by the community pharmacists whom the clients visited (three clients reported using their community pharmacy for drug-related information, n=26). There were 89 records of clients collecting their prescription from their link-pharmacy during the LPS. Seventy-nine of these contacts were, however, not used otherwise than for the dispensing of medication. In 10 cases, issues other than the dispensing of medication were being solved when the clients came to collect their medication. Therefore, a large proportion of the contacts initiated in this way remained unused for involving the clients in any advanced form of contact. In a number of other cases, the link-pharmacy was not the client's most local pharmacy and the clients used non link-pharmacies for the collection of medication (as reported by the clients). In these cases the regularity of the clients' attendance to the community pharmacy could not be utilised to the full potential.
Chapter 9 Part1 - Post-intervention phase results

The quantitative data obtained from the logbooks illustrated that there was limited contact between the link-pharmacists and the clients and limited communication between the professionals. The semi-structured interviews provided a context to these issues.

The interview data are presented below in the same three parts - link-pharmacists (section 9.2), key workers (section 9.3) and clients (section 9.4). Each part is divided into six main subsections: expectations, factors, design, potential pharmacists’ roles, effects and general issues. All the participants were asked about their pre-intervention expectations of the LPS, in order to understand the basis of the participants’ perceptions of the LPS.

9.1 Summary of the data available for analysis

The post-intervention phase interviews took between 40 - 90 minutes.

Link-pharmacists

All nine interviews with the link-pharmacists were tape-recorded and analysed.

Clients

CL14 interrupted her contact with the CMHT and also refused to be interviewed. CL27 did not keep in touch with the link-pharmacist and did not respond to written invitations to the interview. Two clients’ (CL22 and CL15) conditions deteriorated and they were unable to be interviewed. It appeared from the beginning of the interview with CL11 that his answers were influenced by his mental health status and were not reliable. Therefore, the interview was stopped after 10 minutes and the data were excluded from the analysis. Two clients refused to be tape-recorded. Therefore, the researcher took detailed notes that were re-written in a word processor within 24 hours after the interview. Twenty-two (n=27) interviews were analysed.

Key workers

All 19 interviews with the key workers were tape-recorded. On two occasions, a half of the interview was missing from the tape-recorder. In one case this was realised on the day of the interview and notes were made of the key worker’s answers. On the second occasion the transcribing took place at a later date and it was not possible to make any notes of the second half of the interview. Eighteen and a half of the interviews were analysed.
9.2 Link-Pharmacists

9.2.1 The link-pharmacists' expectations of the LPS

The link-pharmacists' interview data included their expectations of the LPS in relation to clients and other professionals.

9.2.1.1 Expectations with regards to clients

The main expectations of the LPS were:

- more intensive involvement in the clients' care than had been experienced so far,
- frequent and regular contact with clients,
- established relationships with clients,
- high numbers of clients,
- being able to help clients to cope with their illness and medication and to increase their understanding of their condition and medication,

"I just wanted them to feel at ease with their illness and themselves. And to make it, you know, that we are here for them if they want to. If they don't want us, doesn't matter. But to be there for them, if that's what they want."

(LP5; 1113-9)

- promote community pharmacists' contributions to clients' care.

The link-pharmacists wished to make the clients aware of the pharmacists' abilities, their availability and to increase the clients' confidence in pharmacists.

Some link-pharmacists were disappointed with the level of their involvement and had hoped that they would have been 'more busy'.

"I expected to be much busier. Much, much busier. And, to have more people to come in, and, I did expect it to be much, much, much busier."

(LP5, 1067-69)

Table 9.1 summarises the link-pharmacists’ expectations and the link-pharmacists’ conclusions about whether they were met.
## Table 9.1: The link-pharmacists’ expectations with regards to clients and their fulfilment

<table>
<thead>
<tr>
<th>Pharmacist</th>
<th>Expectation</th>
<th>Perceived fulfilment</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP1</td>
<td>To form established relationships with clients</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>To have a number of clients</td>
<td>x</td>
</tr>
<tr>
<td>LP2</td>
<td>For the clients to feel better, stable, compliant</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>For the clients to understand medication</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>To give the clients a better service</td>
<td>✓</td>
</tr>
<tr>
<td>LP3</td>
<td>To get more in-depth, treatment-oriented questions</td>
<td>x</td>
</tr>
<tr>
<td>LP4</td>
<td>Deeper involvement in the clients’ care</td>
<td>x</td>
</tr>
<tr>
<td>LP5</td>
<td>To have more clients</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>For the clients to feel at ease with illness and themselves</td>
<td>no explicit answer</td>
</tr>
<tr>
<td></td>
<td>To make the clients aware that the pharmacist was available</td>
<td>no explicit answer</td>
</tr>
<tr>
<td>LP6</td>
<td>No expectations stated</td>
<td>n/a</td>
</tr>
<tr>
<td>LP7</td>
<td>To form relationships with clients</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>For the clients to feel better</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>To make the clients aware that the pharmacist was available</td>
<td>no explicit answer</td>
</tr>
<tr>
<td></td>
<td>To increase the clients’ confidence in pharmacists</td>
<td>no explicit answer</td>
</tr>
<tr>
<td></td>
<td>To make them aware of the pharmacists’ abilities</td>
<td>no explicit answer</td>
</tr>
<tr>
<td>LP8</td>
<td>Regular, frequent contact with clients</td>
<td>x</td>
</tr>
<tr>
<td>LP9</td>
<td>To see how he can help</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>To be more frequently used by clients</td>
<td>x</td>
</tr>
</tbody>
</table>

✓ fulfilled, ✗ not fulfilled

### 9.2.1.2 Expectations with regards to other professionals

The main expectations of the link-pharmacists in relation to other professionals were:

- to promote the pharmacy profession through demonstrating the pharmacists’ abilities to other professionals and through demonstrating that the involvement of community pharmacists was worthwhile,
- to create/improve communication/teamwork,
- to create seamless transfer of information,
- to develop practical working solutions for the community pharmacists’ involvement in community mental health care.

The link-pharmacists concluded that none of these aims was achieved. The link-pharmacists were particularly unhappy about the scheme failing to develop communication between the professionals.

"Much better teamwork, much better transmission of information within different members of the team and, hopefully, you know, giving us an opportunity to be able to give patients much better service as well. ... communication didn’t appear to be two ways, it only appeared to be one way. We were communicating with them most of the time, but they weren’t communicating with us.”

(LP2, 808-17)
Table 9.2 summarizes the link-pharmacists’ interprofessional expectations and their perceptions of whether they were fulfilled. Not all the link-pharmacists are represented in the table as not all of them expressed their expectations regarding other professionals.

Table 9.2: The link-pharmacists’ expectations with regards to other professionals and their fulfilment

<table>
<thead>
<tr>
<th>Pharmacist</th>
<th>Expectation</th>
<th>Fulfilment</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP2</td>
<td>To create teamwork</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>To establish a seamless transfer of information between professionals</td>
<td>X</td>
</tr>
<tr>
<td>LP4</td>
<td>To improve cooperation with other professionals, improve relationships with them</td>
<td>X</td>
</tr>
<tr>
<td>LP6</td>
<td>To improve cooperation with other professionals</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>To identify practical working solution to the involvement of the community pharmacists in CMHC</td>
<td>X</td>
</tr>
<tr>
<td>LP7</td>
<td>To create cooperation with other professionals</td>
<td>X</td>
</tr>
</tbody>
</table>

9.2.2 The link-pharmacists’ perceptions of implementation of the LPS

9.2.2.1 Overall assessment of implementation of the LPS

Despite some link-pharmacists reporting that their expectations had been fulfilled, overall they believed that implementation of the LPS was not successful. The perceived lack of contact with clients and/or communication and cooperation with other professionals were the main reasons for this opinion. The link-pharmacists reported that this was frustrating and resulted in a lack of motivation and less active participation by the link-pharmacists. Some of the link-pharmacists concluded that the implementation process of the LPS was slower than they had expected.

Contacts with clients and with other professionals

Individual link-pharmacists reported different experiences when describing their contacts or intended contacts with the clients and professionals. Some found it frustrating in all aspects, some found creating contacts with clients successful but they found linking with the professionals unsuccessful, some felt vice versa.

“I have found it hasn’t got off the ground here, I don't know, whether it's a shop, I don't know whether it's us. The people have come once only and they have never come back.”

(LP5, 10 -14)

“Basically, client-contact-wise, it was very disappointing,... link-contact: very good contact with the first client's link-worker, but we couldn’t find the links for the second one. In those aspects, it was very disappointing.”

(LP7, 1-2, 13-17)
"I feel at the moment it hasn't really worked and there's two people who are coming regularly. I don't know, I don't feel it's improved the communication at all, to be honest. 'Cause the CPNs have never phoned me or anything to say: Have you seen such and such, ... I mean I would have thought, you know, with [CL26] and his new medication system and what have you, ... may have phoned and ...: Oh, do you think it's working for him, he seems a bit happier, how do you feel? But nobody ever has."

(LP4, 4-6, 426-36)

"The only real original contact I have is with the patient and ... of wanting to develop those relationships with the key workers, the psychiatrists and other members of the mental health team, it's not been successful, no."

(LP2, 789-94)

The link-pharmacists emphasised that there was a need for some form of communication with other professionals. Suggested means for such communication varied and are listed in table 9.3.

Table 9.3: Forms of communication with professionals suggested by the link-pharmacists

<table>
<thead>
<tr>
<th>Link-Pharmacist</th>
<th>Communication Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP2</td>
<td>Personal working relationship with professionals</td>
</tr>
<tr>
<td>LP4</td>
<td>Regular meetings about the clients monthly or once every 3 months, or by telephone</td>
</tr>
<tr>
<td></td>
<td>Regular documented contact</td>
</tr>
<tr>
<td>LP6</td>
<td>Participation in CMHT meetings</td>
</tr>
<tr>
<td></td>
<td>To receive a report from a CMHT meeting (with the client’s consent)</td>
</tr>
<tr>
<td></td>
<td>Brief information (A4) to be automatically sent to a community pharmacist that is regularly used by the client</td>
</tr>
<tr>
<td>LP8</td>
<td>Meetings with professionals</td>
</tr>
<tr>
<td>LP9</td>
<td>Communication through letters, e-mail to inform about identified problems</td>
</tr>
<tr>
<td></td>
<td>Joint courses - once in 6 months or once a year</td>
</tr>
</tbody>
</table>

It was suggested that there should be verbal communication between the pharmacists and key workers concerning the recruitment of clients as some information about the clients may not be suitable for written communication and some information may need clarification.

It was suggested that, if the clients were recently discharged, the pharmacists should be provided with a copy of a discharge letter from the hospital and, generally, that the pharmacists should be informed about the care provided in hospitals.

It was suggested that the information should be provided electronically for improved speed. As a communication aid, LP6 suggested that link-pharmacists could use pre-printed slips.
for example:

Information to: (a professional)
I feel that patient ................................ is not taking this medication ......................
Please re-consult.

Throughout the interviews the link-pharmacists emphasised the perceived importance of
the interprofessional cooperation. Interprofessional cooperation and teamwork were
referred to often, throughout the link-pharmacists’ answers, as one of the main requirements
for successful provision of pharmacists’ services.

"Why not all the professions get together and really look at it, what is the welfare of the client."
(LP9, 425-8)

The following list summarises the link-pharmacists’ reasons why teamwork should exist.
Client-related issues
• to help to gain clients’ trust.

Service-provision-related issues
• to offer more effective care for clients,
• to help to maintain clients’ histories and care-related information,
• to resolve confidentiality problems,
• to know who to contact if the client was in crisis,
• to provide a broader spectrum of professionals so that clients are better
monitored with smooth transfer of information and easy resolution to
problems.

Interprofessional issues
• to learn from each other, sharing knowledge and approaches - holistic care,
• to help to improve the complete care of a client if non-psychiatric staff also
involved,
• “to set the aims together and then work towards those aims, to create a non-
competitive environment where professions will complement each other in
The link-pharmacists suggested the following persons to be involved in teamwork:

- hospital staff/psychiatrists
- CPNs/district nurses
- GPs
- pharmacists
- family/carers
- "all involved in the clients’ care" (LP3).

9.2.2 The factors influencing implementation of the LPS - link-pharmacists' perspective

The link-pharmacists described a number of issues that they had perceived as determining and/or limiting full implementation and development of the LPS.

Client-related factors

Target clients' groups

Some link-pharmacists directly or indirectly related the low utilisation of the service to the fact that people with mental health problems were different from other pharmacy customers.

"I think it's been nature of the beast that they're not very comfortable in talking to people."

(LP5, 149-51)

The link-pharmacists related this distinctiveness to the mental illness itself and characterised it as:

- not being comfortable talking about problems,
- being distrustful,
- presenting poor cognition,
- being reluctant to change.
Two link-pharmacists (1 and 3) concluded that, possibly, the project should have dealt with a different group of clients, such as those with less severe mental health problems.

"Maybe we all are ought to look at the client group which wasn't so severely handicapped, in inverted commas, perhaps the stage before that, before they get to that stage, where you can actually have more of a rapport with them."

(LP1, 638-44)

**Approach to the service**

Some link-pharmacists believed that the clients were not interested in utilisation of the LPS. LP3 and 5 felt that two of their clients (one for each link-pharmacist) asked them questions only to fulfill their 'duties' within the research project. LP5 felt that the clients wished to leave the pharmacy as soon as possible. However, LP8 believed that, when the clients received advice that 'worked', they gained trust to approach the link-pharmacist again.

**No need for the service**

It was acknowledged by LP 4 and 5 that the clients who did not attend the pharmacy might not feel the need to use this kind of service.

"... either not felt the need or they just not felt comfortable enough doing it."

(LP4, 324-6)

**Trust and time**

The clients' lack of trust in the link-pharmacists was also perceived as contributing to the low utilisation of the LPS. The link-pharmacists believed that trust was necessary for working with PMHP. They also noted that the clients' trust did not exist by itself, it had to develop. It was believed that the clients needed to build up a relationship with, and confidence in, the link-pharmacist. They believed that PMHP were at first distrusting. LP5 added that, in the area serviced by her pharmacy, there was a drifting population and therefore, it was not possible to build-up relationships with the clients.

"My personal experience ... dealt with people with mental illness is, that there is this question of trust and it takes a long time to actually develop that."

(LP1, 139-42)
Sufficient time was felt to be needed for successful implementation of the LPS or a similar service to allow the clients to familiarise themselves with the pharmacist and the service and to build-up trust in the pharmacists.

“It was too short time for [CL27] in the project.”

(LP7, 531-2)

**Familiar environment**

Also, one of the link-pharmacists suggested that the clients did not utilise the LPS because they were unfamiliar with the link-pharmacy or it was not convenient for them to visit.

“Well, I think, sometimes they quite feel happy in their own environment and they would much prefer perhaps to stick to the pharmacist that they collected their medication from previously and they weren’t really willing to, sort of, switch over to another pharmacy or, perhaps to a strange environment where they wouldn’t feel, you know, perhaps it wasn’t really the right place for them to go to get their medication, it wasn’t a familiar surrounding, and I think they were generally perhaps a bit apprehensive... Or, or it may not be convenient for them to do so.”

(LP2, 214-30)

**Pharmacists’ busy workload**

The link-pharmacists talked about their busy working schedules and one of them suggested that the clients might not approach the pharmacists as, during a typical working day, they might perceive them too busy.

**Potential language barrier**

LP5 and 9 commented upon possible language barriers that may exist for some clients.

**Key worker-related factors**

**Professional isolation**

It was reported that during the few occasions when link-pharmacists had become involved with clients, these interactions were still performed in isolation. The link-pharmacists expressed feelings of a lack of recognition for their work.

“The only thing missing was information, you never had a clear picture of what was happening, or continuity of information...”

(LP6, 157-60)
"I think you find a lot of pharmacists do [talk to people about what they are taking], it's just automatic of their day's job, whereas they just don't get any recognition for doing it."
(LP4, 512-16)

"...so, what will happen is that there will be very little information coming to me, from the professionals, except from the client. The clients will come and talk to me."
(LP9, 745-9)

One link-pharmacist (LP7) commented that, despite some communication, the key workers within the LPS did not use the link-pharmacists as a matter of course, or automatically. Some link-pharmacists felt that the key workers were not interested in cooperating with them. The link-pharmacist who had hoped that the project would offer practical working solutions concluded that the whole process remained artificial.

**Communication with other professionals - reasons for limited success**

A number of issues were identified from the interviews that contributed to the lack of communication between professionals.

- **Initiation**

The link-pharmacists seemed hesitant and lacking in self-confidence to contact other professionals.

LP4 did not feel comfortable being pro-active and contacting key workers when she was not asked to do so by them. The link-pharmacists expected to be contacted by the key workers but they felt that there was no effort from the key workers' sides, that the key workers were not interested and making contact was solely left to the link-pharmacists. The link-pharmacists felt frustrated by trying to contact the key workers with no response.

"I didn't try to phone the teams, because they, I never felt, I didn't feel, I mean, what I was gonna say to them?: Oh well, I haven't heard from you for a while and ... And, normally when you phone the CPNs, it's not as if, you get them, you get normally get their office then they have to page and bleep them and it seems a lot of, you know, just seems inappropriate to have that. As we haven't had that type of relation. They haven't asked me to keep them up-to-date. Whereas if they said, look, you know, can you just give a quick monthly ring on whether or not you've seen them and how they are. Then I would felt that it was much more appropriate. But I didn't really feel that they were really interested in what we have to say anyway. ... or maybe I should have done it anyway and forced them to..."
(LP4, 954-76)

"They didn't seem to, I mean, they've made no effort."
(LP4, 468-70)
"No, I don't see why I should be chasing to find out that [clients] are in a hospital. It took one phone call or a fax: Oh, by-the-way, [CL7] is in a hospital. So you see the, the reasoning where, no I don't agree with [pharmacists] being the ones that should be pro-active..."

(LP6, 48-54)

**Key workers' high workload**

The link-pharmacists also suggested that the key workers’ heavy workloads made it difficult to introduce a novel service and to develop communication. There was not enough time to build-up relationships between professionals.

"...everybody is working under pressure, it's very difficult to ... ahead and try to develop something new..."

(LP1, 365-7)

**Accessibility**

Based on their experiences, opinions differed about the accessibility of the key workers. Some believed that the key workers were easy to reach while others did not agree.

**Anonymity of professionals**

Some link-pharmacists suggested that the communication did not develop possibly due to the fact that the professionals remained anonymous to each other. Therefore, the informal meetings such as those carried out during the LPS, were found valuable. It was suggested that there should be personal contact between the professionals to overcome this anonymity and to enhance communication.

**Lack of awareness about pharmacists’ services and abilities**

Some link-pharmacists believed that there was insufficient awareness among clients and professionals about the link-pharmacists’ abilities and the services that they offered. It was noted that it would be difficult for the clients to utilise the service if they were not aware of its advantages.

"But if the patient is not aware of what else they can get and that, yes, if I have a problem, I can go to the pharmacist ..."

(LP6, 333-6)

Although LP3 was of a different opinion:
“People are becoming more and more aware of the pharmacy being the place for information... The average family in this country is fully aware of what pharmacists can do.”
(LP3, 703-5, 715-17)

The professionals should be educated about the pharmacists’ professional skills.

“We have the knowledge which in hospital is utilised all the time, but for some reason, once you get in the community, GPs, nurses and what-have-you, not all, obviously, but they tend to think that, I mean, they'll ring the hospital pharmacist.”
(LP4, 922-8)

The link-pharmacists were not specific about the possible way(s) of enhancing the clients’ awareness.

“And perceptions, changing perceptions, patients' perceptions of what pharmacists can provide and changing perceptions of GPs and other health workers on what we can provide and that they should actually start to appreciate us as members of their team, rather than pharmacists being an individual worker behind the counter, counting tablets and just giving advice on cough medicines and cold medicines, sort of thing. They need to get rid of that image of us.”
(LP7, 441-53)

Some link-pharmacists also believed that there should be greater involvement of authorities to support the service implementation.

**Link-pharmacist-related factors**

**No need to contact other professionals**

The link-pharmacists reported that they did not contact key workers as there was no need to do so.

“I didn't feel, to be honest, there was any necessity. The only time was when [CL26] came out of hospital. And we could sort that out with his GP. He actually spoke to his GP verbally on the phone and then we gave him, sort of, ten day, ten tablets just to cover it for him. No, there was no need, really, to involve his key worker.”
(LP4, 193-6, 216-20)

**External influences**

The link-pharmacists reported unexpected external circumstances that prevented them from becoming more involved in the LPS such as being off sick for several weeks, experiencing shortage of staff or opening a new pharmacy.
Constraints
The link-pharmacists mentioned a number of issues that could complicate the pharmacists’ abilities to provide extended services. These are discussed below together with suggested solutions.

- **Heavy workload**
The link-pharmacists complained about their high workload and work pressure. The link-pharmacists reported that they were required to perform various activities and for some of them it was difficult to incorporate consultations with clients or other services included in the LPS.

“It’s the pressure of work, when they come to see you, there are other clients waiting at the same time, that can cause problems.”

(LP1, 246-9)

Suggested solutions for this problem were related to freeing the pharmacists’ time from dispensing duties and providing remuneration for extended services.

- **Current structure of community pharmacy practice**
The current structure of community pharmacies included features that had direct inhibiting effects on the provision of extended services. These included the system of payment for the pharmacists’ services and the fact that the pharmacists had to be physically present for all pharmacy medicines sales. The core of remuneration was solely based on the number of dispensed prescriptions. That meant that the pharmacists could not perform any other activities that would interfere with dispensing, unless they were paid for the extra activity separately to compensate for the lost prescription payments or to pay a locum pharmacist. The link-pharmacists commented that they were not provided with payments for extended services such as counselling. Also, they were unable to attend courses as payment was not provided to cover a locum pharmacist for the time on the course. The fact that the pharmacists were not able to leave their premises during working hours meant that the pharmacists who worked as independents with one pharmacist on the premises (all link-pharmacists), could not provide any services that would take place outside their pharmacies during working hours.
"Pharmacist has to be on a premises, you see, so if you leave the premises, then you're in a very awkward position, so I mean, normally when I go to nursing homes, it's 8 o'clock in the morning, or 7 o'clock at night..., or they can leave the premises but nothing is done when they're not there. So I don't know how to work out how to do that."

(LP4, 1442-7, 1452-5)

Therefore, the link-pharmacists felt that it was difficult to free time for any extended service. The time factor was further complicated by the fact that the days' workloads were unpredictable, making it difficult to instantly free time, for example, for consultation with the client.

"It's just that some days would be better than others."

(LP5, 986-7)

For some link-pharmacists, however, time was not a problem. One link-pharmacist commented that he was able to spend time with the project clients as he had supportive staff. One of the link-pharmacists employed a second pharmacist during the course of the LPS and she reported that it relieved her workload significantly and, currently, it was not a problem for her to find the time to spend with clients.

The link-pharmacists believed that changes should be made to the current structure of pharmacists' roles and the remuneration of community pharmacists to free the pharmacists from their dispensing roles. It was suggested that either the law would have to be changed regarding supervision of dispensing or other means would have to be introduced. These could include, for example, enabling trained dispensers to perform dispensing or provision of remuneration that would allow employing two pharmacists in a pharmacy.

- **Interprofessional issues**

A lack of cooperation with other professionals and the professional isolation of the community pharmacists were also listed as constraints.

"... providing that all the professionals work together, you know, non-competitive environment, it wouldn't be: your patient, my patient, you can't do this. We ought to be partners in the same project. At the present time, it seems to be political constraint as well."

(LP8, 109-16)
Results

Chapter 9 - Post-intervention phase results

Not being an acknowledged member of primary health care and the lack of established communication links with other health care professionals meant that the pharmacists were not provided with information about the clients and their care. The link-pharmacists reported that they were lacking diagnostic and medical history information, personality-related information ('who' the client was) and information about which other professionals were involved in the clients' care. They also would have appreciated information on the clients' approaches to their medication.

"... the client wanted to know, right: 'I am putting on weight with this, I don't want the depot, I want a change, what should I change?' ... I went totally on the defensive, because I don't want to give her recommendation that might have been against the psychiatrist or what the psychiatrist has said, what her compliance are like, a difficult situation." (LP6, 60-72)

The only client-related information that the link-pharmacists could use was that obtained from the clients themselves. The fact that the link-pharmacists were not formally cooperating with the providers of primary (GPs) or specialist (CMHTs) health care meant that the client-related information could not be easily provided due the confidentiality issues.

"Because when you ring up somebody, right, the first thing would be, they say: How much does he know about the client, what is his relation to that client? Should he know all what I know? So, there is always a barrier. And those barriers have to be broken before we can really look at the client and to make a greater improvement." (LP9, 475-85)

The link-pharmacists suggested that becoming a formal and acknowledged part of multiprofessional care teams would resolve these problems. The link-pharmacists believed that multiprofessional planning meetings, joint courses and joint meetings, creating links with other professionals at the implementation stage and education of the professionals about the pharmacists' roles, even at the stage of their training, would help the acceptance of the community pharmacists' role.

It was believed that all involved professionals should be included at the initial stages of the implementation of any service similar to the LPS to ensure that all of them understood and were comfortable with the proposed service and roles of individual professions within the
service. Also, time should be allowed for the service to establish and to motivate other professionals to work with pharmacists (the motivation to be based on gained experience). Pharmacists should be allowed access to the clients’ histories and be invited to participate in joint professional meetings. Information should be updated continuously and the pharmacists should be informed about what information was provided by other professionals. The pharmacists should be informed about overall clients’ care.

- **Knowledge**

The link-pharmacists believed that they would have to have specialised knowledge.

"You, any service you take up, you have to be very confident about it and that's through training."

(LP7, 432-4)

It was admitted that the level of confidence to deal with psychiatric medication-related issues would be different among different pharmacists and that it would have to be ensured that relevant training was available. Experience would also be needed that would be gathered in the course of the service provision. One link-pharmacist asked for training that would focus on the professionals involved in CMHC.

- **No constraints**

LP3 did not see any potential constraints to the provision of the LPS-like service. He only pointed out that there may be a need to introduce time schedules to the clients’ visits to the link-pharmacy to ease the pharmacists’ time management. LP4 and 8 shared this opinion.

**Frustration**

- **Extended roles frustration**

It appeared that the frustrations that the link-pharmacists experienced during their practices had an effect on their attitudes towards mental health extended services. The link-pharmacists reported that they had participated in a number of pilot projects that had never been formally implemented. They seemed disillusioned by health authorities that theoretically planned but never applied the necessary resources that would enable the link-pharmacists to provide the extended services.
Results

Chapter 9 - Post-intervention phase results

"...we've just been given a lip-service but no finance, no training, you know to take us forward."
(LP6, 360-2)

• Professional frustration

Pharmacists felt that they were overqualified for the work that they were currently performing as community pharmacists. The organisation of the pharmacies did not allow the link-pharmacists to be involved in other activities that could be more rewarding. It was added that current morale within the profession was low. It was emphasised that pharmacists needed to be committed to providing extended services and therefore they needed to be motivated to do so.

"I come in and every day I think, you know, I am wasted, ... I don't need to do this, you know, I can delegate this job, why am I doing it, I might be standing at the counter talking to my patients. ... What have I, actually, achieved?"
(LP1, 787-8, 790-4, 802-3)

• Interprofessional frustration

The belief that other health care professionals were not interested in cooperation with pharmacists and that the pharmacists' work was not recognised by others also contributed to the overall link-pharmacists' attitude.

"And so, we are not either recognised giving all this advice, we are not even recognised for trying link-up the clients ... There is no recognition..."
(LP9, 599-602, 1362)

9.2.3 The LPS design - the link-pharmacists' perceptions and suggestions

9.2.3.1 Perceptions of the design of the LPS in general

LP6 concluded that the overall design of the LPS was acceptable.

"I don't see anything wrong with the principles: information passed to the pharmacists, the client given full access to that pharmacist at any time when they want. Whenever they want for advice, information passed back to the key worker if a problem, pharmacist sees a problem. I think, it can't get any simpler than that."
(LP6, 1250-9)

One of the link-pharmacists suggested that the service has to be well structured to help the pharmacists with time management. Another link-pharmacist believed that, in the future, defining all the procedures within the service would ease the process.
9.2.3.2 Recruitment/allocation of clients
The link-pharmacists were aware of the problems with recruitment of clients and offered their views on how this could be improved. Some link-pharmacists suggested that the clients should be allocated to the link-pharmacists. The link-pharmacists differed in their opinion as to whether all or only some clients (for example those with the major problems) should be recruited, with some believing that, on discharge from hospital, all clients should be allocated a link-pharmacist. It was also suggested that, when the client was allocated to a CMHT, he or she could also be allocated a link-pharmacist. Other link-pharmacists used the word recruited but also on discharge from hospital. LP5 added that the clients could also be recruited from depot clinics. She believed that recruitment could be done via hospital pharmacists who would refer clients to a community (link)pharmacist. She believed that hospital pharmacists would be able to identify from the clients the details of their regular community pharmacy and arrange liaison between the client and the pharmacist, which would ensure continuity of pharmaceutical care between hospital and community. Referral from hospital would also help the clients to understand that a community pharmacist was involved and why. LP6 suggested that finding the client’s regular community pharmacist and the consequent linking of the client with this pharmacist could be the role of the key worker.

Some link-pharmacists suggested that the clients could be recruited by pharmacists from their pharmacies. LP9 added that the pharmacists would need to have details about CMHTs to be able to contact the appropriate professional should the clients be recruited from their pharmacies.

Some link-pharmacists suggested that clients could be registered with their link-pharmacist. LP7 and 9 believed that enough time should be allowed for implementation of a service with the gradual introduction of a pharmacist.

9.2.3.3 Information provided on the recruitment of a client
LP3, 6 and 8 thought that the client-related information provided at the beginning of the project was sufficient. LP4 felt that it was ‘sketchy’ but she was able to complete the information by talking to the clients.
9.2.3.4 Venue of consultations

It was commented that the usual setting of a community pharmacy did not always encourage the clients to speak about their medication.

"Some pharmacies I've been to, they've got no areas like this where you can sit down quietly, away from the public where you can have chats..."

(LP7, 459-62)

Some link-pharmacists perceived the community pharmacy to be a suitable venue.

Use of a consultation area

LP5 also wondered whether there was too much attention paid to clients and whether they would prefer a 'brief chat'. A consultation in a separate area was believed to potentially 'label' the clients as 'having problems'.

9.2.3.5 Availability of the link-pharmacists

It was commented that clients cannot plan their problems. The link-pharmacists generally suggested that the service should not use appointments and the pharmacists should always be available when the clients needed.

"I think, from a mental health patient point of view, because they're not that organised, usually, to make an appointment and what-have-you, ... is easier for them rather then having to phone up, making an appointment..."

(LP4, 1321-8)

However, it was also noted that clients should be informed of the most suitable times to visit the link-pharmacist. One link-pharmacist suggested that some appointment system may be introduced to enable the pharmacists to divide their time between the clients who needed instant help and those who could wait for an appointment.

9.2.3.6 Formality of a consultation

LP8 believed that his clients had many other professionals with whom they had to keep in contact. Therefore, he believed that the clients had to want to come to the link-pharmacist. The link-pharmacist suggested that the meetings should be voluntary and informal. LP9
similarly believed that the pharmacist’s approach should not be ‘aggressive’.

“I’m keeping a low profile, because I don’t want [CL8] to feel that we are trying to keep monitoring things on him. Once the confidence builds up, then, gradually say: ‘How have you been doing?’... I could see that there was the barrier and unless you break that barrier, we wouldn’t be able to convince him. But now, without any prompting, because I kept away and, without any prompting, if he has started coming in, it means that at last the rapport is being built up now and as the rapport builds up, we can look into his lifestyle, daily problems ...”

(LP9, 113-18, 154-64)

9.2.3.7 Contact with the link or other pharmacists

One link-pharmacist suggested that information about clients should be kept by the link-pharmacists in a form that would allow a locum pharmacist to replace the link-pharmacist if necessary (continuity of care). However, LP3 believed that the clients should always be seen by the same pharmacist.

9.2.3.8 Telephone consultation

The link-pharmacists reported that providing a consultation over the telephone worked well. Consultation over the telephone should be available in the future. However, a system of verification of the client’s identity would be required.

9.2.3.9 Length of consultation

According to LP7, the link-pharmacists should be able to offer 10 - 15 minutes for each consultation with a client (the median length of the consultations during the LPS was 10 minutes). This time must be available when the clients come. LP7 concluded that, in the current situation, the link-pharmacists were only able to provide this at certain times during a day, when the pharmacy was less busy.

9.2.3.10 Collection of medication

It was suggested that the clients should collect their medication from their link-pharmacy as it would allow continuous health-related monitoring of clients.
9.2.3.11 Involvement of families
The link-pharmacists believed that the clients’ families might also be in need of support.

“I found that the carers, you know, sometimes they are stressed out and they can benefit from an outside help...”

(LP7, 1126-8)

The link-pharmacists suggested that they could assist family members with support. The family members could also play the role of mediator between the pharmacist and the client, providing information about the client’s well being, condition and medication (for example compliance) and so enabling early help to the client or the family members.

“Sometimes the patients are not stable, you know, they are not able to comprehend or communicate very well. You know they might ask me a question but they are not still sure even if you've answered it. Whereas the family will understand and, hopefully help the person.”

(LP3 1634-40)

“If there's a problem that [clients] can't relay themselves to me, someone else or the member of the family can, who is in closer contact with [clients], so that, those sort of things can be developed as well.”

(LP9, 1004-8)

Also, the family members might utilise, the community pharmacists’ knowledge of medication and their accessibility.

9.2.4 Pharmacists’ potential roles - link-pharmacists’ perspective
From the interviews it was possible to identify roles that pharmacists could, in the future, play in the provision of pharmaceutical mental health services. These are presented in two parts. The first section, presents suggestions identified by link-pharmacists themselves in terms of their qualities and how these could be utilised. The second part, includes issues that were identified by the researcher from the link-pharmacists’ comments.

9.2.4.1 Abilities offered by the link-pharmacists
The majority of the link-pharmacists emphasised two attributes of the profession:
- knowledge of medication and therefore their ability to provide drug-related information,
• availability and accessibility.

Some link-pharmacists stressed that community pharmacists were and always would be available any time for the clients.

"... I think the fact that, you're accessible is the big thing, I mean you sell that all the time with the pharmacists, the fact that you're accessible."

(LP4, 1317-21)

It was added that the pharmacists could be in frequent contact with the clients if necessary and on short notice. The link-pharmacists believed that they were able to identify problems quickly and provide instant help, for example referral to a relevant professional. The link-pharmacists believed that they may have more contact with clients than any other professional. Therefore, the link-pharmacists perceived themselves as front-line professionals who should be utilised by other professionals for the monitoring of their clients.

"I would say my care would be in the well-being of the patient with regards to the compliance with the medication, helping them cope with their side effects of their medication and having someone to talk to whenever they felt they needed someone to talk to, at any time they want to, convenient to them."

(LP6, 1725 -1732)

The link-pharmacists believed that they were available as professionals to whom the clients could talk, who would listen to their problems and would use their communication skills to help the clients. They perceived themselves as professionals who were able to talk to the clients about any problem, in an environment that was different to any other health care setting. The link-pharmacists believed that they could be perceived as professionals who were caring, willing to create a relationship with the clients and providing a personal service.

It was also noted that the pharmacists should be allowed to prescribe as means of the pharmacists’ contribution to the clients’ care.

"But when somebody else is actually monitoring the patient right from the stage of asking questions and initiating the treatment, we can do very little. But if we are allowed to prescribe, then things will change."

(LP3, 1064-70)
9.2.4.2 Community pharmacists’ potential roles in CMHC as identified by the link-pharmacists

Table 9.4 summarizes the comments that contained suggestions on potential ways of pharmacists’ involvement in CMHC. The issues were grouped by the researcher to the following categories:

- **supply of medication**
- **provision of information**
- **clinical roles**  
  - health/medication-related monitoring
  - involvement in prescribing
  - interprofessional cooperation
- **access to a professional** (accessibility of the pharmacist, i.e. accessibility of a professional, as a service on its own) and **professional support**
- **general**

| Table 9.4: Pharmacists’ potential roles in community mental health care as identified by the link-pharmacists |
|-------------------------------------------------|-------------------------------------------------|
| Category                                      | Role                                                                                     |
| Supply of medication                           | Assist with supply-related management of medication (disposal of medication), dispensing back-up for clients - have enough medication available |
| Provision of information                       | Information anytime, advice giving - condition, medication, free information service, education about medication |
| Clinical                                       | Health/medication-related monitoring General health monitoring, pharmacists’ care would prevent relapse, improve compliance, stabilise condition - through cooperation with key workers, ‘tackle’ side effects, checking compliance and general assessment always when [clients] come for medication, compliance aids, dispensing daily, in front of the pharmacist, monitoring on day-to-day basis, monitoring the patients on day-to-day basis - informing community mental health care professionals, blood tests for people on lithium |
| Involvement in prescribing                     | Ensuring that correct medication was prescribed, pharmacist to be able to prescribe, correcting wrong prescribing, active involvement in prescribing, to have a say in prescribing, amending prescriptions |
| Interprofessional cooperation                  | Monitoring patients who are not in contact with community mental health care professionals |
| Access/professional support                    | Allay fears in emergencies, allay fears, being available whenever the clients want, accessibility for talking that is comforting, somebody the clients can speak to, somebody who knows about their medication, accessible also for provision of information, support the clients to take their medication - don’t need to go to hospital, listen to needs and follow up the needs - even through referring them to an appropriate professional |
| General                                        | Patient-oriented care (as opposed to supply of medication) |
9.2.5 **Effects and outcomes of the LPS**

Despite the fact that the link-pharmacists generally believed that implementation of the LPS was not successful, they reported the effects that it had had on them.

### 9.2.5.1 Effect on awareness of CMHC

Five link-pharmacists believed that the LPS had improved their awareness of CMHC in one of the following ways:

- broadened their awareness of how they could contribute to CMHC,
- increased their awareness of which professionals were involved and their roles; they had hoped to utilise this knowledge in future discussions with clients and in facilitating their care,
- improved their understanding of problems within CMHC and that these needed to be addressed.

### 9.2.5.2 Effect on confidence

Some link-pharmacists felt that their participation in the LPS had increased their confidence in dealing with people with mental health problems and in their professional abilities.

"Yes, yes, one of the things, I think, that I wouldn’t be afraid to do, is to question some of the therapies."

(LP1, 472-4)

### 9.2.5.3 Effect on interest in people with mental health problems

It was commented that the LPS had enhanced the link-pharmacists’ interest in CMHC and PMHP. LP5 and 9 felt that they were more looking for and/or ‘seeing’ people with mental health problems among other patients.

"... making me more aware of the mental health issues and to look out for people, you know, from their prescriptions."

(LP5, 1041-4)

LP9 started to routinely record his observations of people with mental health problems outside the LPS in their personalised medication records (PMRs). He concluded that this allowed him to monitor these people and so to be more involved in their care.
9.2.5.4 Effect on approach to people with mental health problems

LP8 reported that the LPS reinforced his interest in and approach to people with mental health problems. LP7 reported that participation in the LPS did not change his behaviour towards PMHP but it changed his personal feelings and perceptions about PMHP. Three link-pharmacists stated that their participation did not change their approach to PMHP as they had always approached them with special attention.

9.2.5.5 Effect on the link-pharmacists' relationships with clients

Some link-pharmacists reported that the scheme influenced their previous relationships with clients whom they had known in the past. In one of these cases the link-pharmacist reported that the LPS had had a positive impact on his relationship with the client, as the client had become more open with the link-pharmacist and asked him more questions about her medication. One link-pharmacist reported the opposite. His client had stopped visiting the pharmacy after he was enrolled to the project. In one case the link-pharmacist did not notice any change in the client's behaviour. He reported that the client's medication was collected by her son most of the time.

