Developing the Working Relationship between General Practitioners and Community Pharmacists

by

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Abstract

Interprofessional collaboration between community pharmacists and general practitioners is essential for good quality patient care and the efficient use of resources. There will also be resulting benefits for the practitioners involved, in terms of greater professional role satisfaction. Community pharmacist participation in extended professional roles is dependent on acceptance by general practitioners and could be the key to a better working relationship. The aim of this study was to investigate ways of developing the interprofessional relationship by determining the extent and nature of current collaboration, the potential for the developing the working relationship and establishing and evaluating collaborative projects.

In order to determine the extent and nature of current collaboration and the potential for developing the working relationship, two investigations were carried out. Firstly, semi-structured interviews were conducted with a random sample of 20 community pharmacists and 20 general practitioners. Secondly, pharmaceutical advisers in post throughout England and Wales were contacted for information about formal current and planned collaborative activities.

Two collaborative projects were established and evaluated as a means to explore the professional interface. One project was a locally organised pilot domiciliary pharmacist service. The second project involved three pairs of community pharmacists and general practitioners planning and managing their own collaborative initiatives.

Collaboration between community pharmacists and general practitioners must focus on patient benefits and there must be resulting benefits for the professionals involved. Facilitation is the way forward for the development of the working relationship. A structured approach will ensure that barriers are minimised, local needs are met, resources are used efficiently and patients benefit. Initial collaborative activities need to focus on areas of practice that are both non-threatening to the core role of the general practitioner and centre on the community pharmacist's expertise, to ensure general practitioner acceptance. All health care professionals need to adapt to a new environment of patient-focused care and for community pharmacists this means working closely with general practitioners and creating their own niche within the primary health care team, to ensure their future role in providing good quality patient care.
Acknowledgements

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This thesis is dedicated to the memory of our dear friend Suzy Goller, may she rest in peace.
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List of Abbreviations

BMA British Medical Association
BNF British National Formulary
CP Community Pharmacist
CPPE Centre for Pharmacy Postgraduate Education
DHA District Health Authority
EC European Community
FHSA Family Health Services Authority
GP General Practitioner
HC Health Commission
LMC Local Medical Committee
LPC Local Pharmaceutical Committee
MAAG Medical Audit Advisory Group
MDI Metered Dose Inhaler
NHS National Health Service
NIC Net Ingredient Cost
NSAID Non-Steroidal Anti-Inflammatory Drug
OTC Over-the-Counter
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<td>PACT</td>
<td>Prescribing Analysis and Costs</td>
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<td>PMR</td>
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<td>Prescription Pricing Authority</td>
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<td>RHA</td>
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1.1 Community Pharmacists and General Practitioners - An Historical Perspective

The origins of pharmacy in England can be traced back to the 12th century, when Pepperers and Spicers sold goods, including drugs and spices, brought from the East and the Mediterranean. The Pepperers acted as the wholesalers, the Spicers as retailers (Kremers and Urdang, 1976). On the whole they sold luxury goods and, therefore, their best customers were the king's household and the larger baronial establishments (Trease, 1964). The term apothecary appeared in England in the 13th century and was used interchangeably with 'spicer' for those who had started to specialise in dispensing and compounding medicines (Kremers and Urdang, 1976). The Pepperers changed their name to the Grocers' Company and received a Charter in 1428 (Wootton 1910). The Grocers' Company had authority over the apothecaries and physicians had powers of inspection of the apothecaries' premises and drugs. Physicians utilised the apothecaries to make up the preparations that they ordered and used their shops as consulting rooms. The physician regarded the apothecary as an agent to increase his patient numbers and whilst the physician received his fee, the apothecary was expected to charge for the ingredients plus a small fee for compounding the drugs (Trease, 1964). In 1617 the apothecaries obtained a Charter from James I giving them an independent existence as a City Guild, under the title of the Society of Apothecaries (Wootton, 1910). The Charter stipulated that apothecaries had to be apprenticed for a minimum of seven years and at the end of the period had to pass an oral examination:
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'...concerning the preparing, dispensing, handling, co-mixing and compounding of medicines' (Trease, 1964).

The Grocers' Company protested over the Charter, but the King did not relent; grocers were but merchants, he said, but the apothecary was a mystery (Wootton, 1910).

At the time of the formation of the Society of Apothecaries there were no general medical practitioners, only physicians who were learned, scarce and expensive, surgeons who were unlettered craftsmen and quacks of all sorts (Copeman, 1967). Throughout history the priest-physician had been the embodiment of medical learning and was employed by the rich and powerful. The lower classes depended entirely on the extensive monastic system, which spread over the country. In 1518, Henry VIII incorporated the physicians as a College and they were given the privilege of licensing practitioners. The surgeons worked only to the physician's direction until 1540, when they too became incorporated, allowing them some degree of independence in the treatment of external injuries (Copeman, 1967). The exclusion of unqualified persons and the dissolution of the monasteries under Henry VIII virtually robbed the general public of any form of medical advice. This was the situation when the apothecaries obtained their Charter.

The College of Physicians expressed their approval of the new Society, thinking that it would now be easier to control the apothecaries than when they were members of the large and powerful Company of Grocers (Power, 1939). However, the
Apothecaries soon came to be regarded as the general medical attendants of the sick poor and also of the middle class, who, resenting the double fee for physician and apothecary, had started to turn to the apothecary alone in cases of minor illness (Cripps, 1950). The situation served to heighten the tension between the physicians and the apothecaries and led to charges and counter-charges against prescribing apothecaries and dispensing physicians (Trease, 1964). In 1703 the College of Physicians took legal action against the apothecary William Rose for supplying medicines which had not been prescribed by any physician. The physicians were at first successful, but on appeal the House of Lords found in favour of Rose on the grounds that it was in the public interest to allow apothecaries to advise patients as well as supply them with medicines. As a result of the Rose case, apothecaries had a choice of career pathway, medicine or pharmacy. Many must have chosen medicine because thereafter it became easier for chemists and druggists to move into the pharmaceutical field (Trease, 1964).

In the mid 17th century, two decades after the founding of the Society of Apothecaries, not only were the apothecaries in conflict with the physicians, but the chemists and druggists were infringing on the apothecaries' role by dispensing physicians' prescriptions and counter-prescribing (Kremers and Urdang, 1951). The English druggist was originally a wholesaler, acting as a middle man, passing drugs from importer to apothecary. No sooner had the apothecary become adjusted to his medical function, than his pharmaceutical function was challenged by the rising class...
of chemists and druggists. As they grew in number their range of activities spread. The apothecaries finally got Parliament to pass an Apothecaries Act in 1815, giving the Society certain powers over professional standards and medical education throughout England and Wales and forbade:

‘...unqualified persons from judging disease by external symptoms’,

the qualified persons being the physicians, surgeons and apothecaries (Kremers and Urdang, 1976). The chemists and druggists drafted a clause in the Act, defining their business as consisting of the:

‘...buying, preparing, compounding, dispensing and vending drugs and medicinal compounds by wholesale and retail’ (Wootton, 1910).

They thus acquired a legal status to practice pharmacy without being subjected to any requirements regarding education or apprenticeship. The above definition effectively drew the boundary between the medical and pharmaceutical professions. Most apothecaries moved further towards the practice of medicine and the term apothecary became synonymous with that of general medical practitioner.

In 1841 a proposed Bill was designed to drastically reform the practice of medicine. A group of chemists and druggists met in London to discuss the implications of the bill and focus on the need to protect the right of the chemist and druggist to prescribe and give medical advice. The Bill was defeated in the House of Commons and the Pharmaceutical Society was formed for the purpose of:

‘...uniting the chemists and druggists into one ostensible, recognised and independent body - for protecting their general interests - and for the advancement of pharmacy, by furnishing such a uniform system of education
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as shall secure to the profession and the public the safest and most efficient administration of medicine' (Holloway, 1991).

The Society of Apothecaries made no attempt to conceal their resentment of the newly formed Pharmaceutical Society. In their view it was not only unnecessary, but in many respects highly objectionable. The Society was incorporated by Royal Charter in 1843.

The present division between the practice of medicine and that of pharmacy was socially and politically constructed by three acts of Parliament, the 1858 Medical Act and the Pharmacy Acts of 1852 and 1868. The Pharmacy Acts respectively protected the title of 'pharmaceutical chemist' and required all future chemists and druggists to pass examinations and be registered. The three grades of physician, surgeon and apothecary were drawn together into one fold and a legal fence was set up between them and the chemist and druggist (Holloway, 1991). The general practitioner was, however, still reluctant to give up the sale of drugs, accounting for up to three quarters of his income and equally the chemists and druggists were attached to their role of counter prescribing.

In 1911, Lloyd George stated:

'The first thing which I think should be done is to separate the drugs from the doctors',

a matter achieved by means of the National Insurance Act (Hunt and Jones, 1994). The Act was important for pharmacy in two ways; firstly because it recognised that
dispensing was the sole right of the pharmacist and secondly because of the volume of business it brought to pharmacies. Only in rural areas was an exception made to doctor dispensing, an issue that has continued to be an area of contention between the professions and is reported on frequently (Anon, 1994a; Anon, 1995a; Anon, 1995b; Anon, 1995c). Doctors continued to dispense medication for private patients, but throughout the early 1900s the National Insurance Scheme was extended, covering approximately half of the British population by 1946. The creation of the National Health Service (NHS) in 1948 effectively separated prescribing and dispensing. The public could get the medicines they needed regardless of cost and dispensing became the core role of the community pharmacist.

The latter decades of the 20th century have seen a call for collaboration between the community pharmacist and the general medical practitioner, at individual, local and national levels (Anderson, 1965; Humphreys et al., 1989; Anon, 1993a). A brief look at history has illustrated that interprofessional rivalries and conflicts were the norm throughout the development of the distinct professions of community pharmacy and general practice medicine and the long-standing disharmony has undoubtedly left its mark on the modern day interprofessional relationship. In order to develop the working relationship it will, therefore, be necessary to encourage collaboration in practice areas and by methods that are mutually acceptable to the two professions.
1.2 Why is Interprofessional Collaboration Necessary?

The first step, before investigating ways and means to develop the interprofessional working relationship, must be to ask the above question, why is interprofessional collaboration necessary? The main reason for interprofessional collaboration can be summed up by the following:

'Working together is a positive step because the needs of clients cut across professional boundaries and fragmentation by professional disciplines inevitably leads to fragmentation in the service' (Raman, 1992).

In other words, community pharmacists and general practitioners need to collaborate in order to ensure the provision of good quality patient care. Interprofessional collaboration between community pharmacists and general practitioners can also contribute to the development of an economically viable primary health care system. Greater collaboration between community pharmacists and general practitioners was first proposed in the report to the Nuffield Foundation on pharmacy (1986) for these two reasons:

'We have no doubt that the development of closer relations between GPs and community pharmacists would be in the interests of patients and could lead to a more efficient use of resources within the NHS'.

A further reason for the development of the working relationship between community pharmacists and general practitioners is the benefits that each profession can reap as a result of collaborating. Horder (1991) said in his report on a multidisciplinary conference about interprofessional co-operation:

'Interprofessional co-operation is only justifiable if it benefits the user, but it will neither happen nor continue unless it also benefits practitioners'.

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Community pharmacists should find that a closer working relationship with general practitioners increases their professional role satisfaction, through the utilisation of their knowledge and skills. A further benefit may be enhanced professional status, as collaboration with general practitioners draws the community pharmacist into the primary health care team. General practitioners should also find that their professional role satisfaction increases, as collaboration provides a new perspective on areas of general practice and will possibly allow general practitioners to concentrate on their fulfilling clinical role.

Collaboration between community pharmacists and general practitioners will undoubtedly result in benefits, yet little progress appears to have been made in this area. The reasons for the lack of progress are not entirely clear, although the potential conflict between the community pharmacist's commercial and professional roles, highlighted in the report to the Nuffield Foundation (1986) and further commented on by Taylor (1986), may represent a barrier to greater interprofessional collaboration. A lack of mutual respect and support between community pharmacists and general practitioners will undoubtedly present a barrier to co-operation (Vree, 1991) and in such cases offers of assistance may be viewed sceptically. Furthermore, the defensive nature of a professional group when they feel challenged in the course of their essential work (Horder, 1992) serves to widen the gap between the professions.
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The slow development of the interprofessional relationship in the community has not been mirrored in the hospital setting, where the working relationship between pharmacists and doctors has developed significantly. The successful interprofessional collaboration in the secondary health care system could possibly be used as a model on which to base the development of the pharmacist/doctor working relationship in the community.

1.3 The Hospital Model of Collaboration

In the hospital setting, the relationship between pharmacists and doctors has developed far beyond that of the community pharmacist and general practitioner, primarily due to the development of ward pharmacy and subsequently the larger umbrella of clinical pharmacy.

The major period of change in the hospital setting was the late 1960s when ward pharmacy developed in response to reports of errors in the process leading to the administration of drugs to patients in hospitals (Vere, 1965). It became apparent that drugs required more precise systems for prescribing and administration and that nursing and medical staff required a greater expert support from pharmacists on the wards (Vere, 1965). Deployment of pharmacists to the wards to provide a drug supply service was also thought necessary and was associated with a reduction in the incidence of discrepancies between prescribed and administered drug therapy (Sykes and Oakes, 1968). Ward pharmacy involves pharmacists visiting wards in order to:
• Monitor prescriptions for completeness and accuracy and ensure, as far as possible, that the prescribing and administration processes are being carried out accurately.

• Make themselves available for consultation with nursing and medical staff.

• Ensure that the system for supply of stock and non-stock drugs is working accurately (Hough et al., 1986).

It became apparent that pharmacists needed a greater clinical orientation in order to monitor prescriptions effectively. The concept of clinical pharmacy, therefore, developed from that of ward pharmacy, not as another pharmacy speciality, but central to all pharmacy activities (Hough et al., 1986) and encompassing a host of roles. Clinical pharmacy is about:

'...the optimal use of drugs, ensuring that those reaching the patient are safe, effective, offer value for money and quality of life' (Barber, 1990).

The provision of clinical pharmacy services was endorsed by the Department of Health in 1988 as a means of increasing the cost effective use of medicines and enhancing patient care.

In order to expand into clinical areas, pharmacists need the acceptance of their role by doctors (Weiss, 1994). A study in the United States by Grussing et al. (1984) illustrated a general approval of the role of the clinical pharmacist by doctors. A study by Ritchey and Raney (1981) in the USA showed that an increase in exposure of prescribers to clinical pharmacists led to an increased acceptance of the
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pharmacists performing clinical tasks. Other USA studies have shown that doctors accept a number of clinical roles for pharmacists including patient counselling (Moss et al., 1980) and acting as drug information consultants (Nelson et al., 1978). In their investigation into the value of pharmacists attached to consultant ward rounds in the United Kingdom, Gibson and Freeborn (1985) illustrated that a clinical pharmacist's involvement was essential. Ninety one per cent of queries would have been missed or not asked had the pharmacist not been on the ward round. Investigations of hospital pharmacists participation in medical audit in the UK (Harris et al., 1993; Cotter et al., 1993) showed that doctors, in general, were positive about a contribution from pharmacists. Pharmacists have been involved in the presentation of drug use and expenditure data at medical audit meetings; the provision of prescribing advice during case presentations; creating and monitoring prescribing policies and directly auditing prescribing.

Monitoring prescriptions for completeness and accuracy remains at the core of the clinical pharmacy service because it is the major activity which influences the selection and use of drugs (Eccles, 1992) and it represents a constant audit of prescribing (Barber et al., 1994). Studies in the UK and the USA (Burkle et al., 1982; Haxby et al., 1988; Hawkey et al., 1990) show that doctors readily accept the interventions that pharmacists make as a result of their prescription monitoring activity. The majority of the suggestions relate to the fundamentals of prescribing such as the choice of drug, dose, frequency and route of administration (Batty and Barber, 1992). A literature
review by Klopfer and Einarson (1990) of 23 American and Canadian papers presented an average acceptance rate of pharmacists' suggestions by prescribers of 84.4%, with a range in acceptance rates of 58% to 98%. Computer data bases have been developed to facilitate the recording of prescription monitoring interventions and to measure the impact of the service on patient care (Cousins and Hartoum, 1991; Kennedy and Wind, 1992). The high level of acceptance of pharmacists' interventions by prescribers shows that the advice is valid and appropriate (Eadon, 1992).

A study carried out by Cotter et al. (1994a) investigated the extent to which a wide variety of clinical pharmacy services were provided in NHS hospitals in the UK. Fifty per cent or more of the pharmacies responding to the postal questionnaire provided the following clinical services: monitoring drug therapy; participating in medical ward rounds; participating on drug and therapeutics committees; providing information used in creating prescribing policies; providing information used in making formulary decisions; enforcing formulary policy; providing drug information; providing financial information on drug use; providing advice to clinical directorates; providing education for pharmacy staff; providing education for nursing staff; providing support for clinical trials; counselling patients about their medication; contributing to medical audit and conducting practice research.

Clinical pharmacy services have brought the pharmacist into greater contact with the
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patient and have involved greater collaboration with health care professionals. The acceptance by doctors of pharmacists participation in a wide range of clinical areas, previously dominated by the medical profession, illustrates the extent to which their knowledge and expertise are valued. In particular, pharmacists participation on ward rounds, involvement in hospital policy making groups, participation in specialist multidisciplinary care teams and their role in monitoring drug therapy means that pharmacists are involved in clinical services where they can have some input and influence in drug use decisions. Involvement in this area means that pharmacists can make a real contribution to the quality of prescribing and, therefore, to the quality of patient care. The development of clinical pharmacy has contributed to the professionalisation of hospital pharmacy (Cotter et al., 1994 b) and the acquisition of new roles has increased the prestige of hospital pharmacists work, their power within the hospital structure and their professional status.

The hospital model of interprofessional collaboration can undoubtedly provide some guidance as to how the working relationship between community pharmacists and general practitioners can be developed. A key theme in the development of the working relationship in the hospital setting has been the acceptance of extended roles for the pharmacist by the hospital doctor, resulting in pharmacists involvement in practice areas where they can contribute to good quality patient care and the effective use of resources, with resulting benefits for the professionals involved.
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The development of the interprofessional relationship in the community, areas with the potential for collaboration and methods by which collaboration can be achieved, will now be examined.

1.4 How can the Working Relationship between Community Pharmacists and General Practitioners be developed?

1.4.1 Extended roles for the community pharmacist

In the hospital setting, it was the development of the roles of the hospital pharmacist as a result of changing service needs, which led to the improvement of the interprofessional relationship with doctors. Changes in the primary health care setting, including a reduction in the traditional role of the community pharmacist in the compounding and dispensing of medication, an increase in the complexity of drugs and a greater consideration of the patient in the provision of health care, have paved the way for a variety of extended roles for the community pharmacist, fully utilising his or her professional expertise. The community pharmacist can now have a greater role to play in the quality of patient care and in the delivery of cost effective health care by means of extended role activities, as long as those activities are accepted by the general practitioner. Collaboration is, therefore, the key to the extent of the community pharmacist’s involvement in extended roles; extended roles can also serve to increase the level of interprofessional collaboration.

Extended roles for the community pharmacist were first proposed in the report to the Nuffield Foundation (1986) after all areas of pharmacy practice, including education,
training and research, had been examined. The recommendations made in the report to the Nuffield foundation were, on the whole, supported by the Government in its White Paper on primary health care, Promoting Better Health (1987). Further extended roles for the community pharmacist were proposed following an investigation into the future role of community pharmaceutical services, undertaken by a joint working party of the Department of Health and the Royal Pharmaceutical Society. The working party published its report, Pharmaceutical Care: The Future for Community Pharmacy, in 1992. Recommendations made in the report to the Nuffield Foundation and in the Pharmaceutical Care Report concerned a number of areas of community pharmacy practice. Those recommendations that specifically related to the roles of the community pharmacist required collaboration with general practitioners in order to ensure their effective implementation.

1.4.2 Attitudes towards the extended roles

A number of studies have been conducted investigating the attitudes of general practitioners towards extended roles for community pharmacists. Ortiz et. al. (1989) in their Australian study asked pharmacists and physicians to give a priority rating to 18 different professional roles for the community pharmacist. The pharmacists and general practitioners assigned different priorities to 12 of the 18 roles, pharmacists giving higher priorities to most of the roles. There was greater acceptance by the general practitioners towards pharmacists giving non-prescription related advice than prescription related advice. In the UK, a study by Spencer and Edwards (1992)
found that general practitioners favoured an extension of the pharmacist’s role in the management of minor ailments and the provision of health education, but were concerned about their role in screening patients and in prescribing. A UK study by Woodward (1992) found agreement between community pharmacists and general practitioners about potential extended roles for the pharmacist, including advice to patients on minor symptoms and advice to doctors about effective and economic prescribing. Nathan and Sutters (1993a), in their UK study of the pharmacist’s extended roles and attitudes towards collaboration in clinical areas, uncovered disagreement between community pharmacists and general practitioners over pharmacist involvement in some clinical areas of patient management, especially those concerned with making prescribing decisions. Some extended roles are widely accepted by general practitioners; others, particularly those that appear to encroach into the traditional domain of the general practitioner, are not as well accepted. In order to participate in extended roles, community pharmacists will have to focus on areas of their expertise and prove the value that they can add to patient care by collaborating with general practitioners.

1.4.3 Areas with the potential for collaboration and methods for implementing collaboration

In order to develop the working relationship between community pharmacists and general practitioners, areas with the potential for interprofessional collaboration and methods by which to implement collaboration need to be investigated. The main reason for the development of interprofessional collaboration is to ensure good
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quality patient care. At the community pharmacist and general practitioner interface, good quality patient care encompasses: good prescribing; prescription monitoring, intervention and medication advice; responding to symptoms and the treatment of minor ailments; extended patient services and preventative health care measures.

Good prescribing

The aims of good prescribing have recently been redefined by Barber (1995) as maximising effectiveness, minimising risk, minimising costs and respecting patient choice. Interprofessional collaboration to improve prescribing would, therefore, have an influence on patient care and on the effective use of resources. The community pharmacist's current role in achieving the four aims of good prescribing is not firmly established. Kendall and Strickland-Hodge (1990) reported that the community pharmacist's contribution to prescribing is likely to increase as prescribing is required to become more rational and cost effective. The Nuffield Report (1986) recommended that systematic arrangements should be introduced to enable community pharmacists to co-operate with general practitioners to increase the effectiveness and reduce the costs of prescribing. The Pharmaceutical Care Report (1992) similarly recognised a role for community pharmacists in the selection of the medicine and dosage, within agreed protocols, following medical diagnosis or assessment. In a study of prescription monitoring in the UK by Neville et al. (1989), the authors concluded that community pharmacists may have a key role in influencing the prescribing behaviour of general practitioners. A UK study by Roddick et al.
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(1993) involving oral presentations to general practitioners covering the efficacy, safety, patient acceptability, drug interactions and costs of four drug classes demonstrated that role. The feedback received from the participating general practitioners led the authors to conclude that the presentations were valued, new information had been gained and the general practitioners were intending to change their prescribing practices. The authors further concluded that the provision of independent information on prescribing was an important extended role for the community pharmacist. Nathan and Sutters (1993b) suggested that community pharmacists could collaborate in the analysis of PACT (prescribing analysis and cost) data, in the development of formularies and in rational prescribing, although community pharmacists would have to prove their value and gain the confidence of general practitioners in other areas first, such as the provision of drug information.

**Prescription monitoring, intervention and medication advice**

The community pharmacist’s role in prescription monitoring and intervening when necessary is central to the legal, professional and ethical responsibilities that the pharmacist has to the patient (Rupp et. al., 1992). Studies of prescription monitoring and interventions in the UK and the USA have shown that community pharmacists, using their professional expertise, provide a valuable prescription monitoring role (Greene, 1995a), are capable of making appropriate clinical decisions (Greene, 1995b) and can significantly enhance the safety and quality of pharmaceutical care delivered to patients in the community (Rupp et al., 1992; Rogers et al., 1994). Work
in the UK by Shulman et al. (1981) illustrated that general practitioners appreciate the valuable role that pharmacists carry out in checking erroneous or incomplete prescriptions. Barrett and Vere (1979) in their UK study suggested that there could be further collaboration in this area, doctors and pharmacists deciding on:

‘What should be monitored; by whom and how’.

An extension of the dispensing role is the provision of advice to patients about their prescribed medicines. Barrett and Vere (1979) suggested that further collaboration could take place in this area, to prevent patients receiving differing and possibly conflicting advice. A Drug and Therapeutics Bulletin (Anon, 1981) entitled ‘What should we tell patients about their medicines?’ emphasised the point that the quality and consistency of medication information can be improved by co-operation between general practitioners and community pharmacists. Furthermore, a draft joint statement by the Royal Australian College of General Practitioners and the Pharmaceutical Society of Australia (Anon, 1994b) regarding the improvement of interprofessional communication, suggested that prescriptions should indicate the purpose for which a drug is prescribed as part of the directions to assist the pharmacist in counselling about the medication.

**Responding to symptoms and the treatment of minor ailments**

The community pharmacist’s role in responding to symptoms and the treatment of minor ailments is a traditional role which has expanded recently due to the
re-classification of a number of prescription only medicines to pharmacy only status. A UK study by Morley et al. (1983) illustrated that general practitioners acknowledged the invaluable contribution that pharmacists make in treating minor ailments. However, concern has been expressed about the quality of advice given by some pharmacists for even simple conditions (Consumers’ Association, 1991). Spencer and Edwards (1992) proposed that one way of helping to resolve these problems would be greater co-operation between community pharmacists and general practitioners at local level, in drawing up protocols for responding to symptoms and in the use of pharmacy referral forms. The use of referral forms by pharmacists, when referring patients to their general practitioner, were advocated in the Pharmaceutical Care Report (1992). A UK study by Blenkinsopp et al. (1991) showed that the use of referral forms had a valuable role in patient care and contributed towards the development of interprofessional collaboration.

Extended patient services

A range of patient services have been proposed as part of the extended role for community pharmacists, requiring general practitioner collaboration in order to be carried out effectively. Potential patient services include domiciliary visits and the provision of services to nursing homes and other residential establishments, both proposed in the report to the Nuffield Foundation (1986) and the Pharmaceutical Care Report (1992). A role for the pharmacist in therapeutic drug monitoring within the community was also proposed in the Pharmaceutical Care Report (1992).
Preventative health care measures

Greater involvement of community pharmacists in health education and health promotion have both been proposed as extended roles:

'There is a role for community pharmacists in health education in cooperation with other health care professionals’ (Report to the Nuffield Foundation, 1986).

'Community pharmacists should be encouraged to participate more widely in health promotion activities and campaigns’ (Pharmaceutical Care Report, 1992).

A role in health education could include giving patients advice about a healthy lifestyle including diet and exercise and about the use of preventative medicine. A role in health promotion could include giving patients unsolicited advice and advising at opportunistic consultations.

The Pharmaceutical Care Report further recommended that:

'Community pharmacists should contribute to health promotion by offering diagnostic and screening services'.

A study by Hampton et al. (1990) investigated blood pressure monitoring in an inner city pharmacy in the UK as an attempt to collaborate with general practitioners, but found that the general practitioners were unenthusiastic about the scheme. Drury (1991) proposed that local agreements between pharmacists and general practitioners with regard to screening should be drawn up so that a clear and unequivocal message was received by the public. However, until greater interprofessional collaboration is
realised, pharmacists’ contribution to diagnostic screening is likely to remain small.

Examples of methods of interprofessional collaboration

Joint education at both the undergraduate and postgraduate levels has been proposed as a method of fostering a closer working relationship between general practitioners and community pharmacists. Barrett and Vere (1979) stated that:

‘There is a need for interactions between students of the two professions to ensure that they can communicate and understand each other’s problems after qualification’.

Stewart et. al. (1991a) reported on a study funded by the Department of Health to develop a joint continuing education programme at the local level. Programmes were centred around response to symptoms, generic prescribing and disease prevention. An independent observer found that both professions had a poor understanding of the other’s training and competencies and both professions felt that joint events helped.

Campbell (1989) described a series of joint meetings between local community pharmacists and general practitioners in a market town in Oxfordshire, held to increase interprofessional co-operation. Evening meetings were held every three months, with a main topic addressed by a guest speaker followed by a discussion of other topical issues. Topics covered included over the counter availability of re-classified prescription only medicines, original pack dispensing, generic substitution and common prescribing mistakes. The author concluded that the meetings produced
greater mutual understanding and respect as a result of regular face to face contact and helped to ease frustrations caused by each other’s short comings.

Joint drug liaison meetings at the individual level were reported (Anon, 1992) as a success, after a community pharmacist in Yorkshire was approached by a group practice to help with rationalising their prescribing. Meetings were held every six to eight weeks and were used to discuss drugs drawn from one therapeutic category of the British National Formulary (BNF). The intended outcome of the meetings was to make the general practitioners act as a single group and make their prescribing decisions more objective. The general practitioners reported a greater awareness of the roles of the community pharmacist and ways in which s/he could help them. They also felt that their new awareness would mean that they could make the pharmacist’s roles easier.

The feasibility and potential value of community pharmacist and general practitioner liaison groups at the local level was studied at the invitation of the Royal Pharmaceutical Society and the Royal College of General Practitioners (Blenkinsopp et al., 1993a). Three interprofessional liaison groups were established with the help of a pharmacist facilitator, who encouraged the groups to determine their own priorities. One group focused on clinical issues, the second on links between the professions and the third on matters of common practice. The need for further clinical training for the pharmacists was identified together with the need to be able to
apply that knowledge to the provision of structured advice. The authors concluded that the presence of an independent facilitator enabled the pharmacists to build up confidence and assertiveness and led to the development of good working relationships.

The working relationship between general practitioners and community pharmacists has the potential to develop through a host of extended roles for the community pharmacist and by the employment of a number of different collaborative methods.

1.5 Aim and Objectives of the Present Study

Community pharmacists and general practitioners have traditionally liaised for the common benefit of the patient with regard to the correctness and safety of dispensed medicines, but not always in a manner which develops interprofessional relations (Jepson and Strickland-Hodge, 1995). Despite the fact that community pharmacists and general practitioners see the same half a million patients every day in relation to the same problems (Drury, 1991), the majority of interprofessional communications take place over the telephone and relate to individual prescription queries (Smith, 1990); commonality does not appear to have had any significant influence on the development of the professional relationship. Bruce (1980), in two studies of teamwork for preventative care, examined communications and interrelationships between groups of professionals. In summary he found:

'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 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.

Clearly there is much work to be done to develop the interprofessional relationship between community pharmacists and general practitioners.

The aim of this study was to investigate ways of developing the working relationship between community pharmacists and general practitioners. In order to achieve this aim the following study objectives were set:

- To build up a picture of current informal interprofessional collaboration and determine the potential for the development of the working relationship (Chapter 2).
- To determine the extent and nature of current formally organised interprofessional collaboration (Chapter 3).
- To establish and evaluate collaborative projects (Chapters 4 and 5).

The first objective was fulfilled by conducting semi-structured interviews with a random sample of community pharmacists and general practitioners, to explore their interprofessional relationships and their attitudes towards collaboration. In order to fulfill the second objective a survey of the pharmaceutical advisers in post throughout England and Wales was conducted to gather data about formally organised interprofessional collaboration in each health authority. The third objective was fulfilled by establishing two collaborative projects based on extended roles for the
community pharmacist. One project was a locally organised pilot domiciliary
pharmaceutical care project. The second project involved three community
pharmacist and general practitioner pairs carrying out their own projects based on
mutually agreed agendas. Chapter 6 discusses the research findings and proposes a
number of recommendations for the future development of the working relationship
between general practitioners and community pharmacists.
CHAPTER 2 - INTERPROFESSIONAL COLLABORATION: INTERVIEWS WITH COMMUNITY PHARMACISTS AND GENERAL PRACTITIONERS

2.1 Introduction

The traditional view of the professional relationship between community pharmacists and general practitioners is one of telephone contacts, on the whole pharmacist initiated, to resolve prescription queries. General practitioner initiated contacts usually centre around requests for supply and information and are less frequent than those initiated by pharmacists. General practitioners are tied up with their appointments at the practice and home visits; community pharmacists are tied down to their pharmacy premises in order to be available to dispense prescriptions and provide advice to patients. Both are busy professionals who are often unable to find the time to meet or even to have a prolonged telephone conversation in order to resolve professional matters other than those requiring immediate attention.

Although this is a simplistic view and does not reflect the working relationship of all general practitioners and community pharmacists, it represents the majority of interprofessional relationships and has been supported by research findings. A postal survey of community pharmacists in the UK carried out by Smith (1990) found that 78% of contacts with general practitioners were community pharmacist initiated for the purpose of prescription clarification. The remaining 22% of contacts were initiated by general practitioners, but less than half were requests for information. The majority of the contacts concerned medicine supply. A postal survey of
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physicians carried out by Williamson and Kabat (1971) in the USA found that only 6% of the responding physicians reported using pharmacists as a source of general drug information, with over 70% preferring to use reference texts and medical journals. In a structured survey of community pharmacists and general practitioners carried out by Paes (1983) in Holland, 50% of community pharmacists reported having no contact or irregular contact with general practitioners and over 60% of general practitioners reported having no contact or irregular contact with community pharmacists. In a UK study by Kennedy et al. (1993) community pharmacists and general practitioners were asked to complete a week long diary of interprofessional contacts. The results showed that the majority of the interprofessional contacts were initiated by pharmacists and related to processing prescriptions. The other major areas of contact concerned supply, for example prescription delivery and requests for equipment, and information requests, for example prices and NHS availability.

Limited professional communications between general practitioners and community pharmacists, in terms of time spent on communication and topics discussed, will restrict the development of the interprofessional relationship; extended communications will help to develop it. A survey carried out by Harding and Taylor (1988) in UK health centres with integral pharmacies found that nearly 50% of the responding pharmacists were consulted by general practitioners 10 times or more per week. Seven per cent of the responding pharmacists considered themselves 'hardly ever consulted' by general practitioners compared with 24% of a matched control sample of pharmacists. The authors concluded that by working closely the two
professions acquired an appreciation of the other’s function, resulting in a mutually beneficial working relationship, ultimately benefitting the patient as a result of improved collaboration.