9.2.5.6 Effect on the link-pharmacists' involvement in the CMHC

Lack of contact with clients and/or lack of communication with other professionals led to the opinion, shared by some of the link-pharmacists, that the LPS had not enhanced their role in CMHC.

"No, because we've had no dealings with neither the GPs, or CPNs more or less, other than socially."

(LP4, 853-5)

"No, to be honest, but that's it, you know, because not much was achieved, I felt actually the other way round, you know, I felt you know, that they don't want us in a team at the moment, the patients don't appreciate it, the CPNs would like to see us more involved, but again, they don't know the full extent of our role, so, no, to be honest with you."

(LP7, 878-86)

However, one link-pharmacist (LP9) stated that his objectives to improve his knowledge and to improve his contacts with clients were achieved. Another link-pharmacist (LP6) added that he believed that the LPS contributed to the education of other professionals about pharmacists' abilities.
9.2.5.7 Effect on professional satisfaction

LP5 reported that participation in the LPS had made her a ‘better pharmacist’. LP8 commented that being a link-pharmacist was ‘a worthwhile job’. If the clients did not attend the pharmacies, it was disappointing and frustrating.

LP4 believed that some of her clients liked the service that she offered. This seemed to enhance the pharmacist’s self-esteem. The pharmacist seemed to be pleased that the CL26 visited her when he left hospital. She believed that the relationships with some of her clients had developed.
9.3 Key workers

9.3.1 The key workers’ expectations of the LPS
The key workers were asked about what they had expected to gain from their participation in the LPS either for themselves or their clients.

9.3.1.1 Expected outcomes for the key workers
Some key workers had hoped that participation in the LPS would help them
- to learn about the pharmacists’ abilities;

“... more, kind of, understanding of what pharmacist can actually do, or willing to do...”
(KW5, 605-7)

- to reduce their workload;

“... it’s nice for me to know, that the client has a certain person to contact, if they have a problem, you know, that I can’t resolve, and it means that I don’t have to necessarily contact [link-pharmacist] as well, you know, and they can sort it out for themselves, and it saves me time.”
(KW11, 121-8)

- to build-up relationships with the link-pharmacists and to involve the link-pharmacists in teamwork.

“I mean, primarily, it’d be nice to built up more liaison work with the pharmacists...”
(KW21, 116-9)

9.3.1.2 Expected outcomes for the clients
Access to information
Gaining drug-related information about medication was the main expectation that the key workers had for their clients. Sometimes it was the only expectation despite the fact that monitoring of the clients medication was also proposed as a service that would be provided by the link-pharmacists. Some key workers explained that participation in the LPS would empower the clients to talk and to ask questions about their medication and hence to gain more drug-related information.

“Well, basically, what I wanted from it was that the clients would feel more empowered and would feel more able to ask about the medication.”
(KW6, 281-3)
“I thought that she would be very keen to, you know linking with the pharmacist, because she's got lots of anxieties around her medication, and I thought that the extra information for her would have been very useful, you know, to assure her more.”

(KW12, 98-104)

Additional activity
Some perceived the LPS as a beneficial, additional occupation for the clients.

“It, also, is sort of, empowering the clients to, sort of, get up and do something about it themselves...”

(KW6, 343-6)

9.3.1.3 No expectations
Some key workers did not have any expectations and their only reason to participate was to help with the research project, for example because they were asked to do so by their team manager.

9.3.2 The key workers’ perceptions of implementation of the LPS
9.3.2.1 Evaluation of the LPS from the key workers’ perspective
The key workers were generally positive about the LPS. They commented that it contributed to the networking of professionals and supported the idea of teamwork. The key workers also valued the easier access to drug-related information for clients.

“I thought it was very useful. I think it’s good for work as well as clients and pharmacists as well. It’s networking, isn’t it?”

(KW8, 929-32)

“So, I feel it’s really positive that, in that sense, pharmacists are almost outreaching their services, you know, I feel this positive. I think it’s too early to really say the benefit of that, because, again, it was just one or two people who were interested.”

(KW21, 25-32)

9.3.2.2 The factors influencing implementation of the LPS - key workers’ perspective
The key workers discussed a number of issues that they believed had an effect on implementation of the LPS. Some of these were related to the involved personnel, other issues were related to the design of the scheme.
Client-related factors

Novel service

Many problematic issues within the LPS were perceived as related to the fact that it was a novel service. The key workers believed that, especially in the field of mental health, novel services require time to establish themselves.

"But the thing is with all, with anything new in psychiatry, it's, it's, it takes an awful lot of time to establish things."

(KW1, 1119-22)

Clients’ approaches to any change or anything novel were perceived as careful and slow. It was commented that the LPS aimed to break down barriers that had been present for a long time, such as

- problematic access to drug-related information,
- the barrier between clients and professionals.

"And then, all-of-a-sudden, you know, somebody wants to provide them a personal service, they're very suspicious ...: ‘What the hell do you wanna talk to me about after fifteen years?’.”

(KW1, 1131-6)

KW1 concluded that this made the clients reserved towards the LPS. It was suggested that time would be required for the service to ‘sink in people’s routines’ and to allow promotion of the service among the clients themselves.

"And also, I think, with chronic schizophrenic patient you need to have a routine. If it is something outside their routine, something new to them, because they are used to do things in a certain way, in certain day, certain time. It's very difficult when is something else brought in. You know, it takes time."

(KW3, 134-42)

Throughout the interviews, the key workers were commenting on various characteristics that they perceived to be specific to their clients. These characteristics were referred to as having an effect on implementation of the LPS and are discussed below.

Specific characteristics of people with mental health problems

The key workers’ reported that one of the main characteristics of people with mental health
problems under the care of CMHTs was the variability in their attitudes towards their illness and medication and the inapplicability of any general pattern with regard to their needs and requirements, for example whether the clients did or did not require drug-related information.

"And you've got to spend more time with some people, than you can with other people. Some people are more inquisitive than others, some people would take it, anything, because the doctor said: 'You've got to take it.'"

(KW1, 382-8)

"It depends on the client."

(KW6, 515)

"It depends, because some clients ..."

(KW12, 128)

The key workers commented that they had clients who would take any prescribed medication without questioning it and clients who would not take the medication unless they had enough information. They had clients who constantly asked about their medication, some of them repetitively and clients who did not want any information about their medication. It was claimed that many clients aimed to be medication free and there were others who liked taking medication as it made them feel special. Dealing with the clients was further influenced by the fact that the caseloads included clients with special needs, for example clients with learning difficulties.

Many key workers concluded that it was not possible to expect any future pharmaceutical service to be utilised by all clients. Some key workers believed that some of the clients would not want to utilize the service, for example those clients who were confident about their knowledge.

"...a lot of them already know about their medication and they will tell me, you know, what the medication do."

(KW22, 239-45)

Other clients would not be able to utilise the service, for example if they were too severely ill. The utilization of the service would be difficult for example for clients suffering
agoraphobia. People from some ethnic minority groups were believed to be more likely to experience a lack of knowledge about medication due to the difficult access to drug-related information if they did not speak English.

"... I haven't seen any literature in Bengali, for instance, to be given to people. So we rely on the interpreter to explain. There isn't anything written, we haven't got anything written. And Bengali, for instance, it's a big community here."

(KW 9, 486-501)

However, some clients from these groups, being from different cultural backgrounds, had different approaches to, and beliefs about their medication. This, together with the demand of their cultures could prevent them from using or limit their use of the services offered.

"...some of them are,..., coming from the cultures that, how can I say, are mistrustful towards western medicine, in general, you know, they would rather take something that, their mother, got some herbs or whatever..."

(KW15, 66-72)

"For example, if it is a Bengali client, you know, you will have a Bengali woman who is a part of the research, she may not access the service if it's male pharmacist or if it's someone who can't speak her language ..."

(KW12, 463-9)

"... and most Bengali people will go to the Bengali dispensing pharmacist."

(KW 14; 151-2)

It was further suggested that the group of clients chosen for the research project: people with enduring, severe mental illness (i.e. those under the care of CMHTs) might not be the appropriate target group. Some key workers believed that the service should be offered to different clients' groups or to be targeted specifically to groups that are most in need. The clients' groups suggested by the key workers as suitable are listed in table 9.5. Cooperation with day centres and residential homes would facilitate the service provision through access to clients and professionals. It was suggested that the presence of the known professional (social worker, residential home staff) could aid the development of the trust between the pharmacist and the client and could help the client to express his or her worries about medication.
Table 9.5: Types of clients potentially suitable for an LPS-like service as identified by the key workers

<table>
<thead>
<tr>
<th>Client group</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>People who were not in touch with CMHTs and their</td>
<td>In need for support</td>
</tr>
<tr>
<td>families</td>
<td></td>
</tr>
<tr>
<td>Residential homes</td>
<td>Access to professionals and clients, support to non-medical staff</td>
</tr>
<tr>
<td>People with language barriers</td>
<td>In need for drug-related information</td>
</tr>
<tr>
<td>People who cannot read</td>
<td>In need for drug-related information</td>
</tr>
<tr>
<td>Ethnic minorities (regards to language, cultural</td>
<td>In need for drug-related information</td>
</tr>
<tr>
<td>differences)</td>
<td></td>
</tr>
<tr>
<td>People under short-term care of CMHTs</td>
<td>These clients were discharged after a short period with the CMHT and</td>
</tr>
<tr>
<td></td>
<td>had no more access to professionals although still on medication.</td>
</tr>
<tr>
<td></td>
<td>Therefore, the pharmacists might be the only professionals in contact</td>
</tr>
<tr>
<td></td>
<td>with them.</td>
</tr>
<tr>
<td>Younger clients</td>
<td>Interested in drug-related information</td>
</tr>
<tr>
<td>People newly under care of CMHTs</td>
<td>Interested in drug-related information</td>
</tr>
<tr>
<td>Housebound clients</td>
<td>Limited access to services</td>
</tr>
</tbody>
</table>

A ‘suitable’ client within a CMHT was described as:

'an intelligent, forthcoming person with an active interest in his or her health'
(compiled from different interviews)

**Nature of illness**

The key workers tended to relate the nature of the clients’ illness to their attitudes to their overall care, medication and consequently to the research project and the LPS.

The key workers believed that enduring severe mental illness in many cases altered people’s abilities and personalities, for example, had decreased people’s motivation, jeopardised their social functioning including an ability to communicate and decreased their confidence. It was believed that, with some clients, mental illness negatively influenced their approach, and ability, to understand their medication; some clients tended to trust and to rely on the professionals’ decisions which they would follow without questioning. KW6 concluded:

"... it's a different, sort of clientele you are dealing with. You are dealing with people who are very vulnerable and quite frightened most of the time with professionals ... or they are dealing with people like ourselves whom they get to know quite well, and sometimes we are the only people who they trust, basically."

(KW6, 448-52, 457-60)
Results

Chapter 9 - Post-intervention phase results

- **Effect of mental illness on clients' motivation**

Some key workers explained the low recruitment rates to the LPS and low attendance at the link-pharmacies by the low motivation that was typical of their clients. Lack of motivation was referred to as a common characteristic of PMHP, more precisely those under the care of CMHTs, who suffered severe and enduring mental illness.

"...lack of motivation people have in general, enduring mental health. Because of the nature of the, the nature of the illness, yeah. Because we're not dealing with pure mental health issues, we're dealing with enduring mental health, enduring, severe mental health. People who had, their daily living skills debilitated. So, it's, I think it's a, requires a bit too much of them, for what they, it would be very hard for them."

(KW9, 110-12, 118-27)

Lack of motivation was referred to as being dependent on the severity of illness and presence of negative symptoms. The fact that the LPS expected the clients to actively approach the link-pharmacists and request the service was perceived as unsuitable by some key workers. It was claimed that many clients were not pro-active and would not do so. The key workers commented that it was a problem to involve some of their clients in any activity and that the clients would choose services that were easy to access, regardless of the service quality. Some believed that the clients perceived activities similar to the LPS as an additional burden to many of the other activities that were required from them as part of their treatment and therefore were reluctant to engage. Other key workers concluded that clients just were not motivated and not interested. However, it was commented that the clients should be encouraged to engage in available activities. The LPS was perceived by some as encouraging the clients to act on their own. Furthermore, it was believed that clients would not visit the link-pharmacy unless they had a reason and unless its benefits were explicit.

- **Trust**

The key workers also emphasised that trust was needed in any dealings with PMHP and even more so with the LPS, since the issues discussed between the link-pharmacist and the clients could be highly personal. Trust between the clients and link-pharmacists was also needed because of the stigma attached to mental illness. Clients needed to feel that they
could be open and confident to speak and ask questions. Furthermore, the key workers pointed out that the relationship and trust usually took a long time to develop.

“I mean, you have to build up a relationship with somebody, before, before [clients] will trust somebody. It takes quite some time.”

(KW4, 573-6)

“And to get that clients' trust is very important, or confidence, trust is the word or confidence to initiate a relationship.”

(KW12, 876-9)

Involving pharmacists known to the clients could be helpful. One key worker suggested that informality, a social 'touch' to meetings, might help to build up rapport.

**Initial visit to a pharmacist**

The key workers were asked whether they thought that the clients did not attend the link-pharmacy due to the fact that they were uncomfortable to make the initial visit to the link-pharmacist. The majority of key workers admitted that this could have been a problem.

- Talking to an unknown pharmacist on a first occasion would be talking to a stranger that was generally perceived as a problem for the clients.
- *Stigma* attached to the mental illness was also mentioned. It was believed that the pharmacists could be perceived as another person aware of the clients’ problems. This could make clients uncomfortable if they were not familiar and trusting towards the pharmacist.
- *Lack of motivation* was also reported as influencing visits to the pharmacy. If the clients were unsure about any benefits of the service, they would not be motivated to use it.
- Also, the key workers emphasised that the environment of community pharmacies may at first appear too public, frightening and without the required *privacy*.

It was suggested by some, that a formal introductory meeting between the client and link-pharmacist with the presence of a key worker might facilitate the process. It was further suggested that this introductory meeting could take place in a formal setting outside the link-pharmacy. Full explanation of the service and the pharmacist’s roles would have to
be provided. The key workers agreed that it would be feasible for them to carry out the introductory visit. Even though it was acknowledged that this would add to the key workers’ workload, it was perceived to be beneficial.

**Previous negative experience with professionals**

It was suggested that the clients’ lack of interest in the LPS or a similar service could also have been due to negative experiences with mental health care professionals.

**Professional-related factors - professional reluctance**

**Novel service**

It appeared from the interview data that the key workers might not have used the LPS frequently because the service was novel to them and it was acknowledged that professionals were reluctant to change. KW22 concluded that professionals would need time to incorporate the LPS or a similar service in their working routines.

> “Because people won’t bother. Because people stick to their traditional ways of working and it’s trying to educate them in terms of working in new ways, isn’t it? It’s all about that.”

(KW22, 930-5)

**Routines**

The data suggested that, within their practice, the key workers did or did not carry out activities that they were familiar with. For example, it was clearly identifiable that the key workers would contact known professionals.

> “I mean, the actual person that I’ve actually spoken to, is the community pharmacist [means the hospital pharmacist with a focus on community issues] that deals with mental health at [hospital]. ‘Cause, she actually came, see, the thing is there again - it sticks in your head. She actually introduced herself to this team and she was actually, made a formal presentation about what her role was and what-have you. ... And it’s always stuck in my head.”

(KW1, 702-17)

> “Because we have the, we have the hospital. So, it’s easier to ring one person, rather ringing, going around. It’s just easier, more convenient for us.”

(KW9, 346-50)

**Low awareness about the project**

The data suggested that there was a low awareness of the scheme among the key workers
during the course of the project. Most of them did not seem to be actively involved and it was only if the clients discussed the scheme or the researcher contacted the key workers, that they were reminded. No data suggested that the LPS would be routinely incorporated within the key workers' working schedules.

“Ehm, I haven't had any contact with a pharmacist for months, ehm, I know that one of my clients, [CL20], he's told me on couple of occasions that he's phoned the pharmacist ... Ehm, but apart from that, I don't know anything. And I certainly haven't had to contact the pharmacist about anything. No, I must admit, I haven't really thought about it, recently.”

(KW11, 15-24, 63-4)

**Effect of limited communication**

It was believed that good cooperation required the development of relationships between professionals. It was said that more contact with the link-pharmacists, preferably meetings and particularly at the implementation stage of the service, would stimulate more communication than was experienced during the LPS. Time would be needed and perhaps a more intensive introduction of the LPS to allow professionals to familiarise themselves with the new service.

“Well, first of all it's new, it's a new idea, it's a bit of a change from what was happening in the past and people are generally reluctant to change from what they already know. Ehm, and that's why I think it's, the way I see it, it would be nice to have more pharmacists involved because that would then stimulate more communication anyway... I think that's just a, just a time thing, really, and yeah, more people are aware of it as the time goes on, that more, contact would increase, I think. It just takes time, I suppose. Any kind of change.”

(KW11, 781-9, 801-6)

**Link-pharmacist-related factors**

**Need for promotion**

The key workers suggested that there was a need for promotion of the pharmacy profession and the services that the pharmacists provided. The key workers recommended that the pharmacists should promote their profession and their services to other professionals and clients.

- **Promotion of the pharmacy profession**

The pharmacists were perceived as not forthcoming in 'selling' their abilities. KW1 suggested that the pharmacists' roles should be defined and explicit. It was also suggested
that medical staff may be more likely to be aware of the pharmacists’ abilities.

“I mean, [pharmacists’] image, I think their image is undermined. I think, you’ve got a good resource there, but what people envisage is a man in a white coat that just gives me my tablets. But doesn’t actually know what a community pharmacist is... And I think, now, the people that you’ve worked with, know exactly what a pharmacist is or what they actually do. ... I don’t think [pharmacists’] expertise is really acknowledged. ..., they have to do a lot about promoting themselves, and to do something about their profile, ...”

(KW1 553-62, 690-1, 841-4)

“And [clients] can buy it over the counter, they can also get advice from the pharmacist as well. So, on that level I think, pharmacists need to be marketed more and, ..., public need to be made aware that the pharmacist can actually provide more of the service than the public actually realize they can.”

(KW6, 157-66)

• Promotion of the pharmaceutical services

It was perceived by the key workers that a good introduction and promotion of the services being provided by the pharmacists would aid implementation. For example, a personal presentation by the pharmacists and an introduction of their services to the CMHT would be beneficial.

“...just say: Look, you know, I am here, you know, you can use me, sort of thing. My name is so and so, I am so and so, kind of, a little introduction, you know.”

(KW22, 1009-13)

The key workers further suggested that clients could promote the service by discussing their experiences with other clients.

“I’d say if there’s more people involved, it would stimulate more conversation about it and maybe word would spread...”

(KW11, 584-7)

Factors related to the design

Location of link-pharmacy/pharmacist

The key workers believed that the low number of suitably located pharmacies within the LPS contributed to the low recruitment response from clients. It was claimed that the low number of link-pharmacists complicated the clients’ choice of a conveniently located link-pharmacy and hindered the development of communication between the professionals. The
location of the link-pharmacy was perceived as an important determinant of the clients’ use of the service.

"Maybe it would be a good idea to look around for and check, I know some pharmacists, people go more often ..."

(KW9, 536-9)

"...there aren't that many pharmacies to which they can refer. And so, for some people it means travelling an awful long way, that's much further than they would normally travel to go to the local pharmacy."

(KW17, 302-8)

The key workers suggested that it would be appropriate to use pharmacies that the clients were familiar with and pharmacies that were local. Some key workers noted that many of their clients regularly used a certain pharmacy and that this should be utilised in the future, when implementing a service such as the LPS. Such an arrangement could build on an established relationship between the client and the local community pharmacist or it could assist the creation of such a relationship.

**Number of participating pharmacies**

Related to the discussions about the location of pharmacies were comments about the low number of link-pharmacists involved in the LPS that was perceived insufficient. It was believed that a higher number of link-pharmacists would have stimulated more interprofessional communication.

**Exclusion of non-English speaking clients**

It was commented that a number of people from ethnic minorities lived in ELCHA area. Due to the problems potentially experienced by these people, as described on page 246, it was perceived that these clients should have not been excluded from the project.

**Time available for implementation of the LPS**

It was commented that there might have not been enough time allowed for the clients and professionals to familiarise themselves with the service before they would become regular users.
"I think, maybe if you were gonna sort of, look at running a project like this again, I think you'd need to look at having a warming-up phase, within the project, in the sense of, looking at people with mental health problems, it takes them a long time to get to know people, a long time to develop trust. So, you really have to set yourself up for losing about four months in an initial stage of anything with them."

(KW6, 375-85)

"It would perhaps be nice, certainly in an early stage of this, to meet up with the pharmacists in ... more, sort of, professional, formal level, and just to stimulate some communication between mental health teams and pharmacists."

(KW11, 837-44)

Other complications of implementation of the LPS

Other issues that complicated implementation of the LPS included:

- clients' deteriorated mental health status prevented them from participation,
- a client did not feel comfortable with the link-pharmacist and therefore did not utilize the service,
- lack of primary, dispensing-related contact between the clients and the link-pharmacists that complicated engaging the clients in the LPS,
- key workers were too busy to engage with the project since the LPS represented more work,
- key workers misunderstood the communication pathways and expected to be contacted by the link-pharmacists.

9.3.3 The LPS design - the key workers' perceptions and suggestions

The following text summarizes the key workers’ comments about the LPS design and their suggestions regarding the design of any future service.

9.3.3.1 The service definition

It was suggested that it should be defined explicitly whether the service would be provided on a formal or informal basis, and whether or in what way the professionals would communicate. Specific services provided by link-pharmacists should be negotiated with individual CMHTs.

9.3.3.2 Provision from community pharmacies

It was commented that provision of the LPS from community pharmacies was suitable
because it provided safety for the link-pharmacists who did not need to perform home visits.

9.3.3.3 Community pharmacy as a venue for provision of the LPS-like service

Privacy
Lack of privacy in community pharmacies was one of the key workers' most prominent concerns. Many key workers criticised a community pharmacy environment as being too open and unsuitable for discussions about medication.

"... going to the pharmacist and talking openly in an open shop about things, is not the ideal situation."

(KW1, 185-8)

One key worker also commented that a counter represented a physical barrier between the pharmacist and the clients. The key workers believed that a private area, a one-to-one setting, would be required.

Acquaintance with the link-pharmacist
On the other hand, one key worker compared a community pharmacy and a community pharmacist to an appointment with a psychiatrist. She perceived a pharmacy as a 'less intimidating' place.

"So if they can get that [drug-related information] from a pharmacist, it's in a different setting, which is perhaps, maybe less intimidating in some ways for a service user than being seen by psychiatrist..."

(KW18, 150-4)

She believed that the clients would usually know the community pharmacist and there would be a relationship between them. Also, the link-pharmacists could, in dealings with the clients, utilise all the additional information that they had collected over time about the client, his or her family or other related issues.

9.3.3.4 Availability of the link-pharmacists
The key workers valued that, during the LPS, the clients did not need to make an appointment with the link-pharmacists if they wished to meet them.
"... it was organised in such a way that it was accessible for the clients. I mean, they had the option of going to see their community pharmacist, the community pharmacist was there if they wanted them to be there."

(KW6, 726-31)

They acknowledged that it sometimes took an unnecessary amount of time for clients to obtain an appointment with CMHC professionals. Having access to a community pharmacist was perceived as a potential solution. The easy accessibility of community pharmacists was seen as an advantage of the link-pharmacists' role.

9.3.3.5 Pharmacists' heavy workloads

A key worker expressed doubts whether community pharmacists had enough time to provide the LPS-like services. Some mentioned their personal experience and considered the community pharmacists' busy practice to be a constraint to the link-pharmacists' roles.

"But, obviously, it goes down to time again. Unfortunately, the pharmacy is very, very busy and you go in there and there's about ten people..."

(KW5, 490-2)

However, another key worker reported her experience with a local community pharmacist who always had time to talk to her.

9.3.3.6 Consultation on collection of prescription

It was suggested that community pharmacists could utilise the time when the clients came to collect their prescription. Due to a regular occurrence, this was perceived as an obvious opportunity to engage the clients in conversation.

9.3.3.7 Language used

It was commented that professionals (including pharmacists) should use language understandable to the clients.

"...patients to feel relaxed, because we don’t want to start comment and lecture them and, using their terms, what the patients understand, don’t use jargon, ... to avoid jargon, use, sort of, simple terms which they understand."

(KW3, 826-31)
9.3.3.8 Transfer of information

Within the LPS the key workers were asked to be the link-pharmacist's contact person for the CMHT and, if appropriate, to refer issues brought up by the link-pharmacist to a relevant professional. The key workers were asked about their perceptions of this activity.

Transfer of information from the link-pharmacist to other professionals

To forward the link-pharmacists' information to a relevant professional was perceived as feasible by most of the key workers, sometimes depending on the significance and implications of the information. If required, an action would be taken immediately. Key workers explained that it was their professional responsibility to do so (also described as "covering one's own back"). As they were already communicating with other professionals, to be contacted by a pharmacist would not present any additional workload. Sometimes external influences (such as the required professional was not present, key workers' busy and unpredictable schedules) could make this difficult.

Transfer of information from other professionals to the link-pharmacist

The key workers were asked whether it would be feasible for them to contact the link-pharmacist to inform him or her of any changes in the client's care that had resulted from the pharmacist's original suggestion. This proved problematic during the LPS when the key workers did not volunteer information to the link-pharmacists. The key workers were concerned about confidentiality of shared information and emphasised a need to ensure confidentiality. They reported that issues of confidentiality could complicate community pharmacists' involvement in the clients' care. However, they believed that this could be resolved through an established relationship with community pharmacists. Some specified that the formal involvement of community pharmacists would be required. Many saw this information transfer feasible as they had the same practice established with other professionals. Others perceived it as an addition to their workload with no clear benefits.

"I mean, we already have so many things to do! And if it's not crucial, I mean that is the sort of thing they would find out sooner or later, isn't it? If they are any changes in medication, because of, ..., the client would be taking their prescription to them, presumably, you know. I would suppose, if it's, you know, if you got it in routine, if it was deemed sufficiently important, ..., as part of my, as part of my work, yeah, then I would. But, at this point of time it would feel like another thing to do. Which, I am not too sure if I can see the benefit, entirely see the benefits, perhaps I can see the benefits of it, but at the moment, we don't use pharmacists, I guess, I mean,
in a sense. And we rely on the fact that psychiatrists know what they're doing. If I were to, sort of, take on board what you've just said, I should, perhaps, it should work the other way, or perhaps, it should be for the pharmacist to always raise concerns. If they have ANY concerns about the medication that somebody is on, then they should be getting back to us. Or possibly, perhaps, more directly, with the psychiatrist. Why get it through me?"

(KW 16, 891 - 925)

Some believed that contacting a community pharmacist was beneficial to the clients' care even if it would add to their work. Some perceived it as a general courtesy. It was suggested that a copy of information routinely provided to other professionals could be sent to the link-pharmacists to ensure the continuity of care.

9.3.3.9 Link-pharmacist as an independent care provider

The issue of whether or not the community pharmacists should remain independent of the CMHT while offering the service or whether they should be clearly advertised as part of the team was discussed.

Although there was a general notion that the pharmacists would be included in CMHTs or would closely cooperate, it was discussed that some clients did not trust mental health care professionals and therefore the community pharmacists' independence could be beneficial.

9.3.3.10 Interprofessional cooperation

A prominent issue discussed by the key workers was the importance and implications of interprofessional cooperation in general and for the community pharmacists' involvement in CMHC. The key workers listed a number of reasons why interprofessional cooperation was desired. These are presented below.

Improvement of services in general

Some key workers believed that incorporating community pharmacists in multi-professional primary care would generally improve services for the clients.

"... bringing a pharmacist in as well, bringing an extra professional in, so it's, it's a better service..."

(KW2, 21-3)

"... [cooperation with pharmacists] would, sort of, create a better relationship between us and the pharmacists and, maybe, allow me to get more, a better service for my clients from the community pharmacists."

(KW6, 300-6)
Holistic approach
The key workers believed that there should be a holistic approach to the care for PMHP and interprofessional cooperation was perceived as a means for such an approach. The key workers believed that it was important to link all the professionals involved in the clients’ care. These opinions led the key workers to favour the community pharmacists’ involvement in CMHC. They believed that community pharmacists’ participation in the clients’ care would bring an additional dimension to the care.

“This is something I feel strongly about. On a holistic level, you do need so many people involved, just to address clients’ problems.”
(KW21, 685-90)

“We are different disciplines, different roles and we should work together to benefit the clients.”
(KW3, 281-3)

Enabling
It was thought that if the link-pharmacists did not know the clients, they had little to discuss. It was suggested that the community pharmacists should be familiar with the clients’ cases in order to provide an LPS-like service.

“But also the pharmacist, maybe, not knowing the person, ... , doesn't have an opportunity to say very much.”
(KW4, 437-9)

The key workers reported that being part of a CMHT or being in close contact with other professionals would enable the community pharmacists to contribute to CMHC, mainly by allowing them to be aware of the clients’ overall care.

“If a pharmacist ... provide a service to somebody, they need to know what’s the story about that person, ...”
(KW11, 613-16)

Sharing knowledge
Some believed that pharmacists’ specialist medication-related knowledge should be broadly available to other professionals. The interprofessional cooperation would allow sharing of this knowledge.
"More we can actually get that knowledge across to as many people as possible, and really, I feel, that, you know, more liaison between the community teams, the CPNs and pharmacy, you know, that would be helpful."

(KW21, 69-74)

**Monitoring**

It was perceived that the community pharmacists’ involvement would provide a ‘back-up’ for individual professionals by monitoring clients.

“It was nice to, sort of, having that feeling that there was a back up. It’s nice for me to know, that the clients have a certain person to contact.”

(KW11, 116-123)

Although the interprofessional cooperation was prominent in a number of interviews, some key workers did not talk about it or did not perceive the direct cooperation between community pharmacists and CMHTs always necessary.

“... and information we all have a right to know, I don’t know whether we need to, whether pharmacist necessarily need to communicate that to community mental health teams.”

(KW17, 799-804)

9.3.3.11 **Need for pharmacists’ specialised knowledge**

Closely related to discussions about the community pharmacists’ involvement in community mental health care was the issue of their medication-related knowledge. In many cases the issue of specific knowledge was a hidden notion underlying the key workers’ discussions about community pharmacists’ involvement. The key workers did not doubt the community pharmacists’ knowledge, but there were indications that specific, comprehensive psychiatric medication-related knowledge would be expected and required.

“... But, also, I mean, they are all CPNs, they are community PSYCHIATRIC nurses, they are not general nurses. They have more special, as far as the medication is concerned, their knowledge is more specific. Ehm, and certainly is the psychiatrist as opposed to a GP. You know. Or a pharmacist, I suppose, a pharmacist has more general... Yeah, has more broad, broad knowledge, rather than specialist knowledge of psychiatric medications.”

(KW16, 354-75)

“I suppose nurses have knowledge but they don’t, probably don’t have as much in-depth knowledge of psychopharmacology as pharmacists.”

(KW17, 730-4)
9.3.4 Pharmacists’ potential roles - key workers’ perspective

Throughout the interviews the key workers provided suggestions on areas of community pharmacists’ potential involvement. Some key workers expressed the general belief that community pharmacists should be involved in clients’ care and that they should become part of the multiprofessional care teams.

The more specific comments were grouped into the following categories:

- supply of medication
- provision of information/educational roles (for clients and professionals)
- clinical roles /interprofessional cooperation
- access to professionals, help and support
- additional potential benefits - encouraging clients’ empowerment - social contact for the clients

9.3.4.1 Supply of medication

The key workers were keen to utilize the community pharmacists for various dispensing-related roles such as

- emergency dispensing
- collection of prescriptions from surgeries
- deliveries of medication to housebound clients
- disposal of medication.

Some key workers were not aware of the available forms of alternative dispensing.

9.3.4.2 Provision of drug-related information and educational roles

Advice and explanations should be available to clients, their families and professionals.

Advice and explanations to clients

Drug-related information for clients should be provided with respect to polypharmacy and non-psychiatric medication and should include information on related conditions as well as administration of medication and drug regimens. KW18 commented that professionals assumed that clients followed a given regimen and administration instructions but that this was unlikely. The drug-related information could be provided

- upon referral from the key worker,
- at the client’s request,
- regularly once a year, and more often if needed.

Both written and oral information should be provided at the same time. Provision of written information seemed to be a frequent problem either due to the clients’ inability to read or their inability to read English. The written information should be easily understood and it should be provided in different languages.

“For instance you have, we have some stuff from drug reps, that they give to us to give to clients. But the language is not accessible. It’s not very easy to read ...”

(KW 9; 486 - 90)

**Drug-related information for and education of other professionals**

Drug-related information and advice should also be available to the CMHC professionals.

“I suppose nurses have knowledge but they don’t, probably don’t have as much in-depth knowledge of psychopharmacology as pharmacists. And so, a useful source of information to a service user and for the key worker, ...”

(KW17, 730-6)

The key workers reported that they lacked continuity in their medication-related training and that pharmacists could provide continuing education. It was also suggested that pharmacists could provide support to non-medical staff regarding administration of medication, education about medication, management of minor ailments and the overall monitoring of clients.

**9.3.4.3 Clinical roles**

The key workers foresaw the community pharmacists in roles such as monitoring the clients on their medication, advising the physicians on choice of medication and keeping the clients’ medication histories.

**Monitoring of clients on their medication**

**Coping with medication**

The monitoring of clients by community pharmacists would allow the identification of and opportunities for advice on side effects and interactions for example with non-psychiatric
and OTC medication. Generally, the community pharmacists could assist the clients to cope with medication, and so enhance compliance and prevent deterioration. Provision of alternative forms of dispensing such as monitored dosage systems and daily dispensing were perceived helpful. The key workers supported the purpose and design of the LPS by adding that the community pharmacists could liaise with community mental health care professionals if they identified any problems.

"I think it would be a very good idea in a sense that especially working with the psychiatrist may be, they could actually attend CPA or medical review, would it be once a month, actually link-in to the session in community."

(KW5, 147-52)

"...letting me know things like, if somebody actually hasn't picked up their prescriptions or if there is any concerns and vice versa, me also letting you know, I don't think this person is taking medication, you know ... a two way thing."

(KW14, 91-97)

**Monitoring of clients not in touch with services**

Some key workers commented that monitoring clients who were not in touch with CMHTs would be valuable. Furthermore, the interview data suggested that, sometimes, CMHT professionals had difficulties keeping in touch with some of their clients and the community pharmacists’ input would be useful.

**Prescribing**

**Repeat prescribing**

It was suggested that the community pharmacists should be allowed to manage repeat prescriptions.

"I am all for, sort of, pharmacist being able to prescribe, I think, it would certainly make life a lot easier if a client, cause, for example if a client need something very quickly and they can't get it, it can be very frustrating and it may be, sort of, whole weekend without their medication."

(KW6, 599-607)

**Advice to prescribers**

Noteworthy was the frequency of the key workers’ criticisms concerning the inadequacy of prescribing. Some key workers believed that the community pharmacists should be engaged in the prescribing process to ensure quality prescribing. Community pharmacists
could offer medication-related advice to both general practitioners and psychiatrists and could cooperate with physicians on the choice of medication. If they were not involved in prescribing, they should review medication and suggest changes if the prescribed medication was found to be unsatisfactory.

"Yes, [discussions] about medication. That's mostly about medication. And advise psychiatrists as well, all working together, because the psychiatrists do the prescribing and the pharmacist is issuing the drug, isn't he? 'Perhaps we should try this one or the dose is too high or the dose is too low, or the patient has, sort of effects when they are a bit too sleepy during the day' and like that..."

(KW3, 792-801)

**Multiprofessional discussion support**

The key workers were also interested in utilising the pharmacists' knowledge in treatment-related discussions with psychiatrists. They reported that they had difficulties communicating their opinions to the psychiatrists and their opportunity to contribute to the choice of the clients' treatment was therefore limited. Drug-related information gathered from pharmacists would be valuable in this process.

"... And I spoke to a pharmacist [about the client's medication] and then, it was, it was within limits, it was within the guideline, but it wasn't doing any much good, you know, and so, again, that gave me a little bit more understanding and then, to approach the consultant and say, you know: 'I spoke to a pharmacist and, he said about this and that.', you know, ehm, and got more positive result..."

(KW21, 122-31)

**Keeping medication histories**

One key worker referred to his positive experience with pharmacists' keeping clients' medical histories that were otherwise fragmented.

**Attendance on CMHTs meetings**

Regular, formal meetings between community pharmacists and CMHTs were perceived a potentially useful means of direct cooperation but also as a means of monitoring the progress of the LPS or another form of cooperation. The key workers believed that community pharmacists attendance at CMHT meetings would assist community pharmacists' professional self-promotion and education of CMHT staff about new medication, new research and costs of treatments.
9.3.4.4 Access to help for those without access to CMHTs

The key workers suggested that an *ad hoc* drop-in service within the link-pharmacies for clients who experienced difficulties or were unable to approach other professionals would be beneficial.

9.3.4.5 Potential additional benefits of the community pharmacists’ involvement for clients

Some key workers perceived that by having access to their link-pharmacists, the clients would have an additional professional to speak to. This was believed to increase the clients’ feelings of being looked after and being given time. The contact with the community pharmacists could also be a social event for lonely clients, with the advantage of easy access.

“I think it's for them to also to have a bit of faith that somebody is looking, I think from the client's point of view as well, somebody is taking an interest in me, my medication, that's great, I think. In the way to have one-to-one relationship.”

(KW3, 171-7)

9.3.4.6 No potential role

Some of the key workers did not see any role that community pharmacists could play in the care for their clients.

“... no, I can't think of anything, I am afraid.”

(KW4, 659-60)

9.3.5 Effects and outcomes of the LPS - key workers’ perspective

9.3.5.1 Effects for clients

Some key workers were aware and gave an account of the effects that the LPS had had on their clients. Their opinions were based on the clients’ feedback or were the key workers’ personal perceptions. The issues are summarised in table 9.6.
9.3.6 Assessment of the link-pharmacists

The key workers who have experienced the link-pharmacists’ services commented on the link-pharmacists’ performance. Some found the link-pharmacists ‘friendly and helpful’.

“Very, very helpful actually. She was very keen to get engaged with people.”
(KW8, 799-801)

Others expressed criticism that included in one case the link-pharmacist not keeping to an agreed topic of contact with the client,

“So, it left, it left a feeling of, ehm, uncertainty, when, really, you’ve gone there with the idea that you’re gonna come out with quite a bit of knowledge, to a degree. And we came out with having a nice chat about all previous experiences but nothing ... about the medication that he was on at the time.”
(KW2, 91-9)

and in another case the unsuitable approach of the link-pharmacist towards the client.

“...the pharmacist didn’t seem to have a lot to say to her. And focused, most of our meeting, which was only brief, on me. And I felt, [CL6] felt quite left out.”
(KW4, 28-32)

One link-pharmacist was both complimented and criticised by different key workers.

9.3.7 Key workers’ knowledge about medication

Since the key workers were currently potentially the best accessible source of information for clients, the researcher aimed to investigate the knowledge that they used for informing
their clients and also their sources of drug-related information.

### 9.3.7.1 Medication-related education

CPNs generally gathered their main knowledge about medication during their training and broadened it during their practice. Social workers perceived their knowledge about medication limited or superficial and it was not part of their training. However, some of them perceived their medication-related knowledge sufficient for their practice which was not focused on medication. Also, one social worker admitted that she only gathered her current knowledge about medication after a social service mental health team was merged with their nursing colleagues and, based on the shared care of individual cases, she was more likely to deal with medication-related issues.

Some key workers, even if they felt that they had received sufficient training, believed that their knowledge was not up-to-date. Generally, the key workers seemed to be in favour of further training.

> “I think there is a gap, in updating people, particularly in areas of stuff that you are not using regularly, new medication is coming in all the time and you may not come across with it. It is left more or less to us, if it just happens to come across it and we choose to find out about it.”
> (KW20, 556-63)

### 9.3.7.2 Sources of drug-related information

Table 9.7 summarizes the interviewed key workers’ sources of information about medication. The key workers reported that they favoured sources that were easily accessible such as CMHT colleagues. This was often stated as a reason for not contacting community pharmacists for information. Also, the key workers were more likely to contact hospital rather than community pharmacists as they were known to the key workers and were perceived as easier to access.

> “You just tend to use the contacts that are easily accessible ...”
> (KW20, 861-2)
### Table 9.7: Sources of the key workers' information about medication

<table>
<thead>
<tr>
<th>KW</th>
<th>Profession</th>
<th>ENF</th>
<th>Doctor</th>
<th>Colleagues</th>
<th>Hospital pharmacist</th>
<th>Pharmaceutical companies representatives</th>
<th>Within team - journals, books</th>
<th>Community pharmacist</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CPN</td>
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<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>CPN</td>
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<td>✓</td>
<td>✓</td>
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<td></td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>8</td>
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</tr>
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<tr>
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<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
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<td></td>
</tr>
</tbody>
</table>

### 9.3.8 Key workers' perceptions of pharmacists

The key workers had a fundamental role in implementation of the LPS and it was believed that their perceptions of community pharmacists would have affected their acceptance of and their general approach towards the LPS (Davies, 2000; Firtz-Cozens, 1998; Onyett, 1997). Therefore, the key workers' perceptions of pharmacists were investigated.

#### 9.3.8.1 Experienced contact with pharmacists before the research project

The key workers awareness of pharmacists' abilities seemed to be based on their experience, either professional, or personal. The pharmacists' skills that the key workers
referred to were either descriptions of their experience or their beliefs of what the pharmacists' abilities were, based on this experience. The key workers' main experiences were through cooperation with hospital pharmacists and it needs to be acknowledged that the key workers' accounts were referring to a pharmacist, without distinguishing between hospital and community.

The key workers described that in hospitals, pharmacists were present on ward rounds, they participated in multi-disciplinary meetings, attended depot-clinics, kept medication histories, advised on prescribing, arranged educational group meetings for patients and produced regular written information for professionals. The key workers also approached hospital pharmacists for information regarding medication. The fact that similar roles were not available in the community was acknowledged with regret by some of the key workers. Some key workers discussed the dispensing activities provided to their clients such as monitored dosage systems, supplies of certain formulations of medication, home deliveries and servicing residential homes. Some of the key workers had no experience of any cooperation with pharmacists. In particular, social workers' opinions seemed to be based only on their personal experience. One of them acknowledged that she was aware that her nursing colleagues contacted a hospital pharmacist for drug-related information.

**9.3.8.2 Current perceptions of pharmacists**

Many key workers considered a pharmacist as a professional with specialised medication-related knowledge and experience. Sometimes the key workers perceived pharmacists' knowledge greater than that of psychiatrists.

"... they are experts in the field and they are more on the top of what's going on with medication, with the latest drugs and this and that. More than what our doctors are, and our consultants are."

(KW1, 229-235)

The majority of the key workers reported specific areas in which they believed that the pharmacists had expertise, such as side effects of medication, contra-indications, interactions etc. The CPNs' opinions appeared to be better defined than those of the social workers, which probably reflects the fact that CPNs had more experience working with pharmacists.
9.3.8.3  Questioning pharmacists' professionalism

KW4 and 9 questioned whether the pharmacists would be able to deal specifically with people with mental health problems. KW4 added that, currently, the clients did not ask community pharmacists because they were afraid of not being listened to.

"*KW4
Unapproachable [pharmacists], yeah. No-one would, I don't know if any of my clients would think of asking a pharmacist. It starts with the confidentiality, ..., and a bit of fear and ...
*researcher
Fear?
*KW4
Fear of being, I think fear of being not, I can't put it into words actually, fear of, I know what I want to say, fear of not being listened to, or not being accepted...”
(KW4, 424-36)

"I am not very sure about pharmacists, how much they understand the mental health.”
(KW9, 826-8)

9.3.9  Drug-related information provision - key workers' perspective

With regards to one of the aims of the LPS - provision of drug-related information, the researcher aimed to investigate the key workers' perceptions of the need for such information and their perceptions of how this information was provided by themselves and/or CMHTs.

9.3.9.1  Clients' desire for drug-related information

As was previously described, the key workers reported that the clients’ approach towards their illness and medication was highly individual. Similarly, and perhaps as a consequence, also their desire for drug-related information varied between individuals.

The key workers had different opinions about whether or not their clients asked about their medication. Even if a key worker commented that the clients inquired about their medication, further interview data suggested that it did not apply to all his clients.

The key workers listed a number of factors that, they perceived from their experience, predicted whether or not clients required drug-related information and how much they understood the given information. These are discussed below.
The severity and length of illness and the current state

The key workers reported that the more severe the degree of illness, the less likely the clients were to ask about their medication and they were less able to comprehend the provided drug-related information. It was emphasised that time should be available for consultations, to allow in-depth explanations.

The length of treatment

It was believed that, whether the person was on medication for a long time or newly prescribed, had an effect on whether the clients asked for drug-related information but also on the kind of questions they asked. Clients who had been recently prescribed medication asked general questions whereas clients who had taken their medication for a long time, asked questions that were specific to them.

The level of the clients’ understanding of their illness and the need to take the medication

It was reported that, whether or not the clients inquired about their medication depended on the role of medication in a person’s life.

“[CL3] would take arsenic if it was prescribed three times a day. But people like [CL2], they, actually have an initiative to discuss it...”

(KW1, 107-11)

“There are some, actively keen on understanding. That’s part and parcel of understanding what happened to them ...”

(KW20, 196-9)

Some of the clients repetitively asked about duration of their treatment. KW18 said that people who did not inquire about their medication were those who understood their medication. After probing whether she thought that they really possessed knowledge, the key worker replied:

“...it’s more a case of people who are quite accepting of what’s given to them.”

(KW 18, 451-3)

It was noted that some clients would take any medication prescribed for them and they were
not interested in information about it.

"... some residents will just take medication and simply trust the doctor, don't even think about it..."

(KW15, 61-3)

“They're not necessarily interested in, in the information. I mean, I think, that is one of the reasons why there is a lack of interest in the project. I mean, lot of the clients are just, sort of, accept the medication and trust in the professionals that they're getting the right things and the right doses and the right thing for the side effects...”

(KW16, 639-51)

**Having a reason**

Some key workers summarised that their clients only asked if they had a ‘reason’. The reason could be:

- the client was prescribed a new medication,
- the client experienced problems with their medication.

**Environment**

Another key worker concluded that clients were uncomfortable in outpatient clinics that resulted in them being unable to ask questions about their medication. It was also commented that GPs’ surgeries were perceived by clients as ‘scary’ environments in which they did not feel comfortable and therefore did not ask questions. A pharmacy was perceived as an ‘easier’ environment.

Other factors that were identified by the key workers as influencing the clients’ interest in drug-related information are presented in table 9.8.
Table 9.8: Factors influencing whether and how frequently CMHT clients enquired about their medication as identified by the key workers

<table>
<thead>
<tr>
<th>Factor</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual background</td>
<td>Clients with higher intellect asked more questions</td>
</tr>
<tr>
<td>The age of the clients</td>
<td>Younger clients were more proactive in seeking information</td>
</tr>
<tr>
<td>The level of confidence and assertiveness</td>
<td>Self-confident clients asked questions</td>
</tr>
<tr>
<td>Willingness to speak openly about medication and illness</td>
<td>Clients who were open about their illness asked questions</td>
</tr>
<tr>
<td>Preferences of professionals</td>
<td>If the client did not like a professional he/she was less likely to talk to this professional also about medication</td>
</tr>
<tr>
<td>People from ethnic minority groups</td>
<td>Asian communities lacked drug-related information due to language barriers</td>
</tr>
<tr>
<td>Self-perceived level of knowledge</td>
<td>Some clients liked to ‘show off’ their knowledge and discussed their medication with professionals</td>
</tr>
<tr>
<td>Attention received</td>
<td>Some clients enjoyed attention and therefore asked questions</td>
</tr>
</tbody>
</table>

9.3.9.2 Clients’ sources of drug-related information

It was reported that clients tended to use accessible and familiar sources of drug-related information, for example the key worker.

“They do ask and they tend to ask us as their key workers first.”

(KW20, 94-5)

9.3.9.3 Type of the drug-related information required by clients

The types of drug-related information that clients requested are summarised in table 9.9.

Table 9.9: Types of drug-related information required by the clients as reported by the key workers

<table>
<thead>
<tr>
<th>Type of drug-related information</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the medication for? Why [is the client] on medication?</td>
</tr>
<tr>
<td>Why [is the client] on this medication? What are other available drug treatments?</td>
</tr>
<tr>
<td>What does the medication do?</td>
</tr>
<tr>
<td>How long will [client] take it?</td>
</tr>
<tr>
<td>What are the side effects of the prescribed medication?</td>
</tr>
<tr>
<td>Can the medication be reduced? What happens if the medication is stopped or cut down?</td>
</tr>
<tr>
<td>Is the prescribed medication addictive?</td>
</tr>
<tr>
<td>‘Can I do this or that’ while on medication?</td>
</tr>
<tr>
<td>If the clients experienced a specific problem: Is it related to the prescribed medication?</td>
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</table>
Repeat information

Some key workers shared the opinion that some clients asked the same questions repetitively. The key workers' perceived reasons for clients doing this differed and included the following:

- the drug-related information that the key workers provided was not accepted by the clients.

  "Like I have people who ask every time I see them - do they have to still take it? And I explained every time: I said to them why it's necessary to carry on taking it. Next time again... It hasn't sunk in."

  (KW 20, 239-43)

- the clients needed reinforcement even if different professionals explained the same issue. Some clients tended to avoid medication and therefore the reasons why they were on medication and the benefits of taking it had to be repeated.

  "... because sometimes a service user needs to be explained over and over again, what medication does. Even though the doctors may have explained and nurses may have explained and key workers may have explained, it still needs, sort of, reinforcement all the time ..."

  (KW22, 104-11)

- too much information was provided at once.

It was commented that the clients' education needed to be ongoing. Therefore, regular contact, for example with a community pharmacist, who could fulfill this role, would be useful.

9.3.9.4 Circumstances upon which the drug-related information was not required

Key workers assumed that if the clients did not inquire about their medication, it was for one of the following reasons:

- they did not want drug-related information or were not interested,
- they did not know how to ask,
- they trusted the professionals,
they were previously given satisfactory drug-related information,

"I think once they get an explanation they are happy with, they carry on taking it."

(KW3, 510-12)

the issue was too sensitive; some key workers believed that some side effects may be difficult for the clients to report, and ask about.

9.3.9.5 Increase in the desire for drug-related information

Despite different opinions on how much drug-related information about medication was wanted by clients, some key workers believed that, recently, the clients tended to ask more about their medication than they had done in the past. They believed that people were generally more empowered, that there was more drug-related information available and that it was easily accessible. There was more publicity and openness with regards to mental health. It was perceived that the empowerment of clients with regard to their medication was possible and it was also needed. The empowerment was possible due to the changes in the health care professionals' practice that enabled the clients to become involved in the decision-making processes regarding their treatment. The increased involvement of the clients in their treatments was perceived as needed for clients to cope in the community. Some key workers believed that this was the reason why the clients tended to gather more drug-related information. Such an approach was believed to be facilitated by the fact that clients met frequently, for example in day centres, where they shared information and thus broadened each other's knowledge.

"Well, it's really about empowering people in relation to their medications. Because, I mean, 10, 20 years ago, you were taught not to have any interest on what you were taking. The doctor prescribed and you took it, end of story. ... Whereas now, I think, people are much more in tune about side effects and much more wanting to know about what medications do and why they're on this medication and why they are not on another medication."

(KW6, 66-79)

"It's more: 'What do you think, shall, would you like to...?' So, I think it's more user-friendly. So, they get involved in their care plans. And they get involved with their medication and, they're being now asked: 'What, you know, how are you feeling?'"

(KW4, 398-404)
The key workers also highlighted that this particularly applied to younger clients, the
‘newcomers’ in CMHTs, who tended to be more pro-active in asking questions about their
treatment than older clients.

9.3.9.6 Drug-related information currently provided to clients
Some key workers suggested that, currently, there was not enough drug-related information
provided to clients. This opinion was shared even by the key workers who believed that
professionals tended to provide drug-related information to clients.
This issue is now further discussed in two parts: drug-related information provided by key
workers and drug-related information provided by other professionals.

Drug-related information provided by key workers
The key workers’ approaches to provision of drug-related information were mostly reactive:
• the key workers reacted to a problem that they identified or to an external trigger, for
  example if the client was prescribed new medication or,
• the key workers provided drug-related information when they were directly approached
  by a client.
Some key workers reported that they volunteered drug-related information without any
external prompt and some reported that they identified the level of clients’ knowledge when
they were first assigned to the key worker, providing drug-related information accordingly.
Typical approach of a key worker to provision of drug-related information is expressed in
the following quotes:

“I think, it depends on both, really, depends on a) how much they want to know, and b) how much
I think they need to know. If they don't already know it.”

(KW 17; 266-70)

“I think when they want to ask about the medication you have to take into consideration so many
other things. Because you have to take into consideration their mental state as well, and if they are
very paranoid and the pharmacist may, obviously say, you know, what the facts are, and on how
you present the information. Sometimes it can do more damage than good. And, you know, you
could ... like lithium, you know, if you start talking about the side effects, someone who's paranoid
might think that they've been poisoned and just stop taking their medication. So, you know, I tend
to give information according to what I think the client can deal with. I don't withhold
information, but I present it in such a way that I think: one, it's not going to cause them any
anxieties, and two, in a way that they will be able to understand. And I think that's really
important. And I think you have to have a relationship with your client as well, you know. And because, yes, the clients have the right to information but it's how you deliver that information and, sometimes because of their different personalities and where they are maybe in their illness, I think too much information can be given to them and that can be quite damaging and confusing for them and they get very agitated and they get very distressed.”

(KW 12; 302-38)

Generally, the provision of drug-related information from key workers seemed to depend on whether the key worker deemed it necessary. Some social workers tended to refer the clients to other professionals for specific drug-related information.

“Well, generally, you refer them to the psychiatrist.”

(KW16, 102-3)

Some key workers encouraged clients to seek drug-related information and to ask if they were unsure about any aspect of their treatment.

“I just think we should be open with clients as much as possible. Good things, bad things. I don't believe in keeping clients in dark and telling them, making them to accept our opinion. I simply think, it's their body, they're the ones who are taking those medications…”

(KW 15, 545 - 52)

**Drug-related information provided by other professionals**

With regards to drug-related information provided by other health care professionals, some key workers were rather critical stating that the drug-related information provided from secondary care was unsatisfactory and uninformative; the clients did not get the answers that they wanted from professionals.

“... sometimes they are not always happy with the responses they got from the medical and a nursing team.”

(KW12, 581-4)

It was perceived that the provided drug-related information was only superficial; the clients were told what medication they were prescribed but not any further drug-related information, for example its side effects. It was noted that independent advice from a community pharmacist could therefore be helpful. It was perceived that professionals did not volunteer enough time for discussions with clients.
"I mean, I feel that it's not enough time given for people to digest what's been done and the changes."

(KW1, 78-80)

"It varies, some of them found [drug-information sessions] very useful indeed in terms that it was first time that anybody ..., first time that people bothered to take sufficient time to talk about it."

(KW 20, 409-13)

It was concluded by one of the key workers that, unless the clients directly asked, they were not provided with drug-related information by health care professionals. However, it was also stated that the drug-related information was provided if the clients asked. Some key workers believed that the mental health care professionals tended to provide drug-related information.

"I think it's, it's individual thing. It depends who is the consultant, who is the worker, ... I think, in general, people try to give information..."

(KW9, 481-3)

**Key workers' assumptions about the clients' level of knowledge**

One of the key workers concluded that the reason why, currently, there was not more drug-related information provided the clients was that professionals assumed that the clients were informed.

"I think we all ..., doctors, nurses, social workers, I think all of us. We tend to forget that people don't actually know, ..., like, in the instance of a depot: 'You've got to have your depot, you know you've got to have your depot, your depot keeps you well'. But I wonder how many times, I mean, I myself have to stop to think: 'Hold on, but has anybody actually ever taken the time to explain what it is, how we think it works, how we think it keeps that person well and the importance of it', you know?"

(KW14, 275 - 88)

Such a statement was in line with the researcher's understanding of some of the key workers' opinions about the level of their clients' knowledge. The key workers assumed that clients were knowledgeable about the medication but did not provide evidence. Furthermore, some of the key workers confirmed this by stating that they assumed that drug-related information was provided when medication was prescribed or at a secondary care level. One of the key workers came to the same conclusion during the interview when he was probed about issues relating to his clients' knowledge. He concluded that the
professionals assumed that the clients knew and this was probably because the clients did not approach them with questions.

"Yeah, I think we carry on giving it to them and they carry on taking it and we just assume that they know what it is and what the effects are. It was quite a lot of complacency on our side, about medication and we just, ..., I am doing twenty odd injections every week or whatever and I just assume everybody, you know, knows ... and why they are having them. But maybe they don't."

(KW11; 325 - 35)

One of the key workers believed that drug-related information was not provided as people with mental health problems were perceived by professionals as not able to comprehend it due to their illness.

"Because, either, it's too long winded for a GP or a consultant to talk about it, or they feel like that person wouldn't take it on board anyway, because often people with mental health problems are looked at as being ... thick, you know?"

(KW2, 546 - 52)

9.3.9.7 System of provision of drug-related information to clients

The interview data confirmed that drug-related information was not provided in a regular or systematic way by any of the interviewed key workers and none of the interviewed key workers was aware of the existence of any uniform provision or guidelines within their CMHTs. No one professional was responsible for the provision of drug-related information to clients and, mostly, drug-related information was provided reactively.

It was reported that medication issues were regularly raised at CPA meetings. However, one key worker commented that the time allowed was usually insufficient. Also, the discussion on medication often 'got lost' in other CPA agenda and that clients did not know how to ask about their medication during CPAs.

9.3.9.8 Desired methods of provision of drug-related information

Many key workers shared the opinion that drug-related information should be provided based on a strategy that would consider the influencing factors discussed earlier (section 9.3.9.1). Some key workers believed that too much drug-related information could frighten the clients. They were mostly referring to information about side effects. They believed that too much drug-related information could jeopardize the clients' compliance.
"And sometimes, too much information can frighten the patient as well, because, she had this leaflet with the side effects and that caused a lot of anxiety in her and that's one of the reasons that stopped her from taking her medication. So, you have to be very careful with what you tell the clients."

(KW12, 276-83)

Also, it was suggested that the clients may not fully comprehend drug-related information at the time when the information was given. The key workers believed that the way, time, amount and the level of detail of drug-related information should be customised to each individual client.

"... depends as well how the person is, ..., in a crisis or whatever, so, it's not a right time, you need to pick up the right time..."

(KW9, 606-11)

KW12 suggested that the drug-related information should be customised without withholding any important information. Above all these issues, however, was the belief that the clients had the right to information. One key worker thought that there should be no maximum limit for the provision of drug-related information.

"I think the more information you can get to the client about medication, the better."

(KW3, 154-6)

9.3.9.9 Reasons supporting provision of drug-related information

The key workers' reasons supporting the provision of drug-related information to clients were grouped in the following categories.

To change clients' negative attitudes towards medication

The key workers believed that medication had an important position within mental health care. They emphasised that many clients had a negative attitude towards their medication.

"... the usual issue with medication is, they don't wanna take it..."

(KW11, 245-6)

Not knowing enough about their medication and condition was believed to contribute to the attitude.
"And I think people would be less resistant, in taking medication, if they were told the facts, the truth ... the truth about medication."

(KW1, 410-15)

"The major thing for us is people to be complying with their medication but to also to understand why they need to be complying and also what effects it's gonna have on them..."

(KW2, 601 - 5)

The fact that many clients did not want to take their medication was believed to encourage them to inquire about it.

To empower the clients to cope with medication.

"Well, it's really about empowering people in relation to their medications."

(KW6, 66-8)

To allay clients' anxieties.

Problems with and doubts about medication could cause clients' anxieties. Therefore, drug-related information/explanations were needed even if the problem did not seem important to the professional.

"Somebody to take five minutes of their time to discuss something that's important. Mightn't be important to me but it's important to [clients], you know? It can alleviate an awful lot of anxiety."

(KW1, 405-10)

To avoid misunderstandings

There was a need for explanation, since 'raw' information could be misunderstood.

"...her friend one day phoned me to ask about the medication, because she looked it up in BNF and it was carbamazepine and she said to me: 'This new medication ..., well I looked it up but it's for epilepsy.' So, I said: 'Well, yes, but it's also a mood-stabiliser and it's used for people who've got mood disorders.' :"

(KW12, 941-50)

9.3.9.10 Need for drug-related information by clients' families

It was believed that family members might also be in need of drug-related information. It was believed that if the family members had limited understanding, they could jeopardise the client’s treatment. It was described that the family members had persuaded the clients to stop taking their medication. It was emphasised that in many cases the family members
were responsible for administering the medication but they might not have sufficient knowledge. They might be anxious and concerned about the clients’ illness and medication. Therefore, it was concluded that the community pharmacists should also be available for the family members.
9.4 Clients

9.4.1 The clients’ expectations of the LPS

From their participation in the LPS, the clients expected an opportunity to talk to the link-pharmacist about their medication and to increase their knowledge and understanding of their medication, they wanted to have a place to go for such information if they needed to. Some clients reported that they participated because they believed that it would be beneficial to other persons with mental health problems.

9.4.2 The clients’ perceptions of implementation of the LPS

9.4.2.1 Evaluation of the LPS from the clients’ perspectives

The clients were asked about what they liked and disliked most about the scheme. Most of them stated one issue that they liked but the majority said that there was nothing that they disliked.

Liked most

• getting more information about their medication,
• the link-pharmacists’ willingness to provide the information,
• the link-pharmacists’ friendliness and willingness to talk even if they were busy (in some cases, others criticised link-pharmacists who were busy),
• the link-pharmacists’ interest in the clients and listening to them,
• having somewhere to go for help if needed,
• visit to the link-pharmacist was easier than going to a GP.

Disliked most

• did not learn anything from contact with the link-pharmacist,
• client had to wait for a short time before the link-pharmacist saw her for a consultation,
• had to go into the link-pharmacy,
• the link-pharmacist was not local,
• the link-pharmacy did not offer any privacy,
• by participating in the LPS, the client felt ‘monitored’.
9.4.2.2 The factors influencing implementation of the LPS

Relationships with professionals
Many clients referred to their relationships with professionals in their care. Usually, they reported that it was easier to talk to a professional whom they knew. They also preferred the professional knowing them. One client reported that it was not a problem for her to initially contact the link-pharmacist whom she did not know. However, she reported at another place in the interview that she would ask about her medication in the hospital since they ‘knew her’. Another client reported that if the link-pharmacist knew the client, it would help the community pharmacist to understand the client’s problems. The general opinion within the interview data was that being acquainted with the link-pharmacist would ease the clients’ utilization of the service.

Reasons for non-attendance at the link-pharmacy
If the clients did not attend the link-pharmacy or they did not attend for some time the researcher asked them for their reasons.

No questions
Having no problems with their medication and/or nothing (more) to ask, were the main reasons for not attending the link-pharmacy.

Location
When the link-pharmacy was not conveniently located, it appeared to be a cause for, or at least it contributed to, non-attendance.

Attitude of the link-pharmacist
The fact that the clients felt uncomfortable with the link-pharmacist contributed to the clients not attending the link-pharmacy.

“Anyway, with the struggle, like, she's given [suppositories] to me but she ... 'Well, if you're gonna take them, take them!' You know: 'Don't come in here, asking my advice if you're gonna...', that's the attitude I got. Right, so I took the thing, run out of there and I thought to myself: 'Oh, you know, I don't need this', ...”

(CL10, 36-43)
9.4.3 The LPS design - clients’ perceptions and suggestions

9.4.3.1 Location of the link-pharmacy

It was appreciated when the link-pharmacy was local

"It's actually better, the new, the new location, cause it's just across the road from my doctors."
(CL7, 666-8)

and caused difficulties if it was not.

"... it's a bit out of my way to go to the actual chemist. It's not my local chemist. So, I don't go there for prescriptions."
(CL20, 146-9)

"Yes, it's local, it's handy. But as I told you, I get my medication from a different pharmacy, which is even more local and they get my prescriptions from the surgery for me."
(CL18, 349-51)

It was also reported that clients should be able to choose their own, local community pharmacist as a link-pharmacist because it would ensured familiarity with the community pharmacist and a convenient location.

"So, the only real change to the set up would be if you had more in the scheme, or they were all in the scheme, so that people got to know their nearest, or their local pharmacy, one who was also their link-pharmacist, if you see. And there's more of a chance of getting to know them in another way, you know, if you always go there for the things you buy, ehm, and you also go there to get your medication."
(CL1, 246-57)

9.4.3.2 Venue of consultation

Some clients made comments about the place where the consultations were carried out but indicated that it depended on each person whether or not the environment was important. Nevertheless, the interview data suggested that the pharmacy environment had some features that were unsuitable for the provision of the LPS service. These are summarised below.

Privacy

Some clients commented that the link-pharmacies did not provide enough privacy. The
clients did not like other customers being able to hear the conversation between themselves and the link-pharmacist. Some were disturbed by busy activity and noises in the pharmacy. An adequate level of privacy seemed to be one of the clients’ main requirements.

""Cause otherwise it's like, everyone can hear what you are saying and then ... talk about you. You think they wanna talk about you. You don't want everyone to know that you are on medication. Not just medication, but you've been in hospital as well."

(CL5, 177-82)

Unprofessional feel to a community pharmacy
Some clients complained that the current community pharmacies were too similar to a shop setting and did not feel like a professional place.

"It's not one of the places they go, sit down, you know, let’s talk, have a cup of, time is money, it's a shop. Shop is open, to dispense the medication and sell perfumes. It doesn't seem to have, it's not got facility there to go to one side and be, chatty."

(CL26, 738-43)

Counter as a barrier
The clients found it unacceptable when the link-pharmacist talked to them over-the-counter.

"I don't expect her to put things down and come running ..., just ‘Hang on a minute and than I'll listen to you what you want’. But that wasn't ..., no, she's behind the counter, in front of the girls, and I, I don't, I don't need that, you know, because as I say, the girls are local..."

(CL10, 329-36)

Client's health condition
Some clients suffered agoraphobia that made it difficult for them to attend and stay in a community pharmacy.

"I was gonna give [weekly collection of monitored dosage system] in, because I found, I found, because of agoraphobia that going to the shop once a week was making me ... sometimes you feel ill. And going there feels like it may, sometimes I feel uncomfortable to the point of, like collapse, you know, like, collapse..."

(CL26, 62-5, 1857-62)

9.4.3.3 Availability of the link-pharmacist
One client was asked to make an appointment with her link-pharmacist and this was not appreciated. She also criticised that the link-pharmacist was busy even at the time of the
agreed appointment and the client had to wait before the link-pharmacist saw her. It was appreciated when the link-pharmacist was available instantly at the time the client came for consultation. The clients also seemed to appreciate that it was open and up to them when to go to the link-pharmacist.

"I think, generally, if the person's OK to use self-motivation, then making your own contacts with the pharmacy is the best way."

(CL20, 789-92)

The clients were not at all in favour of any strict appointment system. One client discussed what he called 'semi-appointments' meaning that a client would telephone the link-pharmacist in advance to arrange a consultation. Another client suggested that the pharmacist could have stated times during which he or she would always be available should any client attend for a consultation.

9.4.3.4 Pharmacists' heavy workloads

Some clients reported that, when visiting the link-pharmacy, the link-pharmacists were busy and did not have enough time for the clients. The clients either complained about it or, on the other hand, they explained that they did not feel comfortable to disturb the pharmacist. Either way, it affected the opportunity to approach the link-pharmacist.

"Well, I don't think there is enough contact between the pharmacist and the public, but then again, they always seem to be too busy at the back, doing the tablets, to come out and explain anything to you. They always seem to be far too busy."

(CL13, 472-8)

"But if I go and there's a queue, I wouldn't ask any question, because there are people waiting and they can be impatient and children are crying, and all this type of things. I am trying to be a bit se-, you know, a bit sensible myself."

(CL2, 875-80)

Others seemed indifferent, but still mentioned the fact. Some clients also reported that, sometimes, the consultation was disrupted when the link-pharmacist was asked to deal with other issues.

"...being in a shop, someone may come and she may need to deal with it. Once there was her husband, she, actually introduced me to him. And like twice the phone rang and I think, I can't remember, but I think she left to answer it. If there would be a private space, there would be no disruptions."

(CL18, 203-11)
The clients commented that the lack of community pharmacists’ time might limit the community pharmacists’ involvement in community mental health care. The comments emphasised that it will need to be ensured that the community pharmacists are able to spend time with the clients.

"... there are situations where I get anxious, you know, like in a shop, I can't stop in a shop and talk, because the phone might ring: 'I'll be back in a minute.' ‘Oh God!’ ... and then someone comes and say: 'How much is this, how much is this perfume?' ... ‘Can you help me over here?’, you know, 'I won't be a minute, please, just relax.' You see, I can't relax in the shop. But in [day centre], it's different. It's more, you know, a one-to-one thing in neutral ground. And it's a day centre, it's a mental health place, this is my second home, I've been coming here for a long time. So I feel relaxed here. But in a shop...”

(CL26, 1353-1372)

9.4.3.5 Method of consultation
Some clients greatly supported the opportunity to approach the link-pharmacist by telephone. They found it convenient and more private than a visit to the link-pharmacy.

"I think I'll just phone her because she is busy in the office so I can phone back if she's busy or not."

(CL16, 471-3)

"I'd probably use the phone as well, or whatever, whatever mood I was in. ... If there's somewhere you can talk to him private, it'd be more useful than talking while there's other people in a chemist. Because I get very self-aware about my illness, ...

(CL20, 162-3, 171-5)

Other clients, on the other hand, preferred face-to-face consultation.

"The face-to-face contact is the best form of communication."

(CL5, 997-8)

Clients suggested that the link-pharmacists should provide written drug-related information.

9.4.3.6 Initiation of consultation
One client suggested that the link-pharmacists could always informally talk to clients when they came to collect their medication. Clients were not against the option that their link-
pharmacist would occasionally telephone them.

"...but once in a while, [link-pharmacist] would phone me ... and say: 'How are you getting on with the medicines?' That could probably work."

(CL5, 990-3)

One client reported that she could not contact her link-pharmacist from hospital since she did not have his telephone number.

**9.4.3.7 Introductory meeting**

One client suggested that the introductory meeting with the link-pharmacist is important and should be well planned.

"I didn't think she was very interested. 'Cause I went with you, you know, and it was like, you were there and she was there and I was there and none of us knew one and another. ... we just went in there and we were just there, sort of thing and then, it was a bit different than, I thought she was going to ask me a few more, ehm, few things, to say: 'Well, like, if you get any problems you can come in here...' and, and, but it was just done in the middle of the shop, wasn't it ... and it wasn't private, it wasn't like, sort of, I don't know, I don't know if you know what I mean. It was different to what I thought a little bit, it was gonna be, I thought she, we were gonna get, gonna get to know a little, just a little bit more. So that, you know, she understood me, knew a little about me, you know what I mean..."

(CL10, 1219-51)

**9.4.3.8 Language barrier**

One client appreciated that the link-pharmacist spoke the client’s non-English language.

**9.4.3.9 Clients' personal and condition-related information**

Although all the clients were informed during the recruitment session that their medication-related information would be provided to the link-pharmacist, it happened on a few occasions that the clients did not remember this fact and seemed upset when reminded by the researcher. Generally, the clients seemed very sensitive to any issues relating to their personal information.

"Why does he want all that for?’ But, the second time I went over there, I said: ‘Yes that's necessary.’"

(CL2, 247-50)
“Because they think, the pharmacist is interfering, they are finding out information so that they can, then the person, someone may think they're reporting you back to someone else, that's why they're asking the questions. So you don't know if it's confidential or not.”

(CL5, 1623-30)

One client believed that his local community pharmacy, where he regularly collected his prescribed medication for several years, possessed information about him and he felt comfortable with that. Although he emphasised that he was very self-conscious about his illness and any related issues, he perceived his local community pharmacist as a respectful and trustful professional whom he did not mind holding his personal information.

9.4.4 Clients' perceptions of community mental health care

In order to identify any gaps in the clients’ care where the pharmacists could have had a useful input, the clients were asked about their general care. The clients were asked whether they were missing any services from their current community mental health care. The majority of clients reported that they were not. Although, one of the clients admitted that she did not know whether the care that she was receiving included all the available services.

Access to professionals

Mostly, the clients were happy with the frequency with which they saw the professionals responsible for their care, although some clients reported that they would appreciate more contact. Generally, they seemed to have easy access to CMHT professionals. It was mentioned once that the client experienced problems arranging to meet his key worker and it was mentioned by some clients that they had problems contacting their psychiatrist or GP. Two clients reported that they would appreciate support during evenings and weekends when the majority of professionals were not available.

Review of medication

Another client expressed that she would have appreciated being prescribed a newer treatment.

Emergency help

When asked, most of the clients reported that they had access to help in an emergency situation.
9.4.5 Pharmacists' potential roles - clients' perspective

Table 9.10 summarizes issues that were suggested directly by the clients or identified by the researcher from the clients' interview data as potential roles for community pharmacists in CMHC. The issues were grouped into categories that included:

- **Supply of medication** - the roles mentioned covered different forms of help with the supply of medication including emergency supply and home deliveries of medication.

- **Provision of information** - the most frequent suggestions, covered provision of oral and written information about medication and condition to the clients and their families. The clients often used the word *explanation*.

- **Clinical roles** - this category covered pharmacists' involvement in prescribing via advice to physicians and the monitoring of clients on their medication (including side effects and provision of alternative forms of dispensing).

- **Access to a professional, help or support** - represented the roles for which the community pharmacists’ accessibility was an important factor and included: availability out of hours (including evenings, weekends and holidays), after discharge from CMHT and access to a professional.

- **No potential role** - some clients did not identify any role that the pharmacists could play in their care.

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<thead>
<tr>
<th>Table 9.10: Potential roles for pharmacists in CMHC as reported by the clients</th>
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<tbody>
<tr>
<td><strong>Category</strong></td>
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<tr>
<td>Supply of information</td>
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<tr>
<td>Information provision</td>
</tr>
<tr>
<td>Clinical roles</td>
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<tr>
<td>Access to a professionals, help or support</td>
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Involvement in prescribing

The clients were specifically asked how they would feel if their link-pharmacist as involved in prescribing their mental health medication, possibly through advising the prescriber. The clients gave a number of different opinions ranging from

- those who were not in favour, saying that the doctors knew most about medication,
- through those that could not see any difference that it would make but they would not mind,
- and those who thought it was a good idea and they would not mind,
- to those who were in favour because a pharmacist had a greater knowledge of medication than a doctor.

9.4.6 Effects and outcomes of the LPS clients' perspective

9.4.6.1 Relationship with the link-pharmacist

Some clients appreciated that, since the introduction of the LPS, the link-pharmacist always acknowledged them when they came to the pharmacy, greeted them and/or asked them how they were.

"... he was more ready to have me in his chemist. And he was more ready to give me information and he wanted to be of help to me and to others..."

(CL2, 1410-13)

"... when I went into the shop he always acknowledged me, ..., whether he was serving me or not."

(CL7, 409-12)

9.4.6.2 Perceptions of community pharmacists

In some cases the LPS was the first time that the clients had spoken/were in direct contact with a community pharmacist. Some clients reported that the LPS enlightened their perceptions of community pharmacists.

"But I changed my perception about chemists. I can see that they are quite intelligent and they know quite a lot about drugs they are prescribing."

(CL21, 360-3)
9.4.6.3 Drug-related information

Some clients reported that the LPS had helped them by providing information about their medication. As a result of participating in the LPS some clients realised that their knowledge about medication was incomplete.

"It never really occurred to me, until I was asked to go to the link-pharmacist. It never occurred to me in my mind. But once I ..., it soon cropped up in my head that there were lots of questions that I wanted to ask."

(CL21, 506-511)

One client reported that her expectation to learn more was not satisfied. Table 9.11 summarises the clients' views of whether the LPS increased their knowledge about their medication in context with the number of contacts that they had had with their link-pharmacists and whether or not they perceived having sufficient knowledge prior to the LPS.
Table 9.11: The clients' perceptions of whether or not they gathered new drug-related information through participation in the LPS

<table>
<thead>
<tr>
<th>CL</th>
<th>Number of contacts with LP*</th>
<th>Knowledgeable before the LPS (self-determined)</th>
<th>Increased knowledge after the LPS (self-determined)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>yes</td>
<td>no</td>
<td>Information received from the LP helpful as reassurance</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>yes</td>
<td>no explicit answer</td>
<td>Was given information but not always willing to accept, client 'knows best', the LP verified his knowledge; listened to the reasons but decided himself</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>no</td>
<td>yes</td>
<td>But not about new medicine</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>yes</td>
<td>no explicit answer</td>
<td>Always used LP who was her local community pharmacist as a source but did not have enough contact during LPS, contacts with LP provided continuity of what happened before, discussed medication for reassurance</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>no</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>no explicit answer</td>
<td>no explicit answer</td>
<td>Introductory meeting with the LP and one telephone call from the LP only</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>no</td>
<td>no explicit answer</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>n/a</td>
<td>n/a</td>
<td>No explanatory meeting during the LPS</td>
</tr>
<tr>
<td>13</td>
<td>The contacts were not recorded by the LP</td>
<td>no</td>
<td>yes</td>
<td>Did not know anything about medication before the introduction of LPS</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>yes</td>
<td>yes</td>
<td>Had questions about interactions with other medication</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>yes</td>
<td>no</td>
<td>Did not learn anything new</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>yes</td>
<td>reassurance</td>
<td>Helped to prepare for the discussion with a psychiatrist</td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>did not seek information</td>
<td>no explicit answer</td>
<td>Not enough contact with the LP</td>
</tr>
<tr>
<td>20</td>
<td>2</td>
<td>yes</td>
<td>&quot;not really&quot;</td>
<td>Valued that the LP answered the questions instantly</td>
</tr>
<tr>
<td>22</td>
<td>1</td>
<td>no</td>
<td>yes</td>
<td>A great deal</td>
</tr>
<tr>
<td>23</td>
<td>1</td>
<td>no</td>
<td>yes</td>
<td>None</td>
</tr>
<tr>
<td>26</td>
<td>3</td>
<td>no</td>
<td>no</td>
<td>Discussion about medication did not happen since the client did not want to stay in the pharmacy due to his agoraphobia (interview)</td>
</tr>
</tbody>
</table>

* number of contacts other than collection of medication
Chapter 9 - Post-intervention phase results

9.4.6 Perceived value of the interventions

Some clients who had had an experience with the link-pharmacists reported that they highly valued the link-pharmacists' interventions that either changed the clients' medication (cases 1, 2 and 5, page 210), increased their knowledge of medication or provided easy access to a professional if needed.