A recent UK study by Jepson and Strickland-Hodge (1995) has illustrated that interprofessional contacts between community pharmacists and general practitioners are beginning to diversify. Face to face contacts were reported implying a more interactive level of contact and although 70% of the practice visits made by pharmacists were for the routine collection of prescriptions, there would be opportunities for professional face to face communications. The general practitioners surveyed reported that interprofessional contacts occurred for a variety of professional activities including discussions of patients’ drug therapy, residential home prescribing and discussions centred around general service matters and new pharmacy services. The broad nature of the interprofessional contacts shows that a range of patient, drug and service related topics are now being discussed between general practitioners and community pharmacists during communications that do not focus solely on individual prescription queries.

In order to develop the working relationship between general practitioners and community pharmacists, the following areas needed to be explored further: the extent and nature of the current working relationship; the level of interest amongst community pharmacists and general practitioners for developing the relationship and the areas of practice that were of mutual interest for collaboration. The aim of
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conducting interviews with a random sample of community pharmacists and general practitioners was, therefore, to build up a picture of the current working relationship between local community pharmacists and general practitioners and to determine the potential for developing the relationship.

2.2 Method

Semi-structured interviews were carried out with random samples of community pharmacists and general practitioners in four of the six Family Health Services Authorities (FHSAs) in the North Thames (East) Regional Health Authority (RHA), to investigate the professional relationship between community pharmacists and general practitioners. Face to face interviews were conducted in order to gather detailed information from the participants. Semi-structured interviews allowed flexibility to probe issues and explore opinions.

2.2.1 Sample selection

A list of the general practitioners and a list of the community pharmacies in contract with each of the four FHSAs were obtained. (In the case of general practitioners, service contracts are between the individual general practitioner and the FHSA. In the case of community pharmacists, service contracts may be between a named individual or a company and the FHSA, for specific premises). The general practitioners and the pharmacies on each contractor list were numbered consecutively and then random numbers tables were used to select five general practitioners and five community pharmacies from each of the four FHSAs. The size of the sampling frame
Chapter 2 - Interviews with CPs and GPs

for the general practitioners was 1094; for the community pharmacies it was 485. Random sampling was used to ensure that each general practitioner and each community pharmacist had an equal chance of being selected as far as possible, assuming one pharmacist per pharmacy.

A letter was sent to each of the 20 general practitioners and each of the 20 community pharmacies, the latter addressed to the principal pharmacist (Appendices 2.1 and 2.2). The letters explained: who was conducting the research; the aim of the research; the aim of the interview; how the general practitioner/community pharmacist had been selected; how the information gathered in the interview would be used; the confidential nature of the interview and how long the interview would take. Each pharmacist was contacted by telephone no later than two weeks after the letter had been sent, in order to determine whether the pharmacist was willing to participate in the interview and if so, to arrange the interview date. The letter to the general practitioners was accompanied by a reply paid postcard asking the general practitioner if s/he was willing to participate in the interview and if so, for the name and telephone number of someone in the practice who could be contacted in order to arrange the interview date. The person named on the returned postcards was generally contacted on the day the postcard was received, in order to arrange the interview. General practitioners who did not return the postcard a month after the letter and postcard had been sent were followed up with a telephone call to determine whether they were willing to participate in the interview and if so, to arrange the interview date. A different initial reply method was used for the community
Chapter 2 - Interviews with CPs and GPs

pharmacists and the general practitioners due to an expected difference in accessibility between the two professions.

Community pharmacists who were unable or refused to participate in the interview during the telephone conversation were replaced by another community pharmacist randomly selected from the same FHSA contractor list. General practitioners who were unable or refused to participate, either on the returned postcard or during the follow-up telephone call, were replaced by another general practitioner randomly selected from the same FHSA contractor list. The replacement procedure ensured a sample size of 20 community pharmacists and 20 general practitioners, five of each practitioner from each of the four FHSAs.

Information was gathered from the non-participating pharmacists during the telephone call, to determine whether there were any major differences between the participating and non-participating community pharmacists. Information was gathered about the non-participating general practitioners from two sources, the FHSA contractor lists and, in some cases, the practice managers during a follow-up telephone call.

2.2.2 Piloting

Piloting was carried out in one of the two FHSAs in the North Thames (East) Region not included in the main study. Community pharmacies and general practitioners were randomly selected from the FHSA lists of contractors for the pilot study, using
random numbers tables. Pilot interviews were conducted with both professional groups until no further difficulties were highlighted with the interview schedules. The interview schedules were tested for respondent acceptability and validity by determining how easily the respondents could answer the questions, by ensuring that the respondents understood the questions asked and by checking the respondent's answers for relevance.

The community pharmacist interview schedule was piloted during eleven interviews. The general practitioner interview schedule was piloted during six interviews. The similarity of the two interview schedules meant that some difficulties highlighted during piloting of the community pharmacist interview schedule were relevant to the general practitioner interview schedule and, therefore, fewer general practitioner pilot interviews were needed.

As a result of the pilot study, alterations were made to the interview schedules to remove ambiguity, bias, repetition and irrelevant questions. Prompts were included to rephrase complicated questions, probes were added to enable the elaboration of answers and questions were rephrased so that they focused on actual experiences, rather than hypothetical situations.

2.2.3 Development of the interview schedules

Two semi-structured interview schedules, one for the community pharmacists and one for the general practitioners, were developed as the instruments of data collection.
Chapter 2 - Interviews with CPs and GPs

(Appendices 2.3 and 2.4). The interview schedules were developed in two stages. Initially the main questions to be included were gathered from the literature, focusing on those medical and sociological papers reporting on interprofessional contacts between community pharmacists and general practitioners. The second stage involved the piloting and revision of the schedules as described above. The two schedules were very similar in that they incorporated the same questions; they differed in their phrasing.

The final interview schedules each consisted of a short introduction re-iterating confidentiality in any reporting of the interview data, the aim of the interview, who was going to be interviewed, how the community pharmacist/general practitioner had been selected for the interview and the basic content of the interview schedule. The introduction was followed by five interview sections asking the pharmacists and general practitioners about:

- Local general practices and local community pharmacies respectively, in terms of prescription volume, proximity and those in contact with most frequently.
- The relationship with local general practitioners and community pharmacists respectively, including any social contact.
- Professional communications including any face to face contact.
- Working together including participation in interprofessional meetings and projects, areas with the potential for collaboration and advantages and disadvantages of working together.
- Demographic data about the pharmacists and their pharmacies/the general
practitioners and their general practices.

The detailed development of the interview schedules is described in Appendix 2.5. The development of the two schedules has been described simultaneously for most of the questions asked because of their similarity. ‘General practitioners/community pharmacists’ and ‘surgery/pharmacy’ have been used to demonstrate that the same question was addressed to both the community pharmacists regarding general practitioners or surgeries and to the general practitioners regarding community pharmacists or pharmacies.

### 2.2.4 Interview procedure

The interview questions were read out by the interviewer from the schedules so that each interviewee was exposed to standard interview conditions. The interviewees were given time to respond to each question and to expand on their responses. The interviews were tape recorded when the community pharmacists and general practitioners gave their consent, allowing for standard interview conditions to be checked and allowing the interviewer to listen to the responses and concentrate on the schedule. Interviews that were not tape recorded were recorded in note form on the interview schedule during the interview. All the interviews were transcribed fully to facilitate analysis.

### 2.2.5 Qualitative data analysis

The qualitative data gathered during the interviews were analysed from the interview
transcripts by content analysis. The responses given by each community pharmacist/general practitioner to a given question on the interview schedule were put together in a table, with the question as the table title. Themes and categories were then developed for the responses to each question, grouping similar responses together into one category. In this way a coding frame was developed for the qualitative data and coded responses were entered onto a coding form for each question.

### 2.2.6 Definitions

In the analysis of the demographic data about the community pharmacies, an independent pharmacy was defined as the single pharmacy owned by a proprietor. A small chain pharmacy was defined as a pharmacy that was a branch of a group of pharmacies, ranging in size from two to ten pharmacies inclusive and a multiple pharmacy was defined as a pharmacy that was a branch of a group of pharmacies with more than ten branches. A second pharmacist was defined as a pharmacist working full time, who was not the proprietor or the manager of the pharmacy. A long-term locum was defined as a temporary pharmacy manager.

In the analysis of the demographic data about the general practices, a single handed practitioner was defined as a single general practitioner working in a practice and a group practice was defined as a group of two or more general practitioners working together in the same practice. Small practices were defined as those with a single handed practitioner or two general practitioner partners.
2.3 Results

Twenty five community pharmacies had to be randomly selected from the four FHSAs to give a sample size of twenty pharmacists, a response rate of 80%. Five community pharmacists refused to participate in the interview, one on the grounds that the company’s head office had refused to allow him to participate, one on the grounds that he was a relief manager and three because they were too busy. Information was gathered from all five pharmacists showing that the non-participants were similar to the participant pharmacists in terms of the classification of the pharmacy as independent, small chain or multiple, the sex of the pharmacist and the position of the pharmacist in the pharmacy.

Thirty nine general practitioners were randomly selected from the four FHSAs. Thirty five were eligible for the study; three general practitioners had left their practices and one was on sickness leave. Twenty general practitioners agreed to participate in the semi-structured interview giving a response rate of 57%. Fifteen general practitioners refused to participate because they were too busy. Information was gathered for all 15 non-participants and two Chi squared tests were performed on the data. There was no significant correlation ($X^2 = 1.13$, df = 1, $p < 0.05$) between the sex of the general practitioner and agreement to participate in the interview or not. There was no significant correlation ($X^2 = 3.54$, df = 1, $p < 0.05$) between the general practitioners working in small practices (one or two general practitioners) and those working in larger practices (three or more general practitioners) and agreement to participate in the interview or not. The non-participant general practitioners were
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also found to be similar to the participant general practitioners in terms of the position of the general practitioner in the practice.

2.3.1 Characteristics of the interviewed community pharmacists and their pharmacies

Table 2.1 shows the characteristics of the 20 community pharmacists and the pharmacies that they were working in at the time of the interview. The key for the table is on page 52.

The 20 pharmacists were working at nine independent pharmacies, six branches of small chains of pharmacies and five branches of three different multiple pharmacies. Nine pharmacists were proprietors - eight of independent pharmacies and one of a small chain of four pharmacies. Eight pharmacists were managers - four at a branch of a multiple and four at a branch of a small chain. Two pharmacists were second pharmacists - one at a branch of a multiple and one at an independent pharmacy and one pharmacist was working as a long term locum in a branch of a small chain.

At 16 pharmacies there was only one pharmacist on the premises at any one time. At two pharmacies (both branches of a multiple) there were two full time pharmacists. At one pharmacy (an independent) there was a another pharmacist for half the time (the proprietor) and at one pharmacy (a branch of a multiple) there was a second pharmacist for one day a week.
## Table 2.1: Characteristics of the interviewed community pharmacists and their pharmacies

<table>
<thead>
<tr>
<th>CP</th>
<th>Sex</th>
<th>No. of years in C. pract.</th>
<th>Position</th>
<th>Type of pharm</th>
<th>No. of CPs</th>
<th>Disp. staff</th>
<th>Location</th>
<th>Rx items per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M</td>
<td>11</td>
<td>Man</td>
<td>Multi</td>
<td>2</td>
<td>✓</td>
<td>IC</td>
<td>8000</td>
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<tr>
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<td>M</td>
<td>2.5</td>
<td>Prop</td>
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<td>×</td>
<td>SU</td>
<td>1800</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>7</td>
<td>Locum</td>
<td>SC-2</td>
<td>1</td>
<td>×</td>
<td>IC</td>
<td>1600</td>
</tr>
<tr>
<td>4</td>
<td>M</td>
<td>2</td>
<td>Man</td>
<td>Multi</td>
<td>1</td>
<td>×</td>
<td>TC</td>
<td>2000</td>
</tr>
<tr>
<td>5</td>
<td>M</td>
<td>10</td>
<td>2nd CP</td>
<td>Indep</td>
<td>1.5</td>
<td>×</td>
<td>IC</td>
<td>4000</td>
</tr>
<tr>
<td>6</td>
<td>M</td>
<td>13</td>
<td>Man</td>
<td>Multi</td>
<td>1</td>
<td>×</td>
<td>TC</td>
<td>2500</td>
</tr>
<tr>
<td>7</td>
<td>M</td>
<td>38</td>
<td>Man</td>
<td>SC-5</td>
<td>1</td>
<td>×</td>
<td>IC</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>M</td>
<td>13</td>
<td>Prop</td>
<td>Indep</td>
<td>1</td>
<td>×</td>
<td>IC</td>
<td>2450</td>
</tr>
<tr>
<td>9</td>
<td>M</td>
<td>7</td>
<td>Man</td>
<td>Multi</td>
<td>1.16</td>
<td>✓</td>
<td>TC</td>
<td>2550</td>
</tr>
<tr>
<td>10</td>
<td>F</td>
<td>2</td>
<td>Man</td>
<td>SC-6</td>
<td>1</td>
<td>✓</td>
<td>SU</td>
<td>2500</td>
</tr>
<tr>
<td>11</td>
<td>M</td>
<td>11</td>
<td>Prop</td>
<td>Indep</td>
<td>1</td>
<td>✓</td>
<td>SU</td>
<td>2450</td>
</tr>
<tr>
<td>12</td>
<td>M</td>
<td>12</td>
<td>Prop</td>
<td>Indep</td>
<td>1</td>
<td>×</td>
<td>IC</td>
<td>2000</td>
</tr>
<tr>
<td>13</td>
<td>F</td>
<td>12</td>
<td>2nd CP</td>
<td>Multi</td>
<td>2</td>
<td>✓</td>
<td>TC</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>M</td>
<td>21</td>
<td>Prop</td>
<td>Indep</td>
<td>1</td>
<td>×</td>
<td>IC</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>M</td>
<td>23</td>
<td>Prop</td>
<td>SC-4</td>
<td>1</td>
<td>✓</td>
<td>TC</td>
<td>1650</td>
</tr>
<tr>
<td>16</td>
<td>M</td>
<td>5</td>
<td>Man</td>
<td>SC-2</td>
<td>1</td>
<td>×</td>
<td>SU</td>
<td>2550</td>
</tr>
<tr>
<td>17</td>
<td>M</td>
<td>18</td>
<td>Prop</td>
<td>Indep</td>
<td>1</td>
<td>×</td>
<td>SU</td>
<td>3000</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>30</td>
<td>Prop</td>
<td>Indep</td>
<td>1</td>
<td>×</td>
<td>IC</td>
<td>3500</td>
</tr>
<tr>
<td>19</td>
<td>M</td>
<td>28</td>
<td>Man</td>
<td>SC-10</td>
<td>1</td>
<td>×</td>
<td>TC</td>
<td>2100</td>
</tr>
<tr>
<td>20</td>
<td>M</td>
<td>16</td>
<td>Prop</td>
<td>Indep</td>
<td>1</td>
<td>×</td>
<td>IC</td>
<td>1150</td>
</tr>
</tbody>
</table>
### Key for Table 2.1

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>Community pharmacist (the community pharmacists have been arbitrarily numbered from 1 to 20).</td>
</tr>
<tr>
<td>Sex</td>
<td>Sex of the pharmacist.</td>
</tr>
<tr>
<td>Where: M</td>
<td>Male.</td>
</tr>
<tr>
<td>Where: F</td>
<td>Female.</td>
</tr>
<tr>
<td>No. of years in C. Pract.</td>
<td>Number of years working in community pharmacy practice.</td>
</tr>
<tr>
<td>Position</td>
<td>Position of the pharmacist in the pharmacy.</td>
</tr>
<tr>
<td>Where: Man</td>
<td>Manager.</td>
</tr>
<tr>
<td>Where: Prop</td>
<td>Proprietor.</td>
</tr>
<tr>
<td>Where: 2nd CP</td>
<td>Second pharmacist.</td>
</tr>
<tr>
<td>Where: Locum</td>
<td>Locum pharmacist.</td>
</tr>
<tr>
<td>Type of pharm.</td>
<td>Classification of the type of pharmacy.</td>
</tr>
<tr>
<td>Where: Multi</td>
<td>Pharmacy branch of a multiple.</td>
</tr>
<tr>
<td>Where: Indep</td>
<td>Independent pharmacy.</td>
</tr>
<tr>
<td>Where: SC-X</td>
<td>Pharmacy branch of a small chain with X pharmacies in the chain.</td>
</tr>
<tr>
<td>No. of CPs</td>
<td>Number of community pharmacists working on the pharmacy premises at any one time.</td>
</tr>
<tr>
<td>Disp staff</td>
<td>Employment of dispensary staff.</td>
</tr>
<tr>
<td>Where: ✓</td>
<td>Yes.</td>
</tr>
<tr>
<td>Where: X</td>
<td>No.</td>
</tr>
<tr>
<td>Location</td>
<td>Location of pharmacy.</td>
</tr>
<tr>
<td>Where: IC</td>
<td>Inner city area.</td>
</tr>
<tr>
<td>Where: TC</td>
<td>Town centre.</td>
</tr>
<tr>
<td>Where: SU</td>
<td>Suburb.</td>
</tr>
<tr>
<td>Rx items per month</td>
<td>Estimate of the average number of prescriptions dispensed at the pharmacy in a month.</td>
</tr>
</tbody>
</table>
Chapter 2 - Interviews with CPs and GPs

At six pharmacies there were dispensary staff; only one of the six was an independent pharmacy. At the other 14 pharmacies additional staff were counter assistants only.