"To have somewhere to go where they know their job, what they are doing, somewhere where they will listen to you, understand what you are talking about."

(CL18, 542-4)

Some clients commented that the LPS had had no effect on them.

9.4.7 Assessment of the link-pharmacists

The assessments of individual link-pharmacists concerned:

- their approachability, friendliness, interest and other personal characteristics,
- their availability,
- the time that they spent with the clients,
- their ability to answer/explain the questions,
- the language they used during consultations,

and were both positive and negative. Some link-pharmacists received positive as well as negative evaluations by different clients. Table 9.12 presents examples of the clients' comments regarding their link-pharmacists.
Table 9.12: The clients’ perceptions of the link-pharmacists

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Positive comments</th>
<th>Negative comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal characteristics</td>
<td>Helpful when needed emergency supply, looking after the client if not busy, interested in the CL, listened, she is lovely, really helpful, kept promise to call back was great; interested to hear what the psychiatrist had said; listened; nice lady when she is not busy, always has a kind word, always says hello, lovely personality, wants to help others</td>
<td>Felt social distance between himself and the link-pharmacist, link-pharmacist nice but not very approachable, did not appear interested, service not personal (in the middle of the shop, did not ask the CL questions), not very friendly, patronizing when busy; did not form a relationship</td>
</tr>
<tr>
<td>Availability</td>
<td>Tried to be with the CL as soon as possible, available when needed, seen straight away, never waiting</td>
<td>CL never deals with the LP but the assistants</td>
</tr>
<tr>
<td>Time spent</td>
<td>As much time as needed, not hurried</td>
<td>Could spend more time, if the LP could provide 'a bit of' time</td>
</tr>
<tr>
<td>Ability to answer/explain questions</td>
<td>Provided full explanation; LP answered questions, LP tries to answer [client's] questions, explained very well, very clear and professional</td>
<td>Had to look in the computer to find out the information, too much information at once, explained fully but in short time - difficult to remember, expected the LP to ask her questions, questions not answered fully, did not provide enough information with monitored dosage system, did not inspire confidence; did not know what the client knew</td>
</tr>
<tr>
<td>Language</td>
<td>Understandable language, simple language but names of medicines confusing, simple words, understood everything understandable language, talked the way the CL understood</td>
<td>Some parts a bit difficult - used jargon</td>
</tr>
</tbody>
</table>
Results

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The clients who experienced contact with their link-pharmacists were asked whether they thought that, in the future, they would use their link-pharmacist’s services. The answers are summarised in table 9.13 together with the clients’ reasons.

Table 9.13: Clients’ intentions to visit the link-pharmacy in a future as reported by the clients with an experienced contact with the link-pharmacist

<table>
<thead>
<tr>
<th>Future visit</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Conveniently located, used before the introduction of the LPS, information about her allergy to codeine and not liking child-resistant caps included in the link-pharmacist’s PMR</td>
</tr>
<tr>
<td></td>
<td>Questions about medication answered, feels that he gained all the information that he wished to have</td>
</tr>
<tr>
<td></td>
<td>Now the client knows the pharmacist, therefore he would go, it is ‘his’ pharmacist, learned a lot - from no knowledge to all knowledge</td>
</tr>
<tr>
<td></td>
<td>Gave her confidence to take her medication, made her relaxed</td>
</tr>
<tr>
<td></td>
<td>Reassurance, back-up, helped to prepare questions for his meeting with the psychiatrist, ‘my pharmacist suggested’</td>
</tr>
<tr>
<td></td>
<td>No appointments, instant advice even by telephone, ‘peace of mind’</td>
</tr>
<tr>
<td></td>
<td>Got explanations, help with dispensing</td>
</tr>
<tr>
<td></td>
<td>Emergency supply</td>
</tr>
<tr>
<td>No</td>
<td>The CL did not learn anything new from the LP; would rather go to hospital because they know her (researcher’s comment: later the CL started to regularly visit the LP)</td>
</tr>
<tr>
<td>No explicit answer</td>
<td>Did not receive new information but reassurance of already known, a back up</td>
</tr>
<tr>
<td></td>
<td>Contacts with the link-pharmacist not very nice for the client - bad handling by the pharmacist, pharmacist now knows about her problems and the client does not like this, the relationship is not close enough for the client to feel comfortable</td>
</tr>
<tr>
<td></td>
<td>Not to the current link-pharmacist but she asked to involve her local pharmacist; (researcher’s comment: the client did not utilise the new link-pharmacist’s services, possibly due to difficult family circumstances)</td>
</tr>
<tr>
<td></td>
<td>Medication discontinued, would not have happened without the LP, gained information, change of perception of pharmacists</td>
</tr>
</tbody>
</table>

The interviews with the clients also provided information about the clients’ general perceptions of pharmacists, their perceptions of the care that they were receiving and their approach to drug-related information. These were perceived to be related to the acceptance and utilisation of the LPS. Therefore, these issues were explored and are presented in the following text.

9.4.8 Clients’ perceptions of community pharmacists

The interview data revealed variations in the clients’ views of the community pharmacists’ abilities. The clients varied from those who had never thought of approaching a community
pharmacist for advice to those who perceived the community pharmacists as professionals educated in medication-related issues.

"... my doctors explain everything, normally, so I didn't really find that, the pharmacist really knows much about it."

(CL17, 357-60)

"They seem to be people that gone to school, studied medication and what the tablets do or what they're supposed to do. Over the years of experience they probably know that certain medication would help."

(CL26, 965-70)

Some reported that they did not feel or did not know that they could ask a community pharmacist about their medication.

"Yeah, well, to be honest, I mean I wouldn't have realized that, you know, it was open to you to just go and ask a pharmacist some particular questions about medication that had been prescribed via a doctor elsewhere."

(CL1, 620-4)

Even if the client had a close relationship with a community pharmacist, the type of questions that he or she would ask was limited. It seemed to be more known that the clients could approach a community pharmacist about OTC medication and minor ailments than their prescribed mental health medication.

"... I had an idea that you could go there and ask them that sort of things, because I did before, you know, like with pain, aches and pains, when I've had a pain, ... , I did have an idea like that, ... they can advise you, yeah I always knew that they could do that ...

(CL10, 863-71)

"I've never asked about my medication. I have asked about other things, [if it was] OK to take it with [my] medication and [local pharmacist] said: 'Well, we recommend this or that or the other or whatever,' and I hadn't felt as if I could ... I don't feel as if I could ask him [about prescribed medication]."

(CL20, 191-203)
If I have health problems or health concerns, like a few weeks ago I had a sore throat from smoking too much ... So he gave me some sore throat tablets...

And have you ever discussed with him your medication, your...

Mental health medication? No.

Any reason why you didn't ... ?

I just didn't think to...

Many clients perceived community pharmacists solely as dispensers.

"I don't know, he sort of deals with medicines, he sorts out prescriptions, he deals with prescriptions to the client, you know, the person giving him the prescription. I don't really know, you know. I am not sure."

"Pharmacists, they deal in medicines, you see, you, you got the prescription, you go to the pharmacist, they give you the prescription, they give you tablets, the medicines on the prescription ... So that's, that's all I know about, really, pharmacists, yeah."

The clients' opinions seemed to be based on their experiences: some clients had never been offered any additional help by any community pharmacist. Their observations during their visits to community pharmacies did not give them an impression that they could approach a community pharmacist with questions and that the community pharmacist would have specialised medication-related knowledge.

"I give him my prescription, he gives me medicines and that's it."

On the other hand, some clients spoke about their community pharmacists as being friendly, helpful, understanding and providing support. If there was information provided from a community pharmacist (other than a link-pharmacist) to a client, in the majority of cases it appeared to be prescription-related. However, some clients' comments suggested that the community pharmacists talked to them also about non-medication-related issues. Little was known by clients about the community pharmacists' education. Some clients shared the opinion that the community pharmacists were trained in the pharmacy, like an apprenticeship.
“No, I just thought that like, they, sort of, ehm, learn the job as you learn any other job, don’t you, you know? I don’t know if they’re qualified, I don’t know if they are qualified people.”

(CL10, 702-6)

In summary, the clients’ awareness was fragmented and resulted in the clients’ limited acceptance of the pharmacists’ roles. Even a client who had a positive and informed opinion about pharmacists’ knowledge was reserved towards the idea of the link-pharmacist being involved in the prescribing of his medication or attending the CPA meetings.

“I think the psychiatrist is the best choice, while choosing medicines. ‘Cause they actually treat people and see people all the time. And, I don’t think I’d like to have a chemist at my CPA meetings.”

(CL20, 664-9)

9.4.9 Clients’ approach to hospitalization

Some clients expressed negative attitudes to being hospitalised. It seemed more to be a sense of fear and maybe discomfort rather than a criticism of the services.

“If I would listen, before I became ill, before I end up in a hospital. If I could listen, I would not end up in a hospital.”

(CL23, 130-3)

9.4.10 Community mental health care professionals

Key workers - some clients had very close relationships with their key workers that seemed to be of great importance to them. Usually, they seemed to have access to their key worker when needed.

General practitioners - the clients reported that GPs did not volunteer information about their medication, they did not have enough time to spend with clients and they did not like being asked questions by the clients about medication.

Psychiatrists - some clients commented that they had limited contact with their psychiatrist. One client reported that it restricted the help that the psychiatrist could offer her during times when her mental health deteriorated. Also, the psychiatrists were busy and unable to spend enough time with the clients. One client reported that his psychiatrist always asked him about his prescribed medication.

Hospital professionals - it was reported that the hospital professionals did not have time
to spend with the clients and were reluctant to provide them with information about medication. One client reported that there was nobody available in hospital to see how the client was coping with their medication.

Other - one client reported a relationship with his diabetes nurse who spent time with him and talked to him about his condition and general health-related problems. It was noticeable that the relationship had great value for the client.

9.4.11 Drug-related information provision - clients' perspective

9.4.11.1 Clients' approaches to medication

The approach to medication varied among individuals. Many clients reported that they complied with their medication in order to stay well. However, many clients wished to become and stay medication free.

"I mean, what I am aiming for, but the doctors won't do it, because they think I'll get sick again, they think I'll have a relapse, is to come off all the tablets. And just to have the depot. That's what I want to happen."

(CL19, 83-8)

They perceived medication as helping them but they wished to have it either decreased or discontinued as soon as possible. They were concerned about its side effects and long-term effects. In some cases, medication occupied a lot of the clients' thoughts. In other cases the clients identified that they needed to take their medication. Some took their medication because they were told to do so by health care professionals.

9.4.11.2 Drug-related information

Perceived level of drug-related information and desire for drug-related information

One client believed that there generally was a lack of drug-related information among people with mental health problems. Clients' statements about the level of drug-related information that they possessed varied and there was no trend within the sample of interviewed clients to either having enough drug-related information or lacking information. The level of knowledge seemed to depend on the individual client’s interest in gaining it and in the interviewed sample there were clients with different levels of interest in drug-related information. There was a client who tried to avoid talking about his
medication, the client who wanted to know “only a little” about her medication or the client who would not take newly prescribed medication unless she felt informed enough to make the decision whether or not she wanted to take the medication.

“I wouldn’t take any medication unless I know about it ...”  
(CL7, 576-7)

Therefore, some clients seemed to be knowledgeable about their medication and happy about the drug-related information that they had, whilst other clients were happy to take what was prescribed and never sought drug-related information. These clients were also satisfied with the information that they had.

“... mistakes can be made, so I always check that if I’ve got something different, something new, that it is compatible with what I am taking already ... because I always like to have a chat about my medication ... I should know about what I am taking.”  
(CL7, 223-6, 501-2, 576-7, 599-600)

“Yeah, well, I didn’t know nothing about it before. I just knew that doctor gave me tablets and I took the tablets.”  
(CL13, 942-4)

“... but it wasn’t too much information really. I suppose, I could have asked, but I just didn’t bother, no.”  
(CL21, 551-3)

Clients who were interested in drug-related information were usually able to gather it over time, although it sometimes was a difficult process.

**Reason for not receiving drug-related information**

Some clients reported that they took their medication for several years without receiving information about it.

“Up-till recently I had very little information about medication. I just got given it and I took it ... I’ve never really sought it and it wasn’t offered to me.”  
(CL20, 287-8)

They reported that they neither asked nor was the drug-related information offered to them.
Some did not ask because they did not want to be perceived as complaining, some thought that they were not supposed to ask such questions or that they should ask only when they had experienced side effects. Some clients commented that they did not think of asking. Some clients reported that, in the past, they were satisfied with the drug-related information that they had received, but that some external influence, for example another person experiencing the same problems (CL20), a pharmacist in a depot clinic (CL23) or the link-pharmacist (CL21) had helped them to realize that their knowledge could be improved.

**Actual knowledge**
Generally, clients were able to list names and doses of their medication. Their awareness about the indications for individual medicines was not so obvious; some clients did, some did not and some only partly knew the indications of their medicines.

**Provision of drug-related information to clients**
If there was a change to their medication, some clients seemed to be told what medication was discontinued or started and how the doses were changed, they did not seem to receive any further explanations concerning the new medication.

"But [doctor] didn't give me a very satisfactory answer he didn't explain to me anything, you know, he said you're just getting this for that and this for that..."

(CL13, 956-60)

**Need for provision of drug-related information to clients**
One client reported about the difficult situations that she had experienced over the period of taking her medication and that more information would have helped her to deal with the situations in a better way. Some clients reported that, in the past, they had experienced side effects for some time without realizing that these were related to their medication.

**Clients' sources of drug-related information**
The clients sometimes gathered drug-related information from patient information leaflets (inserts) and other available leaflets. Doctors, mainly hospital, were reported as an information source as well as key workers. Despite this, the clients mentioned several times that medical staff, including general practitioners, psychiatrists and other hospital staff, were not willing to provide drug-related information.
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"... you have to drag information out of [GPs], to be honest."  
(CL1, 694-5)

"I know that doctors know what's right, but a bit more of a discussion ..."  
(CL16, 650-2)

"Doctors don't tell you that. Doctors are reluctant to talk about side effects, they think that if they will mention side effects, you will get it."  
(CL18, 423-5)

Medication was discussed at review meetings but it seemed that the clients were informed about changes rather than provided explanations about the changes and the medication. Clients reported that the drug-related information provided by medical staff was limited and that they had to search for more drug-related information themselves. Rarely, the community pharmacists were stated as a source of drug-related information.

Role of a family

In one case the client was completely dependent on her husband as a carer. The medication was managed and all the drug-related information was gathered by her husband.

Timing

Several interviews suggested that clients did not have enough drug-related information at the onset of their illness. Either this information was not provided or clients were not able to comprehend the information and make an informed decision. In two cases it was up to the client’s family to deal with the situation.
9.5 Summary of the post-intervention data

9.5.1 The participants' views of implementation of the LPS

Analysis of the pre-intervention data (before the introduction of the LPS) identified a low level of communication between the link-pharmacists and the CMHTs' professionals. A minority of clients sought advice about their medication in community pharmacies and received special dispensing services from community pharmacies. The intervention data indicated that the LPS was used infrequently by the clients and had little effect on the level of communication between the professionals.

Most of the link-pharmacists perceived implementation of the LPS as unsuccessful. Some link-pharmacists were and some were not satisfied with the contacts that they had with the clients and with the other professionals. The key workers were not explicit about their perceptions of the success of the scheme. They emphasised that the LPS enhanced the clients' access to drug-related information and opened an opportunity for interprofessional cooperation. The issue was not directly discussed with the clients.

All the participants listed factors that, they believed, contributed to the extent to which the LPS was successfully implemented. These were either attributed to the individual participants or the LPS design - its structure, for example location of the link-pharmacies, the target client group etc., and processes, for example communication between professionals or a relationship between the client and link-pharmacist.

9.5.2 Participants' views of the design of the LPS

No major dissatisfactions with the design of the scheme were identified from any of the participants. Nevertheless, the participants commented on problematic issues and provided suggestions on possible improvements. These comments were used to form the tables of topics, discussed at Part2 - Consensus development panels and, accordingly, were included in or excluded from the model of a community pharmaceutical mental health service. The concerns discussed most intensively in connection to the scheme’s design were the location of the link-pharmacies and privacy in community pharmacies in general. Potential roles for the link-pharmacists were identified and included supply of medication, provision of drug-related information, contribution to prescribing and additional support for the clients.
9.5.3 Clients' views of the drug-related information received

Receiving drug-related information was listed by the clients as one of the issues that the clients 'liked most' about the LPS. All the clients who reported that their knowledge about their medication prior to the introduction of the LPS was not comprehensive and who received drug-related information from the link-pharmacist during the LPS, reported that they had learned about their medication and had personally valued the information that had been provided.

"... I suppose it has helped, really, yeah. Yeah, well, I didn't know nothing about [client's medication] before. I just knew that doctor gave me tablets and I took the tablets. I mean, I didn't know what they've done or anything else. No one ever explained that to me. [Link-pharmacist] explained it to me now."

(CL13, 796-7, 942-47, 971-2)

Other clients commented that the drug-related information from the link-pharmacists did not provide them with new knowledge but was a valuable reassurance of what they already knew or had anticipated. Or, they perceived the link-pharmacist as a source that they would use if they had any questions about their medication. This, again, was reported as valuable to them.

"... it is nice to have someone to whom you can go to if you need. And also [link-pharmacist] helped me with what I want to say to the psychiatrist... She helped me to know, to understand what I want to find out, she helped me to put the questions that I should ask. I didn't know what questions I should ask [psychiatrist] about my medication."

(CL18; 328-36)

One client, although he received new drug-related information about his medication, did not perceive it as having increased his knowledge.

"*Researcher
Did it help your knowledge about medication?
*CL20
Ehm, not really, because, I just, short while beforehand, I got told quite a bit about my medication, ..., so, I was fairly clued up on it anyway. So, it's just like interaction with other things, that I had to contact the chemist about."

(CL20, 813-24)

In the majority, these contacts were positively commented upon by the clients. Clients were grateful for the drug-related information received and justified that there was scope for such a role.
9.5.4 Effect of the LPS on the participants

The link-pharmacists reported various effects that the LPS had had on them. These included an increase in their confidence in dealing with PMHP, awareness of CMHC, interest in and approach to PMHP, improved their relationship with clients and enhanced their professional satisfaction. These effects, however, were specific to individual link-pharmacists rather than common to the whole group. Some link-pharmacists’ interventions were reported by clients as highly significant. The clients appreciated that they were provided with drug-related information, that their medication treatments were improved, that the LPS improved their relationship with the link-pharmacists and improved their knowledge of community pharmacists’ roles. The clients reported that having access to the link-pharmacist was important. The human contact that the clients had with their link-pharmacists was one of the issues that the clients reported liking most about the LPS. The majority of the clients who had experienced contact with the link-pharmacist said that they will or would use the service again. Some clients commented that the scheme did not affect them. The key workers did not identify any effects attributable to the LPS. However, they identified some outcomes of the LPS for their clients. These were concerned with allaying the clients’ anxieties through the provision of drug-related information, help with medication management, changes to the clients’ treatment, promoting the pharmacists’ roles and providing an additional help. Two clients reported feeling uncomfortable during conversation with their link-pharmacists; these were the only negative effects associated with the LPS.

9.5.5 Effect of the LPS on the link-pharmacists’ and key workers’ working relationships

Both types of professionals reported that, during the LPS, there was minimal communication between them and that communication, interprofessional cooperation and teamwork did not improve even though these were expectations of the LPS for both professional groups. Both types of professionals emphasised again the need for cooperation and teamwork. At the end of the LPS, the link-pharmacists reported that they felt still professionally isolated. The participants provided suggestions for improvements that included joint meetings and training sessions.
9.5.6 Effect of the LPS on community pharmacists' role in CMHC

The majority of the link-pharmacists believed that the LPS did not improve their role in the CMHC and they did not perceive themselves as members of community mental health care after the introduction of the LPS. Also, there was no evidence of any informal or formal acceptance of the link-pharmacists' roles by any of the CMHTs and the contacts between link-pharmacists and key workers depended upon individual arrangements. Although it is possible that the scheme increased the awareness of its participants about the community pharmacists' abilities and possible roles, it is not possible to conclude that the scheme enhanced the link-pharmacists' position in community mental health care.

9.5.7 Key workers' and clients' perceptions of community pharmacists

Although both key workers and clients presented mixed perceptions about the community pharmacists' roles, some clients reported that they had learned about the community pharmacists' abilities. The key workers' perceptions of community pharmacists' abilities varied and seemed more in-depth with those key workers who had had experience, prior to the LPS, cooperating with the pharmacists. None of the key workers reported any change to their perceptions of community pharmacists as a result of the LPS. Some key workers and some clients did not identify any roles that the link-pharmacists could play in community mental health care.

9.5.8 The link-pharmacists' involvement in the implementation of the LPS

Many link-pharmacists explained that they were dissatisfied with implementation of the LPS because there was little activity within the LPS; the process was slow, they did not have enough clients and not enough contact with the clients. This appears controversial considering that, in all but two cases, there was no evidence in the data of the link-pharmacists undertaking any extra activity to engage the clients or their key workers in the project. Even if they had the chance to become more actively involved, i.e. were contacted by clients or key workers, they did not seize and develop such an opportunity. Many link-pharmacists did not keep the logbooks as required. Generally, the link-pharmacists did not seem very acceptable of the everyday 'duties' of a link-pharmacist, such as keeping the clients' medication histories and monitoring their medication. More contacts between the...
clients and their link-pharmacists were initiated by the clients than the link-pharmacists (21 and 17 respectively).

To illustrate the lack of the link-pharmacists’ involvement in the LPS provision, table 9.14 presents the expectations that the link-pharmacists reported to have from the LPS together with the records from the logbooks stating how many clients they have had during the LPS, total number of contacts with these clients, number of contacts that were only dispensing-related and a number of contacts initiated by each link-pharmacist. Such a comparison shows that, although the link-pharmacists had high expectations for their participation in the LPS, they did not always project these onto their activities during the LPS.
Table 9.14: The link-pharmacists’ client-related activities during the LPS in comparison to their expectations

<table>
<thead>
<tr>
<th>LP</th>
<th>Expectation</th>
<th>Reported fulfilment</th>
<th>Number of clients</th>
<th>Contacts with clients</th>
<th>Dispensing only contacts</th>
<th>Contacts initiated by the LP or pre-arranged</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP1</td>
<td>To form established relationships with clients</td>
<td>✗</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>To have a number of clients</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP2</td>
<td>For the clients to feel better, stable, compliant</td>
<td>✓</td>
<td>4</td>
<td>18</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>For the clients to understand medication</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To give the clients better service</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP3</td>
<td>To get more in-depth, treatment-oriented questions</td>
<td>✗</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LP4</td>
<td>Deeper involvement in the clients’ care</td>
<td>✗</td>
<td>6</td>
<td>67</td>
<td>42</td>
<td>20</td>
</tr>
<tr>
<td>LP5</td>
<td>To have more clients</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For the clients to feel at ease with illness and themselves</td>
<td></td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>To make the clients aware that the pharmacist was available</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP6</td>
<td>No data</td>
<td>n/a</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LP7</td>
<td>To form relationships with clients</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For the clients to feel better</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To make the clients aware that the pharmacist was available</td>
<td></td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>To increase the clients’ confidence in pharmacists</td>
<td>no explicit answer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To make them aware of the pharmacists’ abilities</td>
<td>no explicit answer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP8</td>
<td>Regular, frequent contact with clients</td>
<td>✗</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LP9</td>
<td>To see how he can help</td>
<td>✓</td>
<td>4</td>
<td>35</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>To be more used by clients</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>27</td>
<td>144</td>
<td>79</td>
<td>24</td>
</tr>
</tbody>
</table>

Also, many link-pharmacists were not pro-active in communicating with the key workers. In the majority of cases, there was no sign of the link-pharmacists trying to initiate communication. More so, the link-pharmacists reported that they expected to be contacted, the same way as the key workers expected to be contacted by the link-pharmacists. The
link-pharmacists reported that the two informal meetings with the key workers arranged jointly by the link-pharmacists and the researcher, initiated communication. However, the majority of the contacts were not followed-up. The two links that were taken further ceased shortly after. Table 9.15 presents the link-pharmacists’ expectations with regards to interprofessional cooperation and their activity during the LPS.

Table 9.15: The link-pharmacists’ professional-related activities during the LPS in comparison to their expectations of the cooperation with the key workers

<table>
<thead>
<tr>
<th>LP</th>
<th>Expectation</th>
<th>Self-perceived fulfilment</th>
<th>Number of link KWs</th>
<th>Number of contacts with professionals</th>
<th>Number of contacts initiated by LP to any prof. to KW</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP1</td>
<td>No data</td>
<td>n/a</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LP2</td>
<td>To create teamwork</td>
<td>X</td>
<td>4</td>
<td>1</td>
<td>1 0</td>
</tr>
<tr>
<td></td>
<td>To establish a seamless transfer of information between professionals</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP3</td>
<td>No data</td>
<td>n/a</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LP4</td>
<td>To improve cooperation with other professionals, improve relationships with them</td>
<td>X</td>
<td>5</td>
<td>0</td>
<td>0 0</td>
</tr>
<tr>
<td>LP5</td>
<td>No data</td>
<td>n/a</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LP6</td>
<td>To improve cooperation with other professionals</td>
<td>X</td>
<td>1</td>
<td>1</td>
<td>0 0</td>
</tr>
<tr>
<td></td>
<td>Practical working solution</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP7</td>
<td>To create cooperation with other professionals</td>
<td>X</td>
<td>1</td>
<td>6</td>
<td>6 3</td>
</tr>
<tr>
<td>LP8</td>
<td>No data</td>
<td>n/a</td>
<td>3</td>
<td>0</td>
<td>0 0</td>
</tr>
<tr>
<td>LP9</td>
<td>No data</td>
<td>n/a</td>
<td>2</td>
<td>9</td>
<td>4 2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>22*</td>
<td>17</td>
<td>11 5</td>
</tr>
</tbody>
</table>

* KW10 joint the LPS for Part 2 - Consensus development panels and is not included in this table

The following section summarizes the issues that were the most prominent within all three sets of interviews, thus suggesting their relevance and importance.
9.5.9 The issues most frequently discussed during the post-intervention interviews

- The need for accessibility of the pharmacists at a convenient location,
- The community pharmacists' busy workloads can jeopardise their availability,
- The need for privacy and the lack of it in community pharmacies,
- The issues of confidentiality of clients' condition and treatment-related information,
- The need for link-pharmacists' access to clients' treatment and condition-related information was identified by the link-pharmacists and key workers, whilst the clients' view was reserved,
- PMHP were perceived distinctive in their characteristics to other people and this was perceived related to their illness,
- A different client group (not with severe mental illness) could/should have been targeted,
- The need for more time for the implementation phase of the project,
- Acquaintance between the clients and the link-pharmacists was believed to ease the acceptance of the scheme by clients,
- The need for trust between the pharmacists and the clients,
- The belief that the LPS was not utilised because there was no need for it due to the clients having no questions about their medication,
- The lack of the key workers' and the clients' awareness of the pharmacists' roles and the service may have contributed to the lack of support for the scheme,
- Health care professionals (except key workers) did not provide enough time for drug-related consultations with the clients,
- Issues related to the involvement of the clients' families in the clients' care,
- The need for interprofessional communication and cooperation, and teamwork and shared care,
- The barriers that could exist for people from different cultural backgrounds, ethnic minorities and not speaking English.

The data presented in sections 9.2, 9.3 and 9.4, were used to generate tables of topics that were discussed at the three consensus development panels in Part2, the results of which are presented below.
Chapter 10 Part 2 - Consensus development panels results

The data on the attendance at the panels are presented first, followed by the results of the three panels' decision making.

10.1 Membership of panels

10.1.1 Clients and Interprofessional Panel
One of the 3 invited link-pharmacists did not attend the panel. Therefore, 3 clients, 3 key workers and 2 link-pharmacists participated.

10.1.2 Interprofessional Panel
One link-pharmacist and one key worker were unable to attend. The Interprofessional Panel started with 4 key workers and 4 link-pharmacists. One link-pharmacist and 2 key workers had to leave before the end of the panel. Two key workers and 3 link-pharmacists completed the session.

10.1.3 Pharmacist Panel
Three link-pharmacists were unable to attend the panel. Six link-pharmacists participated and completed the session.

10.2 Background characteristics of panel members

Background characteristics of the participants of individual panels are presented in table 10.1.

<table>
<thead>
<tr>
<th>Clients and Interprofessional Panel</th>
<th>Interprofessional Panel</th>
<th>Pharmacist Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant</td>
<td>Profession</td>
<td>Sex</td>
</tr>
<tr>
<td>1 CL16</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>2 CL20</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>3 CL22</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>4 KW10</td>
<td>CPN</td>
<td>F</td>
</tr>
<tr>
<td>5 KW11</td>
<td>CPN</td>
<td>M</td>
</tr>
<tr>
<td>6 KW15</td>
<td>SW</td>
<td>F</td>
</tr>
<tr>
<td>7 LP1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 10.2 summarises the length of discussions during each individual sessions (does not include coffee and lunch breaks).

Table 10.2: The length of discussions during individual consensus development panels

<table>
<thead>
<tr>
<th>Panel</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clients and Interprofessional Panel</td>
<td>3 hours</td>
</tr>
<tr>
<td>Interprofessional Panel</td>
<td>3 hours</td>
</tr>
<tr>
<td>Pharmacist Panel</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

**10.3 The summary of the panels' decision making**

The Clients and Interprofessional Panel perceived 37 (n=44) topics important, 6 topics useful and 1 topic unimportant. The wording of 15 topics was altered.

The Interprofessional Panel agreed on 36 (n=51) topics being important, 5 topics useful and 1 unimportant. Topics 8 and 45 were each divided into two as the members agreed that each version of the topic had different importance. Topics 24 and 40 were not agreed on and were placed in two categories. Topics 6 and 27 were excluded from the panel decision making as the members felt that the topics were not relevant and should not be included in the planning of the pharmacists' roles. Topics 3, 4 and 5 were unintentionally omitted. The participants requested re-wording of 15 topics.

The Pharmacist Panel categorised all the topics (n=33) to be important except topic 6. The link-pharmacists felt unable to decide on this topic. The wording of 6 topics was changed.

All the topics that were judged by both, the Clients and Interprofessional, and the Interprofessional Panels (topics 21, 23, 24, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 43 from the Clients and Interprofessional Panel's table of topics, i.e. topics 2, 15, 16, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 47, 18 from the Interprofessional Panel's table of topics) were categorised to the same category by both panels. One key worker of the Interprofessional Panel did not agree with placing of the topic 40 (topic 35 in the Clients and Interprofessional Panel's table of topics) to the category 'Important', where this topic was placed by the Clients and Interprofessional Panel and the rest of the Interprofessional Panel.

The topics in their final form, after being rephrased (marked *) by the panels' participants, are listed in table 10.3. The topics are presented in order of their numbers and category placement.
### Table 10.3: Results of the consensus development panels

<table>
<thead>
<tr>
<th>Topic</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>The pharmacist assigned to the client to be local.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The client to choose the pharmacist.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The client to know the pharmacist.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to know the client.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>If the client and the pharmacist don’t know each other, to be introduced by the client’s key worker.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The client and the pharmacist to have or to build up a relationship.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The client to always go to the same pharmacy.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to dispense all the client’s medication.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to be available anytime.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The client to freely decide when to go to see the pharmacist.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to be able to spend time with the client.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Private area for consultation to be available in the pharmacy. *</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The client to be able to receive the pharmacist’s consultation over the phone.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to have sufficient knowledge (on medication).</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Meetings with the pharmacist to be informal or formal where appropriate.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to use understandable language.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to have access to all relevant client-related information.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to be in continuous contact with CMHT professionals in order to share all the relevant information with them, including any observations related to the client’s health and medication.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Relevant information from a CPA or review meeting to be provided to the pharmacist.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Suitably trained pharmacist to be involved in decision making on choice of medication together with doctors and other professionals involved. *</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to monitor how the client copes with his/her medication.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide the client with information about his/her mental health medication.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide the same information service to the client’s family/carers, with the client’s consent.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide the information to the client when dispensing medication on request.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide information to the client by word of mouth.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide written information to the client.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Information about medication to be provided to the client and/or the client’s family/carers on the onset of the illness.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Information about medication to be provided to the client as soon as the medication is prescribed or a change made.</td>
<td>IMPORTANT</td>
</tr>
</tbody>
</table>
### Table 10.3: Results of the consensus development panels (continued)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information about medication to be provided to the client, more than once on request or if needed.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide help and advice on over-the-counter medication, minor ailments, non-mental health medication and conditions.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Option available: The pharmacist to deliver medication or make a home visit if the client is not well - if appropriate to do so - safety issues!*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide dispensing-related services (emergency supply, collecting prescriptions etc.)*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to assist with administration of medicines (dosett box) - where appropriate.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to be available after the client is discharged from the CMHT care.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The client to have trust in the pharmacist.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Confidentiality of all information to be secured.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist’s role to be well defined and explained.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The client to be seen by the same pharmacist each time.</td>
<td>USEFUL</td>
</tr>
<tr>
<td>With the client’s consent, the pharmacist to be in touch with the client’s family.*</td>
<td>USEFUL</td>
</tr>
<tr>
<td>The client to be contacted by the pharmacist.*</td>
<td>USEFUL</td>
</tr>
<tr>
<td>A pharmacist to be available out of hours.*</td>
<td>USEFUL</td>
</tr>
<tr>
<td>The pharmacist to provide the client with information about the client’s mental health condition.</td>
<td>USEFUL</td>
</tr>
<tr>
<td>The client to be able to have a non-medication related ‘chat’ with the pharmacist (social point of contact).</td>
<td>USEFUL</td>
</tr>
<tr>
<td>A pharmacy to be focused on professional rather than retail services.</td>
<td>UNIMPORTANT</td>
</tr>
</tbody>
</table>

#### Interprofessional Panel

<table>
<thead>
<tr>
<th>Topic</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>The service and the individual professionals’ roles to be well defined.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to have access to relevant client-related information.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to be present at the CMHT meetings.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The communication concerning the client to be mediated via the client’s key worker and/or directly to an appropriate professional.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Regular documented communication between the client’s key workers and the pharmacist regarding the client.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to contact the key worker if he/she identifies a problem with client’s general health, compliance etc.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Verbal communication/meeting with the client’s key worker when the client is first assigned to the pharmacist.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Relevant info from a CPA or review meeting to be provided to the pharmacist.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Suitably trained pharmacist to be involved in decision making on prescribing together with doctors and other professionals involved.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to contribute to the planning of the client’s care.*</td>
<td>IMPORTANT</td>
</tr>
</tbody>
</table>
## Results

### Table 10.3: Results of the consensus development panels (continued)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidentiality of all information to be secured.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Joint courses for the pharmacists and the key workers/CMHT professionals.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to be well educated in mental health medication.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Every person with mental health problems/accepted for care by CMHT services to be offered a link with a community pharmacist where the need was identified.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The service to be tailored for individual clients.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to keep clients' medication histories.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to monitor the clients' collection of prescribed medication.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide updates on the client's general health etc. to the key worker/CMHT as necessary.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide the client with information about his/her mental health medication.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide the same information service to the client's family/careers upon request, with the client's consent.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide the information to the client when dispensing medication on request.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide information to the client by word of mouth.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide written information to the client.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Information about medication to be provided to the client and/or the client's family/careers at the onset of the illness. To be available to the family with CL's consent and upon request.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Information about medication to be provided to the client as soon as the medication is prescribed or a change made.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Information about medication to be provided to the client more than once and if needed.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>To arrange for a delivery of medication in an emergency. Safety issues to be considered!*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide dispensing-related services (emergency supply, collecting prescriptions etc.)*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to assist with administration of medicines (dosett box).</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide drug-related information and education to the key workers/CMHT professionals.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to be available for the client's family/careers.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to be available after the client is discharged from the CMHT care.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Community pharmacists to promote their profession.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Community pharmacists to promote their services.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Professionals to meet before the service is set up to agree to its aims.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>Two way communication between pharmacists and community pharmacists.*</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>The pharmacist to provide the client with information about his/her mental health condition.</td>
<td>USEFUL</td>
</tr>
<tr>
<td>The key worker and the pharmacist to be able to contact each other instantly.</td>
<td>USEFUL</td>
</tr>
<tr>
<td>Pharmacists and key workers to know each other personally.</td>
<td>USEFUL</td>
</tr>
<tr>
<td>Topic</td>
<td>Category</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>14. The pharmacist to be present at multiprofessional care meetings regarding the client (CPA/review).</td>
<td>USEFUL</td>
</tr>
<tr>
<td>10. Meetings between the client’s key worker and the pharmacist.*</td>
<td>USEFUL</td>
</tr>
<tr>
<td>20. Contacts between professionals to be face-to-face.</td>
<td>UNIMPORTANT</td>
</tr>
<tr>
<td>8. Meetings between CMHT professionals and pharmacists. Regular meetings between CMHT professionals and pharmacists.</td>
<td>IMPORTANT &amp; USEFUL</td>
</tr>
<tr>
<td>45. A pharmacist to provide written references and updates on mental health treatments to the key workers/CMHT professionals, UPON REQUEST. A pharmacist to provide written references and updates on mental health treatments to the key workers/CMHT professionals</td>
<td>IMPORTANT USEFUL</td>
</tr>
<tr>
<td>24. The pharmacists to be specifically trained in mental health (dealing with people with mental health problems).</td>
<td>IMPORTANT (5) USEFUL (2)</td>
</tr>
<tr>
<td>40. The pharmacist to provide help and advise on over-the-counter medication, minor ailments, non-mental health medication and conditions to the client.</td>
<td>IMPORTANT (4) I did not agree</td>
</tr>
<tr>
<td>6. The pharmacist to be a member of a CMHT.</td>
<td>EXCLUDED BY THE PANEL</td>
</tr>
<tr>
<td>27. The pharmacist to identify persons with mental health problems and refer them to services (CMHT/GP).</td>
<td>EXCLUDED BY THE PANEL</td>
</tr>
<tr>
<td>3. The pharmacist to be informed about overall client’s care with updates on any changes.</td>
<td>MISSED</td>
</tr>
<tr>
<td>4. The pharmacist to be informed about any changes in the client’s medication.</td>
<td>MISSED</td>
</tr>
<tr>
<td>5. The pharmacist to be in continuous contact with CMHT professionals in order to share all the important information with them, including any observations related to the client’s health and medication.</td>
<td>MISSED</td>
</tr>
</tbody>
</table>

**Pharmacist Panel**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The service to be defined</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>1a. Services to be provided by the pharmacists</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>1b. Roles of individual professionals</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>1c. Issues related to communication and provision of information between professionals</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>1d. What info to be shared between professionals *</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>2. The service to be promoted, supervised, supported and audited by a responsible body. *</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>3. Pharmacists to be enabled to provide the services.</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>3a. Changes to current community pharmacist’s roles</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>3aa. Freeing community pharmacists from dispensing roles (would allow time)</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>3ab. Allowing them to leave premises (would allow all roles and training out of pharmacies)</td>
<td>IMPORTANT</td>
</tr>
<tr>
<td>3b. Remuneration provided for the defined service.</td>
<td>IMPORTANT</td>
</tr>
</tbody>
</table>
Table 10.3: Results of the consensus development panels (continued)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>3c</td>
<td>Training to be provided.</td>
</tr>
<tr>
<td>3ca</td>
<td>- mental health medication</td>
</tr>
<tr>
<td>3cb</td>
<td>- dealings with PMHP</td>
</tr>
<tr>
<td>3cc</td>
<td>- provision of CMHC</td>
</tr>
<tr>
<td>4a</td>
<td>A community pharmacist’s roles and services to be promoted to health care professionals.</td>
</tr>
<tr>
<td>4aa</td>
<td>Information about pharmacists’ services to be provided to professionals during their training.</td>
</tr>
<tr>
<td>4b</td>
<td>A community pharmacist’s roles and services to be promoted to clients.</td>
</tr>
<tr>
<td>4c</td>
<td>The promotion to be (also) done by the responsible body.*</td>
</tr>
<tr>
<td>5</td>
<td>Establish communication with CMHTs.</td>
</tr>
<tr>
<td>5a</td>
<td>- as early as possible (before or as soon as possible after the introduction of the service)</td>
</tr>
<tr>
<td>5b</td>
<td>- joint training on the provision of the service *</td>
</tr>
<tr>
<td>5c</td>
<td>- meetings</td>
</tr>
<tr>
<td>7</td>
<td>The clients to be registered with a link-pharmacist.*</td>
</tr>
<tr>
<td>8</td>
<td>Information about a client to be provided to the pharmacist.</td>
</tr>
<tr>
<td>8a</td>
<td>- personal (‘kind of person’)</td>
</tr>
<tr>
<td>8b</td>
<td>- diagnosis/medical history</td>
</tr>
<tr>
<td>8c</td>
<td>- persons/professionals involved</td>
</tr>
<tr>
<td>8d</td>
<td>- medication</td>
</tr>
<tr>
<td>9</td>
<td>Information to be provided continuously and as a matter of course.</td>
</tr>
<tr>
<td>9a</td>
<td>- changes in the client’s care</td>
</tr>
<tr>
<td>9b</td>
<td>- changes in the client’s medication</td>
</tr>
<tr>
<td>6</td>
<td>To be linked with a ‘reasonable’ number of clients. (Time and resource issues to be considered.)*</td>
</tr>
</tbody>
</table>

* The original wording of the topic was changed by the panel to the presented form.