Figure 2.1 shows the number of community pharmacists reporting the provision of specialist services for their patients. The community pharmacists were asked which other health care professionals they had contact with and their responses are shown in Figure 2.2.

2.3.2 Characteristics of the interviewed general practitioners and their general practices

Table 2.2 shows the characteristics of the 20 general practitioners and their practices. The key for the table is on page 56.

Fourteen male and six female general practitioners participated in the interview. Five general practitioners had studied medicine in the United Kingdom. The remaining 15 had studied outside the UK, with 14 studying outside the EC. Eleven general practitioners were partners in their practices, seven were single handed practitioners and two were senior partners.

Seventeen general practitioners (data missing for three) reported a range of two to 36 support members of staff. Eleven practices had five or fewer members of support staff, four had ten or more. The median number of support staff was five.
Chapter 2 - Interviews with CPs and GPs

Figure 2.1: The number of community pharmacists reporting provision of each specialist service

<table>
<thead>
<tr>
<th>Specialist Services</th>
<th>No. of Community Pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE</td>
<td>14</td>
</tr>
<tr>
<td>CT</td>
<td>12</td>
</tr>
<tr>
<td>GM</td>
<td>10</td>
</tr>
<tr>
<td>BPM</td>
<td>8</td>
</tr>
<tr>
<td>DV</td>
<td>6</td>
</tr>
<tr>
<td>HP</td>
<td>4</td>
</tr>
<tr>
<td>RH</td>
<td>2</td>
</tr>
<tr>
<td>PC</td>
<td>1</td>
</tr>
<tr>
<td>PT</td>
<td>0</td>
</tr>
<tr>
<td>MD</td>
<td>0</td>
</tr>
<tr>
<td>OT</td>
<td>0</td>
</tr>
</tbody>
</table>

Where: NE = needle exchange; CT = cholesterol testing; GM = glucose monitoring; BPM = blood pressure monitoring; DV = domiciliary visits; HP = Health promotion; RH = residential homes service; PC = prescription collection; PT = pregnancy testing; MD = medicine delivery; OT = oxygen therapy.

Figure 2.2: The number of community pharmacists reporting contact with other health care professionals

<table>
<thead>
<tr>
<th>Health Care Professionals</th>
<th>No. of Community Pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td>HV</td>
<td>14</td>
</tr>
<tr>
<td>ST</td>
<td>12</td>
</tr>
<tr>
<td>CD</td>
<td>10</td>
</tr>
<tr>
<td>MW</td>
<td>8</td>
</tr>
<tr>
<td>HD</td>
<td>6</td>
</tr>
<tr>
<td>OP</td>
<td>4</td>
</tr>
<tr>
<td>NSH</td>
<td>2</td>
</tr>
<tr>
<td>PN</td>
<td>1</td>
</tr>
<tr>
<td>DT</td>
<td>0</td>
</tr>
<tr>
<td>DN</td>
<td>0</td>
</tr>
</tbody>
</table>

Where: HV = health visitor; ST = speech therapist; CD = chiropodist; MW = midwife; HD = hospital doctor; OP = optician; NSH = nursing staff in home; PN = practice nurse; DT = dentist; DN = district nurse.
### Table 2.2: Characteristics of the interviewed general practitioners and their practices

<table>
<thead>
<tr>
<th>GP</th>
<th>Sex</th>
<th>UK qual.</th>
<th>No. of years in gen. pract.</th>
<th>Position</th>
<th>No. of GPs</th>
<th>List size</th>
<th>Loc</th>
<th>Fund holding</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F</td>
<td>✓</td>
<td>11</td>
<td>Partner</td>
<td>5</td>
<td>11500</td>
<td>SU</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>✓</td>
<td>36</td>
<td>Partner</td>
<td>5</td>
<td>12700</td>
<td>IC</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>3</td>
<td>M</td>
<td>x</td>
<td>35</td>
<td>Single</td>
<td>1</td>
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<td>SU</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4</td>
<td>M</td>
<td>x</td>
<td>29</td>
<td>S. Part.</td>
<td>2</td>
<td>4000</td>
<td>TC</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>5</td>
<td>M</td>
<td>✓</td>
<td>25</td>
<td>Partner</td>
<td>8</td>
<td>17000</td>
<td>SU</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>6</td>
<td>M</td>
<td>x</td>
<td>15</td>
<td>Single</td>
<td>1</td>
<td>2900</td>
<td>TC</td>
<td>x</td>
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<td>7</td>
<td>M</td>
<td>x</td>
<td>24</td>
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<td>1800</td>
<td>SU</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>8</td>
<td>F</td>
<td>x</td>
<td>11</td>
<td>Partner</td>
<td>2</td>
<td>2000</td>
<td>IC</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>9</td>
<td>M</td>
<td>x</td>
<td>32</td>
<td>Partner</td>
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<td>5000</td>
<td>SU</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>10</td>
<td>M</td>
<td>x</td>
<td>15</td>
<td>Single</td>
<td>1</td>
<td>2300</td>
<td>IC</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
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<td>F</td>
<td>x</td>
<td>6</td>
<td>Partner</td>
<td>4</td>
<td>7800</td>
<td>SU</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>12</td>
<td>M</td>
<td>x</td>
<td>10</td>
<td>Single</td>
<td>1</td>
<td>-</td>
<td>SU</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>13</td>
<td>M</td>
<td>x</td>
<td>10</td>
<td>Partner</td>
<td>2</td>
<td>3500</td>
<td>IC</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>14</td>
<td>M</td>
<td>✓</td>
<td>6</td>
<td>Partner</td>
<td>4</td>
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<td>SU</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>15</td>
<td>M</td>
<td>x</td>
<td>8</td>
<td>S. Part.</td>
<td>2</td>
<td>4300</td>
<td>IC</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>16</td>
<td>F</td>
<td>x</td>
<td>8</td>
<td>Partner</td>
<td>2</td>
<td>5200</td>
<td>SU</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>17</td>
<td>F</td>
<td>✓</td>
<td>14</td>
<td>Partner</td>
<td>6</td>
<td>12000</td>
<td>SU</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>18</td>
<td>M</td>
<td>x</td>
<td>32</td>
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<td>1</td>
<td>3000</td>
<td>SU</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>19</td>
<td>F</td>
<td>x</td>
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<td>Partner</td>
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<td>10000</td>
<td>IC</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>20</td>
<td>M</td>
<td>x</td>
<td>10</td>
<td>Single</td>
<td>1</td>
<td>4000</td>
<td>IC</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

55
### Key for Table 2.2

<table>
<thead>
<tr>
<th>GP</th>
<th>General practitioner (the general practitioners have been arbitrarily numbered from 1 to 20).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Sex of the general practitioner.</td>
</tr>
<tr>
<td>Where: M</td>
<td>Male.</td>
</tr>
<tr>
<td>Where: F</td>
<td>Female.</td>
</tr>
<tr>
<td>UK qual.</td>
<td>Qualified as a doctor in the United Kingdom.</td>
</tr>
<tr>
<td>Where: ✓</td>
<td>Yes.</td>
</tr>
<tr>
<td>Where: ✗</td>
<td>No.</td>
</tr>
<tr>
<td>No. of years in gen. pract.</td>
<td>Number of years working in general practice.</td>
</tr>
<tr>
<td>Position</td>
<td>Position of the general practitioner in the practice.</td>
</tr>
<tr>
<td>Where: Partner</td>
<td>Partner in the practice.</td>
</tr>
<tr>
<td>Where: S.Part.</td>
<td>Senior partner in the practice.</td>
</tr>
<tr>
<td>Where: Single</td>
<td>Single handed practitioner.</td>
</tr>
<tr>
<td>No. of GPs</td>
<td>Number of general practitioners working in the practice.</td>
</tr>
<tr>
<td>List size</td>
<td>The number of patients registered with the practice.</td>
</tr>
<tr>
<td>Loc</td>
<td>Location of the general practice.</td>
</tr>
<tr>
<td>Where: IC</td>
<td>Inner city area.</td>
</tr>
<tr>
<td>Where: TC</td>
<td>Town centre.</td>
</tr>
<tr>
<td>Where: SU</td>
<td>Suburb.</td>
</tr>
<tr>
<td>Fundholding</td>
<td>A fundholding practice.</td>
</tr>
<tr>
<td>Where: ✓</td>
<td>Yes.</td>
</tr>
<tr>
<td>Where: ✗</td>
<td>No.</td>
</tr>
<tr>
<td>Form</td>
<td>The practice has its own formulary.</td>
</tr>
<tr>
<td>Where: ✓</td>
<td>Yes.</td>
</tr>
<tr>
<td>Where: ✗</td>
<td>No.</td>
</tr>
</tbody>
</table>
Chapter 2 - Interviews with CPs and GPs

The general practitioners were asked about the specialist clinics or treatments available at their practices and Figure 2.3 shows the responses given.

The general practitioners were asked:

'Which other members of the primary health care team do you work closely with?'

The responses given are shown in Figure 2.4.

2.3.3 Section 1 - Local general practices/local community pharmacies

The questions in Section 1 of the community pharmacist interview aimed to build up a picture of the local general practices in relation to the pharmacy and in the general practitioner interview, a picture of the local pharmacies in relation to the practice.

The pharmacists were asked where their prescriptions came from, in terms of the number of general practices and practitioners involved. The 20 community pharmacists reported receiving over 50% of their prescriptions from a total of 68 local general practices. The mean number of local practices providing the majority of the prescriptions for each of the 20 pharmacies was three, a range of one to seven practices per pharmacy. Thirteen pharmacists said that more than 70% of their prescriptions came from local practices. The number of general practitioners in each of the local practices ranged from one (single handed practitioners) to seven. Small practices with one or two general practitioners accounted for 40 of the 68 local practices. Fifteen pharmacists identified one local general practice that they dealt
Chapter 2 - Interviews with CPs and GPs

Figure 2.3: The number of general practitioners reporting provision of each specialist clinic / treatment

<table>
<thead>
<tr>
<th>Specialist Clinic / Treatment</th>
<th>No. of General Practitioners</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC</td>
<td>3</td>
</tr>
<tr>
<td>FT</td>
<td>4</td>
</tr>
<tr>
<td>CO</td>
<td>5</td>
</tr>
<tr>
<td>HP</td>
<td>6</td>
</tr>
<tr>
<td>DT</td>
<td>7</td>
</tr>
<tr>
<td>CS</td>
<td>8</td>
</tr>
<tr>
<td>CH</td>
<td>9</td>
</tr>
<tr>
<td>HDC</td>
<td>10</td>
</tr>
<tr>
<td>VAC</td>
<td>11</td>
</tr>
<tr>
<td>AC</td>
<td>12</td>
</tr>
<tr>
<td>MS</td>
<td>13</td>
</tr>
<tr>
<td>FP</td>
<td>14</td>
</tr>
<tr>
<td>DC</td>
<td>15</td>
</tr>
<tr>
<td>ANC / PNC</td>
<td>16</td>
</tr>
</tbody>
</table>

Where: OC = obesity clinic; FT = family therapy; CO = counsellor; HP = health promotion; DT = dietician; CS = cervical smear; CH = child health; HDC = heart disease clinic; VAC = vaccinations; AC = asthma clinic; MS = minor surgery; FP = family planning; DC = diabetes clinic; WPC = well person clinic; ANC / PNC = ante-natal and post-natal clinics.

Figure 2.4: The number of general practitioners reporting working closely with other health care professionals

<table>
<thead>
<tr>
<th>Health Care Professionals</th>
<th>No. of General Practitioners</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>2</td>
</tr>
<tr>
<td>CD</td>
<td>3</td>
</tr>
<tr>
<td>MacN</td>
<td>4</td>
</tr>
<tr>
<td>CO</td>
<td>5</td>
</tr>
<tr>
<td>PHY</td>
<td>6</td>
</tr>
<tr>
<td>SW</td>
<td>7</td>
</tr>
<tr>
<td>CPN</td>
<td>8</td>
</tr>
<tr>
<td>MW</td>
<td>9</td>
</tr>
<tr>
<td>HV</td>
<td>10</td>
</tr>
<tr>
<td>DN</td>
<td>11</td>
</tr>
</tbody>
</table>

Where: OS = osteopath; CD = chiropodist; MacN = Macmillan nurse; CO = counsellor; PHY = physiotherapist; SW = social worker; CPN = community psychiatric nurse; MW = midwife; HV = health visitor; DN = district nurse.
with most frequently; this was usually the practice nearest to the pharmacy. Five pharmacists identified two of their local general practices that they dealt with most frequently.

The general practitioners were asked how many pharmacies were involved in the dispensing of their prescriptions. Nineteen general practitioners (data missing for one) reported that a total of 73 local community pharmacies dispensed more than 50% of their own prescriptions, a range of two to eight pharmacies per general practitioner. The mean number of local pharmacies dispensing the majority of the prescriptions for each of the 19 general practitioners was four. Eleven general practitioners said that more than 70% of their prescriptions were dispensed at local pharmacies. Eleven general practitioners identified one local pharmacy that they dealt with most frequently, five identified two and one general practitioner identified three local pharmacies. Two general practitioners said that they did not deal with any particular pharmacies (data missing for one general practitioner).

In response to a question asking about the distance to the local general practices and the local pharmacies, the community pharmacists and general practitioners expressed the distances in different ways: yards, miles, location or the length of time that it took to walk/drive. In order to illustrate the proximity, the distance to the nearest local general practices/pharmacies was described in terms of: 'fifty yards away', 'next door', 'round the corner' and a 'two minute walk'. The distance to the further local practices/pharmacies was described in terms of: 'one mile away', 'a twenty minute
walk' and 'a five minute drive'.

In order to complete the local picture, the community pharmacists were asked how many other pharmacies there were in the locality (defined as a one mile radius from their pharmacy) and the general practitioners were asked about other local general practices. The results are shown in Table 2.3. The median number of other local community pharmacies was four; the median number of other local general practices was five.

Table 2.3: The number of local pharmacies and local general practices reported by the community pharmacists and general practitioners respectively.

<table>
<thead>
<tr>
<th>No. of community pharmacists (n = 20)</th>
<th>No. of other local pharmacies</th>
<th>No. of general practitioners (n = 13, data missing for 7)</th>
<th>No. of other local general practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>1</td>
<td>12</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>15</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>1</td>
<td>19</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.3.4 Section 2 - Relationship with local general practitioners/community pharmacists

Section 2 of the interview schedules asked the pharmacists and general practitioners about the nature of their interprofessional relationships and the extent and nature of any social contact.

2.3.4.1 The nature of the interprofessional relationship

The community pharmacists were asked to describe their relationship with each local general practitioner and the general practitioners were asked to describe their relationship with each local community pharmacist. The responses were categorised into positive, neutral and negative, as shown in Table 2.4.

Table 2.4: The community pharmacists (CPs) and general practitioners (GPs) responses, when asked to describe their relationships with the local general practitioners and community pharmacists respectively.

<table>
<thead>
<tr>
<th>No. of positive responses given by:</th>
<th>No. of neutral responses given by:</th>
<th>No. of negative responses given by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPs 11</td>
<td>GPs 17</td>
<td>CPs 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CPs 5</td>
</tr>
</tbody>
</table>

The majority of the community pharmacists and general practitioners described their relationships in positive terms; no general practitioners initially responded negatively. The positive responses given included: 'excellent', 'extremely good' and 'very friendly'. The neutral responses included: 'OK', 'not bad' and 'reasonable'.

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The negative responses included: ‘fairly poor’, ‘very minimal’ and ‘no relationship’.

The probes following the main question asked the community pharmacists and general practitioners to elaborate on their responses. Four of the community pharmacists, who had described their relationships with the local general practitioners in positive terms, qualified their responses by describing the way that their local general practitioners handled queries:

‘Dealing with problems on prescriptions, any queries, are very happily dealt with’.

One pharmacist described a reciprocal relationship:

‘They are always asking for information and they are always willing to share any information that I need’.

Good communication was mentioned by another pharmacist:

‘We can talk about everything’.

One community pharmacist had been instrumental in helping to set up three of the local general practices and was involved in the provision of patient orientated services, including oxygen therapy and domiciliary visits, which he felt contributed to his ‘excellent’ relationships.

Two community pharmacists who had initially described their relationships in positive terms, added that they felt the positive descriptions only applied to local single handed general practitioners and not to larger local practices:

‘With the group practice we don’t get much chance....I think they are a long established practice and simply cope by themselves pretty well. They seem to be self sufficient’.

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One community pharmacist, who initially described his relationships with the local general practitioners in positive terms, added that he felt there was 'scope for improvement' and that there needed to be greater understanding of each other's roles.

The general practitioners, who had described their relationships with the local community pharmacists in positive terms, generally qualified their responses by further describing the local community pharmacists as: 'helpful', 'obliging' and 'understanding'. Two way communication was also mentioned:

'They ring me up; I can ring them up'.

The provision of supportive patient services by the community pharmacists, including prescription collection, medicine delivery, ordering items for particular patients and the provision of emergency supplies of medication, were also given as reasons to explain why the general practitioners had described their relationships in positive terms.