The panels’ discussions were transcribed from the tape records and coded. The issues discussed during the panels’ decision making reflected the discussions during one-to-one interviews. Table 10.4 presents those codes identified from the panels’ discussions that correspond with the one-to-one interview data.
### Table 10.4: Main themes of the panels' discussions

<table>
<thead>
<tr>
<th>Theme</th>
<th>Clients and Interprofessional Panel</th>
<th>Interprofessional Panel</th>
<th>Pharmacist Panel*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug-related information</td>
<td>8,26,27,29,30,31,32,33,34</td>
<td>3,31,32,33,34,35,36,38,39,40</td>
<td></td>
</tr>
<tr>
<td>Interprofessional communication</td>
<td>1,5,10,22,23,40</td>
<td>10,11,12,13,14,17,19,20,21,45</td>
<td>5</td>
</tr>
<tr>
<td>Process of transfer of information between professionals</td>
<td></td>
<td>3,12,15</td>
<td></td>
</tr>
<tr>
<td>Teamwork, interprofessional issues (dynamics)</td>
<td>22</td>
<td>6,7,8,10,14,17,22,30,50,51</td>
<td>1b,1c,4a</td>
</tr>
<tr>
<td>Continuity of care</td>
<td>22,23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidentiality issues</td>
<td>13,20,28,43</td>
<td>2,18,33,37,46</td>
<td>1c</td>
</tr>
<tr>
<td>Privacy/stigma</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for the clients' free choice</td>
<td>2,7,11,34</td>
<td>2,25,34</td>
<td></td>
</tr>
<tr>
<td>Flexible approach to the service</td>
<td>19,30,31,38</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Choice of a link-pharmacies (location, known to the client)</td>
<td>1,3,4,5,7,8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship/trust</td>
<td>2,3,4,5,6,9,21,39,42</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Accessibility/availability of community pharmacists</td>
<td>10,12,16,17</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Need for access to the clients' background information by pharmacists</td>
<td>1,4,9,7,8,21,23</td>
<td>2,13,15</td>
<td>1d,7,8,9</td>
</tr>
<tr>
<td>Pharmacists' knowledge/education/professionalism/skills</td>
<td>18,24,41</td>
<td>23,24,32</td>
<td>3cb,9</td>
</tr>
<tr>
<td>Pharmacists' constraints to the provision of the service</td>
<td>38</td>
<td>41</td>
<td>3,5c,6</td>
</tr>
<tr>
<td>Clients' or key workers' awareness of the pharmacists' skills</td>
<td>24,27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The LP/LPS position in the clients' care</td>
<td>11,14,16</td>
<td></td>
<td>1,4b</td>
</tr>
<tr>
<td>Needed but problematic nature of involving a clients' families</td>
<td>13,32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for promotion of pharmacists and their services</td>
<td></td>
<td>48,49</td>
<td>4a</td>
</tr>
<tr>
<td>Definitions of the service and the pharmacists' roles</td>
<td>20,25,36,37,44</td>
<td>1,16,27,28,29,31,40,42,47</td>
<td>1,2,4c,6</td>
</tr>
</tbody>
</table>

* the theme was present on discussion of the topic and all its sub-topics; the sub-topics that included an additional theme to the main topic are stated separately.
10.4 **Review of individual categorising and changes of the opinions**

Before the panel discussions, the panel participants categorised the topics individually. This section compares the results of individual categorising with the results of consensus of each panel.

### 10.4.1 Clients and Interprofessional Panel

Six topics were categorised by the panel to a different category compared with the majority of the individual respondents. *Topics 3, 4, 5, 10 and 11* were placed higher by the panel, *topic 27* was categorised lower by the panel. The topics and their categorisation by individuals and by the panel are presented in Table 10.5. The text that follows the table presents the discussions that accompanied the panels’ decision making. ‘Main themes’ that follow the final wording of each topic are summaries of the discussion on the topic, the ‘hidden themes’ were underlying the discussion.

**Table 10.5:** The topics categorised differently by the Clients and Interprofessional Panel than by individual participants (n=8)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Important</th>
<th>Useful</th>
<th>Unimportant</th>
<th>Unanswered</th>
<th>Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>The client to know the pharmacist.</td>
<td>2</td>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>The pharmacist to know the client.</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>If the client and the pharmacist don’t know each other, to be introduced by the client’s key worker.</td>
<td>2</td>
<td>4</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>The pharmacist to be available anytime.</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>The client to freely decide when to go to see the pharmacist (for advice). *</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>27</td>
<td>The pharmacist to provide the client with information about the client’s mental health condition.</td>
<td>5</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* the changed wording after the panel’s discussion
Results

Chapter 10 - Part 2 - Consensus development panels results

Topic 3: The client to know the pharmacist.

Main themes: To know the link-pharmacist when entering the project would be useful, but may not be possible; the relationship can develop.

Hidden themes: The discussion on this topic stressed the need to include as many pharmacists as possible in the service provision so that the clients would be able to choose a link-pharmacist whom they knew. It was believed that this would ease the clients' use of the service.

It was emphasized at the beginning of the discussion that a relationship between the client and link-pharmacist could develop. Therefore, knowing the pharmacist at the start may not be necessary also because it may not always be possible to ensure that the client would know the pharmacist. The importance of the issue was revealed when the clients confirmed that, if they had a choice where to inquire about their medication, they would use a pharmacist that they knew. Professionals understood this view and based their further contributions to the discussion on the fact that knowing the link-pharmacist would facilitate the clients' talking to him or her. Consequently, the discussion moved towards the importance of knowing the pharmacist at the moment of entering the project/service.

Topic 4: The pharmacist to know the client.

Main themes: Valuable to clients; pharmacists wanted basic background information before advising.

The topic was not perceived important by link-pharmacists, who would aim to help by giving advice to any client who would approach them regardless of whether they were acquainted with them. However, the link-pharmacists emphasised that they would seek basic background information before they would give any advice. In the one-to-one interviews, the issue was discussed by the clients who reported that they felt better if the pharmacists knew them. It was clarified that the topic did not apply to the first client visit, but generally to the provision of the service.
Topic 5: If the client and the pharmacist don’t know each other, to be introduced by the client’s key worker.

Main themes: Important in ‘serious’ cases; stimulate communication; formalization of the service.

Hidden themes: Need for communication.

All the clients participating in the panel introduced themselves to their link-pharmacists. From their personal experiences they tended to see topic 5 as useful rather than important. When, based on the joint discussion, they started to think about the topic in a more general way, their opinion shifted to ‘Important’. It was admitted by the clients that in more serious cases the issue would be important.

The link-pharmacists added that such an introduction would stimulate communication with the key workers. A key worker highlighted that it would be appropriate for a key worker to introduce the client since the key worker was the professional responsible for coordinating the client’s care. Another key worker added that it would make the introduction official and, therefore, would help the client to be confident to use the pharmacists’s services.

Topic 10: The pharmacist to be available anytime.

Main themes: Emphasises an important feature of community pharmacies; risk of potential misuse; required/appreciated by clients; feasibility questioned.

Hidden themes: The discussion about the topic was influenced by the current situation in community pharmacies. The discussion did not consider potential changes that could be implemented to enable the community pharmacists’ involvement in the LPS (for example changes in remuneration and dispensing supervision as identified during the LPS).

Noteworthy was the thoughtful approach of the clients and key workers to feasibility; they did not present unrealistic expectations.

The topic was originally misunderstood; the participants understood that the link-pharmacist would be available 24 hours. Based on that fact, the majority of participants did not agree with the topic as they perceived it not to be practical. It was explained by the researcher that it was meant that the pharmacist should be available anytime during
opening hours. A link-pharmacist argued that the community pharmacist’s availability is a positive feature of the LPS or a similar service. The link-pharmacists were of the opinion that the community pharmacists were and always will be accessible. The availability was defined by one of the link-pharmacists as:

   a) being able to see a client without a prior appointment,
   b) the client would have access to a professional service within 5 to 10 minutes,
   c) the client would be attended by the link-pharmacist even if this would only be for arranging an appointment for a more convenient time.

After the meaning of the topic was clarified, the clients supported the idea stating that clients would not mind waiting 5 - 10 minutes but would not want to be told that they could not be seen.

The key workers suggested that the system could be abused by some clients. A link-pharmacist argued that it would be up to the pharmacist to prevent abuse or to get in touch with the client’s key worker if any problem of this kind arose. One key worker also believed that fulfilling this topic would be unrealistic. All the participants were clearly against any appointment system.

**Topic 11:** The client to freely decide when to go to see the pharmacist.

**Modified to:** The client to freely decide when to go to see the pharmacist (for advice).

**Main themes:** The clients to freely decide; may be a need for an arranged appointment; clients cannot be forced unless under the Mental Health Act.

The clients did not want to be restricted to having to go to see the link-pharmacists. One link-pharmacist wished to have the chance to invite a client for a visit. One of the key workers had the same view. He felt that he may want the client to visit the link-pharmacist for a consultation as part of the client’s care. He also believed that his clients’ regular contacts with the link-pharmacist(s) would assist the key worker with monitoring the clients. It was perceived by all participants that the clients could not be forced to go to see the link-pharmacist unless under special provisions of the Mental Health Act. A client explained that the appointment, if required by the key worker, would be made at everybody’s convenience, therefore it would still be a client’s free choice.

It was agreed that the topic should be specified in terms of seeking advice, as in some other
cases the client may be required to visit the link-pharmacist.

**Topic 27:** The pharmacist to provide the client with information about the client’s mental health condition.

**Main themes:** Physicians’ role; need for more easily understood information.

**Hidden themes:** Setting limitations to the community pharmacists’ knowledge by the participating clients and key workers.

It was felt by a key worker that provision of information about the condition was a “doctor’s” or even a key worker’s role rather than a pharmacist’s. A client noted that she believed that a pharmacist would not have as much insight into conditions as did a doctor. Another key worker felt that more information “cannot do any harm” to the client and perceived the topic important. One of the clients emphasised that there was a need for information that would be easy to understand by the clients.

*Topics 1, 18, 20, 29, 42 and 43 (table 10.6)* were categorised by all individual respondents, who answered the topic, as ‘Important’. Also, the Clients and Interprofessional Panel categorised all these topics as ‘Important’. No other topic was placed by all the individual respondents into the same category.

**Table 10.6:** The topics categorised ‘Important’ by all the participants of the Clients and Interprofessional Panel that answered the topic

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The pharmacist assigned to the client to be local. (n=9)</td>
</tr>
<tr>
<td>18</td>
<td>The pharmacist to have sufficient knowledge (on medication). (n=9)</td>
</tr>
<tr>
<td>20</td>
<td>The pharmacist to use understandable language. (n=9)</td>
</tr>
<tr>
<td>29</td>
<td>The pharmacist to provide the information to the client when dispensing medication on request.* (n=9)</td>
</tr>
<tr>
<td>42</td>
<td>The client to have trust in the pharmacist. (n=7)</td>
</tr>
<tr>
<td>43</td>
<td>Confidentiality of all information to be secured. (n=6)</td>
</tr>
</tbody>
</table>

* the changed wording after the panel’s discussion

Least agreement after the individual categorising was identified with *topics 15, 19, 23, 24, 34, 36* and *41*. The categorising of these topics by the individual respondents and the panel decision are presented in the table 10.7. The summary of the discussions that accompanied the panel’s decision making follows the table.
Table 10.7: The topics with least agreement after the individual categorisation, and the Clients and Interprofessional Panel decision (n=8)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Important</th>
<th>Useful</th>
<th>Unimportant</th>
<th>Unanswered</th>
<th>Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>Important</td>
</tr>
<tr>
<td>19</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>Important</td>
</tr>
<tr>
<td>23</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>Important</td>
</tr>
<tr>
<td>24</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>Important</td>
</tr>
<tr>
<td>34</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>Important</td>
</tr>
<tr>
<td>36</td>
<td>3</td>
<td>4</td>
<td>-</td>
<td>1</td>
<td>Important</td>
</tr>
<tr>
<td>41</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>Unimportant</td>
</tr>
</tbody>
</table>

* the changed wording after the panel's discussion

**Topic 15:** Private area in the pharmacy for consultation.

**Modified to:** Private area in the pharmacy to be available for consultation.

**Main themes:** Privacy important but private area not always necessary; practicalities questioned.

**Hidden themes:** The need to consider privacy issues.

The clients commented that they did not want other people to hear about their problems and therefore a private area would be welcomed. One of the key workers expressed doubts about the practicality of requiring a private area. Another key worker emphasised that the area should be available but not necessarily always used. He believed that using a separate area could result in the clients being 'labelled' as having problems. “To be available” was added to the original wording of this topic.

**Topic 19:** Meetings with the pharmacist to be informal.

**Modified to:** Meetings with the pharmacist to be informal or formal where appropriate.

**Main themes:** Informality not necessary; formal setup may be preferred or required

**Hidden themes:** The need for a flexible approach to the service.

It was noted by one of the clients that informality helped people to relax during any
discussion with professionals. The key workers argued that some people might prefer a more formal setup and also that, on some occasions, a formal setup may be required. It was suggested that either of the options may be relevant. The wording of the topic was amended accordingly.

**Topic 23:** A copy of a hospital discharge letter or details from a review meeting to be provided to the pharmacist.

**Modified to:** Relevant information from a CPA or review meeting to be provided to the pharmacist.

**Main themes:** Misunderstanding of the meaning of ‘discharge letter’; not all information relevant to pharmacists; CPA documentation or participation at CPA meetings potentially a better option.

**Hidden themes:** A need for the pharmacists to familiarise themselves with the provision of community mental health care.

The original link-pharmacists’ and key workers’ different understandings of the term ‘hospital discharge letter’ was clarified. It was emphasised by the key workers that a hospital discharge letter was too explicit and that only some information from this document would be relevant to the link-pharmacists. Providing Care Programme Approach documentation was seen as more practical and relevant as it was documentation that was created in the client’s presence. Also, the option that the link-pharmacists could be present at the CPA meetings where all the relevant information would be available to the pharmacist was considered.

The wording of the topic was changed as above.

**Topic 24:** The pharmacist to be involved in decision making on prescribing together with doctors and other professionals involved.

**Modified to:** Suitably trained pharmacist to be involved in decision making on choice of medication together with doctors and other professionals involved.

**Main themes:** Suitably trained pharmacist to undertake the role; relevance of such role.

**Hidden themes:** Pharmacists’ education needs to be considered.

Pharmacists’ specialised knowledge was emphasised and valued in relation to this topic.
One of the link-pharmacists reported that only a “suitably trained” pharmacist would be able to undertake the role. This seemed to be a surprise statement for other participants who assumed the pharmacists’ knowledge as a matter of course. The link-pharmacist explained that such a role would require specialised knowledge. He was not using this knowledge in his everyday practice and therefore would not feel comfortable to be expected to advise doctors on prescribing. This statement stressed the need for careful consideration of the link-pharmacists’ education should such a role be included.

One of the clients felt uncomfortable with the fact that the pharmacist should be involved directly in ‘prescribing’. One of the key workers mentioned that one of the prescribers with whom he cooperated, tended to ask his opinion about the prescribed medication. Thus, he had an input in prescribing although the final decision was up to the prescriber. One of the link-pharmacists mentioned that once the doctor diagnosed the patient, a pharmacist should be able to contribute to the choice of medication.

**Topic 34:** Information about medication to be provided to the client repetitively.

**Modified to:** Information about medication to be provided to the client more than once on request or if needed.

**Main themes:** Repeat provision of the same information may be needed.

**Hidden themes:** The need for free choice for clients.

A client suggested that the topic should be rephrased to “more than once if necessary”. The researcher explained that, within the original one-to-one interview data it was suggested that it may be needed to provide drug-related information afresh even if the clients did not requested it, for example all information on the dosage of medication. Therefore, she suggested to add words “or if needed”. A key worker believed that a link-pharmacist should feel free to ask the client about how he or she is managing the medication but it would be up to the client to answer such questions. Another key worker believed that, depending on the situation, there should be an element of repetition for example if the medication is prescribed ‘as required’.
Topic 36: The pharmacist to deliver medication or make a home visit if the client is not well.

Modified to: Option available: The pharmacist to deliver medication or make a home visit if the client is not well - if appropriate to do so - safety issues!

Main themes: Appreciated by the clients; safety issues to be considered; may not be practical for the pharmacists.

One of the clients confirmed that there might be situations when such a service would be very helpful. A key worker emphasised that safety issues should be considered and the service should be provided only if appropriate to do so. He also suggested that a client’s attendance at a link-pharmacy could be part of his or her therapeutic intervention and the delivery of medication would therefore be inappropriate. He concluded that the option should be available with regards to these issues. One of the link-pharmacists noted that it may not be practical for the link-pharmacists to provide such a service as, while he or she is delivering the medication, another client may need his or her services in the pharmacy. The researcher reminded the participants to consider the issue in the event that resources would be available for community pharmacists to provide this type of role (for example presence of a second pharmacist) and that they should consider what they want from the service without regards to currently existing practical problems. This contributed to the decision to place the topic into the category ‘Important’.

Topic 41: A pharmacy to be focused on professional rather than retail services.

Main themes: Unimportant if professional service; business essential for pharmacists.

Hidden themes: It may be considered that the clients were not critical since the link-pharmacists were present; professionalism important.

The clients perceived the topic unimportant. They felt that as long as a professional was dealing with them and their medicines in a professional way, the rest of the pharmacy was not important. The key workers did not have any special comment. A link-pharmacist stated that pharmacists knew “where to draw the line”. Also, he stated that sale of non-medication related goods was important for community pharmacists’ businesses.
10.4.2 Interprofessional Panel

Five topics were categorised differently by the panel compared with the majority of the respondents individually. *Topics 25, 39, 41 and 46* were categorised higher by the panel. *Topic 14* was categorised lower than the majority of the individual respondents. The topics and their categorisation by individuals and by the panel are presented in table 10.8. The panel’s discussions on each topic are summarised below the table (the discussion on *topic 14* will be presented on page 334).

Table 10.8: The topics categorised different by the Interprofessional Panel than by individual participants (n=8)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Important</th>
<th>Useful</th>
<th>Unimportant</th>
<th>Unanswered</th>
<th>Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>Important</td>
</tr>
<tr>
<td>39</td>
<td>1</td>
<td>6</td>
<td>-</td>
<td>1</td>
<td>Important</td>
</tr>
<tr>
<td>41</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>Important</td>
</tr>
<tr>
<td>46</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>Important</td>
</tr>
<tr>
<td>14</td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>Useful</td>
</tr>
</tbody>
</table>

* the changed wording after the panel’s discussion

**Topic 25:** Every person with mental health problems/accepted for care by CMHT services to be allocated to a community pharmacist.

**Modified to:** Every person with mental health problems/accepted for care by CMHT services to be offered a link with a community pharmacist where the need was identified.

**Main themes:** Should be voluntary - the LPS not relevant to all the clients.

**Hidden themes:** The clients to be able to freely decide.

The participants found the original wording of the topic too restrictive. They felt that a client should have the choice, that the option should be available rather than mandatory. Also, a key worker reported that not all the persons under a care of a CMHT would need a link-pharmacist’s services as not all the clients were prescribed medication.
participants rephrased the topic as above and agreed that it was important.

**Topic 39:** Information about medication to be provided to the client repetitively.

**Modified to:** Information about medication to be provided to the client more than once and if needed.

**Main themes:** The word “repetitively” unsuitable.

The participants were not happy with the term “repetitively”. The researcher suggested to rephrase it the same way as during the Clients and Interprofessional Panel session. This was accepted by the participants.

**Topic 41:** The pharmacist to deliver medication or make a home visit if the client is not well.

**Modified to:** To arrange for a delivery of medication in an emergency. Safety issues to be considered!

**Main themes:** Should be available but potential problems to be considered; alternative options discussed; definition of circumstances of provision necessary.

It was believed that home visits should be provided by a GP rather than a pharmacist. However, a link with a pharmacy should be available in case medication was needed for the patient. The participants suggested that the delivery should be available on the pharmacist’s professional judgment, if the pharmacist found it necessary to provide such service. One of the link-pharmacists disagreed strongly that this topic should be included into the potential definition of the LPS. He highlighted potential problems:

- it would have to be the pharmacist delivering the medication, not any of the pharmacy staff (connection to time management),

- community pharmacists were unable to leave a pharmacy during opening hours.

Therefore, the service would have to be provided in the pharmacists’s free time after the pharmacists’s full working day.

It was thought that the service should be available, however, the participants admitted to the difficulties that the provision of the services could cause. Other options such as arranging the service in cooperation with social services or the clients’ key workers were also discussed. The need for a strict definition as to under what circumstances the service
would be provided was also discussed. The topic was rephrased and categorised 'Important'.

**Topic 46:** The pharmacist to be in touch with the client’s family/carers.

**Main themes:** Need for the client’s consent; the family as a source of client-related information for the pharmacist.

**Hidden themes:** Confidentiality; the link-pharmacist should not provide the family with client-related information without the client’s consent but the information available from the family might be useful for the pharmacists.

The issue of the need for the client’s consent was discussed. The participants also referred to previous discussions on this issue (topics 33 and 37). It was explained by the researcher that some link-pharmacists raised the issue during the one-to-one interviews and that they believed that the family could be a source of valuable patient-related information. Such reasoning was accepted by the participants.

**Topics 12, 18, 23, 31, 37, 38 and 50** were categorised ‘Important’ by all the individual respondents that categorised this topic. The Interprofessional Panel also categorised all these topics as ‘Important’. No other topic was categorised to the same category by all the individual respondents.

**Table 10.9:** The topics categorised 'Important' by all the participants of the Interprofessional Panel that answered the topic

<table>
<thead>
<tr>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
</tr>
<tr>
<td>18</td>
</tr>
<tr>
<td>23</td>
</tr>
<tr>
<td>31</td>
</tr>
<tr>
<td>37</td>
</tr>
<tr>
<td>38</td>
</tr>
<tr>
<td>50</td>
</tr>
</tbody>
</table>

* the changed wording after the panel’s discussion
Least agreement after the individual categorising was identified with topics 8, 9, 14, 20 and 33. Their individual categorisation and the panel decision are presented in the table 10.10.

Table 10.10: The topics with least agreement after the individual categorisation, and the Interprofessional Panel decision (n=8)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Important</th>
<th>Useful</th>
<th>Unimportant</th>
<th>Unanswered</th>
<th>Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Meetings between CMHT professionals and pharmacists.</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Regular meetings between CMHT professionals and pharmacists.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The communication concerning the client to be mediated via the client’s key worker and/or directly to an appropriate professional.*</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>The pharmacist to be present at multiprofessional care meetings regarding the client (CPA/review ).</td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>Contacts between professionals to be face-to-face.</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>33</td>
<td>The pharmacist to provide the same information service to the client’s family/carers upon request, with the client’s consent.*</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* the changed wording after the panel’s discussion

**Topic 8:** (Regular) meetings between CMHT professionals and pharmacists.

**Main themes:** Difference in the level of need for the meetings at the implementation stage of the service provision and later; connection to communication.

**Hidden themes:** Importance of communication.

At first the opinions about the appropriate category for the topic differed. However, the participants’ reasoning behind their opinions was the same, communication.

It was even suggested by a link-pharmacist that the meetings should be mandatory. A key worker suggested that, initially, such meetings would be important in order to identify any positive or problematic issues related to the scheme and, as the service would become routine, the meetings would become useful. The idea was well accepted by others. It was suggested by the same key worker that an issue of coordination of such meetings would have to be considered. It was offered by the researcher to delete the word “regular” but the participants believed that the meetings would have to be regular at the initial stage and wished to keep the term. It was agreed that the topic would be categorized ‘Important’ which would apply at the early stages of the service implementation and ‘Useful’ for the later stages.
Chapter 10 - Part 2 - Consensus development panels results

**Topic 9:** The communication concerning the client to be mediated via the client’s key worker (as opposed to directly to an appropriate professional).

**Modified to:** The communication concerning the client to be mediated via the client’s key worker and/or directly to an appropriate professional.

**Main themes:** The key workers need to be informed but not necessarily as the first professional.

Some of the participants suggested that the information should always be mediated via key workers who were coordinators of clients’ care. Others highlighted that it would depend on a particular situation and set of circumstances whether the community pharmacists should directly approach a relevant professional or the client’s key worker (for example prescription-related problems would not require the key worker’s involvement). One of the key workers argued that although a key worker did not have to be the *first* informed professional, he or she should receive the information at some stage. It was suggested to rephrase the topic using the words “and/or”.

**Topic 14:** The pharmacist to be present at multiprofessional care meetings regarding the client (CPA/review).

**Main themes:** Not necessary; pharmacists could be provided documentation instead; could be a part of the link-pharmacists’ training; highlights the pharmacist’s presence in the client’s care; multidisciplinary work; may not be a suitable place for the physician-pharmacist discussions on medication.

**Hidden themes:** Teamwork; importance of the introduction of the pharmacist in the client’s care.

Some link-pharmacists perceived the possibility of experiencing a CPA meeting as an important part of their training as link-pharmacists. A key worker emphasised that the pharmacist’s presence would make the link-pharmacist’s involvement in the care explicit to the client. It would also help the development of a relationship between the client and the link-pharmacist. The issue of multidisciplinary work was emphasised by the link-pharmacist. A key worker noted that it may not be necessary for a pharmacist to attend. He said that not all the invited professionals were always present but they were provided with documentation from the meeting. The need for communication was stressed. One of the key
workers was concerned that it would not be appropriate if pharmacists and medical staff argued about medication in front of the client. Another key worker stated that, in some cases, this may have a positive effect as the client could see that the professionals were concerned with his or her care. Generally, it was perceived that it would not be necessary for the pharmacist to be present at a CPA meeting.

**Topic 20:** Contacts between professionals to be face-to-face.

**Main themes:** Face-to-face contact not necessary if there would be a communication; may be useful on introduction of the service and professionals.

**Hidden themes:** Interprofessional communication.

Panel discussions generally, including discussion on this topic, suggested that participants believed that there should be a communication between professionals. However, they did not have any particular requirements as to how the communication should happen. Face-to-face contact was perceived unimportant if there was a contact and a communication between professionals. It was noted by one of the key workers that face-to-face contact may be required for instance when the professionals met each other for the first time. A communication should be the primary requirement, not a "face-to-face" communication.

**Topic 33:** The pharmacist to provide the same information service to the client’s family/carers.

**Modified to:** The pharmacist to provide the same information service to the client’s family/carers upon request, with the client’s consent.

**Main themes:** Differences between general and client-specific information; the need to ensure confidentiality; questions of clients’ ability to provide informed consent.

**Hidden themes:** Complexity and importance of confidentiality issues.

It was discussed that general condition or medication-related information should be provided if the family requested it. However, any information related specifically to a client should only be provided with the client’s consent and on the family’s request. Discussion concerning confidentiality formed a large part of the discussion on this topic. The situation when a client became ill and was unable to give informed consent was
suggested for consideration. The participants believed that a different procedure would be applied on such occasions involving medical staff and/or other CMHT staff. The topic was rephrased as above and categorised as ‘Important’.

10.4.3 Pharmacist Panel

Two of the three link-pharmacists that were not present at the panel provided their individual categorisation of the topics. Therefore, 8 tables of topics were compared with the panel results.

The majority of the link-pharmacists individually categorised most of the topics ‘Important’. The panel categorised all but one topic ‘Important’. None of the topics was categorised differently by the panel than by the majority of individual respondents. Topics listed in table 10.11 were categorised ‘Important’ by all the link-pharmacists.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1c</td>
<td>Issues related to communication and provision of information between professionals.</td>
</tr>
<tr>
<td>3b</td>
<td>Remuneration provided for the defined service.</td>
</tr>
<tr>
<td>3c</td>
<td>Training to be provided.</td>
</tr>
<tr>
<td>3ca</td>
<td>- on mental health medication</td>
</tr>
<tr>
<td>3cb</td>
<td>- on dealings with PMHP</td>
</tr>
<tr>
<td>4a</td>
<td>A community pharmacist’s roles and services to be promoted to health care professionals.</td>
</tr>
<tr>
<td>5a</td>
<td>Establish communication with CMHTs as early as possible (before or as soon as possible after the introduction of the service).</td>
</tr>
<tr>
<td>5b</td>
<td>Establish communication with CMHTs through joint training on the provision of the service.</td>
</tr>
<tr>
<td>8d</td>
<td>Information about a client to be provided to the pharmacist - medication.</td>
</tr>
</tbody>
</table>

* the changed wording after the panel’s discussion

Least agreement after the individual categorising was identified with topic 6 that was categorised ‘Important’ by 5 link-pharmacists and ‘Useful’ by 3 link-pharmacists. The topic remained ‘Undecided’ by the panel. The discussion that accompanied the panel’s discussion on this topic is presented below.
Topic 6: To be linked with a ‘reasonable’ number of clients.

Modified to: To be linked with a ‘reasonable’ number of clients. (Time and resource issues to be considered.)

Main themes: Various aspects to be considered; the number to be included in definition, both minimum and maximum number to be considered.

The discussion suggested that a number of clients per link-pharmacist should be considered with respect to:

• economics (what would be feasible, what would be value for money etc.),
• time available,
• the way the link-pharmacists would be funded (per person or for being a link-pharmacist),
• type of service or roles included (will the service be pharmacy-based or will it require attending meetings etc.), and
• whether a second pharmacist would be available.

Both minimum and maximum numbers were discussed. The reasons supporting the definition of a minimum number included the argument that having a certain number of clients would be important in influencing the amount of experience that the link-pharmacist would gather. It was also commented that it would not be ‘fair’ to a community pharmacist who was willing to function as a link-pharmacist to have insufficient number of clients for the service. A maximum number of clients per pharmacist should be considered as too many clients might not be manageable for a link-pharmacist. The ‘number of clients’ should be included within a proposal presented to community pharmacists when recruiting them for an LPS-like service. The link-pharmacists felt that other issues would have to be defined before the decision could be made about the number of link-clients. Therefore, the link-pharmacists wished to mark the topic ‘Undecided’.
Discussion
Chapter 11 Discussion and conclusions

The research project presented in this thesis implemented and evaluated a service that was in line with the Government strategies to improve mental health care and the pharmacy profession’s programme for reshaping the profile of community pharmacies. The value of this work is in the uniqueness of the service that it offered and the comprehensiveness of the evaluation.

This chapter will first discuss the application of the methods in this research project. Then, it will consider the research findings in context of other available evidence. Finally, the proposed model of a community pharmaceutical mental health service and the conclusions will provide recommendations for the future development of specialist community pharmacy mental health services.

11.1 Methods

11.1.1 Limitations to the methodology

The design of the LPS was based on the available literature. No preliminary work had been carried out investigating the need for the proposed type of a service. Although the researcher was aware of this problem, implementation of the LPS and a prompt start of the data collection was requested by the health authority.

11.1.1.1 Samples and recruitment limitations

All participants except the non-LPS pharmacists were non-random, self-selected samples and it is unknown if the opinions of those who refused participation or those not approached were different. Whilst an instrument was developed to record details of refusing clients, the key workers did not comply with its completion. Therefore, the data regarding the number of clients who refused participation, their characteristics and reasons for refusal are very limited. The samples for the consensus development panels were subject to further selection. As far as possible, known opinions expressed during the one-to-one interviews were presented to the panels by the researcher, so that the opinions of those not present could be used in the decision making. This sample selection limitation could have been overcome by performing the panels on a larger scale with all the LPS
participants or even non-participating relevant personnel. However, this was beyond the capacities of the LPS research project. The Context study quantitative data were obtained from 19 questionnaires and the findings cannot be generalised to all ELCHA community pharmacists. Nevertheless, the overall lack of involvement in mental health care provision, the lack of awareness of community mental health provision and lack of cooperation with other mental health care professionals was common to both groups of pharmacists, suggesting general trend in the wider population of ELCHA independent community pharmacists. The characteristics of the participants limit generalisation of the findings of the LPS evaluation and the Context study. This is not perceived problematic as it was the purpose of the project to inform the local health authority's policy and service development.

Since the greatest part of the recruitment of clients depended on the key workers, the researcher had limited control over this process. Although the key workers were encouraged by letters and telephone calls to recruit the clients, the recruitment remained low and resulted in application of the additional methods of recruitment, i.e. recruitment by the researcher from a depot clinic and recruitment by a link-pharmacist. Yet, the planned number of clients was not reached. Since implementation of the LPS involved a new and often unknown professional to the client, it was expected that the inclusion of key workers would facilitate the process of recruitment. However, the key workers did not contribute as hoped. This was probably related to the key workers' limited awareness about the community pharmacists' abilities and roles, and the purpose of the LPS. It is believed that an improved understanding and ownership of the scheme by members of CMHTs would have enhanced the recruitment of clients. Furthermore, the first stages of the scheme implementation encountered resistance from some consultant psychiatrists. These problems could have been addressed if these significant professionals, i.e. consultant psychiatrists and CMHTs members, had been more closely involved in the planning and conduct of the LPS. The LPS was presented to each CMHT involved in the project to ensure their understanding of the scheme. The CMHTs members were also invited to present any suggestions for modifications of the scheme during these presentations. The key workers were contacted during recruitment period and encouraged to recruit clients. Two informal meetings took place between key workers and link-pharmacists during the study period. However, this
proved insufficient. Involvement of key workers and other important relevant professionals, for example consultant psychiatrists, during the whole process of the service planning and implementation from its earliest stages may have facilitated recruitment and implementation of the LPS. The Consensus development panels (Part 2) suggested that the involvement of key workers in decision making about service features was possible and valuable. Personal introduction of link-pharmacists to CMHTs, as suggested by the key workers during the post-intervention interviews, may have also facilitated the key workers' interest and their involvement in the LPS. Furthermore, intensive promotion of pharmacists' roles in the care for people with mental health problems to health care professionals, may have ensured that these roles were readily accepted by them. Despite this experience, it is still perceived as important that the key workers are involved in recruitment of clients; the data suggested that the familiarity and the relationship between the clients and the professionals in their care were important.

The requirement for the clients to speak English intrinsically limited the recruitment numbers. It was reported by the participating professionals that non-English speaking clients may be more in need for drug-related information and management services than English speaking clients. Their inclusion would have broadened the sampling frame and provided valuable insights that could be different to those of English speaking clients. However, data collection involving non-English speaking clients would have required special provisions such as translation of instruments and use of interpreters during the interviews that were beyond the remit of the LPS research project. Furthermore, these procedures have their own methodological difficulties. The issue of inclusion of non-English speaking clients should be addressed in future work to ensure that pharmaceutical mental health services are designed for use by all the targeted clients.

11.1.1.2 Instruments limitations
Structured questionnaires were developed for the pre-intervention phase of Part 1 and the Context study and were subject to the problems related to the development of an original instrument. Pilot work was carried out to reduce such problems. It is perceived that it would have aided the face validity of the pre-intervention and the Context study
questionnaires if a time limit had been set for the respondents' recalls of activities and contacts with people with mental health problems and professionals. Also, a definition of the terms 'counselling' and 'consultation' could have helped to make the pharmacists' and key workers' answers regarding provision of a consultation to people with mental health problems more explicit.

Although the questionnaire answers were verified with the respondents when the questionnaire had been collected, it was identified during the data analysis that some textual answers did not provide adequate detail to allow unambiguous interpretations of the meaning. These answers were not included in the data analysis.

11.1.1.3 Analysis limitations

The process of triangulation of methods and data was used whenever possible as the main means to minimise reliability and validity difficulties inherent to the applied methods. These difficulties and the procedures applied to minimise them, are described below.

The logbooks were potentially subject to non-completion and recall error and thus the accuracy of the records could be impaired. However, this was addressed before the analysis; logbook entries were confirmed with the respondents and by comparison with other collected data, i.e. key workers' and link-pharmacists' logbooks with clients' calendars, routinely recorded data (the key workers' case notes and the link-pharmacists' computerised PMRs), and the post-intervention semi-structured interview data.

Similarly, the semi-structured interviews were subject to limitations, including interviewer bias and transcription and coding error since all the data collection and processing were carried out by the principal researcher alone. Relying on the respondents' testimonies could also be criticised. This problem was reduced by triangulation of the data obtained from the three types of respondent. Some factual testimonies were confirmed with the records in logbooks. To confirm validity, reliability and credibility of the interview data and its analysis, large parts of the interview data findings were validated with the consensus development panels. It is acknowledged that the findings may still bear inherent coding errors if the researcher failed to code a theme and if a relevant theme was not included in the tables of topics.
Discussion

The introduction to this thesis provided an overview of the studies that evaluated pharmaceutical mental health services. The position of the LPS evaluation design within these studies is discussed below.

11.1.2 Design of the LPS evaluation in context of other evaluation studies

Evaluations of a community pharmaceutical mental health service to the extent applied within this thesis are rare. Some projects are ongoing and evaluations are not available, findings from other studies have not been published in peer reviewed journals (Anonymous, 1999; RPSGB Mental Health Task Force, 2000b). The projects that were published either were descriptions with no evaluation (Hemmings et al. 1991) or the evaluation was limited, using a self-designed evaluation questionnaire (Cochrane et al. 1995; Ewan and Greene, 2000).