The four community pharmacists who gave a neutral response to the main question qualified their responses by saying that they did not really have a relationship with the local general practitioners and only had contact with them regarding prescription queries. Two of the general practitioners who responded in a neutral manner, expanded their responses when probed:

'The relationship is mainly with our receptionists'.
'There is no personal relationship'.

One of the five community pharmacists, who described his relationships with the local general practitioners in negative terms, had only been working at the pharmacy where he was interviewed for a period of a month and he hoped that he would be able to establish relationships with time. Negative responses were qualified by the other four community pharmacists by the following additional comments:

'The relationship...seems to be very one sided. She won't help us'.

'They are not really interested in any kind of communication'.

'The practices are not overly keen on getting involved at all'.

'I don't think the doctors appreciate what the pharmacist can do'.

Four general practitioners who had initially responded positively to the main question, added negative comments in response to the probes. The comments made by three of the general practitioners specifically applied to one or two local pharmacists:

'It is difficult to have a good relationship with people that you don't know. Sometimes some of the advice that has been given is perhaps not the advice that I would have chosen for patients to have or the right sort of approach'.

'We have some worries about one [of the local community pharmacists]'.

'Sometimes you think that he would like to be a doctor and you have to remind him that he is a pharmacist'.

'One or two you do get worries with sometimes because you find that they are defrauding the patients'.
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2.3.4.2 Social contact

Section 2 continued by asking the community pharmacists and the general practitioners whether they had any social contact with their local general practitioners and community pharmacists respectively. Seventeen community pharmacists said that they did not have any social contact with the local general practitioners. Three pharmacists said that they did have social contact with one local general practitioner; two reporting that the social contact took place at the pharmacy:

'One of the local general practitioners] comes to the shop quite often; once or twice a week'.

'Sometimes on a Saturday the doctor opposite will come down and have a chat'.

Reasons given by the pharmacists to explain why they did not have any social contact with the local general practitioners included: lack of time; not living in the area where they worked; lack of interest on behalf of the general practitioners; the fact that some general practitioners did have or may have established relationships with other local pharmacists and having only been in practice in the area for a short period of time.

Seventeen general practitioners said that they had no social contact with any of the local community pharmacists. The three general practitioners who said that they did have social contact, reported that they invited the local community pharmacists to the practice Christmas party. Two general practitioners gave reasons to explain the lack of social contact:

'Chances are very limited'.

'They are busy and we are busy'.
2.3.5 Section 3 - Professional communications

Section 3 of the interview schedules explored the community pharmacists' and general practitioners' interprofessional relationships in terms of the methods, frequency and nature of the professional contacts, as well as exploring feelings about the contacts and responses received. The issue of face to face contact was also explored.

2.3.5.1 Who usually initiates professional contacts?

Thirteen community pharmacists felt that they usually initiated professional contacts with their local general practitioners, although one of the 13 pharmacists said that contacts were initiated by both parties with respect to one particular local general practitioner. Seven pharmacists felt that professional contacts were initiated equally by themselves and their local general practitioners. None of the pharmacists felt that the local general practitioners usually initiated the professional contacts.

Twelve general practitioners felt that contacts were initiated by both parties, six felt that their local community pharmacists usually initiated the professional contacts and two general practitioners felt that they usually initiated the professional contacts with their local community pharmacists.

2.3.5.2 Methods of contact

All the community pharmacists and general practitioners reported that the telephone was the primary method of communication, for pharmacist and general practitioner
initiated contacts. Five community pharmacists reported that they would, on
occasion, write to a general practitioner and four said that they would contact local
general practitioners in person. Seven pharmacists, including the four who said that
they would contact general practitioners in person, reported that general practitioners
would contact them in person. Three pharmacists reported that they would initiate
contact by sending a member of staff to the practice.

Six general practitioners said that they would contact local community pharmacists in
person - five reported that they would do this occasionally, but one general
practitioner felt that he initiated 50% of his professional contacts with one local
pharmacist in person. Four of the six general practitioners, who said that they would
contact local pharmacists in person, reported that local pharmacists would contact
them in person. Four general practitioners reported professional contacts being
initiated by the pharmacist sending a member of staff to the practice. Three general
practitioners said that community pharmacists may contact them by letter and one
general practitioner reported being contacted by one local pharmacist by fax.

2.3.5.3 Frequency of professional contacts

The community pharmacists and general practitioners were asked how frequently they
would initiate professional contacts and how frequently general practitioners/
community pharmacists would initiate contacts with them respectively. The
pharmacists and general practitioners were asked to give general frequencies and
specific frequencies for each local general practitioner/community pharmacist, but
only general responses were given. The results are shown in Table 2.5.

### Table 2.5: The community pharmacists (CPs) and general practitioners (GPs) reported frequencies of professional contacts.

<table>
<thead>
<tr>
<th>Frequency of contact</th>
<th>No. of CPs reporting frequency of:</th>
<th>No. of GPs reporting frequency of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CP initiated contact (n = 20)</td>
<td>GP initiated contact (n = 16)</td>
</tr>
<tr>
<td></td>
<td>CP initiated contact (n = 19)</td>
<td>GP initiated contact (n = 19)</td>
</tr>
<tr>
<td>Two to four times a day</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Daily</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Two to four times a week</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Once a week</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Once every two to four weeks</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Once every two months</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Once every three months</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Once every six to twelve months</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

All 20 community pharmacists reported that they would contact a general practitioner no less frequently than once every two to four weeks; six pharmacists reported initiating at least once daily contact. Over half the community pharmacists said that a general practitioner would contact them once every two to four weeks or less frequently. Four pharmacists were unable to quantify how
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frequently they would be contacted by a general practitioner - three said that general practitioner initiated contacts were very rare and one pharmacist said that he had never been contacted by a general practitioner.

Over half the general practitioners reported that they would be contacted by a community pharmacist at least once a week and over half reported initiating contacts at least once a week. One general practitioner was unable to quantify how frequently a pharmacist would contact him and another general practitioner was unable to quantify how frequently she initiated professional contact with a community pharmacist:

'I can't remember the last time that I did [contact a pharmacist]'.

2.3.5.4 The nature of interprofessional contacts

Section 3 of the community pharmacist and general practitioner interview schedules continued by exploring the nature of the professional contacts initiated by community pharmacists and general practitioners. The community pharmacists and general practitioners were asked for specific examples of any contacts that day and/or earlier in the week. A few examples were given but the majority of the responses were generalisations.

Community pharmacist initiated contacts

Eighteen of the community pharmacists gave a total of 65 responses when asked about the reasons for contacts that they had initiated. Two pharmacists said that they
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initiated contact with general practitioners when prescription queries arose, but did not give any further information. A range of two to nine detailed responses were given by each of the 18 pharmacists; the median number of responses was three. All 20 general practitioners gave detailed responses regarding the nature of community pharmacist initiated contacts. A total of 69 responses were given, ranging from one to nine responses per general practitioner. The median number of responses was three. The responses are shown in Table 2.6.

General practitioner initiated contacts

Seventeen community pharmacists gave a total of 44 responses when asked about the nature of contacts that had been initiated by general practitioners. A range of one to five detailed responses were given by each of the 17 pharmacists; the median number of responses was two. Three pharmacists were unable to respond to the question - two could not remember the details of any general practitioner initiated contacts because they occurred very infrequently and one pharmacist said that he had never been contacted by any general practitioners. Four of the seventeen pharmacists made additional comments regarding the nature of general practitioner initiated contacts, illustrating that they felt under-utilised:

'\textit{They don't ask me any knowledge questions}'.

'\textit{They don't consult us on other professional matters}'.

'\textit{I wish they would [consult us for other reasons] but they don't}'.

'\textit{Very rarely have we had a general practitioner come and ask for advice}'.

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### Table 2.6: The nature of the contacts initiated by community pharmacists as reported by the interviewed pharmacists and general practitioners

<table>
<thead>
<tr>
<th>Contacts to confirm a point on a prescription when:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The dose on a prescription is different to the one previously prescribed for a patient</td>
</tr>
<tr>
<td>• A different or new item is prescribed for a patient</td>
</tr>
<tr>
<td>• A dose appears to be too high or too low for a patient</td>
</tr>
<tr>
<td>• A different or inappropriate quantity of medication is prescribed</td>
</tr>
<tr>
<td>• A prescribed item seems unsuitable for a patient</td>
</tr>
<tr>
<td>• An item is prescribed generically and it is not possible to determine what the prescriber intended</td>
</tr>
<tr>
<td>• A prescription is written by hand and is illegible</td>
</tr>
<tr>
<td>• A prescription is generated by computer and contains an error</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contacts regarding missing information on a prescription, when any of the following are missing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Quantity</td>
</tr>
<tr>
<td>• Strength</td>
</tr>
<tr>
<td>• Dose</td>
</tr>
<tr>
<td>• Dosage instructions</td>
</tr>
<tr>
<td>• Form</td>
</tr>
<tr>
<td>• Size of a dressing or appliance</td>
</tr>
<tr>
<td>• Prescriber's signature</td>
</tr>
<tr>
<td>• A regularly prescribed item</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contacts regarding drug interactions</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Contacts concerned with inability to supply when:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• An item is no longer prescribable on the NHS (ie. blacklisted items)</td>
</tr>
<tr>
<td>• A manufacturer is unable to supply an item for a considerable time</td>
</tr>
<tr>
<td>• A manufacturer has discontinued an item</td>
</tr>
<tr>
<td>• A patient reports an allergy to a prescribed item</td>
</tr>
</tbody>
</table>

The 20 general practitioners gave a total of 49 detailed responses regarding the nature of contacts that they had initiated, ranging from one to five responses per general practitioner. The median number of responses was two. The responses are shown in Table 2.7.
Table 2.7: The nature of the contacts initiated by general practitioners as reported by the interviewed pharmacists and general practitioners

- **Contacts regarding supply including:**
  - Emergency supply of medication for a patient
  - A specific item to be ordered for the practice or a patient
  - Medication to be delivered to a patient
  - Medication to be dispensed for a drug addict
  - The availability of an item on the NHS
  - The availability of long term out-of-stock items

- **Contacts to request clinical information including:**
  - The different strengths, forms or sizes available for a particular product
  - The recommended dosage of a given medication for a specific patient
  - Information about dressings and appliances
  - The active ingredients in a particular preparation
  - Alternative items that can be prescribed when a similar item is unavailable on the NHS
  - Contra-indications to a particular drug
  - Current indications for a particular drug
  - Information from the pharmacy held patient medication records

- **Contacts to request general information/general requests**

**2.3.5.5 Professional contacts: feelings and responses**

The pharmacists were asked to express how they felt about contacting general practitioners, how general practitioners responded when they were contacted and how the pharmacists felt when general practitioners contacted them. The general practitioners were asked the same questions with respect to their feelings about initiating contacts, the way community pharmacists responded and their feelings about being contacted by community pharmacists. The responses given by the community pharmacists and general practitioners to the three questions were categorised into
positive (+), neutral (0) and negative (-) as shown in Table 2.8.

Table 2.8: The community pharmacists (CPs) and general practitioners (GPs) responses to three questions about initiating contacts, responses received and being contacted.

<table>
<thead>
<tr>
<th>Questions posed</th>
<th>No. of community pharmacists responding;</th>
<th>No. of general practitioners responding;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 17; data missing for 3)</td>
<td>(n = 18; data missing for 2)</td>
</tr>
<tr>
<td>How do you feel about initiating contacts?</td>
<td>+ 0 -</td>
<td>+ 0 -</td>
</tr>
<tr>
<td></td>
<td>3 12 2</td>
<td>9 9 0</td>
</tr>
<tr>
<td></td>
<td>(n = 20; five CPs gave two answers)</td>
<td>(n = 19; data missing for 1)</td>
</tr>
<tr>
<td></td>
<td>+ 0 -</td>
<td>+ 0 -</td>
</tr>
<tr>
<td></td>
<td>12 4 9</td>
<td>14 5 0</td>
</tr>
<tr>
<td></td>
<td>(n = 14; data missing for 6)</td>
<td>(n = 18; data missing for 2; five GPs gave two answers)</td>
</tr>
<tr>
<td>How do the GPs / CPs respond ?</td>
<td>+ 0 -</td>
<td>+ 0 -</td>
</tr>
<tr>
<td></td>
<td>6 8 0</td>
<td>8 11 4</td>
</tr>
</tbody>
</table>

The positive responses given by the community pharmacists in response to the first question concerning their feelings about initiating contact with general practitioners.
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included: 'fine' and 'quite happy to do so'. The positive responses given by the general practitioners in response to the first question concerning their feelings about initiating contacts included: 'delighted', 'first class; it's as mutual understanding' and 'quite easy'. The neutral responses given by the pharmacists in response to the first question included: 'it's part of the job', 'there are no problems' and 'it is essential'. The neutral responses given by the general practitioners included: 'I don't feel anything' and 'alright'.

The negative responses given by the two pharmacists to the first question were:

'It is difficult when you are really, really busy and customers are waiting'.

'You have to phone up doctors for silly reasons really. A lot of mistakes that get rectified by us can be avoided'.

Two pharmacists added to their responses to the first question by saying that they sometimes had difficulty in trying to bypass receptionists in order to speak to general practitioners.

The second question asked the community pharmacists how the general practitioners responded to pharmacist initiated contacts. Five pharmacists gave more than one response to this question, covering their experiences with a number of different general practitioners. The positive responses included: 'appreciative', 'understanding', 'friendly' and 'helpful'. The positive responses given by the general practitioners concerning the responses received when contacting community pharmacists included: 'they are always very helpful', 'very co-operative', 'they are
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super in the main' and 'very positive'. The neutral responses given by the community pharmacists and the general practitioners in response to the second question included: 'no problems' and 'alright'. Nine community pharmacists responded negatively to the second question - four also gave positive responses with regard to the way that some of the general practitioners responded to contacts and one pharmacist also gave a neutral response. The negative responses included:

'They are a bit short if they are busy'.

'They get upset if you correct them too many times'.

'I get the impression that they feel we are being a pain'.

The third question explored how the community pharmacists and general practitioners felt when they were contacted. In response to this question three pharmacists, including two who had previously said that they felt under utilised, stated that they would welcome further contact from general practitioners. The positive responses given by the six community pharmacists included:

'Good that they feel free to call'.

'Pleased that they are involving me in patient care'.

'Very proud because at least I know that they recognise our role'.

Five general practitioners each gave two responses in answer to the question concerning their feelings when community pharmacists contacted them, reflecting their experiences with different pharmacists. The positive responses included:

'They are a safety net and they stop things from going wrong, so I am only
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too pleased they do'.
'I am quite happy for them to ring'.
'Absolutely fine'.

One general practitioner who initially gave a neutral response:
'I don't mind',
elaborated his feelings, giving a final positive response:
'I'm usually grateful'.

The neutral responses made by the community pharmacists included:
'It is part of the job'.
'No problem'.

The neutral responses made by the general practitioners included:
'We don't have any problems'.
'It is part of the normal running of the practice'.

One general practitioner who initially gave a negative response:
'Obviously it is a nuisance because they are ringing you during surgery time',
then elaborated to give a neutral response:
'It is essential and it is normally my fault'.

Two general practitioners who gave negative responses to question three had initially
given positive responses and another general practitioner who responded negatively
had initially given a neutral response. The negative responses given by these three
general practitioners elaborated on their initial positive/neutral responses, by giving examples of situations that would lead to the general practitioners feeling negative:

'If they start telling me what I should prescribe then I would be very unhappy about it'.

'The only thing is that they should know not to disturb me unnecessarily in the middle of surgery'.

'You can sometimes feel a bit twitchy that someone is trying to tell you your job'.

2.3.5.6 Face to face contacts

The community pharmacists and general practitioners were asked about face to face contacts with the local general practitioners and community pharmacists respectively. Questions covered the frequency, place and nature of any such contacts.

The majority of the community pharmacists (14) reported that they did have face to face contact with local general practitioners at the pharmacy and/or at the general practice. The frequency of face to face contacts ranged from occasionally to daily; the majority of the face to face contacts occurring once a month. Eight pharmacists reported face to face contacts both at the pharmacy and at general practices, four reported face to face contact only at the pharmacy and two reported face to face contacts at general practices only. Two community pharmacists who reported face to face contacts at general practices expanded their responses as follows:

'[Face to face contact only occurs] if the general practitioner is there behind the reception'.

'[Face to face contact only occurs] if I am at the surgery and I happen to see
In general, the pharmacists reported that face to face contacts at general practices took place when the pharmacists went to collect prescriptions and to have prescriptions amended. Face to face contacts at the pharmacy took place when the general practitioners came to purchase items and when they came to deliver prescriptions. The pharmacists reported that the majority of face to face contacts were with one or two local general practitioners, in particular with the single handed local general practitioners.

Fourteen general practitioners reported that they had face to face contact with local community pharmacists, ranging in frequency from infrequent contact to daily contact. The majority of the contacts occurred once a month. Nine general practitioners reported face to face contacts at pharmacies and the general practice, five reported that all the face to face contacts took place at pharmacies. Three general practitioners who reported face to face contacts at the general practice expanded their responses as follows:

‘I might happen to catch one coming up to the desk to pick up something’.

‘If I see them here I speak to them’.

‘[The community pharmacist] may talk to me if I am free’.

General practitioners went to the local pharmacies to purchase items, deliver prescriptions and amend prescriptions. Local community pharmacists came to the practice to collect prescriptions and deliver items that had been ordered. The general practitioners reported that the face to face contacts were, on the whole, with one or
two local pharmacists. Six of the general practitioners who reported face to face contacts were single handed practitioners; only one single handed practitioner interviewed reported having no face to face contact with local pharmacists.

2.3.6 Section 4 - Working together

Section 4 of the interview schedules explored: the extent and nature of the community pharmacists and general practitioners past and current involvement in interprofessional collaboration; their level of interest with regard to working together in the future; areas with the potential for collaboration and advantages and disadvantages of interprofessional collaboration.

2.3.6.1 Past and current involvement in interprofessional collaboration

In order to explore the extent and nature of past and current interprofessional collaboration, the community pharmacists and general practitioners were asked if: they had ever attended any joint meetings, workshops or study days; whether they were invited to attend meetings by local general practitioners/community pharmacists respectively; whether they invited local general practitioners/community pharmacists to attend meetings and whether they were currently or had been involved in any joint projects.

Meetings, workshops and study days.

Thirteen community pharmacists had never been to any joint meetings, workshops or study days; seven had. Four of the seven pharmacists were pharmacy managers at
branches of a multiple or a small chain, two were independent proprietor pharmacists and one was the second pharmacist at the branch of a multiple. The seven pharmacists reported attending a total of 17 such events, ranging from two to four per pharmacist. The majority of the joint events were organised by the FHSAs. One pharmacist reported attending a joint event organised by a drug company. The format of the events varied; some were whole study days with guest speakers in the morning and workshops in the afternoon and others were afternoon or evening meetings. Six of the seven pharmacists, who had attended these events, felt that more pharmacists than general practitioners had attended. Subjects covered at the meetings and study days included: PACT data interpretation; pharmacy audit; liaison between general practitioners and community pharmacists and health promotion. Some of the joint events attended had been clinical meetings and topics covered had included: cardiology, oral health, diabetes, dermatology and arthritis. On the whole the pharmacists felt that the benefits of such events were educational. One pharmacist reported:

'There is really no social aspect; there could be but everyone is very pushed for time'.

Time, funding and finding locum cover were reported as the barriers to attending such events by the community pharmacists who had never attended.

Fifteen general practitioners reported that they had never attended any joint meetings, workshops or study days; five had. Three of the five general practitioners were single handed, one was the senior partner in a two general practitioner practice and the fifth
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was a general practitioner partner in a practice with six general practitioners. Two
general practitioners reported that they had attended only one such event, organised
by the FHSA. The joint meeting attended by one general practitioner had focused on
prescribing practice. The second general practitioner had been to a joint workshop
on formulary development. Two general practitioners had each attended one joint
promotional event organised by a drug company. The fifth general practitioner had
attended a joint clinical course organised by the medical audit advisory group
(MAAG) looking at heart disease prevention, lipid monitoring and contraception.

Invited to meetings

Sixteen community pharmacists reported that they had never been invited to a
meeting at any of the local general practices; four pharmacists reported that they had.
Two of the pharmacists were independent pharmacist proprietors, one was a
pharmacy manager at a branch of a small chain and the fourth was a pharmacy
manager at a branch of a multiple. The two pharmacist managers each reported that
they had attended monthly meetings at a local general practice where they had
previously worked. One reported that the meetings had involved discussions centred
around prescribing issues; the other reported educational monthly meetings for the
whole of the primary health care team. One independent pharmacist proprietor had
attended a single meeting at a local general practice together with other local
pharmacists, nurses and midwives to discuss nurse prescribing. The second
independent pharmacist proprietor reported currently attending regular meetings at
two of his local general practices, at which they discussed:
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‘All and sundry from the business plan to staffing’.

Although no other pharmacists reported attending meetings in person, the second pharmacist at an independent pharmacy reported that the proprietor pharmacist had attended a meeting at a local general practice to discuss asthma medication and inhalation devices.

None of the general practitioners reported having ever been invited to attend a meeting by a local pharmacist.

**Invited a general practitioner/community pharmacist to a meeting**

Eighteen pharmacists reported that they had never organised a meeting and invited a local general practitioner or practitioners to attend; two pharmacists had. One pharmacist, a manager at a branch of a multiple, had invited local general practitioners, their receptionists and all the staff from the nursing homes where they provided a pharmaceutical service to come to the pharmacy one evening. The visitors were given an explanation and demonstration of the monitored dosage system used in the nursing homes and a tour of the dispensary. The second pharmacist had invited local general practitioners to the pharmacy where he had previously worked. He had shown them around and they had discussed over the counter prescribing.

Although no other pharmacists reported having organised such meetings for local general practitioners, one pharmacist had invited the receptionists from one local
practice to the pharmacy where he had worked previously, to show them the monitored dosage system that he supplied to the local nursing home. Another pharmacist, the second pharmacist at a branch of a multiple, reported that she was involved in an informal scheme whereby the general practitioner trainee at the local practice attended the pharmacy for up to a week during his/her training period and the pre-registration pharmacy graduate at the pharmacy spent time at the local practice.

Three general practitioners reported that they had invited local community pharmacists to the general practice for a single meeting in the past. One of those general practitioners also reported that a local community pharmacist had, in the past, been invited to attend a few practice meetings when the development of drug protocols was discussed.

Projects

The community pharmacists and general practitioners were asked if they were currently involved in a project with any local general practitioners/community pharmacists respectively or if they had been in the past. Two independent proprietor pharmacists replied that they were currently involved in a joint project. The second pharmacist at a branch of a multiple was also supposed to be involved in a joint project but it had foundered. One single handed general practitioner reported involvement in a joint project and another general practitioner, the senior partner in a two general practitioner practice, was intending to set up a joint project.
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One independent proprietor pharmacist reported being involved in an FHSA project concerned with primary health care team work. The 'team' consisted of all primary health care professionals who would visit a housebound patient at home, plus any others who could provide a service that a housebound patient might need and, therefore, could join the team as and when required. In order to fulfil his role in the team, the pharmacist had attended a domiciliary care training programme. The project involved improving communication between all the team members by the use of a file kept at the patient's home. Any team member who visited the patient had access to the file and could make notes in it for future reference. The pharmacist explained that this was a pilot project and if successful could be implemented throughout the FHSA.

The second independent proprietor pharmacist was involved in a formulary development project, organised jointly by the practice and pharmacist. Discussions were often opportunistic, but a more formal structure would be adopted for the writing stage of the project.

The failed joint project reported by the third community pharmacist was a formulary development project, organised by the FHSA. Six meetings had been held at the FHSA for the participating pharmacists (approximately 20) to facilitate their involvement in formulary development, followed by two joint meetings for the community pharmacists and their partner general practitioners. However, the pharmacist had heard nothing further from the general practitioner or his practice,
Despite a clear agenda set out by the FHSA and apparent enthusiasm from both parties.

One general practitioner reported that he was involved in a formulary development project with one local community pharmacist and together they had attended a formulary development meeting at the FHSA. A second general practitioner reported that he was intending to set up a formulary development project, currently at the planning stage.

2.3.6.2 Future collaboration

The community pharmacists and general practitioners who reported that they were not currently involved in any interprofessional meetings and/or projects were asked if they would be interested in having joint meetings and/or if they would be interested in participating in joint projects. The community pharmacists and general practitioners who responded positively to these two questions were then asked what areas they would want to discuss at meetings and/or what particular areas they would like to work on in the form of a joint project. The question of interest in collaboration by local general practitioners/community pharmacists respectively was also raised.

Meetings

Nineteen community pharmacists who reported that they did not currently attend regular meetings with local general practitioners were asked if they would like to have meetings with one or more of their local general practitioners. Thirteen pharmacists
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(seven pharmacists were proprietors - six of an independent pharmacy and one of a small chain of pharmacies; four pharmacists were managers; two were second pharmacists - one in a branch of a multiple and one in an independent pharmacy) responded that they would like to have meetings:

'It would be a good idea because it would help us to get to know each other'.

'I think it would be a great help to both professions and the patient'.

'Meetings would be useful for improving the service...for improving relations'.

Six pharmacists (four managers, one independent proprietor and one locum pharmacist) were unsure as to whether they would like to have meetings with local general practitioners or not. The reservations expressed included:

'I don't know how useful it would be'.

'Possibly, but it would have to be well planned'.

'It's difficult; it depends on the doctor'.

The 20 general practitioners were all asked if they would like to have meetings with one or more local pharmacists (n = 19, data missing for one). Seven general practitioners responded positively and comments included:

'Something fruitful could come out of it'.

'Good idea'.

'It is just nice to get together'.

Six of the seven general practitioners were either single handed or worked with one
general practitioner partner.

Four general practitioners were unsure about having meetings with local community pharmacists and comments included:

'If there is a goal - yes - we will have meetings; if there is no goal...We more or less thrash out our problems on a daily basis anyway'.

'We discuss things on the phone and I don't know if we could discuss things any further or not'.

'If you are going to have any meetings at all, it would have to have a definite purpose'.

Eight general practitioners responded negatively and comments included:

'We have no problems in our relationships with the pharmacists so there is no need'.

'I am quite happy with the contacts that we have. I don't see the purpose of having any deeper contacts'.

'I don't know that there would be much to be gained by it...I can get all the help I need'.

'I don't think my local chemists have got much to add'.

'I think the local pharmacist is accessible and there is very little extra to gain [by formal meetings]'.

Two general practitioners; one who was unsure about having joint meetings and one who responded negatively, both felt that having the FHSA pharmaceutical adviser attend meetings would be more helpful than a local community pharmacist:

'Perhaps because she [the pharmaceutical adviser] has an overall view of our prescribing that is actually more helpful to us'.
The community pharmacists and general practitioners who were unsure about joint meetings and those who responded positively to the idea of joint meetings, were asked if there were any areas that they would want to discuss. The community pharmacists suggested a number of areas that could be discussed including a variety of prescribing issues such as: advice to be given to patients with their prescription medicines; the number of days treatment provided on any one prescription, including a consideration of calendar packs and pack sizes; the prescribing of dressings and vaccines and repeat prescribing. Other areas highlighted were: formulary development; drug interactions; cost issues; collaboration in patient therapy; additional services for particular patient groups; health promotion and over the counter prescribing. The general practitioners felt that the following areas could be covered at joint meetings: improvements that could be made to patient services; problems that community pharmacists encounter with prescriptions; drug costs; over the counter prescribing; dispensing for drug addicts; emergency supplies of prescription only medicines and formulary development.

**Projects**

The 17 community pharmacists and 18 general practitioners who reported that they were not involved in any joint project were asked if they would like to work on a particular project with any of their local general practitioners/community pharmacists...
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respectively.

Nine pharmacists (four independent proprietor pharmacists, four pharmacy managers and the second pharmacist in an independent pharmacy) replied that they would like to work on a joint project. Three pharmacists (two independent proprietors and one manager) were unsure about participating in a joint project. Five pharmacists (three managers, one locum pharmacist and one proprietor of a small chain) said that they would not want to participate in a joint project. The main reservation and objection to participating was the time involved:

'We are so pressed normally with paper work and other commitments that we really haven't got much time'.

'We are tied down for the hours that we are here; even if I do deliveries I lose business and it is a very long day already'.

Four general practitioners responded that they would be interested in participating in a joint project; three of the four were single handed practitioners or worked in a two general practitioner practice. Three general practitioners were unsure about participating in a joint project and 11 general practitioners said that they would not want to participate in a joint project. The main reservation and objection again was time:

'I don't think I would have the time'.

One general practitioner who responded negatively also felt that a joint project would not achieve anything:

'I don't think that it is going to improve anything for the patients'.
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The community pharmacists and general practitioners who expressed an interest in participating in a project were asked if there were any particular areas they would like to work in. The main question was followed by a prompt: Anything particularly frustrating that you would like to discuss and work on with one or more of your local general practitioners/community pharmacists or perhaps a particular patient group that you feel you could provide a greater service for by collaborating.

Two pharmacists - one independent proprietor and one small chain branch manager - were very enthusiastic to get involved in a project with local general practitioners. The independent proprietor pharmacist wanted to collaborate with local general practitioners on a smoking cessation project that he had already initiated at his pharmacy. The second pharmacist was hoping to join an FHSA programme for formulary development. The other fields that were raised by the pharmacists as possible project areas were: prescribing issues including generic prescribing, repeat prescribing and PACT data analysis; improving the patient medication records held at the surgeries and the care of three specific patient groups - asthmatics, diabetics and hypertensive patients.

The general practitioners who expressed an interest in participating in a joint project mentioned the following areas that they would like to work in: prescribing of appliances; prescribing of borderline substances; care of asthma patients; treatment of dyspepsia; treatment of dysmenorrhoea and referral of patients to their general practitioners by the pharmacist.
Would your local general practitioners / community pharmacists be interested in participating?

In order to cover all aspects of future joint meetings and projects, the community pharmacists and general practitioners who were not already collaborating in regular joint meetings or in a joint project, were asked if they thought that their local general practitioners/community pharmacists would be interested in participating in joint meetings or projects respectively.

Four pharmacists thought that local general practitioners would be interested in participating, three thought that they might be, three pharmacists felt that local general practitioners would not be interested in participating and six did not know (data missing for one; three pharmacists were involved in joint projects, including the one pharmacist who had regular joint meetings with local general practitioners).

Four general practitioners thought that local community pharmacists might be interested in participating, two felt that they would probably not be interested, one general practitioner felt that local pharmacists would definitely not be interested in participating and nine general practitioners did not know (data missing for two; two general practitioners were involved in joint projects).

2.3.6.3 Areas with the potential for collaboration

The community pharmacists and general practitioners were asked what general areas they felt had the potential for collaboration. Their responses are shown in Table 2.9.
Table 2.9: Areas with the potential for collaboration

<table>
<thead>
<tr>
<th>Responses given by the community pharmacists and the general practitioners:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prescribing Issues:</strong> Rational prescribing</td>
</tr>
<tr>
<td>Generic prescribing, including generic substitution</td>
</tr>
<tr>
<td>Repeat prescribing, including the development of protocols and monitoring patients</td>
</tr>
<tr>
<td>Formulary development, including wound management</td>
</tr>
<tr>
<td><strong>Costs and budgets, including the analysis of PACT data</strong></td>
</tr>
<tr>
<td><strong>Care of the elderly, including delivery services and domiciliary visits</strong></td>
</tr>
<tr>
<td><strong>Adverse drug reactions, including advice to be given to patients and adverse drug reaction reporting</strong></td>
</tr>
<tr>
<td><strong>Health promotion including advice on diet, exercise and preventative medicine.</strong></td>
</tr>
<tr>
<td><strong>Minor ailments and the safe use of over the counter medications</strong></td>
</tr>
</tbody>
</table>

**Further responses given by the community pharmacists**
- **Audit**
- **Referral of patients to their general practitioners, including the development of a protocol**
- **Hoarding and waste**
- **The development of a 'swap' scheme between general practitioner trainees and pre-registration pharmacy graduates.**

**Further responses given by the general practitioners**
- **Education for asthmatic and diabetic patients**
- **Diagnostic testing**
- **Drug interactions**

2.3.6.4 *Advantages/benefits of working together*

The community pharmacists and general practitioners were asked what they thought
were the advantages or benefits of working closely with local general practitioners/community pharmacists respectively. Twenty nine responses were given by 16 community pharmacists (data missing for four) with a range of one to four responses per pharmacist. The median number of responses was two. Twenty four responses were given by 17 general practitioners (data missing for three) with a range of one to three responses per general practitioner. The median number of responses was one. The responses given have been classified into six categories: patient benefits; improving the community pharmacist/general practitioner relationship; information; ease in dealing with problems; cost savings for the general practitioner and a miscellaneous category.

Patient benefits

Eight community pharmacists felt that patients would benefit from a closer working relationship between community pharmacists and general practitioners, as did six general practitioners. The advantages the community pharmacists gave included: reducing inconvenience to patients regarding the supply of their prescribed medicines; the provision of a more streamlined patient service and improvements to patient care. The advantages given by the general practitioners included: the provision of services for housebound patients and explanations to patients about their prescribed medicines.

Improvements in the interprofessional relationship

Five community pharmacists and four general practitioners felt that an advantage of
general practitioners and community pharmacists working closely would be an improvement in the interprofessional relationship, because it would allow the two professionals to get to know each other. The pharmacists further expanded on their responses by adding that having the opportunity to get to know each other could, in turn, result in improved communications:

'It would be better to get to know each other and we’d probably feel more inclined to speak to each other'.

'There will be more personal contact and telephone contact and then there might be some improvement in the responses that we get'.

Information

Three community pharmacists felt that the exchange of information would be an advantage of a close working relationship:

'Exchange of information will be beneficial to both professions'.

'I could probably learn from them and they could use my knowledge as well'.

Two pharmacists felt that the information they could give to general practitioners would be a benefit of a closer working relationship and one pharmacist felt that information he could obtain would be a resulting benefit.

One general practitioner felt that information exchange would be a benefit of working closely with local community pharmacists:

'I can take his advice or he can take my advice'.