Although objectivity is one of the main requirements for good evaluation, sometimes this is not the case in pharmacy practice research, at least at the level of dissemination of the data. For example an article informing about the services provided by community pharmacists to PMHP in Liverpool (Anonymous, 1993) suggested a contribution to clients’ compliance, while the article presenting the evaluation (Watson, 1997) did not refer to any measure of compliance. Madden and Donoghue (1998) claimed that drug-related consultations of patients with schizophrenia, by a pharmacist, resulted in a decrease of “distress from side effects”. For evaluation they used LUNSERS, the scale for measuring side effects of neuroleptic medication (Day et al. 1995) and it is not clear why they made the conclusion that the service decreased distress. Such examples give an impression that the evaluations are carried out with preconceptions of the findings in researchers’ minds and the interpretation of the data is fitted to these preconceptions. It also poses the question whether, due to the enthusiasm for extending the pharmacists’ roles, the researchers overemphasise positive results of such studies, with limited discussions concerning the practical issues of such provisions. Smith (1999b) discussing pharmacy practice research reported:

“In the published literature, the objectivity of some studies may appear questionable by an unbalanced statement of the aims of the study. It is not unusual for objectives to be expressed in terms of demonstrating that objectives are met rather than assessing the extent to which they are or are not fulfilled”.

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The research project presented in this thesis was designed to provide comprehensive evaluation of all the components of the LPS service provision - service structure, processes and outcomes. The objectives were selected to allow a thorough evaluation of the LPS. The most appropriate methods were applied to answer these objectives. Three types of respondents were involved to obtain a range of relevant perspectives. The methods and the obtained data were triangulated carefully to provide accurate and complete data on the range of dimensions of the LPS evaluation.

The following text discusses in more details important features of the applied methodology, including the contributions of triangulation.

11.1.3 Data collection

The research project presented in this thesis was atypical as it used three different sources of data in parallel, obtaining three different perspectives in each of the three parts of the data collection, and it involved service users in the evaluation.

11.1.3.1 Involvement of various respondents

The use of different sources of data is an acknowledged way of triangulation (Denzin, 1970; Fielding and Fielding, 1990). The LPS used three different types of respondents. This approach contributed to the completeness of the data as well as its validation. Not only that these participants offered different points of view of the LPS that were based on different values, but the testimonies of those who experienced the same events were reciprocally corroborated. The data collected from the non-LPS pharmacists provided a different perspective to that obtained from the link-pharmacists, illustrating the biases that were inherent to the LPS sample.

11.1.3.2 Involvement of service users in data collection

In pharmacy practice research, service users have been involved in the evaluations of services provided to them. This often has the form of a structured questionnaire or a structured interview seeking the users’ opinions of the service (Essex et al. 1990; Vicente et al. 1993; Cochrane et al. 1995; Caan et al. 1996; Anderson, 1998; Ewan and Greene,
2000). In other studies one-to-one interviews (Barnes and Wistow, 1994; Watson, 1997) or group interviews (Barnes and Wistow, 1994) have been employed to assess the users’ views, with some studies attempting to measure outcomes (Madden and Donoghue, 1998; Shaw et al. 2000). Other studies have not involved the service users in the evaluation (Hemmings et al. 1991; Kettle et al. 1996). Researchers have described problems associated with involving people with mental health problems in evaluation studies, such as withdrawals after recruitment (Shaw et al. 2000), difficulties with self-completion of questionnaires (Caan et al. 1996) or difficulties accessing service users (Barnes and Wistow, 1994). The reliability of the data obtained from people with mental health problems has been questioned. The LPS provided valuable evidence of involving service users, people with mental health problems, in data collection. Although the recruitment of clients to the LPS proved difficult, and this seemed to be related to the fact that the clients were suffering a severe form of mental illness, their involvement in the data collection was a positive experience. Although application of the calendars at the intervention phase of the LPS was not the most successful with a response of 23%, the clients were willing to participate in other data collection procedures. During the post-intervention semi-structured interviews the clients openly discussed the issues raised and were critical as well as positive. Their opinions were valuable and greatly informative in relation to the evaluation of the LPS. The factual data from the clients were validated by testimonies from the key workers and the link-pharmacists and similarly, the clients validated the data from the professionals. In one case it was obvious that the clients’ answers lacked comprehension and the data were not used. Generally, the interviews conducted with the clients for the LPS evaluation did not provide any evidence that the testimonies of the interviewed sample of people with severe mental illness would be any less reliable than that of other respondents.

Further, the invited clients were willing to participate in the Clients and Interprofessional Panel. The one client, who was experiencing a relapse of his illness at the time of the panel session and did not participate, contacted the researcher later and offered his participation at any further data collection exercises should this be needed. During the panel, the clients were involved throughout, they voiced their opinions and were able to support these opinions if they found it appropriate. They did not seem suppressed by the presence of the
professionals and they made equal and valid contributions to the discussions. Some clients commented that the fact that their participation may be valuable to other clients determined their decision to participate in the LPS.

The involvement of service users in the planning of services is being encouraged by governmental bodies (House of Commons, 1990) and by the service users themselves (Barnes and Wistow, 1994; Service User Advisory Group, 1999) and lack of involvement has been criticised (Bowl, 1996). The LPS paid attention to service users’ perspectives and involved the service users not only throughout the evaluation of the service in Part1 but also in Part2 of the research project that aimed to provide recommendations for the future planning of pharmaceutical mental health services.

Use of multiple triangulation in the evaluation of the LPS and the Context study proved appropriate, serving successfully both the purposes for which it was used and allowed obtaining comprehensive and accurate data.

11.1.3.3 Use of triangulation to obtain complete data

Some examples from the LPS of the contribution of triangulation to the completeness of the data are given below. The post-intervention interview data provided context and explanations of the data gathered from the logbooks. For example, one key worker’s logbook did not contain any data and, based on that, it could be concluded that there was no contact between the professionals. However, the key worker explained in the interview that she misunderstood the flow of communication and expected the link-pharmacist to contact her. Therefore, the data from the interviews offered a possibility for consideration of what could be done about improvement of the communication, rather than concluding that there was no communication. Also, the outcomes of the LPS for the clients were not always identifiable from the logbooks and were identified from the interview data. Although the one-to-one interview data suggested the conclusion that involving families in clients’ care would be recommended and such an arrangement straightforward, the panel discussions indicated that it was a complicated issue and further consideration and careful planning would be needed. During the Context study, the semi-structured interview data provided an insight into the community pharmacists’ perspectives and a context for the
questionnaire data and helped to identify differences that have not been obvious from the questionnaire data alone, for example perceptions of and interest in, the provision of community mental health care that might have influenced the pharmacists’ actual involvement in this care.

11.1.3.4 Use of triangulation for validation of the data

Triangulation of methods and data for validation purposes proved valuable. Through comparisons of logbook and calendar data discrepancies in the recorded dates of contacts were identified and explained, before the data were analysed. When the respondents of the semi-structured interviews commented on contacts between the link-pharmacists, clients and key workers, they confirmed records that were made in the logbooks. They also confirmed each other’s testimonies, when they described the same events. Consensus development panels (Part2) confirmed that relevant issues were identified by the researcher from the semi-structured interview data.

11.1.4 Analysis

It has been emphasised that if the researchers compare data, this data must be inherently comparable (Mason, 1996). As part of the evaluation of the LPS, the researcher decided to compare the data that were not obviously comparable; the data obtained from the pre-intervention phase structured questionnaires/interviews and the intervention logbooks had different units of analysis, a respondent and a record respectively. Furthermore, the Part1 pre-intervention questionnaires inquired about contacts with any person with mental health problems and any CMHC professional at any time point, while logbooks were concerned with certain clients and key workers over the intervention phase of the LPS. The fact that different instruments were used to gather the data was the result of practical difficulties and the lack of time available for conducting the pre-intervention phase data collection, rather than a methodological mistake and it was recognised before the data collection that the data would carry this problem. The problem was resolved by comparing findings rather than the data itself.

Application of the two approaches to analysis of the post-intervention interview data
Discussion and conclusions (section 4.10.2, page 129) proved appropriate. The grounded approach allowed the identification of issues that were not originally sought. For example, the LPS was designed to address the need for drug-related information among people with mental health problems suggested in the literature. However, the post-intervention interview data revealed the complex nature of providing drug-related information to this patient group and that more research is needed to enable an objective conclusion about the need for provision of this information and consequent action.

11.1.5 Research findings in context of different epistemologies

The LPS evaluation was based on a decision made at the planning stage of the LPS, that the frequency of contacts between the clients and the link-pharmacists would indicate the success of the LPS implementation. Therefore, the data obtained from the logbooks suggested that the LPS was not successfully implemented as it was infrequently utilised. However, the clients' interview data suggested a different conclusion. Many clients reported that they used the scheme to the extent that they needed. Even if the clients did not use the LPS in terms of keeping regular contact with the link-pharmacist, they appreciated the scheme's existence and the fact that they could use it if they needed. Therefore, depending on what was perceived as evidence of successful implementation of the LPS, two different conclusions could be drawn. Implementation of the LPS can be perceived unsuccessful if measured by the number of contacts between the participants but if the evidence consists of the clients' perceptions, the LPS implementation succeeded, as it satisfied clients' personal needs for the service. The need to be aware of different epistemologies that can be applied while evaluating services has been emphasised in the literature (Mason, 1996; Smith, 1999a). The LPS demonstrated that such considerations and flexibility of the approach to data interpretation are important for ensuring objectivity of the evaluation and drawing the valid and dependable conclusions.

The following section first reviews the LPS in context of policy and research in provision of services from pharmacists to people with mental health problems. Consequently, it discusses the issues of structure and processes within the LPS that were of high concern to the participants and sets these in context of other available literature, and considers the
measurement of outcomes within the LPS. Finally, it debates the issues that were found to influence implementation of the LPS.

11.2 Research findings in context of literature

Few studies have been published that allow a comparison with the LPS. Published projects investigating the involvement of community pharmacists in mental health care differed in the character of the service provided and it is difficult to compare them to the LPS. The LPS's structure and processes are most comparable with the study by Watson (1997) who evaluated newly developed services provided to the former inpatients in Liverpool and Nottingham. Some general findings from the Watson (1997) study regarding the involvement of community pharmacists in CMHC were similar to the findings of the LPS, corroborating the data and suggesting the significance of both data as they were obtained under similar circumstances, using similar methods (interviews with the projects' participants) but in different geographical areas. These findings are referred to on several occasions in the text below.

11.2.1 The position of the LPS among other pharmaceutical mental health services described in literature

The extended services provided to PMHP living in the community in the United Kingdom were often provided by hospital pharmacists (Cochrane et al. 1995; Kettle et al. 1996; Madden and Donoghue, 1998; Furniss et al. 2000; Shaw et al. 2000). The studies evaluating services provided by community pharmacists are infrequent, although such provision has been encouraged over the last 13 years (The Working Party of the Council of the Royal Pharmaceutical Society of Great Britain, 1988; United Kingdom Psychiatric Pharmacy Group, 1995). Within these services, hospital and community pharmacists have provided drug-related information to PMHP, supplied medication to the clients or to residential care settings and assisted with medication administration, or were, to various levels, involved in prescribing decisions. These roles were repeatedly identified as the potential roles for the community pharmacists in CMHC (Donoghue, 1994; United Kingdom Psychiatric Pharmacy Group, 1995; Taylor and Duncan, 1997). Some of the services were provided in cooperation with other mental health care professionals, also in
line with recommendations (Nuffield Pharmacy Inquiry Committee, 1986; Branford, 1991). During the LPS, the same framework of roles was applied and the LPS encouraged interprofessional cooperation through integrating the link-pharmacists in the multiprofessional CMHTs. However, within the previous projects, the community pharmacists were usually providing services to residential homes or day centres where they had to attend (Hemmings et al. 1991; Watson, 1997; Ewan and Greene, 2000), or they performed domiciliary visits (Harris, 1999). According to The Medicines Act 1968, community pharmacists are required to supervise the dispensing and purchasing of all prescription-only and pharmacy-only medicines. For independent community pharmacists this may present a problem if they were to provide services outside their pharmacies with usually only one pharmacist on the premises during opening hours. In light of this, the feasibility of the above services in the circumstances of everyday practice, outside pilot schemes, is questionable. For example, the community pharmacist providing advisory sessions to the clients of two CMHT centres in the study by Ewan and Greene (2000) provided the service for four weeks, for one to three hours a week and without remuneration. It may be questioned whether the pharmacist would be willing and able to provide the service long-term.

Unlike other studies, the services within the LPS were provided under naturalistic conditions, where the link-pharmacists remained, and were available to the clients, in their pharmacies allowing themselves and the clients to minimally alter their normal practice. Even so, implementation of the LPS faced difficulties. The LPS, unlike other studies, has valuably contributed to the evidence base by uncovering a number of problems related to the provision of such a service, explaining the difficulties and suggesting solutions.

The achievement of a defined outcome(s) is the most desirable indicator of the effectiveness of a service. The structure of, and the processes within the service, may be direct determinants of the service outcomes (St Leger et al. 1992). Thus, monitoring and evaluating these two aspects is important in order to identify and apply a service structure that would allow the development of adequate processes and consequently lead to the desired outcomes. The text that follows first presents structural issues identified as significant for implementation of the LPS, followed by issues related to processes within
the LPS and then a discussion regarding the outcomes of the LPS.

The clients did not use the LPS because they did not perceive a need to do so or because something prevented them from doing so. The preventing factors were mostly related to structural issues, although discomfort with the link-pharmacist, as a process factor, was also noted. The lack of interprofessional contacts appeared more associated with processes within the scheme than its structure. The findings confirmed the appropriateness of the LPS design, since minimal changes to this design were recommended by the LPS participants. However, the few structural issues that were found to be problematic, in particular the location of the link-pharmacies, had an important impact on the utilization of the LPS by the clients. More detail on these issues is provided below.

11.2.2 Structure

11.2.2.1 Provision from a community pharmacy

The fact that the LPS was provided from community pharmacies was mostly perceived as a positive feature, although the participants identified the following problems.

Location of the link-pharmacies

The inconvenient location of the link-pharmacies for some clients was one of the most important difficulties reported by both the clients and the key workers as leading to the low utilization of the LPS. The inconvenient location of the link-pharmacies for their clients, was also stated as a reason for non-participation by the key workers who did not recruit any clients. The same reason was also stated by some clients who refused to participate in the LPS and its importance was confirmed by the Clients and Interprofessional Panel. Convenient location of community pharmacies has been claimed to play an important role in the patients’ satisfaction with and utilization of community pharmacies services (Briesacher and Corey, 1997; Watson, 1997; Hassell et al. 1999).

Furthermore, many clients use the same pharmacy. Rees et al. (1997) have shown that 85% of people with schizophrenia participating in their study, regularly used the same community pharmacy. In their study, 39 participating community pharmacists collected data from their 285 patients with schizophrenia. It may be criticised that the pharmacists themselves asked clients about their visits to the community pharmacy and thus the
patients’ answers could be biased. However, pharmacy customers’ loyalty to a certain pharmacy has also been claimed by John et al. (1997). They analysed 358 questionnaires answered by a random sample of members of the Coeliac Society register (72% response). The questionnaire sought data about the use and opinions of community pharmacies. Although it may be questioned, whether there was an association between this particular condition and the pattern of use of community pharmacies, half of the respondents of this study always used the same pharmacy, 31% usually used the same pharmacy and 12% respondents used two pharmacies. The LPS pre-intervention data showed the same finding with the LPS clients; the majority of clients (22/26) reported that they always or mostly used the same community pharmacy. The Clients and Interprofessional Panel agreed that it was important for the clients to choose their link-pharmacy. This would ensure that the most convenient pharmacy would be chosen, also with regard to its location.

**Privacy in a community pharmacy**

The lack of privacy in community pharmacies was discussed and criticised by some clients, key workers and link-pharmacists. Some clients were also unhappy that, during the conversation with them, the link-pharmacists were distracted by other activities. Lack of privacy and community pharmacists being distracted by other duties were also criticised by the people with mental health problems participating in the study by Watson (1997). Matheson (1998) carried out interviews with 124 illicit drug users. The study was similar to the LPS in terms of the sensitivity of the issues to be discussed or dealt with by the community pharmacists. Those respondents who had to consume their methadone in the pharmacy emphasised the lack of privacy as a problem. They also expressed mixed opinions about whether or not a separate area should be used, explaining that the use of a separate area could make them ‘exclusive’ and this could be stigmatising. Although ensuring an adequate level of privacy was perceived fundamental by the participants of the LPS, the use of a separate consultation area was found not to always be necessary by the respondents of the post-intervention interviews as well as the Clients and Interprofessional Panel.

Discussions concerning the stigma and social exclusion experienced by people with mental health problems have frequently appeared in recent Government documents and research
papers (Department of Health, 1998a; Department of Health, 1999b; Department of Health, 1999d; Department of Health, 1999f). The aim of the policy makers and professionals is to eliminate the stigma attached to mental illness. The community pharmacists’ position at the interface between people with mental health problems and other members of the public may contribute to eliminating the stigma (RPSGB Mental Health Task Force, 2000a). The findings from the LPS suggested that this, however, would not be possible without addressing the issues of privacy and confidentiality.

11.2.2.2 Confidentiality of shared client-related information
Confidentiality of shared clients’ condition and treatment-related information was an important part of the discussions about the community pharmacists’ involvement in CMHC during the LPS. The importance of confidentiality has been emphasised by the pharmacy profession in association with the community pharmacists’ keeping computerised patient medication records and increasing cooperation with other professionals (Wingfield et al. 1997; Craft and McBride, 1998). McHale (1999) emphasised, in relation to sharing the condition and treatment-related information of those with mental illness, that confidentiality is of paramount importance but increasingly, absolute confidentiality is less likely to be achieved if client-related information has to be shared by different professionals or even nonprofessionals. This is due to the changing care for PMHP that is being provided by multiprofessional teams where the sharing of client-related information may be necessary to achieve effective care of clients.

The LPS data suggested that the confidentiality of the clients’ information is a very sensitive issue discussed by all types of the participants. Nevertheless, the clients were willing to accept that their condition and treatment-related information would be shared by the link-pharmacists, when the reasons and circumstances were explained. It has been previously claimed that it must be understood by the clients what information and by whom it will be shared (General Medical Council, 1995).

11.2.2.3 The provided services
The services provided by the link-pharmacists within the LPS, i.e. provision of drug-related information, monitoring of the clients on their medication and keeping their medication
histories, were the roles previously recommended by professional bodies (The Working Party of the Council of the Royal Pharmaceutical Society of Great Britain, 1988; United Kingdom Psychiatric Pharmacy Group, 1995; RPSGB Mental Health Task Force, 2000a), applied in research projects and other schemes (Pratt and Dunnett, 1985; Essex et al. 1990; Hemmings et al. 1991; Caan et al. 1996; Maslen et al. 1996; Ewan and Greene, 2000; Furniss et al. 2000; Shaw et al. 2000;) and also reported by community pharmacists as currently being provided to people with schizophrenia (Rees et al. 1997). The fact that the participants of the Context study, the post-intervention interview respondents and the Clients and Interprofessional Panel identified similar roles to be applied to a future pharmaceutical mental health care service, contributes to the evidence of the appropriateness of these roles. Provision of services to family members was intensively discussed during the LPS, and perceived important although problematic with respect to the issues of confidentiality of client-specific information.

The role that was most disputed during the Clients and Interprofessional Panel was the provision of condition-related information as it was perceived that provision of this information was the role of physicians. This highlights the uncertainty of other professionals and the clients about the scope of the community pharmacists' knowledge.

The link-pharmacists and the key workers discussed that the community pharmacists should be allowed to manage repeat prescribing as it would allow the clients easier access to their medication. Such opinions are in line with recent developments. It was suggested in the Crown Report (Crown, 1999) that pharmacists could be given the role of 'dependent prescribers', who would be responsible for the clinical management of patients whose diagnosis was established and a care plan agreed. The 'dependent prescribers' would be responsible for ensuring that the issued prescription was needed and appropriate but they would not make changes to the prescription without the assessing prescriber's ('independent prescriber') knowledge. However, it was further suggested that pharmacists carrying out reviews of patients' medication could be given limited discretion to vary treatment on their own initiative, within agreed limits. Attempts have already been made to implement these suggestions (Hughes et al. 1999). The NHS Plan for Pharmacy (Department of Health, 2000b) stated that, by 2004, repeat dispensing from community pharmacies will be established and patients will be able to get their prescriptions from their
local pharmacies without the need to contact their prescriber. Such a provision would support the purposes of the LPS and would suitably complement the whole package of services offered by the link-pharmacists, simplifying the clients’ access to their medication or, for example, enabling the link-pharmacists to act on some of their medication reviews. Furthermore, such a role would be more suitably carried out by the link-pharmacists who would have substantial knowledge of their clients, compared with any other community pharmacist.

The provision of drug-related information was one of the main aims of the LPS. However, the data obtained during the LPS suggested that the issues surrounding the provision of this information are complex and the need for its provision is not explicit. The following section discusses these issues.

**Provision of drug-related information**

The gathered data revealed that there was no system in providing drug-related information to the clients and there was no one professional responsible for provision of this information. The clients’ interest in drug-related information varied and the data were not conclusive as to whether there was a demand from the clients for the provision of drug-related information. The key workers based their decisions whether to provide this information on their assumptions about the level of clients’ knowledge. However, some clients only realised that they lacked knowledge about their medication when relevant drug-related information was provided to them by the link-pharmacists. The data also suggested that clear difference should be made between provision of information and explanation. The New Oxford Dictionary of English (1998) defines ‘information’ as “facts provided or learned about something or someone”, and it defines ‘explanation’ as a “statement or account that makes something clear; a reason or justification given for an action or belief”. The way the key workers and clients talked about drug-related information suggested that, often, information was provided, rather than explanation. The interviewed key workers did not seem to make the distinction between providing information and explanation. For example in the following quote:
"...I came across people who are sometimes very reluctant to take medication, because they may have, sort of, preconceived notions about what that drug is about, I mean, without actually having any factual knowledge. They'd be there worried about, you know, they've heard about side effects and things and they don't really know exactly what the side effects are, but they're worried that they'll have them, anyway.”

(KW18, 165 -77)

From the quote above it seems that the clients might have received information either from health care professionals or from other sources, but not an explanation. This might lead to clients generating preconceptions about their medication.

Clients’ needs for drug-related information, including hidden need for information, should be defined and addressed if effective drug-information services were to be offered. Drug-related information cannot be forced upon those clients who do not want it, but, on the other hand, professionals should actively offer and promote the opportunities to receive drug-related information. Educating clients that there are issues to be asked about, that they can and should ask, and how to ask would allow the clients to make an informed decision about whether or not they want information about their medication. Watson (1997) reported that the pharmacists’ advisory sessions in day centres within their project, were not demanded by service users and providers but, when implemented, became the most appreciated part of the provided services. The clients within their study also expressed satisfaction with the provided services because they had learned more about their medication. Care should be taken that medication-related issues are explained to clients instead of the clients being provided with information, the relevance of which they may not fully comprehend.

11.2.2.4 Appropriateness of the target client group

It was discussed by the participants of the LPS, whether the targeted group, i.e. people with enduring severe mental illness, was appropriate for the provision of the LPS services. Some believed that people with less severe problems should be targeted, while some discussed whether the target should be even more selective and only people with special needs should be offered the service. Published studies (Pratt and Dunnett, 1985; Essex et al. 1990; Hemmings et al. 1991; Caan et al. 1996; Maslen et al. 1996; Ewan and Greene, 2000; Furniss et al. 2000; Shaw et al. 2000) have included a variety of clients’ groups,
including patients of acute admission wards, residential homes and CMHT clients. It is likely that some of these clients were comparable to the LPS clients in terms of the severity and the length of their illness and treatment. However, the authors did not comment on this issue. The services described in these studies were usually used by interested clients and none of the authors provided any comments about the health of these clients or those who did not utilise the services. The LPS indicated the possible importance of the targeted client group and it is recommended that the designers and providers of future services should pay attention to this issue.

11.2.2.5 Link-pharmacists as independent providers of a pharmaceutical service

It was discussed within the LPS, whether the link-pharmacists should provide their services independently of the CMHTs or whether they should be clearly advertised as part of the CMHC provision. Although there was, within the LPS, a general notion that community pharmacists should become formal members of CMHTs or could closely cooperate with them, for example, to enable them to share clients’ condition and treatment-related information, it was claimed that some clients did not trust mental health care professionals and therefore the pharmacists’ independence could be beneficial. Watson (1997) reported that the service users within their project, appreciated that the pharmacists were independent from other community mental health services.

11.2.3 Process

Dynamics within the LPS including participants’ attitudes towards the LPS influenced its implementation. The identified issues are discussed below.

11.2.3.1 Client-related factors

It has been claimed that the unpredictable nature of mental illness can cause difficulties when providing services to people with mental health problems (Jones and Norman, 1998). Implementation of the LPS was also influenced by changes in the clients’ approaches. For example, a client started attending the link-pharmacy after refusing to go and another one avoided visits after wanting the LPS services. Although it would be difficult to eliminate this factor, it should be acknowledged as it can affect implementation of a service.
Limited awareness and limited understanding of the LPS and in general, community pharmacists' roles and abilities, by the LPS clients and key workers and their expressed doubts about the value of the LPS, appeared to influence their acceptance of the LPS and to contribute to the low utilization of the link-pharmacists' services.

**Clients**

In the pre-intervention questionnaire, the fact that the clients were not aware that they could ask a community pharmacist about their medication was prominent. Similar results have been reported in studies that investigated the public’s perceptions of community pharmacists’ roles in general. These studies provided mixed results with some suggesting that both the public was (Wilson *et al*. 1992; Varnish, 1998) and was not (Chewning and Schommer, 1996) aware that community pharmacists can provide advice on general health and minor ailments. Varnish (1998) concluded that community pharmacists’ knowledge of drugs was seen as superior to doctors but that doctors were perceived as responsible for the patient’s health. This conclusion was derived from five focus groups with self-selected samples of attenders of different types of pharmacies (three to seven participants on each panel, 23 in total). Unfortunately, the author did not comment on the number or characteristics of those who refused to participate or those who failed to attend the panels and therefore did not provide any indication of representativeness of the sample. One of the author’s claims was that the participants were knowledgeable about the community pharmacists’ education. This finding is in contrast with the LPS data that suggested that few clients knew about community pharmacists’ education. This may be because the samples from the study by Varnish (1998) were self-selected and might include people with such knowledge. Also, the data were obtained from group discussions and those people who did not know about the pharmacists’ education might not have spoken out. A study by Vallis *et al*. (1997) demonstrated that there was a high regard for community pharmacists as professionals but there were low expectations concerning their diagnostic and therapeutic roles. They surveyed a random sample of 579 persons from the region’s electoral register about their views of community pharmacy services (58% response). Another study by John *et al*. (1997) reported that clients would ask community pharmacists about OTC but not their prescribed medication. The same was identified from the LPS’
Part 1 pre-intervention and post-intervention clients' interview data. The data from the above studies confirm the findings of the LPS that there is variation and uncertainty about the community pharmacists' roles. Evans and John (1997) concluded that if the patients did not perceive a community pharmacist to be an expert in certain areas, they would not use pharmacists as an information source in those areas. Their claim was based on a survey of 1,174 members of the public in south-east Wales about their advice seeking on certain conditions. The questionnaire was distributed to all 2,956 residences on a sample of streets and achieved only a 40% response. The non-responders were not discussed. Nevertheless, their findings suggested that the awareness may be fundamental to whether or not the clients would use the offered pharmaceutical services. It has also been claimed that if the clients do not have a clear understanding of the objectives of an offered service, then they may not use it (Barnes and Wistow, 1994). Therefore, the public needs to be educated about the community pharmacists' roles and the services offered if they are to fully utilise them.

**Key workers**

It was apparent from the LPS' Part 1 post-intervention interview key workers' data that cooperation with the link-pharmacists, or community pharmacists generally, was not a part of the key workers' working routines and it is believed that, similarly to the clients, the LPS did not become established in these working routines. Introducing link-pharmacists meant introducing a new professional to the key workers' current system of work. It was suggested that the challenge to change (introduction of a new service and a new professional in the case of the LPS) has to be welcomed by the professionals involved and they have to believe that the collaboration with others will bring improvements (Alpert et al. 1992). They need to be confident, respectful and trustful of those newly introduced to the team and they have to acknowledge and recognise each other (Davies, 2000). The involved professionals need to be aware of each other's skills, in order for these to be properly used (Firtz-Cozens, 1998). The roles of individual professionals have to be explicit (Onyett, 1997). The tendency to mix with those who are 'similar' may pose a problem for the introduction of a new professional (Firtz-Cozens, 1998). The lack of understanding of the contribution that community pharmacists can make by some provider groups, was the reason for a reserved approach to some services provided by the
community pharmacists in the study by Watson (1997). The studies that directly connected the pharmacists with other health professionals and where the pharmacists were part of the team before or during the project, did not report any such problems (Pratt and Dunnett, 1985; Kettle et al. 1996). Within the LPS, some key workers presented a lack of awareness of the community pharmacists’ abilities and they were unsure of the purpose of the LPS. The key workers’ voluntary active involvement in the LPS was scarce and some of them admitted that the LPS was not among their work priorities. Many key workers were not sufficiently involved in the providers’ part of their role within the LPS, i.e. recruitment of clients and liaising with link-pharmacists, and consequently did not contribute sufficiently to its implementation. Although many key workers were keen about the idea of the LPS, their involvement did not seem to reflect this. Considering the importance of the key workers in implementation of the LPS, the need to explain and promote the pharmacy profession and the offered services to other professionals should not be overlooked. The initial problems that the LPS experienced in relation to obtaining the consultant psychiatrists’ approvals demonstrated the need for wide-spread promotion of community pharmacists and their services at an interprofessional level.

11.2.3.3 High turnover of key workers
Another obstacle to the development of cooperation between professionals could be the high turnover of CMHT professionals. This was experienced during the LPS and it has been previously identified as a problem contributing to the inequalities in the provision of community mental health care (Onyett and Ford, 1996).

The majority of the link-pharmacists did not appear to be pro-active in the provision of the LPS service and their possible reasons are discussed in the following section. The link-pharmacists identified a number of constraints to their providing the LPS services. However, it was not clear from the data, whether it was the identified constraints or the link-pharmacists’ personal approaches that led to their lack of involvement in the scheme.

11.2.3.4 The link-pharmacists’ involvement in the provision of the LPS services
It was suggested by Penna (1990) that pharmacists themselves may be the constraint to the
provision of pharmaceutical care. It appeared that some link-pharmacists did not accept the fact that they were offering a new service and that they needed to be pro-active in providing it. The key workers and link-pharmacists reported that more frequent contacts with the clients and the key workers would have possibly helped the link-pharmacists to get to terms with their new role.

Community pharmacists' approach to CMHC as identified from the Context study
The aim of the Context study was to investigate and to compare the link-pharmacists' and the non-LPS pharmacists' current involvement in CMHC and their perceptions of community mental health care provision as a context of their providing services within CMHC. The link-pharmacists were a self-selected, enthusiastic group of community pharmacists and the Context study aimed to identify whether their opinions differed to other independent community pharmacists practising in the same health authority area. The differences, for example the pharmacists' evaluations of community mental health care or their willingness to become involved in mental health care, as well as similarities, for example minimal level of involvement in community mental health care provision and perceived limited current role in community mental health care, were identified. Overall, the link-pharmacists seemed to be biased towards a greater need for pharmaceutical mental health services. The structured questionnaire data suggested that the link-pharmacists were more pro-active towards the provision of services to PMHP and contacting mental health care professionals.

The findings from the Context study correspond with the findings of Tann et al. (1996) suggesting that there are differences in community pharmacists’ approaches to implementation of extended services and that it is possible to identify generic characteristics of the leading practitioners within the profession. Based on the data obtained by using critical incident technique, structured interviews and The Kirton Adaptation Innovation Inventory they identified that the ‘leading edge’ community pharmacy practitioners are, for example, pro-active in identifying the needs of their patients and taking up opportunities to address these needs. They tend to network with other professionals and generally take their practice far beyond routine medication supply tasks. The issues that discriminated the LPs and non-LPS pharmacists echoed these
characteristics. This however, complicates the explanation of processes related to the LPS implementation. The link-pharmacists share some of the characteristics of leading edge practitioners, yet their contribution to implementation of the LPS was limited. Contribution of other factors is likely, for example the attitudes of the key workers and clients, and constraints identified by the link-pharmacists. The proposition that differences exist in community pharmacists’ practices also suggests potential complications if community pharmaceutical mental health services were to be applied throughout the ELCHA area.

The data gathered during the Context study revealed a low awareness of the structure and delivery of community mental health care and the professionals involved. Similarly, the majority of the community pharmacists who completed a questionnaire in the study by Maslen et al. (1996) was not sure or not aware of the role of a CPN. Through their extended roles, community pharmacists are expected to cooperate with other professionals (Nuffield Pharmacy Inquiry Committee, 1986; Royal Pharmaceutical Society of Great Britain, 1996a; RPSGB Mental Health Task Force, 2000a). To be able to do so and to identify their own unique roles that are valid, the community pharmacists need to be aware of how the care is provided. It was suggested in the White Paper, ‘Saving Lives: Our Healthier Nation’ (Department of Health, 1999b), that a number of people with mental health problems remain undetected by the services and that health care professionals have to be able to recognise symptoms of mental health problems in order to identify these patients. Community pharmacists could play an important part in symptom recognition as they are in frequent contact with the public (RPSGB Mental Health Task Force, 2000a). However, neither this role, nor that of a care facilitator as identified by the community pharmacists in the study by Ewan et al. (1995), would be possible unless the community pharmacists were familiar with the system of the care provision. The promotion of mental health care issues among community pharmacists and informing them about existing problems in service provision could help community pharmacists to realise the important role that they could play.

A number of the non-LPS pharmacists stated that they would not be interested in becoming involved in community mental health care provision. Their reasons included lack of time.
and remuneration, other professional interests and not having this particular type of patient. Lack of time and remuneration are frequently cited as constraints to the provision of extended services generally (Penna, 1990; Troein et al. 1992; Raisch, 1993; Sarriff, 1994; Bell et al. 1997) and with regard to services provided to PMHP (Maslen et al. 1996). The non-LPS pharmacists who were interested to be involved in mental health care provision, nevertheless, as well as the link-pharmacists in the pre-intervention and post-intervention interview data also identified constraints that included, again, lack of time and remuneration and furthermore: high workloads, lack of contact with other professionals and lack of clients' background information. These constraints were consistent with the findings of other studies looking at general (Bell et al. 1997; Anderson, 1998b) and mental health care (Maslen et al. 1996). The above studies were related to certain geographical areas and most of them gathered data from samples of a limited size. However, similar results were found using different methods (structured questionnaires, interviews, rating scales) and in different parts of Britain as well as in different countries consistently over eight years. These findings related to constraints on pharmacists' provision of extended services also appear to be valid in light of the current structure of remuneration of community pharmacists in Britain. This system encourages community pharmacists to dispense high numbers of prescriptions at the expense of non-dispensing activities. It should be acknowledged that the infrastructure of community pharmacy practice, does not facilitate community pharmacists' involvement in the provision of extended services, and authorities should aim to implement changes that would enable community pharmacists to provide extended services for which they are challenged.

The second reason why the non-LPS pharmacists were not interested in the provision of extended services to PMHP was having other professional interests. Such a statement appears to be a surprising and unsatisfactory argument considering the emphasis that was recently paid to mental health care by the Government and the pharmacy profession itself. Even if pharmacists were not prepared to focus their patient-oriented services solely on mental health, they should not ignore it. Medication plays an important part in mental health care and treatments and the pharmacists could and should offer their expertise.

The third reason for the non-LPS pharmacists' lack of interest to be involved in mental health care was the low number of customers with mental health problems. This is, again,
a questionable argument. For example, the statistics of prescription items dispensed in the community pharmacies in England from 1989 to 1999 showed that the medication categorised under the British National Formulary (BNF) category Central Nervous System (although this also includes antiepileptics and drugs used in parkinsonism and related disorders), was the second most frequently dispensed group of drugs (National Statistics, 2000). In an observational study of 1,472 prescription items, Aslanpour and Smith (1997) reported that the most items dispensed were those categorised under BNF category Central Nervous System (n=224, 17.1%). The data were collected in 50 community pharmacies including all types of pharmacy ownership and located in various parts of greater London.

One of the possible contributing factors to the link-pharmacists’ lack of involvement in the LPS provision, their negative perceptions of their professional position in primary care, is now discussed.

**Link-pharmacists’ perceptions of their position in primary care**
The link-pharmacists’ involvement in the LPS seemed to be distracted by their own perceptions of their professional position. The link-pharmacists felt that other professionals did not want to cooperate with them and they were hesitant to contact the key workers for this reason. It was identified that link-pharmacists had feelings of not being valued and not being recognised for their work. The link-pharmacists’ reports about their current position in community mental health care at the end of the intervention phase did not differ to those at the pre-intervention phase, also confirming that the LPS did not improve the interprofessional cooperation. The data obtained from the key workers did not support the link-pharmacists’ assumptions.

Similarly, some link-pharmacists felt that their clients asked them questions only to fulfill their ‘duties’ within the research project. However, there was no data in the clients’ interviews to support this belief. The clients reported that they asked what they needed to ask. The link-pharmacists’ expectations concerning what was required from them by clients differed to those of their clients and the link-pharmacists perceived this as a failure. It seemed that the link-pharmacists were sensitive to issues relating to their professional roles and how they were perceived by others. The link-pharmacists’ reported negative
feelings about these issues during the LPS, which are likely to have contributed to the passive role that they assumed.

If it was decided, in line with the pharmacy profession’s visions (Royal Pharmaceutical Society of Great Britain, 1997; RPSGB Mental Health Task Force, 2000a), to apply community pharmaceutical mental health services on a wide scale in the ELCHA area, community pharmacists’ reasons for being uninterested in the provision of extended pharmaceutical mental health services and constraints on their involvement should be further explored. These issues could be then addressed, making implementation of extended mental health services more attractive and feasible for the community pharmacists.

11.2.3.5 Time factor
Related to all the process factors reported above seems to be the issue of the time available for implementation of the LPS. It was suggested during the Part1 post-intervention interviews that the time available to implement and evaluate the novel LPS might have been insufficient. The issue also seems related to the acceptance of the project by the professionals and clients, and the development of relationships and consequently trust between the clients and link-pharmacists. It has been claimed that clients’ trust and confidence in pharmacists are essential if community pharmacists are to be involved in clients’ care (Szeinbach and Bleidt, 1991). During the post-intervention interviews and Clients and Interprofessional Panel, some clients reported that it was easier to talk to a professional if they knew him or her and/or if the professionals knew them. The possible association of the development of a relationship and trust with the length of the implementation period was demonstrated by the fact that some clients became regular attenders in their link-pharmacy only after several months after their recruitment. The interview data suggested that the time available for implementation of the LPS allowed some relationships between the link-pharmacists and the clients to reach a level of acquaintance but not trust, and this was insufficient for the clients to confidently use the link-pharmacists’ services.

Similarly, the introduction of the LPS represented a change to the key workers’ working
routines and it has been claimed that professionals need time to adjust to a new situation (Firtz-Cozens, 1998; Garside, 1998). The development of community mental health care itself is a manifestation of the length of time needed for professionals to implement changes.

The interprofessional dynamics within the LPS seem to correspond with the conclusions of Bruce (1980):

"Co-operation between professionals has not been found to result automatically either from physical proximity or being involved with the same client. It appeared to develop step by step as the frequency of contacts increased, as the relevance of such contacts became clearer, as a better understanding of roles emerged, accompanied by the disappearance of stereotypes, as social proximity increased, as mutual trust began to grow and problems of confidentiality to shrink."

The above issues should be considered when planning pharmaceutical services and additional time should be allowed at the initial stage of service implementation for the service to be accepted by all involved and to become established in the clients’ and professionals’ routines. The LPS did not inform the optimum length of time needed. However, for example, a study evaluating a newly developed primary care-based service for people with long-term mental health problems was carried out over a four-year period and included more than two years of building up the service (Pullen and Kendrick, 1995).