Six general practitioners felt that the information they could obtain from pharmacists would be a benefit of working closely:
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'There are a lot of things that we can learn from the chemist'.

Ease in dealing with problems

Three pharmacists and three general practitioners felt that a close working relationship would make it easier to deal with problems, including interprofessional problems:

'We can sort out any problems that exists between pharmacists and general practitioners';

and prescription problems:

'Simple errors can be rectified quickly'.

Cost Savings

Five community pharmacists felt that by working closely they could help general practitioners to reduce their prescribing costs:

'[Close working] can also result in a bit of a cost saving to the general practitioners as far as rationalising prescribing is concerned'.

Two general practitioners also felt that a close working relationship would mean that they could ask pharmacists for help with their drug costs.

Miscellaneous

One community pharmacist felt that a close working relationship with local general practitioners would be beneficial for public education. A second felt that a close working relationship would help with formulary development. Two general practitioners felt that a benefit of a close working relationship would be to make life
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easier for the three parties involved: themselves, the community pharmacists and the patients.

2.3.6.5 Disadvantages/barriers to working together

The community pharmacists and general practitioners were asked if they thought that there were any disadvantages or barriers to working closely with local general practitioners/community pharmacists. Time was the barrier reported by over half the pharmacists and just under half of the general practitioners. Other disadvantages/barriers that the pharmacists mentioned included: increased work load; an unwillingness to participate; remuneration; the need for further training and resentment on the part of the general practitioners, who may feel that working closely with local pharmacists will restrict their practice. The community pharmacists and the general practitioners felt that a further barrier could be resentment on the part of other local pharmacists, who may feel excluded from and possibly threatened by a particular close working relationship between a local general practitioner and another local community pharmacist. Five community pharmacists and five general practitioners did not feel that there were any disadvantages or barriers to collaboration.

2.4 Representativeness of the Samples

The data gathered during the interviews with the samples of community pharmacists and general practitioners cannot be generalised to their wider populations, although some of the demographic data collected were comparable with national information
and statistics and some of the results were comparable with those found in larger previous studies as shown below.

The most recent manpower survey of pharmacists (Anon, 1996) reported that the percentage of women on the register of the Royal Pharmaceutical Society increased from 40% in 1988 to nearly 47% in 1994. The survey also found that the principal occupation of 59% of female and 63% of male pharmacists in 1994 was community pharmacy. In the sample of community pharmacists interviewed, however, three were female and 17 were male. Although there are no available figures on the percentage of men and women in full time employment in community pharmacy, the small percentage of principal female pharmacists interviewed can possibly be explained by the following:

'Part time employment continues to account for significant numbers of women pharmacists' (Anon, 1996).

Nine (45%) of the pharmacists interviewed were proprietors, a figure comparable with that found in a survey by Magirr and Ottewill (1995), where 45% of the contracts with 61% of the FHSAs in England were with named individuals rather than companies. Seven (35%) of the community pharmacists interviewed worked in pharmacies that were a branch of a multiple or a branch of a small chain of pharmacies, with more than five pharmacies in the chain. In 1992 (Anon, 1995d) 33% of community pharmacies were owned by multiples or small chains with more than five pharmacies in the chain, a comparable figure.
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Thirty per cent of the general practitioners interviewed were female, a figure comparable with that found by the Committee on the Career Progress of Doctors in 1994, when 28% of all NHS doctors in general practice were female. In 1994, 6% of UK qualified general practitioners worked in single handed practices compared to 34% of those who qualified outside the EC (Committee on the Career Progress of Doctors, 1994). In the sample of general practitioners interviewed, 30% of those who had qualified outside the EC were single handed practitioners and no UK qualified general practitioners interviewed worked as single handed practitioners.

Seventy five per cent of all the general practitioners interviewed had qualified outside the UK. No national data are available on the total number of NHS general practitioners who qualified outside the UK.

Smith (1990) in her large scale postal survey of managing pharmacists in all pharmacies in the London postal districts (n = 1270; usable response rate = 43%), reported that over half the pharmacies received prescriptions mainly from no more than three medical practices. In the interviews, 12 out of the 20 community pharmacists reported receiving the majority of their prescriptions from three or fewer local general practices. General practitioner initiated contacts reported by Smith were requests for supplies and information. These two areas were reported by the community pharmacists and general practitioners as the reasons for general practitioner initiated contact in the interviews. In Smith’s study 78% of the pharmacist respondents said that they would like to see further development of relations between pharmacists and general medical practitioners through, amongst
others, joint meetings and discussions. In the interviews nearly 70% of the community pharmacists who were not already participating in joint meetings said that they would like to attend such meetings.

The reasons for interprofessional contact reported by the community pharmacists and the general practitioners in the interviews, were compared to the reported purpose of interprofessional contacts given by the general practitioners in a study by Jepson and Strickland-Hodge (1995). In their study, Jepson and Strickland-Hodge selected a random sample of 500 general practitioners from the professional register, who were then sent a self-complete questionnaire. The response rate was 58%; 54% of the returned questionnaires could be analysed. The interprofessional contacts were of a similar nature, but those reported by the community pharmacists and general practitioners in the interviews were not as diverse, for example therapeutic areas and service matters were not reported as reasons for contact. In the study by Jepson and Strickland-Hodge, however, a different methodology was used. The responders were given a list of professional activities and asked to tick those involving contact between community pharmacists and general practitioners. The use of a tick list within the community pharmacist and general practitioner interviews may have led to the participants reporting further reasons for interprofessional contacts.

2.5 Discussion

The semi-structured interviews investigated the extent and nature of the current working relationship between community pharmacists and general practitioners and
the potential to develop that relationship. The community pharmacists' and general practitioners' attitudes to their current interprofessional relationships and to participating in collaborative initiatives were explored and ways in which to develop the working relationship have been identified.

The samples of community pharmacists and general practitioners were selected using the FHSA contractor lists and random numbers tables. The method had a number of limitations resulting in selection bias. Firstly, the FHSA contractor lists are not always up to date. Secondly, the chemist contractor lists contained only the names of the pharmacies and not the pharmacists, therefore, pharmacies were being selected. Although in the majority of pharmacies there is only one pharmacist, the fact that more than one pharmacist may be working in some pharmacies resulted in selection bias towards the single handed pharmacists.

The information gathered from the non-participant community pharmacists and general practitioners showed that the participant and non-participant groups were similar in some demographic details. However, it was not possible to gather information from the non-participants about their attitudes towards the interprofessional relationship and its development. Therefore, it was not possible to show whether attitudes about collaboration affected the decision to participate in the interview or not, but if so, then this is a further source of sampling bias. The large difference in interview participation rates for the community pharmacists and general practitioners (80% vs. 57%) could indicate that attitudes about collaboration did have
an effect on the decision to participate, with the community pharmacists having a more positive attitude towards interprofessional collaboration than the general practitioners. Alternatively, the difference in participation rates could reflect a difference in the 'ease of access' between the two professions.

A large majority (85%) of the general practitioners described their interprofessional relationships in positive terms, in comparison with just over half (55%) of the community pharmacists. The variation in response draws attention to a difference between the general practitioners' and community pharmacists' attitudes towards their current interprofessional relationships. The general practitioners seemed to be very content with their relationships, whilst the pharmacists raised more concerns, seemed less satisfied and felt that there was room for improvement in their current relationships. A difference in autonomy could possibly explain why the general practitioners were more satisfied with their relationships than the community pharmacists. General practitioners are basically autonomous when prescribing, but community pharmacists, in carrying out their dispensing duties, essentially have to act on the general practitioner's instructions. The community pharmacists may, therefore, have perceived their role as subservient to that of the general practitioner, leading to dissatisfaction with their interprofessional relationships. The difference in responses could further show that the general practitioners were unaware of the nature of problems that community pharmacists experience in the relationship. Community pharmacists and general practitioners need to develop a greater understanding of each other's role in order to resolve interprofessional differences
and be able to work together.

In describing their relationships with local general practitioners, two community pharmacists commented that their positive remarks only applied to local single handed practitioners and not to the larger local practices. Furthermore, the majority of the face to face contacts were reported to be with local single handed practitioners and nearly all the single handed practitioners interviewed reported that they had face to face contact with local community pharmacists, implying a more interactive professional relationship. General practitioners working alone may feel professionally isolated and are, therefore, more interested in developing their professional relationships with local community pharmacists than those general practitioners working in large group practices with considerable numbers of support staff. (Ten of the eleven general practices with five or fewer members of support staff were small practices with one or two general practitioners). All the general practitioners reported contact with a variety of health care professionals, but such contacts could be infrequent or brief and in the absence of general practitioner practice meetings, isolation could be a problem (Green, 1993).

Professional isolation may also be a problem for community pharmacists in general, but particularly for those working in independent pharmacies; pharmacists working in small chains or multiples had more dispensary staff than those in independent pharmacies. Professional isolation may, therefore, explain the greater enthusiasm of those pharmacists working in independent pharmacies about future participation in
joint meetings and projects compared to those working in a branch of a small chain or multiple. In practice, however, the majority of the pharmacists who reported having attended a locally organised joint meeting, workshop or study day worked in a branch of a small chain or a multiple. A possible explanation for this may be that the issues of time, locum cover and remuneration are more problematic for independent proprietor pharmacists than for employee pharmacists, when attending locally organised fixtures.

Three community pharmacists reported having social contact with local general practitioners as did three general practitioners. One of the reasons given by the community pharmacists to explain the lack of social contact was lack of interest on behalf of the general practitioners, none directly blamed themselves. However, other reasons the pharmacists gave, such as living out of the area and lack of time, could indicate that the community pharmacists were not interested in a social relationship with their local general practitioners. Social contact is not an essential element in the development of the working relationship and may develop as a result of working more closely. However, if extensive social contact had been reported a high level of interprofessional collaboration may have been expected.

A high proportion of the contacts initiated by the community pharmacists, particularly those to confirm prescription queries, appear to be frustrating both for the pharmacists and the general practitioners. The need for such contacts could be reduced if more care was taken when writing/printing prescriptions and if the
pharmacist could be notified of any intentional prescribing anomalies or changes to a patient's medication. The Royal Australian College of General Practitioners and Pharmaceutical Society of Australia have produced a joint statement on interprofessional communication (Anon, 1994b). Some of the methods to improve communication listed in the statement, for example the use of abbreviations on prescriptions to notify pharmacists about a change of directions or a new treatment, could help to reduce the number of frustrating contacts. In turn, a reduction in the number of frustrating contacts could pave the way for more meaningful interprofessional dialogue and, in the future, contacts may be able to focus on patient care rather than prescription and supply queries.

Face to face contacts between community pharmacists and general practitioners provide a valuable opportunity for interprofessional communication. Comments made by community pharmacists and general practitioners who reported face to face contacts showed that such contacts were often opportunistic. Those opportunities could be used to discuss professional matters, rather than to make polite conversation. Face to face contacts in order to have prescriptions amended would, in particular, provide an opportunity for discussing patient focused issues.

A marked difference was found in the attitudes of the community pharmacists and the general practitioners towards future participation in collaborative initiatives, with the community pharmacists showing considerably more enthusiasm. Sixty eight per cent of the community pharmacists wanted to participate in joint meetings compared to
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37% of the general practitioners. A number of reasons could explain this difference. The community pharmacists may have been motivated to participate in collaborative initiatives in order to initiate improvements to their interprofessional relationships. A further motivating factor could have been the pharmacists’ feelings of under-utilisation and the hope that collaboration would lead to an increase in professional role satisfaction. Nearly half the pharmacists also felt that they had something to contribute to good quality patient care, a possible further reason for their positive attitudes towards collaboration. Professional isolation may have been another reason.

The general practitioners may have been less enthusiastic about participating in collaborative initiatives due to a high level of satisfaction with their current relationships. The general practitioners may have felt that there was no need to extend communications because their local pharmacists were accessible and issues that arose could be resolved at the time. Furthermore, some of the general practitioners were unsure about the value of collaborative initiatives. The general practitioners reported working with a wide range of health care professionals and possibly with the exception of those working in small practices, may have felt that they had neither the time nor the need to participate in collaborative initiatives with community pharmacists.

Despite the fact that the majority of the community pharmacists who were not already involved in joint initiatives reported that they would be interested in attending joint meetings and in participating in joint projects, but currently did not, could indicate that the community pharmacists do not feel able to approach general practitioners
with their ideas on collaboration. The pharmacists may feel that approaches should be made by their local general practitioners, particularly when general practitioners are often involved in practice meetings or primary health care team meetings and could invite local pharmacists to attend. Furthermore, the negative experiences that some pharmacists reported when contacting general practitioners on a day to day basis may inhibit them from trying to extend those contacts. However, general practitioners who are happy with their interprofessional relationships and do not see how a community pharmacist can make a valuable contribution to patient care are unlikely to take the initiative and approach their local community pharmacists.

The majority of the general practitioner initiated contacts related to the supply role of the community pharmacist and not to the clinical role. Furthermore, those general practitioners who expanded on their positive responses regarding their interprofessional relationships recounted examples of the valuable supply function of their local community pharmacists. The general practitioners, therefore, appeared to have little appreciation of community pharmacists' professional knowledge and skills, a point confirmed by the community pharmacists who felt that they were under-utilised in areas of clinical practice. The general practitioners' lack of appreciation of the professional aspects of the community pharmacist's role may be because they are uninformed about pharmacists professional training and practice. A question then arises: If general practitioners do not have any expectations about community pharmacists' ability to contribute to patient care, then how can they be expected to want to develop a closer working relationship? General practitioners must,
therefore, be made aware of the extent of the community pharmacist’s skills and knowledge and the ways in which they and their patients could benefit from a closer interprofessional relationship. The responsibility for the raised awareness should probably initially fall on local organisations.

The current level of involvement in formal joint initiatives, meetings and projects, was relatively low, with participation in locally organised joint initiatives reported marginally more frequently than initiatives organised by individual practitioners. The development of the working relationship at least initially, would therefore appear to need local facilitation to bring the two professions together, to encourage improved communication, to allow an understanding of each other’s roles to develop and to demonstrate how collaboration can be of value.

The community pharmacists and general practitioners reported contact with a small number of local general practitioners and community pharmacists respectively, indicating that the structural foundations for the development of the interprofessional working relationship are already in place and it would not be impossible to build on them because of the small numbers involved. The community pharmacists and the general practitioners did feel, however, that a particular community pharmacist and general practitioner working relationship may result in other local pharmacists feeling excluded or threatened. Collaboration would, therefore, have to take into account other pharmacists in the locality and it may be possible for the working relationship to be developed on a greater scale than one to one, through co-ordination and
Chapter 2 - Interviews with CPs and GPs

The fact that over half the pharmacists reported that there were four or fewer other community pharmacists in the locality would suggest that the scale on which it may be necessary to develop the working relationship would be manageable. Encouraging the collaboration of local single handed general practitioners and independent community pharmacists could have the added advantage of providing an important support network.

A variety of practice areas were raised by the community pharmacists and the general practitioners when asked what they would want to discuss at joint meetings, areas they would like to collaborate on in the form of a joint project and general areas they felt had the potential for collaboration. The responses given by the community pharmacists and the general practitioners showed considerable overlap and it would, therefore, seem that collaboration in a number of areas would be both acceptable and of interest to the community pharmacists and the general practitioners, as well as being of patient benefit.

The semi-structured interviews have provided an essential baseline of information about the current interprofessional relationship between community pharmacists and general practitioners and attitudes towards collaboration. An informed understanding of the current interprofessional relationship is a necessity before ways in which to develop the relationship can be explored. The following chapter describes the next step in gaining an understanding of interprofessional collaboration, through an investigation of the extent and nature of formally organised collaborative initiatives.
CHAPTER THREE - FORMAL INTERPROFESSIONAL COLLABORATION IN ENGLAND AND WALES

3.1 Introduction

The semi-structured interviews, conducted with 40 randomly selected community pharmacists and general practitioners, investigated the extent and nature of current interprofessional collaboration. The interviews provided detailed information about the informal collaboration occurring on a day to day basis, but provided very little information about formal collaboration because only a minority of the community pharmacists and general practitioners interviewed reported participating in such initiatives. In order to develop the interprofessional relationship the extent and nature of current formal collaboration needed to be explored further.

The majority of the formal, locally organised joint initiatives attended by the interviewed community pharmacists and general practitioners had been organised by their FHSAs. FHSAs have accepted responsibility for the integration of primary health care services following the promotion of their key role in this area by both the Government in its consultative document ‘The Health of the Nation’ (1992) and the Royal Pharmaceutical Society in its Pharmaceutical Care Report (1992). ‘The Health of the Nation’ charged the FHSAs with the task of using their resources to promote collaboration in primary health care and to develop strategies and policies to match local needs. The Pharmaceutical Care Report (1992) also advocated the development of:

‘...effective professional relationships....at the level of planning and
The FHSAs were, therefore, felt to be appropriate organisations to contact for detailed information about formal interprofessional collaboration.

The pharmaceutical advisers in post at each FHSA were chosen as the survey population on the grounds that they were ideally placed to provide the information required, due to their initial remit to work closely with general practitioners on prescribing issues and more recently to develop community pharmaceutical services (Panton, 1993). A survey was conducted with all the pharmaceutical advisers in post throughout England and Wales with the aim of building up a clear picture of the extent and nature of current formal interprofessional collaboration, as well as any planned initiatives for the future.