11.2.4 Outcomes

Due to the limited number of interventions by the link-pharmacists, the outcome indicator of the LPS originally selected to be measured, i.e. significance of the link-pharmacists’ interventions for the clients’ health, was not quantifiable. To overcome this, future effectiveness studies should aim to obtain a higher number of clients in their samples than that was achieved in the LPS. Addressing the recommendations regarding the structure and process of the LPS, and more intensive involvement of the significant professionals in the planning and execution of the scheme, is likely to assist in increasing the recruited numbers. Higher numbers of recruited clients may result in a more dynamic LPS with more interventions by the link-pharmacists. However, it was suggested by the key workers and also through other LPS findings that the LPS would not be utilised by all the clients, all of the time. Therefore, a reasonable period of time would have to be allowed for the
collection of intervention data (in terms of years rather than months). Measurement of clinical outcomes of the link-pharmacists’ interventions, for example number and nature of changes to the clients’ medical treatment as a consequence of the pharmacists’ interventions and the significance of these changes to the clients’ treatment, would be a suitable and desirable outcome measures for assessment of the effectiveness of the LPS. Furthermore, the LPS proved that, in addition to the foreseen outcomes, there can be a number of various outcomes defined by individual clients. It proved relevant, in the circumstances of the LPS, to explore these client-specific outcomes. These outcomes varied for different clients. Alongside the outcomes for which the LPS was designed, i.e. changes to the client’s medication treatments and an increase in the clients’ self-perceived drug-related knowledge, other outcomes were also identified, such as allaying clients’ fears of medication. Identification of these outcomes from the LPS confirms that the strict measurement of the chosen outcome may lead to omission of other outcomes that are significant to individual clients. Patton (1987) argued that for a programme that requires individualisation, i.e. matching programme services to the needs of individual clients, outcomes will also be individual-specific. The outcomes will vary along specific common dimensions and they will also be qualitatively different for different clients. Also, one outcome may have a different meaning for different participants. Therefore, measuring an outcome against a standardised measure may be inappropriate and investigating one uniform outcome may be insufficient. Patton (1987) listed community mental health services as one of the possible fields where this can apply and the findings from the LPS support this. It was emphasised by the key workers that the clients’ approaches to their treatment and services, are variable and the identification of a uniform pattern would be difficult.

It is recommended for projects such as the LPS to adopt a flexible approach to measuring outcomes and, apart from measuring desired predefined outcomes, the outcomes self-identified by the service users should also be explored to ensure that the whole spectrum of outcomes had been monitored.

11.2.5 Implementation of the LPS

It was shown in the results, that the LPS was not frequently used, that it did not improve
communication between professionals, that there was a varying contribution from the professionals and confusion about the LPS purpose. The whole process gave an impression of unsettledness. To understand better the process of implementation of the LPS, an analogy has been made of the care provided by the CMHTs in which the LPS was introduced, with an organisation in which a change has been implemented, using a ‘change management model’. There is consensus among authors of change management models that the process of implementation of change has three stages: current state, transitional state and desired future state (Garside, 1998). The commonly applied change management model described by Lewin (1947) described that the process of implementation of change is shaped by the interaction of driving forces and restraining forces for change and that ‘better’ strategies for implementing a change rest on reducing the restraining forces. In the case of the LPS, both types of the forces were identified. While, for example, an urge for improvements in mental health care, enhancing the pharmacy profession and individual link-pharmacists’ professional satisfaction acted as the driving forces, there were a number of restraining forces such as the current structure of community pharmacy practice and the link-pharmacists’ feelings of inferiority, possibly resulting in the lack of courage to be pro-active in contacts with clients and other professionals. In addition, the clients and key workers’ had doubts about the purpose and value of the LPS and there were some structural difficulties related to the LPS. It is further argued that, if implementation of the change is to be successful, the entire organisation must contribute and be involved in implementation of the change and that this includes change strategists, implementors and recipients (Garside, 1998). During the LPS, these would include the health authority (ELCHA) and researcher as the strategists, the link-pharmacists, researcher and key workers as the implementors and the clients and key workers as the recipients. The health authority was involved by making preliminary plans and then commissioning the LPS research project. However, there was no further input from the health authority during implementation, i.e. the intervention phase of the study. Limited contributions from the involved professionals and clients were discussed earlier. Comparing implementation of the LPS to the change management models suggest that implementation of the LPS remained in the ‘transitional phase’. This is evident for example from the fact that some clients started to utilize the LPS towards the end of the intervention phase. Also, the contacts between the link-pharmacists
and the key workers during the intervention phase of the LPS mainly concerned ‘organisational issues’ such as introducing each other and the client or arranging a meeting. By identifying the restraining forces to the LPS implementation, the research project presented in this thesis provided evidence for the future planning of the community pharmaceutical mental health services. It should be paramount to address these forces and thus to enable full implementation of the LPS or a similar service.

An analogy can also be found between future implementation of community pharmaceutical mental health services and applying research evidence as a basis for a change in practice. It was suggested that there are certain features that interventions should contain to enhance acceptance of the evidence by professionals (Blenkinsopp et al. 1998). The features include ownership, relevance/applicability, credibility and access. Future implementation of community pharmaceutical mental health services will need to address these issues since the negative effect of these features, or the lack of them, on implementation of the LPS has been identified during the LPS evaluation. Implementation of the LPS faced difficulties due to the lack of ownership of the scheme by the key workers and also the link-pharmacists. More intensive involvement of these professionals in the planning and implementation of the community pharmaceutical mental health services could help this issue. Also, a perceived lack of relevance of the LPS and a lack of access due to the poor communication flow between the professionals had direct negative effect on the LPS implementation. The need for thorough promotion of the pharmacy profession, pharmacists’ roles and offered services to other professionals was suggested earlier in this discussion.

11.2.6 Need for community pharmaceutical mental health services
The original belief that the clients needed an LPS-like service proved less straightforward. One of the key workers’ explanations of the low recruitment response to the LPS was that they did not have many clients likely to use it, thus suggesting that there may be only few clients for whom the service would be needed. Furthermore, the LPS data suggested that there may be a limited need for the provision of drug-related information to clients. The link-pharmacists and the non-LPS pharmacists in the Context study reported that people with mental health problems infrequently inquired about their medication. This
corresponds with findings of Maslen et al. (1996) within which 81% (n=236) of community pharmacists stated that they were asked for advice never or less frequently than once a month. They also reported that the lack of contact with people with mental health problems was a constraint to the provision of services for them. Such findings, however, do not reflect the findings of Donoghue (1993) and the study carried out by ELCHA (Duggan, 1996), both of which identified a lack of drug-related information among participating people with mental health problems. The findings of the above three studies and the Context study indicated that, on one side, there is a reported lack of information among people with mental health problems and, on the other side, there is a limited level of enquiries to community pharmacists from clients. One of the reasons could be that the clients are not aware that they can do so. The community pharmacists were not always perceived as able to advise on prescribed medication by patients, thus the clients may consider it inappropriate to ask community pharmacists about their medication (Evans and John, 1997; John et al. 1997), as also identified in the LPS. Consequently, the clients’ need for drug-related information remains undetected by the pharmacists. This may contribute to the pharmacists being passive in the provision of drug-related information to people with mental health problems in their pharmacies and so preventing these people (and other sectors of the public) becoming aware of and utilizing the community pharmacists’ advisory role. It, however, should be also considered that the studies investigating clients’ needs for drug-related information might not provide accurate results. Donoghue (1993) used a structured tool to interview 81 users of community mental health services in Liverpool. The author did not explain how the sample was drawn and he did not describe the sample. Such information would be helpful as the findings were rather extreme with high percentages of people with mental health problems expressing a need for drug-related information. The data were also collected in a limited geographical area and caution must be taken in terms of generalisation. In the ELCHA study (Duggan, 1996), 14 community pharmacists interviewed 179 persons with mental health problems in the ELCHA area using an originally designed structured tool.

Some data from the LPS suggested that there was a need for community pharmaceutical mental health services, including provision of drug-related information.
The diverse range of potential pharmacists' roles as identified by the key workers and the clients may be an indicator of the need for pharmacists' involvement in CMHC. The interventions made by the link-pharmacists during the LPS were not frequent but highly valued by those involved. Therefore, it should be considered whether the service should be provided even for a low number of clients.

The need for provision of drug-related information was supported by the key workers who reported that the clients had a low level of knowledge about their medication and the clients' themselves, who had appreciated the provision of drug-related information by the link-pharmacists.

The majority of the clients responded negatively when asked whether they were missing any services within their community mental health care. However, the clients decided to take part in the LPS, which aimed to improve community mental health care, many with the aim to gather more information about their medication.

The key workers were of different backgrounds and the data suggested that they had different levels of medication-related knowledge. However, they were the professionals within community mental health care that were likely to be approached by clients for information about medication because of their close and frequent contact with their clients. Key workers reported that specific advice concerning medication might not be available immediately to those clients whose key worker was a social worker. Therefore, it may be helpful if this was addressed through the involvement of pharmacists.
11.3 Model of a community pharmaceutical mental health service

Based on the findings from the LPS, the following recommendations can be made about the provision of a community pharmaceutical mental health (CPMH) service provided in the ELCHA area by community pharmacists to people with mental health problems in conjunction with community mental health teams. The model represents desirable design features as identified from the LPS, including the provisions required to eliminate the restricting forces identified during the provision of the LPS. In order for the model to be fully functional, changes to the current practice in community pharmacies would be required and these are summarised at the end of the model.

- CMHC services should be planned jointly by the involved professionals and should consider the special needs of individual clients, at a local level.

It is important that implementation of community pharmaceutical mental health service is based on joint planning by the involved professionals and official bodies so that all professional stakeholders are fully aware of the available service and their roles in its implementation. Joint planning would also enhance a sense of ownership of the proposed service among the involved professionals. Although the service would have the common features listed in this model, due to variations in the clients’ approaches to their treatments and care, aspects of the CPMH service will have to be customised for each client according to their individual needs.

- Enrollment of the clients to the CPMH service must be voluntary but available to all clients with an identified need.

Every client, for whom the need for specialised pharmaceutical services was identified during the CPA process, should be offered a link with a community pharmacist. If the client decided to use the service, the client would register with the community pharmacist of his or her choice.

- The community pharmacists should monitor the clients on their medication, including their general health and the frequency with which they collect their prescribed medication, and maintain the clients’ medication histories.

During contacts with their clients, the community pharmacists will continuously monitor their clients’ mental and general health and, if appropriate, they will contact a relevant
professional to discuss/refer any issues, for example changes in the clients’ general health or compliance with collection of medication. If the relevant professional was not the client’s key worker, a system must be in place so that the key worker is consequently informed about the issue.

- The community pharmacists should provide drug-related information to the clients. Drug-related information should be available to the clients at the onset of illness, when a (new) medication is prescribed or a change of medication made or any other time if requested by a client. Information should be available to the clients at the time of dispensing. If needed or if appropriate, drug-related information should be provided to the clients more than once. Drug-related information should be available to the clients verbally, in an easily comprehensible language and in writing at the same time. Information regarding over-the-counter medication, minor ailments, non-mental health medication and conditions should also be available to the clients. If consented by the clients and if requested, the client-specific medication-related information should be made available to the clients’ families. All other general drug-related information should be available to the family if confidentiality of the clients was preserved.

- The community pharmacists should be involved in managing the drug treatments of their clients.

Community pharmacists with appropriate knowledge should be involved in decision making about their clients’ treatment either through advice to prescribers or directly, through managing repeat prescriptions or other forms of direct prescribing.

- The community pharmacists should provide medication supply and administration-management services to their clients.

As part of the CPMH service, emergency supply of medication, collection of prescriptions from surgeries and provision of monitored dosage systems or other forms of alternative dispensing should be available to clients. Deliveries of medication directly to the clients’ homes and home visits by the community pharmacists should be provided or arranged if appropriate, after agreement with the clients’ key workers and if it was safe to do so. It was identified that not all the key workers were fully aware of the available forms of alternative dispensing. Therefore, the community pharmacists could increase awareness of the CMHTs’ professionals about these alternatives.
The community pharmacists may provide additional services. There were some features of the CPMH services that were found useful rather than necessary for its provision. These could be applied if the providers considered them relevant for the local circumstances or for individual clients. These included: provision of information to the clients about their mental health condition, opportunity for the clients to discuss non-medication related issues with the community pharmacist, opportunity to access the service out of hours and provision of medication-related information and education to other professionals by community pharmacists.

- The service should be provided from a local pharmacy that, where possible, is known to the client.

The importance of a convenient location of the community pharmacy and the advantage of familiarity of the clients with their community pharmacists were emphasised. In order to provide this, the clients have to be allowed to choose the community pharmacist for provision of CPMH services. If the community pharmacist was new to the client, then the client should be introduced to the community pharmacist by his or her key worker. It was suggested, that this could take place in a formal setting other than the community pharmacy.

The community pharmacies have to provide an adequate level of privacy and, if requested by the clients, a private consultation area. Provision of the CPMH service by telephone was also reported to increase the feeling of privacy for some clients as well as to increase the accessibility of the service. A system of verification of the client’s identity would be required if the service was provided by telephone.

- Special provisions should be made for the clients who cannot attend the community pharmacy.

Relevant provisions, for example home visits and home deliveries should be made for those clients who are housebound or have other problems, e.g. agoraphobia, if appropriate and based on the recommendations made above.

- The service has to be provided at the clients’ own discretion or upon invitation, if appropriate, reasonably quickly and with time for discussion.

It should be the clients’ own decision when to visit the community pharmacist for CPMH services, without the need for an appointment. However, for example, if after agreement with the key worker, it was decided that a review or medication-related advice was needed,
the community pharmacist would invite the client for a visit. Except under the provisions of the Mental Health Act, it would still be the client's choice whether to accept or decline this invitation. When a client attends a consultation, it is important that the community pharmacist is available as soon as possible during working hours and provides sufficient time for each consultation with the client. Under normal circumstances, meetings between the community pharmacists and clients should be informal. However, when appropriate and based on arrangement with the key worker, the consultation may be carried out in a formal way.

- The community pharmacists will need to have access to clients’ condition and treatment-related information, be aware of the overall care of their clients and be involved in the planning of the pharmaceutical part of this care.

The pharmacists will need to have access to all relevant client-related information, including personality characteristics, diagnosis/medical history and medication history and persons and professionals involved in the client’s care. The information should be continuously updated; a summary of relevant information from the CPA meetings would be a suitable means for the provision of necessary client-related information. When the client is first assigned to the community pharmacist for the CPMH services, verbal communication or a meeting between the key worker and the community pharmacist would be important to clarify all relevant client-related information. An up-to-date list of the medication taken by the clients, including OTC medication could be updated via the clients themselves. However, since the clients cannot be expected to collect or buy all their medication from the community pharmacy providing the CPMH services, it would have to be arranged so that the relevant information, for example about medication dispensed elsewhere, was provided to the community pharmacist with whom the client was registered for the CPMH services. Confidentiality of all client-related information must be always secured. Participation of the community pharmacists in their clients’ CPA process may enable the pharmacists to be involved in the planning of the pharmaceutical care of these clients.

- The clients’ families may be involved in the service if the clients’ confidentiality is preserved.

The family members could provide community pharmacists with information about the
clients’ well-being, compliance with medication etc. Also, the family could be invited to use the community pharmacists’ CPMH services on the prerequisite that no client-specific information would be revealed without the clients’ consent.

- Involvement of high number of community pharmacists would be required to satisfy the need for easy accessibility to the CPMH service.

It was discussed how many community pharmacists should be involved in the CPMH service provision or whether it should be exclusive to a limited group. The link-pharmacists argued that it may be difficult to provide remuneration for the service if there are many community pharmacists involved and also that it might result in too low numbers of clients under the care of one pharmacist. However, issues such as the opportunity for the clients to choose their CPMH service community pharmacist and the need for convenient locations of the CPMH service community pharmacists suggest that as many as possible community pharmacists should be involved.

- Early establishment of interprofessional communication and cooperation is fundamental and should be achieved as soon as possible.

Individual professionals’ roles in the service provision have to be explicitly defined, understood and accepted by the involved professionals. Joint courses for the community pharmacists and other mental health care professionals and interprofessional meetings would enhance the development and maintenance of the interprofessional communication and cooperation. The meetings should be regular at the planning and early implementation stages of the service. Explicit definitions and explanations of the pathways of communication are equally important to establish and maintain communication.

- Special provisions will be required for the above model of the service to be fully functional and a considerable period of time will be needed for it to become established.

To enable the community pharmacists to fulfill the roles of the CPMH service community pharmacists, changes to current community pharmacy practice would be required as well as special remuneration and training of the community pharmacists. The community pharmacists need to be freed from dispensing roles to create time for provision of the CPMH services, and allowed to leave the premises to provide opportunities for the provision of roles out of pharmacies. The community pharmacists should be provided with
remuneration for the provision of the defined CPMH services. The community pharmacists would be expected to have sufficient knowledge in the field of mental health. Therefore, training would have to be provided to the community pharmacists on mental health medication and the system of provision of CMHC. There was no agreement in the consensus development panels (Part 2) data between the key workers and link-pharmacists on whether or not the community pharmacists would need special training on dealing with PMHP. Whilst the link-pharmacists were all in favour of such training, some key workers would only support training regarding the risks associated with the provision of services to PMHP and this issue needs further debate.

The pharmacy profession and available services have to be promoted to other professionals and to the public, and this should be done by the pharmacists themselves and responsible official bodies.

Based on the data from the LPS, some suggestions can also be made about how the community pharmaceutical mental health services could be provided through liaison between community and hospital pharmacists.

11.3.1 Provision of community pharmaceutical mental health services in cooperation with hospital pharmacists

Cooperation of community and hospital pharmacists on the provision of CPMH services could ease some problems that the link-pharmacists faced, such as access to clients' background medication and condition-related information, access to other professionals or participation at multidisciplinary meetings. These issues are discussed below.

- Hospital pharmacists could attend interprofessional and CPA meetings and the same option should be available to the community pharmacists.

Currently, hospital psychiatric pharmacists are in contact with hospital staff and it may be assumed that they have established relationships. This could ease the acceptance of the pharmacists' participation at multiprofessional meetings. In Scotland, schemes existed within which hospital pharmacists participated as members of CMHTs, accepting referrals from other team members and contributing to the medication treatment of the CMHT patients. They also participated at multiprofessional meetings (Kettle et al. 1996). It was
emphasised at the Interprofessional Panel, that the community pharmacists should be given an opportunity to attend such meetings.

- Hospital pharmacists could be involved in identifying the clients eligible for the service and linking them, in cooperation with other professionals involved in the clients' care (CMHTs, GPs, psychiatrists), to the community pharmacists.

Interface between hospital and community pharmacists and seamless continuity of care after discharge is one of the currently prominent topics within the pharmacy profession (Chewning and Schommer, 1996). Schemes have been carried out within which relevant information was shared between secondary and primary care (Pegrum, 1995; Duggan et al. 1998; Dvorak et al. 1998; Kuehl et al. 1998; Brookes et al. 2000). The same principles could be applied to CPMH services.

- Excellent communication would have to be established between hospital and community pharmacists in order for the community pharmacists to be continuously informed about the clients' care, interprofessional and any other relevant issues.

Good communication was perceived as a core element of successful cooperation between the link-pharmacists and CMHT professionals during the LPS. Equally, established communication would be required for successful cooperation between the hospital and community pharmacists. Effective communication can facilitate awareness about the clients' progress, changes to the clients' medication and changes to the clients' care.

Within the schemes in Scotland described above, the hospital pharmacists had access to patients' condition and treatment-related information (Kettle et al. 1996). Thus, the hospital pharmacists could, based on an agreed protocol, ensure the provision of relevant information to the community pharmacists.

- The hospital pharmacists could, if necessary, serve as a source of specialised medication-related information for the community link-pharmacists.

Some link-pharmacists believed that it was possible that not all the community pharmacists would possess adequate specific mental health medication-related knowledge. The community pharmacist who provided drug-information services to clients of two CMHTs in the study by Ewan and Greene (2000) reported that he did not always feel confident in answering the clients' queries and he referred some clients to a specialised telephone helpline. The lecture on psychiatric medication given to the link-pharmacists during their
training day by a psychiatric hospital pharmacist was well accepted. This suggests that the hospital pharmacist’s role as a reference source and educator for the community pharmacists, could be valuable.

- The hospital pharmacists could secure provision of the drug-related information to clients at the onset of illness.

It was confirmed by the data from the LPS that there was a need for provision of drug-related information to the clients at the onset of their illness. Therefore, for the clients who were admitted to the hospital, it seems logical to suggest such a role to the hospital pharmacists who are involved in the clients’ hospital treatment and have specialised medication-related knowledge. A similar model was applied, for example, during initiation of treatment with warfarin when a hospital pharmacist and specialised nurses designed and delivered educational sessions for each outpatient who was initiated on treatment with warfarin (Personal communication, Miss Manisha Madhani, BPharm, MRPharmS, Clinical Pharmacist, Saint Bartholomew’s Hospital, London).

- The hospital pharmacist could provide drug-related education and information to CMHTs.

The key workers expressed the need for more comprehensive knowledge of medication. It was commented that, currently, there was no ongoing education available that focused on medication. The Interprofessional Panel agreed that the education of CMHTs by pharmacists was a possible component of a future CPMH services. Some key workers reported that they used hospital pharmacists as a source of drug-related information. Therefore, it can be suggested that the hospital pharmacists should provide education to CMHT members, especially if there were other forms of liaison with the teams already in place, as discussed above.

- Existence of community CPMH service pharmacists would be needed to ensure easy accessibility of the service.

The easy accessibility of the community link-pharmacist played an important role during the LPS. The accessibility of link-pharmacists was perceived as an important feature of the LPS during the interviews with individual participants as well as during the Clients and Interprofessional and Interprofessional Panels. Therefore, the existence of community link-pharmacists would remain important.
11.4 Conclusions

The research project presented in this thesis evaluated one model of a pharmaceutical mental health care service and provided recommendations for the future planning of community pharmacists' roles in this specific and prioritized field of health care. The White Paper 'Saving lives: Our healthier nation', the recent revision of the Mental Health Act 1983 and the National Service Framework for Mental Health are evidence Government’s interest in this field of health care. Based on the National Service Framework, the Royal Pharmaceutical Society of Great Britain produced practice guidance on the care of people with mental health problems. The LPS presented in this thesis matched the Government’s long-term plans for the development and modernization of mental health services and the RPSGB’s aims to develop pharmacists’ roles in this field.

The LPS results showed that community pharmacists can make a positive contribution to the care of people with severe mental illness by providing them with an easily accessible professional, medication-related service, by supporting them with medication-related information and through involvement in their medical treatment. A further effectiveness study is needed to confirm these findings at a statistical level.

The research project presented in this thesis involved both providers and users of the service: community pharmacists, clients and members of community mental health teams. All these parties were involved in data collection and their perspectives were considered in the analysis and interpretation of the results, thus providing a uniquely comprehensive picture of the service. Importantly, the respondents identified a number of issues hindering the implementation of the LPS within the current circumstances of community pharmacy practice and community mental health care. By involving the three different types of respondents it was possible to explore these factors from the perspectives of service providers as well as service users and to make recommendations for changes based on these different perspectives. Findings from the LPS research project confirmed previous research, which had identified difficulties related to community pharmacists’ involvement in extended roles. However, the LPS summarized these within the specific context of the LPS.
Most of the identified problems can be resolved and changes implemented in a future CPMH service.

- Lack of communication and cooperation between the link-pharmacists and CMHTs was identified as a prominent problem by the professionals. Joint meetings and training are a suitable means of encouraging cohesion between the professionals. As this will require organization, appointment of a coordinator at a health authority or primary care trust level may be needed. The appointment of a coordinator would also be justifiable in terms of the overall management of the service.

- Financial reward to pharmacists for the provision of the service is needed. A CPMH service could be designed as a service package provided by community pharmacists and purchased by health authorities or primary care trusts under the recommendations of the NHS Plan for Pharmacy. The service should include 'main' services that would be common to all CPMH services and could contain 'additional' services negotiated on a local level between pharmacists, CMHTs and coordinators. Involving the clients in this process would be valuable.

- Hospital pharmacists should be involved in the service provision. They could assist with linking the clients with community pharmacists, take responsibility for the clinical roles at a CPA level and for transfer of clinical information between CMHTs and community pharmacists.

- Issues related to confidentiality, especially what client-related information would be shared and the process of transfer of the information, should be specified in the description of the CPMH service package. This description should be available to all concerned, including the clients.

Other identified problems will only be resolvable on a long-term basis.

- Promotion of community pharmacists to other professionals and members of the public is essential and will require the involvement and support of official bodies.
• Revision of community pharmacy practice and amendments to it, such as changes to the medication supply supervision requirements and implementation of community pharmacists’ roles in prescribing, will make a vital contribution to establishing the community pharmacists’ roles in community mental health care.

• The problem of the lack of privacy in community pharmacies is known. It was also prominent in the LPS data. Separate consultation areas should be available although its use may not be always required. The importance of this issue to the clients must be reinforced with pharmacists.
References


References


References


Department of Health and Social Security (1975) Better Services for the Mentally Ill, London: HMSO.


References


References


References


House of Commons (1990) National Health Service and Community Care Act, HMSO, London


References


Service User Advisory Group (1999) Developing a strategic framework for mental health in London. Core values - 'Telling it as it is'.


Appendices
Appendix 1

Part 1 - Pre-intervention phase - Structured Questionnaire
Link-pharmacists
and
The Context study - Non-LPS pharmacists
The care for people with mental health problems living in the community is often shared. There are discussions about the need for communication between professionals caring for this client group. I would like to find out the level of cooperation between health care professionals in the community, and the level of your involvement in community mental health care.

The questionnaire comprises ‘open-ended’ questions. When answering them, please be as open as possible and express your personal opinion or experience.

I would like to assure you, that all data obtained from this questionnaire will be treated as strictly confidential and no individuals will be identifiable in the final report.

For purposes of this study, people with mental health problems are defined as those diagnosed in any of following World Health Organisation’s classification (ICD-10) of mental disorders in primary health care categories:

- F20 Chronic psychotic disorder
- F31 Bipolar disorder
- F32 Depression
- F40 Phobic disorder
- F41.0 Panic disorder
- F41.1 Generalised anxiety
- F41.2 Mixed anxiety and depression

or, defined as those being dispensed British National Formulary drug categories:

- 4.2 Drugs used in psychoses and related disorders
- 4.3 Antidepressant drugs

If you have any queries, please do not hesitate to contact me on 0171 - 753 5956.

Thank you for your cooperation.
In the first part of the questionnaire I would like to find out what services and what information you provide to people with mental health problems in your pharmacy. Known (in the questions below) means that you are confident that these persons belong to categories listed above.

1. What current service(s) do you provide for known people with mental health problems (as defined above) when they visit your pharmacy? Please tick all services you provide.

- Drug dispensing (including OTC) ............................................................... 01
- Consultation about the dispensed drugs (including OTC) .......................... 02
- Provision of information leaflets ............................................................... 03
- Non-drug related consultation ................................................................. 04
- Please specify:

  Other ........................................................................................................... 05
  Please specify:

2. Do you provide any other special service(s) (that you have not mentioned so far) to individual people with mental health problems (e.g. dosett boxes)?

   Yes ................................... 01
   Description:

        No ..................................... 02

3. Do you REPEATEDLY offer any consultation to any person with mental health problems IN ADDITION to consultation while dispensing? (You may have arranged appointments, or another form of agreement with any person with mental health problems.)

   Yes ................................... 01
   Please describe:

        No ..................................... 02  Go to Qu. 5

4. How many clients have used this kind of consultation over the last month?

   _____ clients
5. What sort of information do you give to people with mental health problems (as defined before)?

A) Information on medicines given for psychiatric diagnoses .......................... 01
B) Information on medicines for non-psychiatric diagnoses ......................... 02
C) Minor ailments ........................................................................................ 03
D) Topics not directly related to medicines (e.g. job, household, relationships, leisure time etc.) ................................. 04
Please specify:

E) Other .................................................................................................... 05
Please specify:

6. Thinking only about A & B from previous question (info on medicines...), what kind of information do you provide?

Tick all information you provide.

Indications .................................................................................................. 01
Side effects ................................................................................................... 02
Drug-drug interactions .................................................................................. 03
Other interactions (drug-food, drinks, activities etc.) ................................. 04
Doses of medicines ....................................................................................... 05
Dosage ......................................................................................................... 06
Other ........................................................................................................... 08
Please specify:

7. Who tends to initiate a consultation, you or people with mental health problems?

Pharmacist .................................................................................................. 01
People with mental health problems .......................................................... 02

Comments:
This section is looking at the communication between you and other health care professionals. First, the questions focus on YOU contacting members of community mental health teams.

COMMUNITY PHARMACIST ➔ COMMUNITY MENTAL HEALTH TEAM

8. In the context of mental illness, and community care of people with mental health problems do YOU ever contact any member of community mental health teams in any professional matter? Please specify how often. Use the space below lines in case you are in contact with more than one professional. Use the space at the end of the questionnaire if you need to.

<table>
<thead>
<tr>
<th>Professional</th>
<th>Regularly (Specify how often: once/week, once/month...)</th>
<th>Occasionally / accidentally (Not able to specify frequency)</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant psychiatrist</td>
<td>1) ___________________________</td>
<td>□</td>
<td>□</td>
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<tr>
<td></td>
<td>2)</td>
<td>□</td>
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</tr>
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<td></td>
<td>3)</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Community psychiatric nurse (CPN)</td>
<td>1) ___________________________</td>
<td>□</td>
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<td></td>
<td>2)</td>
<td>□</td>
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<td></td>
<td>3)</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Social worker</td>
<td>1) ___________________________</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Clinical Psychologist</td>
<td>1) ___________________________</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>1) ___________________________</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Community support worker</td>
<td>1) ___________________________</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>1) ___________________________</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
9. **How do you contact these professionals?** (Tick all ways of the contact that you use.)

<table>
<thead>
<tr>
<th>Professional</th>
<th>by telephone</th>
<th>personally</th>
<th>in writing</th>
<th>other (please specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant psychiatrist</td>
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<td></td>
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<tr>
<td>CPN</td>
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<tr>
<td>Social worker</td>
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<tr>
<td>Occupational therapist</td>
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</tr>
<tr>
<td>Community support worker</td>
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<td></td>
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<tr>
<td>Other (please specify)</td>
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</tr>
</tbody>
</table>

10. **What are the most common reasons for contacting specific health professionals?**
(Please write your answer to each professional listed below. State up to three reasons.)

Consultant psychiatrist

Community psychiatric nurse (CPN)

Social worker

Clinical psychologist

Occupational therapist

Community support worker

Other (please specify)
In previous questions I have asked about you approaching other community health care professionals. Now I would like to find out whether and how often members of COMMUNITY MENTAL HEALTH TEAMS contact you.

**COMMUNITY MENTAL HEALTH TEAM ➔ COMMUNITY PHARMACIST**

11. In the context of mental illness, and community care of people with mental health problems do you ever RECEIVE contact from any member of community mental health teams in any professional matter? Please specify how often. Use the space below lines in case you are in contact with more than one professional. Use the space at the end of the questionnaire if you need to.

<table>
<thead>
<tr>
<th>Professional</th>
<th>Regularly (Specify how often: once/week, once/month...)</th>
<th>Occasionally / accidentally (Not able to specify frequency)</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant psychiatrist</td>
<td>1) _______________________</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Community psychiatric nurse (CPN)</td>
<td>1) _______________________</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Social worker</td>
<td>1) _______________________</td>
<td>□</td>
<td>□</td>
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<tr>
<td>Clinical Psychologist</td>
<td>1) _______________________</td>
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<tr>
<td>Occupational therapist</td>
<td>1) _______________________</td>
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<tr>
<td>Community support worker</td>
<td>1) _______________________</td>
<td>□</td>
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<tr>
<td>Other (please specify)</td>
<td>1) _______________________</td>
<td>□</td>
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</tbody>
</table>
12. **How do these other community mental health professionals contact you?** (Tick all ways of contact they use to contact you.)

<table>
<thead>
<tr>
<th>Professional</th>
<th>by telephone</th>
<th>personally</th>
<th>in writing</th>
<th>other (please specify)</th>
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</thead>
<tbody>
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<tr>
<td>Occupational therapist</td>
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<tr>
<td>Community support worker</td>
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<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. **What are the most common reasons for these contacts?** (Please write your answer to each professional listed below. State up to three reasons.)

Consultant psychiatrist

Community psychiatric nurse (CPN)

Social worker

Clinical psychologist

Occupational therapist

Community support worker

Other (please specify)
14. What, in your opinion, are the positive and negative aspects of your contacts with members of community mental health teams?

Positive aspects:

Negative aspects:

Not applicable ........................................... □

15. In general how would you assess the communication between you and other members of community mental health teams in your area? Please express your opinion about the communication by making an X mark anywhere between ‘poor’ - ‘very good’ according to your opinion.

poor _____________________________________________________________________ very good

16. Would you have any comments on your answer?

This section focuses on your training needs (if any).

17. If you were to provide an extended service to people with mental health problems (chronic psychotic disorder, bipolar disorder, depression, phobic disorder, panic disorder, generalised anxiety, mixed anxiety and depression) do you have any training needs.

Yes ......................... 01□
No ......................... 02□ - Go to Qu. 19

18. Please describe them.
Now, to help me classify your answers statistically and preserve anonymity, I would like to ask you a few questions about yourself and the pharmacy.

19. When did you start your practice as a registered pharmacist?
   Year: 19 __ __

20. When did you start working as a community pharmacist?
   Year: 19 __ __

21. What is your job description?

22. Do you have any postgraduate qualification(s) apart from your pharmacy degree?
   Certificate examination ....... 01□
   Diploma ......................... 02□
   MSc/other masters degree ..... 03□
   PhD .............................. 04□
   Other ............................ 05□
   Please specify:
   No ............................... 06□

23. Have you attended any specialised training or courses in psychiatry or the drug treatment of psychiatric diseases?
   Yes ......................... 01□
   No ............................. 02□ - Go to Qu. 25

24. Could you give details of these courses with the year of finishing of each course, please?
   Course Year
   __________________________________ 19 __ __
   __________________________________ 19 __ __
   __________________________________ 19 __ __
   __________________________________ 19 __ __
   __________________________________ 19 __ __
   __________________________________ 19 __ __

25. What is your current commitment in terms of an on-call rota?
26. How many persons of each of following professions are there in the pharmacy you work in?
   No.
   _____ Pharmacist(s) (full time)
   _____ Pharmacist(s) (part time, locum)
   _____ Dispenser(s) / Technician(s)
   _____ Counter Assistant(s)
   _____ Manager / Supervisor (if this is NOT a pharmacist)
   _____ Other (please specify)
   ________________________________
   ________________________________
   ________________________________

27. Could you state the opening hours of the pharmacy, please?

   Mon ________________________________
   Tues ________________________________
   Wed ________________________________
   Thur ________________________________
   Fri ________________________________
   Sat ________________________________
   Sun ________________________________

28. We would like to inform your future link-patients about the TIME you are most likely to be available for consultation with them. If you have any preferences, please state these below.

   No preferences .................. 01 □
   Preferences as follows: ... 02 □
   ________________________________
   ________________________________
   ________________________________
   ________________________________
   ________________________________

29. Please use the space below for any further comments you may have.

THANK YOU VERY MUCH FOR YOUR HELP.
Researcher’s comments:

30. Sex of the respondent

Male ..................... 01 □
Female ................... 02 □

31. Any other comments:
Appendix 2

Part 1 - Pre-intervention phase - Structured Questionnaire
Key workers
The care for people with mental health problems living in the community is often shared. There are discussions about the need for communication between professionals caring for this client group. I would like to ascertain the level of communication you or your team may have with community pharmacists. I am also interested in the services offered to your clients from the community pharmacists.

The questionnaire comprises 'open-ended' questions. When answering them, please be as open as possible and express your personal opinion or experience. I would like to assure you, that all data obtained from this questionnaire will be treated as strictly confidential and no individuals will be identifiable in the final report.

For purposes of this study, people with mental health problems are defined as those diagnosed in any of following “World Health Organisation's classification (ICD-10) of mental disorders in primary health care” categories:

- F20 Chronic psychotic disorder
- F31 Bipolar disorder
- F32 Depression
- F40 Phobic disorder
- F41.0 Panic disorder
- F41.1 Generalised anxiety
- F41.2 Mixed anxiety and depression

or, defined as those patients being dispensed British National Formulary drug categories:

- 4.2 Drugs used in psychoses and related disorders
- 4.3 Antidepressant drugs

For purposes of this study, the client is defined as a person with mental health problems (as defined above) in the care of a community mental health team.

If you have any queries, please do not hesitate to contact me on 0171 - 753 5956. Thank you for your cooperation.
First, I have two questions about your community mental health team:

1. Could you list below, please, what other professions are involved in the community mental health team of which you are a member?

   
   
   
   
   
   

2. How often do you meet as a team?

The following questions ask about the communication between you and community pharmacists. First they focus on YOU contacting a community pharmacist.

KEY WORKER ➔ COMMUNITY PHARMACIST

3. In the context of mental illness and community care of people with mental health problems (as defined above) do YOU ever contact any community pharmacist with any client-related or other professional problem?

   Yes ........................................ 01 □
   No ...................................... 02 □  - Go to Qu. 4

3a. Please specify how often and with how many community pharmacists you are in contact with.

   Occasionally (not able to specify frequency) ...................... 01 □
   Number of pharmacists: ______

   Regularly ............................................................................. 02 □
   (Specify how often: e.g. once/week, once/month... on lines below
   Once in fortnight Number of pharmacists: 2):

   Number of pharmacists: ______
   Number of pharmacists: ______
   Number of pharmacists: ______
3b. Could you describe the most common reasons for these contacts (in general words: e.g. delivery of medicines, side effects of medicines, dose of medicines etc.)? 
(Please, write out as many reasons as you want, from one to five.)

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

3c. How do you contact the community pharmacists? (Tick all ways of contact you use to contact them.)

by telephone ............... 01 □
in person ................. 02 □
in writing ................. 03 □
Other (please specify) ... 04 □

_________________________________________________________________________

_________________________________________________________________________

In previous questions I have asked about you approaching a community pharmacist. Now, I would like to find out whether and how often COMMUNITY PHARMACISTS contact you.

COMMUNITY PHARMACIST ➞ KEY WORKER

4. In the context of mental illness and community care of people with mental health problems do you (as an individual key worker) ever RECEIVE contact FROM a community pharmacist, with any client-related problem?

Yes .................. 01 □
No .................... 02 □  - Go to Qu. 5

4a. Please specify how often and how many community pharmacists contact you.

Occasionally (not able to specify frequency) ...................... 01 □

Number of pharmacists:______

Regularly ......................................................... 02 □
(Specify how often: e.g. once/week, once/month... on lines below
Once in fortnight Number of pharmacists:______)

_________________________________________________________________________

Number of pharmacists:______

_________________________________________________________________________

Number of pharmacists:______

_________________________________________________________________________

Number of pharmacists:______
4b. **Could you describe the most common reasons for these contacts** (in general words: e.g. delivery of medicines, side effects of medicines, dose of medicines etc.)? (Please, write out as many reasons as you want, from one to five.)

- 
- 
- 
- 
- 

4c. **How do the community pharmacists contact you?** (Tick all ways of contact they use to contact you.)

- by telephone ............. 01
- in person .................. 02
- in writing ................. 03
- Other (please specify) . . 04

- 
- 

5. **What, in your opinion, are the positive and negative aspects of your contacts with community pharmacists (IF APPLICABLE)?**

Positive aspects:

Negative aspects:

Not applicable ................. 

6. **Are there any community pharmacists in contact with your community mental health TEAM?**

- Yes ..................... 01
- No ..................... 02 - Go to Qu. 10

7. **How many community pharmacists are in contact with your team?**

_____ community pharmacist(s)
8. Could you describe the contact(s)?

9. What, in your opinion, are the positive and negative aspects of the contacts of your TEAM with the community pharmacist(s) (IF APPLICABLE)?

Positive aspects:

Negative aspects:

Not applicable ................................ □

Now I would like to ask you a few questions about your views on pharmacists' involvement in community mental health care. Please, think about what is HAPPENING CURRENTLY.

10. At the current situation, in the context of care for people with mental health problems, do YOU, personally, think that a community pharmacist is contributing to this care?

    Yes ........................................ 01 □
    No ......................................... 02 □
    Not sure ................................. 03 □

10a. Could you please explain, why you say that?
11. How would you assess the frequency and quality of communication between YOU (as an individual key worker) and community pharmacists? 
If you do not communicate, please tick the box below 
No communication .......... □ 
If you do communicate, please express your opinion about a) frequency and b) quality of the communication by making an X mark anywhere between ‘couldn’t be worse’ - ‘couldn’t be better’ according to your opinion.

a) FREQUENCY of communication 
worst possible ........................................................................................................ best possible 

b) QUALITY of communication 
worst possible ........................................................................................................ best possible 

12. Reasons for your answer:

13. How would you assess the frequency and quality of communication between your community mental health TEAM and community pharmacists? 
If the team does not communicate, please tick the box below 
No communication .......... □ 
If your team does communicate, please express your opinion about a) frequency and b) quality of the communication by making an X mark anywhere between ‘couldn’t be worse’ - ‘couldn’t be better’ according to your opinion.

a) FREQUENCY of communication 
worst possible ........................................................................................................ best possible 

b) QUALITY of communication 
worst possible ........................................................................................................ best possible 

14. Reasons for your answer:
When clients come to a community pharmacy to collect their medicines, they will usually receive an advice while their medicines are dispensed. This advice consists of general information on the medicines and how to use them (e.g. dose, frequency and possibly side effects etc.)

15. Are any of your clients repeatedly COUNSELLED by a community pharmacist in addition to the advice described above? (By repeatedly I mean that the consultation is agreed between a client and a pharmacist in some way, but not necessarily precise time intervals)

   Yes ........................................ 01
   No ........................................ 02 □ - Go to Qu. 18
   I don't know .......................... 03 □ - Go to Qu. 18

16. How many of your clients are repeatedly counselled by the community pharmacist(s)? (Please write the number.)

   ____ client(s)
   I don't know .............................. □

17. Would you have any comments on the description of such a consultation?

18. Do any of your clients repeatedly use any other SERVICE (in addition to prescription dispensing and advice connected with dispensing) from a community pharmacist (e.g. compliance aids - e.g. dosett boxes)?

   Yes ........................................ 01□
   No ........................................ 02 □ - Go to Qu. 21
   I don't know .......................... 03 □ - Go to Qu. 21

19. How many of your clients use any such services? (Please, write the number of clients.)

   ____ client(s)
   I don't know .............................. □

20. Please describe this (these) service(s).
To help me classify your answers statistically and preserve anonymity, I would like to ask you a few questions about yourself.

21. What is your profession?

22. When did you qualified (in this profession)?

   Year: 19 __ __

23. When did you start your practice?

   in a community mental health team: Year: 19 __ __
   in this community mental health team: Year: 19 __ __

24. Have you undertaken any post qualification education (postgraduate education, courses...) related to your profession and/or mental health?

   Yes ......................... 01 □
   No ......................... 02 □

25. Would you state what education?

26. What is your recent case load (today's number of clients)?

   _____ client(s)

27. Please use the space below for any further comments you may have.

THANK YOU VERY MUCH FOR YOUR HELP!
Researcher's comments:

28. Sex of the respondent:

    Male .................. 1☐
    Female ................. 2☐

29. Any other comments:
Appendix 3

Part 1 - Pre-intervention phase - Structured Questionnaire
Clients
People may or may not seek information about the medicines they are taking. If they do, there are different places where the information can be found. I have a few questions about these issues. They are no right or wrong answers! Please answer openly. All answers you give will be treated as confidential; no one else than the researcher will have access to your answers; your name will not be revealed on any report.

1. Do you ever want to know anything about your medicines?
   - Yes ............................................................. 01 □
   - No ............................................................... 02 □  Go to Qu. 4

2. If you want to know anything about your medicines, do you go to a CHEMIST for this information?
   - Yes ............................................................. 01 □
   - No ............................................................... 02 □  Go to Qu. 4

   Would you tell me why? Do you have any reason for it (to go to the chemist for the information)?

3. Do you visit the SAME chemist every time for the information about your medicines?
   - Always .................................................... 01 □
   - Mostly yes ................................................ 02 □
   - Mostly no ................................................ 03 □
   - Never ......................................................... 04 □

   Would you tell me why?

4. Do you go to the chemist for any (other) reason (at all)?
   - Yes ............................................................. 01 □
   - No ............................................................... 02 □  - Go to Qu. 6

   Except what you said before, do you receive any other services from the chemist (e.g. dosett boxes - a small box with little compartments that helps to organise your daily medicines, or any other service we did not mention so far)?

5. Where do you get your medicines from?

6. What is this (are these) reason(s)?

7. Do you go to the same chemist every time (for these reasons)?
   - Always .................................................... 01 □
   - Mostly yes ................................................ 02 □
   - Mostly no ................................................ 03 □
   - Never ......................................................... 04 □

8. Except what you said before, do you receive any other services from the chemist (e.g. dosett boxes - a small box with little compartments that helps to organise your daily medicines, or any other service we did not mention so far)?
   - Yes ............................................................. 01 □
   - No ............................................................... 02 □  Go to Qu. 9

9. Would you describe this (these) service(s), please?
Appendix 4

Part1 - Intervention phase - Logbook - Link-pharmacists
Community Pharmacy Mental Health Research Project

CLIENT FORM
Name

Date of birth/age ..........................................................

Address ...........................................................................

Telephone No. .........................................................

Type of accommodation .............................................

Last stay in a hospital
from ............... to .................

Key-worker

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<th>Name</th>
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<th>Telephone No.</th>
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</table>

Profession


Psychiatrist


General practitioner


Other carers & contact person(s)

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<th>Profession/Relation</th>
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433
CLIENT MEDICATION RECORD
Medical History List

**Diagnosis:**

Psychiatric

**Other(s):**


**Allergies (and other warnings):**


**Drug history and recent medication**

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<th>Dose</th>
<th>Started</th>
<th>Discontinued</th>
<th>Indication, comments/ date of recording</th>
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Initial Review of Drug Therapy

Date  

Outcomes

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<th>Drug(s), subject(s)</th>
<th>Nature of the problem (see codes below)</th>
<th>Suggestion</th>
<th>Action taken / Performed changes</th>
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Nature of the problem:
1. untreated indication
2. improper drug selection
3. subtherapeutic dosage
4. overdosage
5. adverse drug reactions
6. drug interactions [drug-drug (D-D); drug-food (D-F)]
7. drug use without indication
8. pharmaceutical problem (modified released tablet needs to be halved etc.)
9. other - please specify

Other observations and suggestions/Comments
Community Pharmacy Mental Health Research Project

PHARMACIST - CLIENT CONSULTATION RECORD
Consultation

Who initiated consultation?

☐ this is an arranged appointment
☐ the client came to collect prescription
☐ the client
☐ the pharmacist
☐ other professional

name .................................................................
profession ...........................................................

1. Evaluation of client's well-being (any change?)

2. The topic(s) of the consultation

<table>
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<tr>
<th>Client's question(s)</th>
<th>Solution</th>
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3. Any other observations and suggestions

4. How long did the consultation take? [ ] minutes

The date of next appointment with the pharmacist
(If any appointment agreed)

5. Did you need to contact the key-worker? Yes ☐ No ☐

If Yes, go to 'Interprofessional Communication Record'.

6. If the key-worker was unavailable, did you need to contact anyone else? Yes ☐ No ☐

If Yes, go to 'Interprofessional Communication Record'.

440
## Consultation

### Who initiated consultation?
- □ this is an arranged appointment
- □ the client came to collect prescription
- □ the client
- □ the pharmacist
- □ other professional: name .......................................................... profession .................................................

### Follow-up From the Last Consultation

1. Has the client visited his/her psychiatrist or GP?
   - Yes □  No □  I don't know (DK) □
   - name ..........................................................
   - profession .................................................
   - Is it as a result of your consultation? Yes □  No □  Not applicable (NA) □

1a. Any change to the client's prescription?
   - Yes □  No □  DK □
   - Is it as a result of your consultation? Yes □  No □  NA □

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2. Has the client visited any other physician?
   - Yes □  No □  DK □
   - (Related to coexisting illness, e.g. asthma, diabetes)
   - name ..........................................................
   - profession .................................................
   - Is it as a result of your consultation? Yes □  No □  NA □

2a. Any change to the client's prescription?
   - Yes □  No □  DK □
   - Is it as a result of your consultation? Yes □  No □  NA □

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3. Have the client visited any other community mental health or social care professional?
   - Yes □  No □  DK □
   - name ..........................................................
   - profession .................................................
   - Is it as a result of your consultation? Yes □  No □  NA □

4. Other comments

   

441
**Recent Consultation**

1. **Evaluation of client's well-being** (any change?)

2. **The topic(s) of the consultation**

<table>
<thead>
<tr>
<th>Client's question(s)</th>
<th>Solution</th>
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</table>

3. **Any other observations and suggestions**

4. **How long did the consultation take?**

   [ ] _______ minutes

**The date of next appointment** with the pharmacist
(If any appointment agreed)

5. **Did you need to contact the key-worker?**  
   Yes [ ]  No [ ]

   If Yes, go to ‘Interprofessional Communication Record’.

6. **If the key-worker was unavailable, did you need to contact anyone else?**  
   Yes [ ]  No [ ]

   If Yes, go to ‘Interprofessional Communication Record’.
INTERPROFESSIONAL COMMUNICATION RECORD
Date

Contact initiated by:
- key-worker
- link-pharmacist
- other professional

Who contacted (if contact made by pharmacist):
- key-worker
- other professional

The way of communication
- telephone
- in person
- written
- other

The nature (reason) of the contact (problem)

The link-pharmacist's recommendation

Date (of recording)

Action taken by the CMHT

The outcome for the client

Comments
In case of any problems or queries or needing further supplies, please contact:

Dita Engová
Centre for Pharmacy Practice
The School of Pharmacy, University of London
29/39 Brunswick Square
London WC1N 1AX

tel.: 0171- 753 5956
fax: 0171- 753 5920
Appendix 5

Part1 - Intervention phase - Logbook - Key workers
Community Pharmacy Mental Health Research Project

LOGBOOK - KEY-WORKER
Community Pharmacy Mental Health Research Project

CLIENT FORM
Community Pharmacy Mental Health Research Project

INTERPROFESSIONAL COMMUNICATION RECORD
### Client

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<th>Name</th>
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### Key-worker

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### Link-pharmacist

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<th>Telephone number</th>
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### Psychiatrist

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### General practitioner

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Date  

Contact initiated by:

☐ key-worker
☐ link-pharmacist
☐ other professional

name .................................................................
profession .........................................................

Way of communication

☐ telephone
☐ in person
☐ written
☐ other ............................................................

Nature (reason) of the contact (problem)

________________________________________________________________________

Link-pharmacist's suggestion

________________________________________________________________________

Other professional(s) contacted

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In case of any problems or queries or needing further supplies, please contact:

Dita Engová

Centre for Pharmacy Practice
The School of Pharmacy, University of London
29/39 Brunswick Square
London WC1N 1AX

tel.: 0171-753 5956
fax: 0171-753 5920
Appendix 6

Part 1 - Intervention phase - Calendar - Clients
### My contacts with the link-pharmacist:

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</table>
Appendix 7

Part 1 - Post-intervention interview schedule - Link-pharmacists
Community Pharmacy Research Project

Interview schedule: Link-pharmacists

Structure
☐ For past 10 months you were a link-pharmacist, could you tell me something about your experience??
☐ After experiencing the LPS - anything you would suggest to do differently?

Delivery
☐ Do you see any constraints to your provision of the service?
☐ How do you perceive the clients, what could you say about your work with them?
☐ Did you utilize your experience in relation to any other client?
☐ Did you utilize your contacts from LPS in relation to any other client?
☐ When you agreed to participate in the project, did you have any expectations as to what you can gain for yourself?
☐ Any other expectation (for clients)?
☐ Contacts with KWS - how was it to work with them, how easy/not easy?
☐ How would you describe the level of communication you had with CMHTs before the project? Has this changed in any way?
☐ One of the aims was to help you to create or to improve contacts with CMHTs was this achieved? Working relationships.
☐ Where do you see your role in a CMHC?
☐ Do you feel more as a member of a CMH care?
☐ Other ways of providing pharmaceutical services to PMHP?
☐ Cooperation on prescribing/CPAs.

Context

ID: .........................

Date: .........................

Time:
Start: .........................
Finish: .........................

Gender
M ☐
F ☐

458
Appendix 8

Part 1 - Post-intervention interview schedule - Key workers
Community Pharmacy Research Project

Interview schedule: Key workers

☐ What was known about the project over the past x months?
☐ In contact with LPs?
☐ Expectations from the project at the beginning of the project.
☐ Intention to contact a PH with medic-related problems related to other CLs?
☐ Lack of information/explanation among PMHP?
☐ Describe pharmacists as a profession. How have you perceived a CP? Has your perception changed during the project? Has the project influenced perceptions?
☐ Is there a role for a community pharmacist?
☐ How would you describe the level of communication you had with pharmacists before the project? Has it changed in any way?
☐ Other ways of providing pharmaceutical services to PMHP?
☐ Was it a problem for the clients to go to an LP to introduce themselves - what to do about it?
☐ The sources of drug-related professional information?
☐ Medication-related education?
☐ Feasibility of feeding back on action taken after a link-pharmacist's suggestion?
☐ Cooperation on prescribing/CPAs

**Context**

ID: .................................

Date: .................................

Time:
Start: .................................
Finish: .................................

Gender
M □
F □

460
Appendix 9

Part 1 - Post-intervention interview schedule - Clients
Community Pharmacy Research Project

Interview schedule: Clients

Introduction
I have a list of topics that I would like to discuss with you. Therefore, I will look sometimes in my notes. I don’t want you to think that I am not listening.

Do not hesitate to talk about both - positive and negative aspects of your experience with the LPS. What you say is confidential and it will be only me who will know what specifically you said. It is extremely important and helpful for us if we had your honest opinions, because these will be used when designing this or similar kind of service in the future. We want to develop a service that will be helpful for you and other people. I think that the best way how to do this is to base decisions on people’s opinions and experience.

<table>
<thead>
<tr>
<th>Gender</th>
<th>M</th>
<th>F</th>
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</thead>
<tbody>
<tr>
<td>Ethnicity</td>
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<td>B</td>
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<td>Accommodation alone</td>
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</table>

DOB

Dg
**Delivery - Pharmacist**

- **Professionalism and knowledge**
  - Ability to listen to you and to understand your problems
  - The personal manner (how did you feel about the LP as a person?)
  - Knowledge of the medical history (How important was it for you that the LP new what medication you are on?)
  - Professional knowledge and competence (How did you feel about what the chemist knew?)
  - Did you understand the LP when s/he was explaining things to you?
  - How satisfied were you with the way the chemist answered your questions? Did the chemist answer your questions?

- **Time**
  - How were your meetings with the LP organised? Could you just pop in or did you need to make an appointment first? How did you feel about it?
  - Willingness to see the client (If you just popped in, how long did it take before the LP could or was willing to see you? How did you feel about it?)
  - Waiting time (Did you have to wait or did the pharmacist see you straightaway?)
  - Possibility of obtaining convenient appointment (If you had to make an appointment, how was it done?)
  - Punctuality of the LPs (If you had an appointment, did the LP stick to the agreed time or did you have to wait?)
  - Generally, if you think about your meetings with your LP, how do you feel about the time that the LP spent with you during these meetings?
  - Emergency or urgent need (Have you ever used the LP’s service urgently or in emergency? How did it work?)
  - Opportunity of being followed-up by the same pharmacist

**Structure**

- It was up to you to go to the pharmacy to see the LP, how did this suit you?
- People have different preferences as to where they want to discuss their medication and other issues related to their illness. How did coming to the chemist suit you? How else could we arrange this kind of a service? Any other way preferred?
- Where did you usually talk to the PH? Which part of the pharmacy? How did it suit you? Appearance, comfort level and physical layout of the PH
- Location and accessibility
- Did you know (the LP) before you started the scheme? How was it to go there for a first time?
- Opportunity to choose a pharmacist (Was it a problem that you were given a pharmacist? Would you have preferred to choose one? Should you choose one, what would be your criteria?)

**Overall Satisfaction**

- Effect of the services to help you to stay well and to prevent relapse
- The amount of help you received
- How the service helped you in your life?
- Help to deal with problems

**Information**

- Helping you improve your knowledge about medication/illness. (How helpful the service was in providing information about medication?)
- Did you expect that a chemist would be able to help you in this way before you entered the LPS?
- Is there anything else that a chemist can help you with? What else could a chemist do for you?
- Info primary or secondary help? What was your main reason for going back each time? Will you be going there again?

**Delivery - General**

- What have you disliked most (liked least) on the service? What have you liked most on the service? Confidentiality and respect to your rights as an individual?
- How could we improve the service?
Community Pharmacy Research Project

Interview schedule: Clients

Questions for those who did not go to the LP or very rarely

☐ What was your perception of a CP?

☐ When you agreed to participate in this project, what did you expect to gain from it?

☐ What kept you off coming to the pharmacist?

☐ What kind of a service is missing from the care you are receiving?

☐ What could we do differently so that you wouldn’t hesitate to be in touch with the chemist?

☐ Pharmacist present at CPA

☐ Pharmacist involved in prescribing

☐ Ever get to the situation that you urgently needed but was not able to get in touch with professionals? Did you think of a pharmacy?

☐ How often do you see professionals? Is it sufficient?
Appendix 10

Part 2 - Consensus development panels
Table of Topics - Clients and Interprofessional Panel
## Community Pharmacy Research Project

### Consensus Development Panels

### Topics for discussion - Clients & Interprofessional Panel

<table>
<thead>
<tr>
<th>Topic</th>
<th>Important</th>
<th>Useful</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The pharmacist assigned to the client to be local.</td>
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<tr>
<td>2</td>
<td>The client to chose the pharmacist.</td>
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<td>3</td>
<td>The client to know the pharmacist.</td>
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<td>4</td>
<td>The pharmacist to know the client.</td>
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<td>5</td>
<td>If the client and the pharmacist don’t know each other, to be introduced by the client’s key worker.</td>
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<td>6</td>
<td>The client and the pharmacist to have or to build up a relationship.</td>
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<td>7</td>
<td>The client to always go to the same pharmacy.</td>
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<td>8</td>
<td>The pharmacist to dispense all the client’s medication.</td>
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<td>9</td>
<td>The client to be seen by the same pharmacist each time.</td>
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<td>10</td>
<td>The pharmacist to be available anytime.</td>
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<td>11</td>
<td>The client to freely decide when to go to see the pharmacist.</td>
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<td>12</td>
<td>The pharmacist to be able to spend time with the client.</td>
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<td>13</td>
<td>The pharmacist to be in touch with the client’s family.</td>
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<td>14</td>
<td>The client to be contacted by the pharmacist (eg. if not in touch for a long time).</td>
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<td>15</td>
<td>Private area in the pharmacy for consultation.</td>
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<td>16</td>
<td>The client to be able to receive the pharmacist’s consultation over the phone.</td>
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<td>17</td>
<td>The pharmacist to be available out of hours.</td>
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<td>18</td>
<td>The pharmacist to have sufficient knowledge (on medication).</td>
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<td>19</td>
<td>Meetings with the pharmacist to be informal.</td>
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<td>20</td>
<td>The pharmacist to use understandable language.</td>
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<td>21</td>
<td>The pharmacist to have access to all important client-related information.</td>
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<td>22</td>
<td>The pharmacist to be in continuous contact with CMHT professionals in order to share all the important information with them, including any observations related to the client’s health and medication.</td>
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<td>23</td>
<td>A copy of a hospital discharge letter or details from a CPA or review meeting to be provided to the pharmacist.</td>
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<td>24</td>
<td>The pharmacist to be involved in decision making on prescribing together with doctors and other professionals involved.</td>
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<td>25</td>
<td>The pharmacist to monitor how the client copes with his/her medication.</td>
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<td>26</td>
<td>The pharmacist to provide the client with information about his/her mental health medication.</td>
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<td>27</td>
<td>The pharmacist to provide the client with information about the client’s mental health condition.</td>
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<tr>
<td>Topic</td>
<td>Important</td>
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<td>28</td>
<td>The pharmacist to provide the same information service to the client's family/carers.</td>
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<td>29</td>
<td>The pharmacist to provide the information to the client when dispensing medication.</td>
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<td>30</td>
<td>The pharmacist to provide information to the client by word of mouth.</td>
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<td>31</td>
<td>The pharmacist to provide written information to the client.</td>
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<td>32</td>
<td>Information about medication to be provided to the client and/or the client's family/carers on the onset of the illness.</td>
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<td>33</td>
<td>Information about medication to be provided to the client as soon as the medication is prescribed or a change made.</td>
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<td>34</td>
<td>Information about medication to be provided to the client repetitively.</td>
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<td>35</td>
<td>The pharmacist to provide help and advise on over-the-counter medication, minor ailments, non-mental health medication and conditions.</td>
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<td>36</td>
<td>The pharmacist to deliver medication or make a home visit if the client is not well.</td>
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<td>37</td>
<td>The pharmacist to provide dispensing-related services (emergency supply, deliveries, collecting prescriptions etc.)</td>
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<td>38</td>
<td>The pharmacist to assist with administration of medicines (dosett box).</td>
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<td>39</td>
<td>The client to be able to have a non-medication related 'chat' with the pharmacist (social point of contact).</td>
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<td>40</td>
<td>The pharmacist to be available after the client is discharged from the CMHT care.</td>
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<td>41</td>
<td>A pharmacy to be focused on professional rather than retail services.</td>
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<td>42</td>
<td>The client to have trust in the pharmacist.</td>
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<td>43</td>
<td>Confidentiality of all information to be secured.</td>
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<tr>
<td>44</td>
<td>The pharmacist's role to be well defined and explained.</td>
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Appendix 11

Part 2 - Consensus development panels
Table of Topics - Interprofessional Panel
Community Pharmacy Research Project

Consensus Development Panels

Topics for discussion - Interprofessional Panel

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<th>Topic</th>
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<th>Useful</th>
<th>Unimportant</th>
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<tbody>
<tr>
<td>1</td>
<td>The service and the individual professionals' roles to be well defined.</td>
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<tr>
<td>2</td>
<td>The pharmacist to have access to all important client-related information.</td>
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<td>3</td>
<td>The pharmacist to be informed about overall client's care with updates on any changes.</td>
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<td>4</td>
<td>The pharmacist to be informed about any changes in the client's medication.</td>
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<td>5</td>
<td>The pharmacist to be in continuous contact with CMHT professionals in order to share all the important information with them, including any observations related to the client's health and medication.</td>
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<td>6</td>
<td>The pharmacist to be a member of a CMHT.</td>
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<td>7</td>
<td>The pharmacist to be present at the CMHT meetings.</td>
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<td>8</td>
<td>(Regular) meetings between CMHT professionals and pharmacists.</td>
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<td>9</td>
<td>The communication concerning the client to be mediated via the client's key worker (as opposed to directly to an appropriate professional).</td>
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<td>10</td>
<td>(Regular) meetings between the client's key worker and the pharmacist.</td>
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<td>11</td>
<td>Regular documented communication between the client's key workers and the pharmacist regarding the client.</td>
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<td>12</td>
<td>The pharmacist to contact the key worker if he/she identifies a problem with client's general health, compliance etc.</td>
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<td>13</td>
<td>Verbal communication/meeting with the client's key worker when the client is first assigned to the pharmacist.</td>
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<td>14</td>
<td>The pharmacist to be present at multiprofessional care meetings regarding the client (CPA/review ).</td>
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<td>15</td>
<td>A copy of a hospital discharge letter, details from a CPA or review meeting to be provided to the pharmacist.</td>
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<td>16</td>
<td>The pharmacist to be involved in decision making on prescribing together with doctors and other professionals involved.</td>
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<td>17</td>
<td>The pharmacist to be involved in the planning of the client's care.</td>
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<tr>
<td>18</td>
<td>Confidentiality of all information to be secured.</td>
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<tr>
<td>19</td>
<td>The key worker and the pharmacist to be able to contact each other instantly.</td>
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<td>20</td>
<td>Contacts between professionals to be face to face.</td>
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<td>21</td>
<td>Pharmacists and key workers to know each other personally.</td>
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<td>22</td>
<td>Joint courses for the pharmacists and the key workers/CMHT professionals.</td>
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<tr>
<td>23</td>
<td>The pharmacist to be well educated in mental health medication.</td>
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<td>24</td>
<td>The pharmacists to be specifically trained in mental health (dealing with people with mental health problems).</td>
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<td>25</td>
<td>Every person with mental health problems/accepted for care by CMHT services to be allocated to a community pharmacist.</td>
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<tr>
<td>Topic</td>
<td>Important</td>
<td>Useful</td>
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<td>26</td>
<td>The service to be tailored for individual clients.</td>
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<td>27</td>
<td>The pharmacist to identify persons with mental health problems and refer them to services (CMHT/GP).</td>
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<td>28</td>
<td>The pharmacist to keep clients' medication histories.</td>
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<td>29</td>
<td>The pharmacist to monitor clients' compliance.</td>
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<td>30</td>
<td>The pharmacist to provide (regular) updates on the client's general health, compliance etc. to the key worker/CMHT.</td>
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<tr>
<td>31</td>
<td>The pharmacist to provide the client with information about his/her mental health medication.</td>
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<tr>
<td>43</td>
<td>The pharmacist to assist with administration of medicines (dosett boxes).</td>
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<tr>
<td>44</td>
<td>The pharmacist to provide drug-related information and education to the key workers/CMHT professionals.</td>
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<tr>
<td>45</td>
<td>The pharmacist to provide written references and updates on mental health treatments to the key workers/CMHT professionals.</td>
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<tr>
<td>46</td>
<td>The pharmacist to be in touch with the client's family/carers.</td>
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<tr>
<td>47</td>
<td>The pharmacist to be available after the client is discharged from the CMHT care.</td>
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<tr>
<td>48</td>
<td>Community pharmacists to promote their profession.</td>
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<tr>
<td>49</td>
<td>Community pharmacists to promote their services.</td>
<td></td>
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<tr>
<td>50</td>
<td>Professionals to meet before the service is set-up to agree to its aims.</td>
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<tr>
<td>51</td>
<td>The pharmacist to liaise with GPs.</td>
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</tbody>
</table>
Appendix 12

Part 2 - Consensus development panels
Table of Topics - Pharmacists Panel
### Community Pharmacy Research Project

**Consensus Development Panels**

**Topics for discussion - Pharmacists Panel**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Important</th>
<th>Useful</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The service to be defined.</td>
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</tbody>
</table>

If 1 found Important or Useful - The definition to include:

1a Services to be provided by a pharmacist

1b Roles of individual professionals

1c Issues related to communication and provision of information between professionals (eg. ways, documentation, **Anything else?**)

1d What information to be shared between professionals (to avoid confidentiality issues)

**Anything else to be added to the definition?**

2 | The service to be promoted, supervised and supported by a Health Authority.

3 | Pharmacists to be enabled to provide the services. Can the service be provided in the current situation or not?

If 3 found Important or Useful - To be enabled through:

3a Changes to current community pharmacist’s roles

If 3a found Important or Useful - The changes to be made:

3aa Freeing community pharmacists from dispensing roles (would allow time)

3ab Allowing them to leave premises (would allow all roles and training out of pharmacies)

3b Remuneration provided for the defined service.

3c Training to be provided.

If 3c found Important or Useful - The training to include:

3ca - mental health medication

3cb - dealings with PMHP

3cc - provision of CMHC

4a A community pharmacist’s roles and services to be **promoted** to health care professionals.

If 4a found Important or Useful:

4aa Information about pharmacists’ services to be provided to professionals during their training.

4b A community pharmacist’s roles and services to be promoted to clients.

If 4a or 4b found Important or Useful:

4c The promotion to be (also) done at health authority level.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Important</th>
<th>Useful</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Establish communication with CMHTs.</td>
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<tr>
<td>If 5 found Important or Useful - To establish links and communication with CMHC professionals</td>
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<tr>
<td>5a - as early as possible (before or as soon as possible after the introduction of the service)</td>
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<td>and through</td>
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<tr>
<td>5b - joint training</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5c - meetings</td>
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<tr>
<td>6 To be linked with a 'reasonable' number of clients. How many?</td>
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<tr>
<td>7 The clients to be registered to a pharmacy.</td>
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<tr>
<td>8 Information about a client to be provided to the pharmacist.</td>
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<tr>
<td>If 8 found Important or Useful - The information to be included:</td>
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<tr>
<td>8a - personal ('kind of person')</td>
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<tr>
<td>8b - diagnosis/medical history</td>
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<td>8c - persons/professionals involved</td>
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<td>8d - medication</td>
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<td>Any other information needed?</td>
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<tr>
<td>9 Information to be provided continuously and as a matter of course.</td>
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<td>If 9 found Important or Useful - The information to include:</td>
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<td>9a - changes in the client's care</td>
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<td>9b - changes in the client's medication</td>
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Appendix 13

Recruitment Sheet
## Recruitment Sheet: Clients who refused participation

<table>
<thead>
<tr>
<th>Sex (M/F)</th>
<th>Age</th>
<th>Ethnic (A/B/W)</th>
<th>Diagnosis</th>
<th>Reason for NOT participating</th>
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</table>

Sex - male (M), female (F); Ethnicity - Asian (A), Black (B), White (W); Participation - Yes (Y), No (N)
Appendix 14

Patient Information Leaflet
Community Pharmacy Research Project
EAST LONDON AND THE CITY HEALTH AUTHORITY

Information to Participants of the Research Project

We invite you to take part in a research study of great importance. It is entirely your choice whether or not you decide to take part. This leaflet tells you what will happen if you take part. It is important that you understand its content. Please feel free to ask any questions about the study, and we will try our best to answer them.

• What is this study about?

Many people are regularly taking prescribed medicines for various reasons. With these medicines, different amounts of information are available from different people. We would like to find out what information is available to you about your medicines. We would also like to know how satisfied you are with this information and the way you receive it. As part of the study, we are offering you the free use of a new extended service from the community pharmacy (chemist). By participating in the study, you will be provided with a named community pharmacist ('chemist'). We will call him/her the link-pharmacist. You can choose your link-pharmacist from a list of nine community pharmacists taking part in the study. We will invite other professionals involved in your care to participate in the study. They will work together with the link-pharmacists to deal with any issues related to your medicines.

• What can your link-pharmacist do for you?

If you have any questions about your medicines the link-pharmacist will be able to discuss them with you. With your consent, your link-pharmacist will obtain your medical information, which will help him/her to review your medicines, monitor possible adverse-effects or any other problems you may have with your medicines. The link-pharmacist will inform you when, during pharmacy working hours, he/she is most able to spend time with you. However, you will be able to drop in to your link-pharmacy or telephone your link-pharmacist anytime you want any information or will have any concerns about your medicines.
• **Why are we doing this study?**

We would like to find out how useful it will be for you to have a link-pharmacist providing specific information about your medicines. We would like to include people who take similar medication to yours. That is why we asked you.

• **What would participation in the study involve for you?**

We would like to ask you to fill in a short questionnaire at the beginning of your participation, because this will help us to evaluate the study. This questionnaire will take about 5 minutes to complete. We will also invite you to an interview during which the researcher will discuss with you your opinions of the service.

• **Confidentiality**

All the information we collect - from you, from the key-worker and from the link-pharmacist will be treated as strictly confidential and will not be revealed to anyone. Similarly, your link-pharmacist will treat all your medication information as confidential. No-one else other than the researcher will have access to the information collected in the interviews. You will not be identified in any report or publication on the project.

• **Would you like more information?**

Please contact me at the address or telephone number below.

Name: Dita Engová  
Address: Centre for Pharmacy Practice  
29/39 Brunswick Square  
London WC1N 1AX  
Telephone number: 0171 - 753 5800
Appendix 15

Written Consent Form
WRITTEN CONSENT FORM
Community Pharmacy Research Project
East London and The City Health Authority

Name of Client (Block Capitals): .................................................................
Address: ......................................................................................................

- The study organisers have invited me to take part in this research. □
- I understand what is in the leaflet about the research. I have a copy of the leaflet to keep. □
- I have had the chance to talk and ask questions about the study. □
- I know what my part will be in the study and I know how long it will take. □
- I understand that I should not take part in more than one study at a time. □
- I know that the local East London and The City Health Authority Research Ethics Committee has seen and agreed to this study. □
- I understand that personal information is strictly confidential: I know the only people who may see information about my part in the study are the research team or an official representative of the organisation which funded the research. □
- I know that all information that I will give to the link-pharmacist will/might be shared with other professionals responsible for my care. □
- I know that the researchers will/might tell my general practitioner (GP) about my part in the study. □
- I freely consent to be a subject in the study. No-one has put pressure on me. □
- I know that I can stop taking part in the study at any time. □
- I know if I do not take part I will still be able to have my normal treatment. □
- I know that if there are any problems, I can contact:

  Dita Engová
  Tel. No.: 0171- 753 5956

Client’s: Signature ..............................................................................
Witness’s Name ....................................................................................
Witness’s Signature .............................................................................
Date ........................................................................................................

As the responsible for this research or a designated deputy, I confirm that I have explained to the patient named above the nature and purpose of the research to be undertaken.

Researcher’s Name Dita Engová
Researcher’s Signature ........................................................................
Date ........................................................................................................
Appendix 16

Contacts with the Clients Sheet
# Community Pharmacy Mental Health Research Project

## Contacts with the clients

### Link-Pharmacist

<table>
<thead>
<tr>
<th>Name</th>
<th>Telephone number</th>
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### Week

From:  
To:  

<table>
<thead>
<tr>
<th>Client’s Name</th>
<th>Seen</th>
<th>Date(s)</th>
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<tbody>
<tr>
<td></td>
<td>Yes</td>
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Appendix 17

Welcome Letter
Mr [Client's name]
[Client's address 1]
[Client's address 2]
London [Postcode]

Dear [Client's name],

I would like to welcome you to

**The Community Pharmacy Research Project - Link-Pharmacist Scheme**

Your link-pharmacist is

[Ms/Mr] [Link-pharmacist's name]
at

[Pharmacy name]
[Pharmacy address 1]
London [Postcode]
tel. [telephone number]

You are taking part in an important research project which will contribute to the organization of community health care in East London. You are now one of the group of clients, community key workers and pharmacists that will set up a new way of supporting people in the community. Most importantly, we believe, that your participation will be beneficial to yourself. Nevertheless, through the results of this project we can be beneficial to many other people. We are grateful that you have decided to help!

Should you have any queries, please do not hesitate to contact the researcher (on the address and the telephone number below), your link-pharmacist or your key worker.

Thank you very much!
I look forward to our cooperation!

Yours sincerely,

Dita Engová
Research Pharmacist
Centre for Pharmacy Practice, School of Pharmacy, University of London
29-39 Brunswick Square
London WC1N 1AX
tel. 0171 753 5956
Appendix 18

Link-Pharmacists' Training Day Programme
Community Pharmacy Mental Health Research Project
Training Day Programme

[Date]
[Venue]

9.00  coffee on arrival

9.30 - 9.45  Opening session
(Dita Engová, Research Pharmacist, School of Pharmacy, University of London)

9.45 - 10.45  ‘An overview of current medication used in mental health’
(Rachel Sporton, Senior Pharmacist - Community Services, Newham General Hospital)

10.45 - 11.00  coffee break

11.00 - 12.00  ‘Communication with people with mental health problems’
(Mary Horton, Community Psychiatric Nurse, Bow & Poplar Community Mental Health Team)

12.00 - 13.00  ‘Centrally active drugs: pharmacological mechanisms’
(Prof Michael A. Simmonds, Head of Department of Pharmacology, School of Pharmacy, University of London)

13.00 - 14.00  lunch

14.00 - 14.15  ‘Community mental health care - structure’
(Dita Engová, Research Pharmacist, School of Pharmacy, University of London)

14.15 - 14.45  Meeting with community mental health teams members

14.45 - 15.45  ‘Communication skills’
(Ian Bates, Senior Lecturer in Pharmacy Practice, School of Pharmacy, University of London)

15.45 - 16.00  afternoon coffee

16.00 - 17.00  Project practicalities
(Dita Engová, Research Pharmacist, School of Pharmacy, University of London)
Appendix 19

Recruitment Questionnaire
Dear Sir/Madam,

Community Pharmacy Mental Health Research Project

I am writing to you concerning the above research project. I presented the project twice to your team ([Month], [Month] [Year]) and invited all key workers to take part. Overall, the team agreed to participate. Nevertheless, I have not received any response from any individual key workers as to whether they wish to participate or not. Therefore, I am writing to you today.

I would be extremely grateful if you could answer the question(s) attached. The first question asks about your willingness to participate. If you do not wish to participate, it is of a great importance and interest to me to find out why. The second question asks about your reasons. Based on your answers (and the number of participating key workers) I may have to make changes to the project. Your answers to the second question will be included in the project analysis. All the information you provide with this question will be treated as confidential!

Slow recruitment of key workers is causing a significant delay to the project data collection and I need to start to collect data as soon as possible. It would be extremely helpful if you could help me by answering my question(s) at your earliest convenience.

Please return the ‘questionnaire’ page in the prepaid envelope provided.

The project outline and the project timetable (enclosed) are for your information.

Should you have any further queries, please do not hesitate to contact me on 0171 753 5956.

Your kind cooperation is very much appreciated!

Yours faithfully,

Dita Engová
Research Pharmacist
My questions are as follows:

1. Do you wish to participate in this research project?
   
   Yes ............................................................... □
   No .......................................................... □

   If your answer is YES, I will be contacting you as soon as I receive your questionnaire to discuss your participation. Do not answer the second question.

   If your answer is NO, please answer the following question. You may tick more than one answer. I would be grateful, if you would give any comments/explanations to your answer(s).

2. What is (are) you reason(s) for NOT participating in this project?

   I am too busy in my work and/or the project would add more work ........................................01□
   I am participating in/carrying out a different research project .....................................................02□
   I am not interested in participation in any research project ...........................................................03□
   I am leaving the team soon ...........................................................................................................04□
   I can’t see any benefits of the project for myself ..........................................................................05□
   I can’t see any benefits of the project for my team ......................................................................06□
   I can’t see any benefits of the project for my clients ....................................................................07□
   I don’t have any client suitable for the project in my caseload ....................................................08□
   My clients are not interested in participation in this project ..........................................................09□
   I don’t want my clients to participate in this project ...................................................................10□
   I do not have enough information about the project .................................................................11□

   (In this case, would you like more information about the project and a time to consider again your participation?)

   Yes ............... a□
   No ................... b□

   Other reason .............................................................................................................................................13□

   Please specify:

Any comments:

Could you, please, state the following information?

Your name:_________________________________________ Profession:____________________

MANY THANKS FOR YOUR TIME!