3.2 Method

A request for information was sent to all the pharmaceutical advisers in post throughout England and Wales, asking about current collaborative initiatives between community pharmacists and general practitioners in their FHSAs, planned future enterprises and any training programmes that aimed to improve communication and interprofessional interaction. A copy of the letter can be found in Appendix 3.1. The request for information was intentionally broad to allow the respondents to provide all available information that was relevant to interprofessional collaboration.

The survey was conducted at a time when the organisation of health authorities was
undergoing considerable change, notably a reduction in the number of RHAs from 14 to eight, in preparation for the establishment of eight regional offices of the NHS Executive and the integration of FHSAs and District Health Authorities (DHAs) on a locality basis, to form joint interim Health Commissions (or Health Agencies), in preparation for the establishment of the new local Health Authorities by April 1996 (Anon, 1994c). In order to be able to contact all the pharmaceutical advisers in post at the time, each of the new RHAs was asked for a list of all the FHSAs and Health Commissions within their region and the name of the pharmaceutical adviser in post at each.

In total a request for information was sent to each of the pharmaceutical advisers in post at 100 FHSAs and Health Commissions, a total of 97 advisers (three advisers were each employed by two FHSAs). Non-responders received a follow-up letter approximately three months after the initial request for information had been sent.

3.3 Results

Responses were received to the request for information over a five month period, August to December 1994, from 73 pharmaceutical advisers in post at 76 FHSAs and Health Commissions in England and Wales. A response rate of 58% was attained for the initial request for information and a response rate of 56% for the follow-up request, giving an overall response rate of 75%.

Local collaborative initiatives were reported most frequently by the pharmaceutical
advisers, although two regional initiatives were also reported, as well as joint events organised by the individual professionals involved. At the local level, each adviser who responded to the request for information was able to give an account of current or planned collaborative activity in their area, organised by the FHSA/Health Commission. The advisers in post at 44 FHSAs/Health Commissions reported current collaborative initiatives and those at 17 FHSAs/Health Commissions reported both joint events that had been held recently and further planned joint initiatives. The advisers in post at 15 FHSAs/Health Commissions reported planned collaborative activities only - 12 reporting future specific events and three reporting discussions to determine a collaborative strategy for the future.

The collaborative initiatives reported by the pharmaceutical advisers have been summarised in Table 3.1, together with the percentage of FHSAs/Health Commissions involved in each type of local/regional initiative and reporting individually organised initiatives. The initiatives have been detailed separately below, following the structure of Table 3.1. Additional information relating to interprofessional collaboration, provided by the pharmaceutical advisers, has been grouped together in the last section of the ‘Results’ and covers the prescribing incentive scheme, strategies for the development of pharmaceutical services and the investigation of collaborative issues to help with the development of joint initiatives.
Table 3.1: Classification of the collaborative initiatives reported, together with the percentage of FHSAs/Health Commissions (HCs) reporting each.

<table>
<thead>
<tr>
<th>Classification of Collaborative Initiatives</th>
<th>Percentage of FHSAs/HCs involved in local/regional initiatives and reporting individual initiatives (n = 76)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local initiatives:</td>
<td></td>
</tr>
<tr>
<td>• Meetings, seminars and workshops:</td>
<td>63</td>
</tr>
<tr>
<td>• The W / CPPE interface course</td>
<td>45</td>
</tr>
<tr>
<td>• Other joint meetings, seminars and workshops</td>
<td>30</td>
</tr>
<tr>
<td>• Pilot projects</td>
<td>62</td>
</tr>
<tr>
<td>• Training initiatives:</td>
<td></td>
</tr>
<tr>
<td>• Community pharmacist training initiatives</td>
<td>20</td>
</tr>
<tr>
<td>• Joint training initiatives</td>
<td>5</td>
</tr>
<tr>
<td>• Miscellaneous training initiatives</td>
<td>3</td>
</tr>
<tr>
<td>Regional initiatives:</td>
<td></td>
</tr>
<tr>
<td>• North West Region inequivalence project</td>
<td>8</td>
</tr>
<tr>
<td>• Welsh initiative on minor ailments</td>
<td>1</td>
</tr>
<tr>
<td>Individual initiatives:</td>
<td></td>
</tr>
<tr>
<td>• Meetings to discuss prescribing issues</td>
<td>17</td>
</tr>
<tr>
<td>• Formulary development projects</td>
<td>11</td>
</tr>
</tbody>
</table>
3.3.1 Local initiatives

Meetings, seminars and workshops

Joint meetings, seminars and workshops were reported by the pharmaceutical advisers in post at 48 (63%) FHSAs and Health Commissions. The advisers at 34 FHSAs/Health Commissions reported organising the joint interface course run by the Centres for Pharmacy Postgraduate Education (CPPE and WCPPE in Wales). The advisers at 23 FHSA/Health Commissions reported organising other joint educational meetings, seminars and workshops (nine advisers reported both).

The W/CPPE general practitioner/community pharmacist interface course had been held at 23 FHSAs/Health Commissions and was on the agenda at a further eleven. This educational course consists of three workshops and covers generic prescribing, health promotion, responding to symptoms and over-the-counter (OTC) medication. The participants work in small groups, both on a unidisciplinary and interdisciplinary basis, with feedback in plenary sessions. The course was, on the whole, enthusiastically received by the pharmaceutical advisers as illustrated by the following comments:

'These [workshops] went well and I was encouraged by the interest shown by both professions' (Sandwell Health).

'This [series of workshops] proved to be very successful and popular with both pharmacists and general practitioners' (Liverpool FHSA).

The pharmaceutical advisers in post at five FHSAs/Health Commissions where the CPPE course had already been held, reported adapting and developing the course to suit local needs. The advisers planned to run their course in different localities over a
period of time, giving all their general practitioner and community pharmacist contractors the opportunity to attend.

The pharmaceutical advisers at 23 FHSAs/Health Commissions reported other joint meetings, seminars and workshops. The advisers in post at 13 FHSAs/Health Commissions reported events that had been held in the past. Seven FHSAs/Health Commissions were currently providing an on-going series of joint lectures or workshops and the advisers at seven FHSAs/Health Commissions reported that joint meetings and workshops were being planned. The advisers in post at each of four FHSAs/Health Commissions reported past or current joint meetings as well as the planning of similar joint events in the future. The joint meetings were facilitated by the pharmaceutical advisers and evening meetings often had a social element. Seminars were run for a whole day or for a single session (morning or afternoon) on each of two or three consecutive days. Workshops generally took the format of a guest speaker, followed by small group discussions and then a feedback plenary session.

The majority of the areas already covered and those planned for joint meetings, workshops and seminars were reported by an individual FHSA or Health Commission. However, advisers in post at seven FHSAs/Health Commissions reported joint clinical seminars, those at four FHSAs/Health Commissions reported a workshop on primary health care development and advisers at three FHSAs/Health Commissions reported a meeting on formulary development. The following initiatives
were each reported by the advisers at two FHSAs/Health Commissions: a seminar on the general practitioner/community pharmacist interface, a meeting to discuss repeat prescribing and a workshop on PACT data analysis. Table 3.2 shows the areas already covered and those planned for joint meetings, seminars and workshops.

<table>
<thead>
<tr>
<th>Table 3.2: Areas already covered and those planned for joint meetings, seminars and workshops</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Primary health care team development</td>
</tr>
<tr>
<td>• The general practitioner / pharmacist interface</td>
</tr>
<tr>
<td>• Developing the clinical role of the pharmacist</td>
</tr>
<tr>
<td>• Nurse prescribing</td>
</tr>
<tr>
<td>• Community care development</td>
</tr>
<tr>
<td>• Immunisations for overseas travel</td>
</tr>
<tr>
<td>• Monitored dosage systems</td>
</tr>
<tr>
<td>• Palliative care</td>
</tr>
<tr>
<td>• Prescribing incentive scheme</td>
</tr>
<tr>
<td>• Quality markers</td>
</tr>
<tr>
<td>• Formulary development</td>
</tr>
<tr>
<td>• PACT data analysis</td>
</tr>
<tr>
<td>• Prescribing issues:</td>
</tr>
<tr>
<td>- Rational prescribing</td>
</tr>
<tr>
<td>- Repeat prescribing</td>
</tr>
<tr>
<td>• Prescribing and review in:</td>
</tr>
<tr>
<td>- Asthma</td>
</tr>
<tr>
<td>- Depression</td>
</tr>
<tr>
<td>- Dermatology</td>
</tr>
<tr>
<td>- Diabetes</td>
</tr>
<tr>
<td>- Dysmenorrhoea</td>
</tr>
<tr>
<td>- Gastrointestinal disease</td>
</tr>
<tr>
<td>- Hyperlipidaemia</td>
</tr>
<tr>
<td>- Infection</td>
</tr>
<tr>
<td>- Migraine</td>
</tr>
<tr>
<td>- Prostate disease</td>
</tr>
<tr>
<td>- Respiratory disease</td>
</tr>
</tbody>
</table>


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Pilot projects

The second most frequently reported collaborative initiative was the pilot project. The pharmaceutical advisers in post at 47 (62%) FHSAs and Health Commissions reported the organisation of a total of 61 pilot projects. Forty pilot projects were currently running in 33 FHSAs/Health Commissions. A further 19 pilot projects were being planned at 15 FHSAs/Health Commissions (including two where pilot projects were currently running) and in each of two FHSAs/Health Commissions a collaborative pilot project had recently been completed (including one where a different pilot project was currently running). Eleven FHSAs/Health Commissions reported involvement in two or more different collaborative pilot projects.

The project areas and the number of FHSAs/Health Commissions involved in each are shown in Table 3.3. The majority of the pilot projects (44 out of 61) focused on prescribing issues and aimed to improve the quality of prescribing, whilst promoting co-operation and improving communication between practitioners and community pharmacists. On the whole, the prescribing based pilot projects involved a community pharmacist working with a local general practice for a number of sessions over a finite period of time, for example one session a month for six months. In general, small numbers of community pharmacists and general practices (range 2 to 10) were involved in each pilot project. An example of one pilot prescribing project follows and the two miscellaneous projects are explained below.
### Table 3.3: Collaborative pilot projects reported by the pharmaceutical advisers at 47 FHSAs/Health Commissions

<table>
<thead>
<tr>
<th>Collaborative Areas</th>
<th>Number of FHSAs and Health Commissions reporting pilot projects (n = 47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescribing issues in general, including rational prescribing</td>
<td>16</td>
</tr>
<tr>
<td>Repeat prescribing</td>
<td>11</td>
</tr>
<tr>
<td>Formulary development</td>
<td>8</td>
</tr>
<tr>
<td>PACT data analysis</td>
<td>2</td>
</tr>
<tr>
<td>Prescribing audits</td>
<td>2</td>
</tr>
<tr>
<td>Review of prescribing for:</td>
<td></td>
</tr>
<tr>
<td>• Patients on multiple medication</td>
<td>3</td>
</tr>
<tr>
<td>• Patients on long term medication</td>
<td>1</td>
</tr>
<tr>
<td>• Elderly patients</td>
<td>1</td>
</tr>
<tr>
<td>Domiciliary Visits</td>
<td>8</td>
</tr>
<tr>
<td>Health promotion in general</td>
<td>3</td>
</tr>
<tr>
<td>• Smoking cessation project</td>
<td>1</td>
</tr>
<tr>
<td>Use of pharmacy referral forms</td>
<td>3</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total no. of projects</strong></td>
<td><strong>61</strong></td>
</tr>
</tbody>
</table>

In St. Helens and Knowsley FHSA, a prescribing initiative had been organised and involved joint meetings between local general practitioners and community.
Chapter 3 - Formal Collaboration

pharmacists. The pharmaceutical adviser reported that 10 community pharmacists were working with 10 general practices (28 general practitioners) and a total of 28 meetings had been held over a seven month period. A range of one to six meetings had been held by each practice. A wide range of prescribing issues had been tackled including: generic prescribing; the re-classification of prescription only medicines to pharmacy only medicines; drug interactions; choice in drug treatment and the drug tariff.

One of the miscellaneous pilot projects was an adverse drug reaction reporting scheme in Humberside FHSA. The project involved community pharmacists reporting any suspected adverse drug reactions on ‘yellow cards’ as fully as possible. The cards were then sent to the patient’s general practitioner, who, if in agreement with the reported reaction, sent the card on to the Committee on Safety of Medicines.

The second miscellaneous pilot project was reported by the pharmaceutical adviser at Bromley FHSA. The project was multidisciplinary, involving general practitioners, hospital and community pharmacists, district nurses and social services and aimed to investigate the use of monitored dosage systems by patients in the community.

Training Initiatives

The pharmaceutical advisers were specifically asked for information on training initiatives. Training events were reported by the advisers in post at 20 (26%) FHSAs and Health Commissions. Advisers in post at fifteen of the 20 FHSAs/Health Commissions reported training initiatives for their community pharmacist contractors.
only. The advisers at four FHSAs/Health Commissions reported joint training initiatives for their general practitioner and community pharmacist contractors (including one who also reported community pharmacist training). Two advisers reported miscellaneous collaborative training initiatives.

Training events for community pharmacists, to equip them with the knowledge and skills to be able to collaborate effectively with general practitioners, had been organised in three FHSAs and Health Commissions, were currently running in four and were being planned in a further eight. The training was organised by the pharmaceutical advisers, occasionally in conjunction with postgraduate tutors and the local pharmaceutical committee (LPC). Most of the areas already covered or planned for community pharmacist training were reported by only one or two FHSAs/Health Commissions. However, pharmaceutical advisers in post at eight FHSAs/Health Commissions reported training in PACT data interpretation. The advisers in post at six reported communication skills training and the advisers at five FHSAs/Health Commissions reported training community pharmacists in formulary development. Table 3.4 shows the areas already covered and those planned for the community pharmacist training initiatives and an example follows.

In Lincolnshire, a community pharmacist practice formulary group had been established as an educational initiative, with the aim of providing pharmacists with the skills they would need in order to be able to offer help and advice to general practitioners on a wide range of prescribing issues. The initial focus was on PACT
Table 3.4: Areas already covered and those planned for community pharmacist training initiatives.

- PACT data analysis
- Formulary development
- Rational prescribing
- Review of repeat prescribing
- Clinical training
- Health promotion
- Community care
- Audit
- Risk management
- Communication skills
- Negotiating skills
- Influencing skills
- Assertiveness skills

data and courses on communication skills and negotiating skills were being planned.

Joint training initiatives were reported by the pharmaceutical advisers in post at four FHSAs/Health Commissions. One adviser reported a joint general practitioner and community pharmacist communication skills training initiative and three pharmaceutical advisers said that they were planning to hold joint training initiatives in the future covering PACT data interpretation, health promotion and compression hosiery and appliances respectively.

Two miscellaneous collaborative training initiatives were reported. The pharmaceutical adviser at Barnet FHSA reported an initiative whereby general
practitioner trainees had placements in local community pharmacies. The second initiative was reported by the pharmaceutical adviser at Clwyd FHSA, where five community pharmacists were involved in the training of general practice staff.

3.3.2 Regional initiatives

Two regional initiatives were reported. The pharmaceutical advisers in post at six FHSAs/Health Commissions reported participating in the North West Region’s inequivalence project. ‘Inequivalence’ is the term being used to describe the occurrence, on prescriptions, of quantities of long-term medicines which are not logically related. For example, if a patient is prescribed one medicine for a treatment period of one month, but another for a period of two months. Another example would be prescribing tablet quantities in multiples of 30, for items available in calendar packs of 28 days supply. The pharmacists involved in the project will record any inequivalence information, focusing on the repeat prescriptions received from one or two local general practices of their choice. It is up to the individual pharmacists how they use the data collected, but it is envisaged that they will report their findings to the general practitioners involved and use the data as a starting point for discussions on specific therapeutic areas, as well as patient review. Sixty five community pharmacists throughout the region have been recruited to participate in the project and all the data collected will be analysed regionally at the end of an initial six month period.

The pharmaceutical adviser in post at one FHSA reported on the Welsh initiative,
planned by the director of the WCPPE and the director of medical postgraduate education, to encourage health care professionals to provide more advice to patients with minor ailments. The launch meeting for the initiative was to be held in February 1995 and was entitled ‘A discussion forum on promoting self-care for self-limiting illness; the pharmacist - general practitioner interface’.

3.3.3 Individual initiatives

The pharmaceutical advisers at nineteen FHSAs/Health Commissions reported close working relationships between individual community pharmacists and general practitioners (or practices) and were able to give examples of involvement in specific initiatives. The advisers at 13 FHSAs/Health Commissions reported joint meetings to discuss a range of prescribing issues and those at eight reported formulary development initiatives (the advisers in post at two FHSAs reported both activities):

‘Individual fundholding surgeries have paid community pharmacists to assist them in formulary development’ (North Yorkshire FHSA).

‘We have several community pharmacists supporting their local practice with formulary development and we are aware that some practices regularly invite community pharmacists to the practice meetings where prescribing issues are discussed’ (Leeds FHSA).

The pharmaceutical advisers at seven of the FHSAs reported that they actively promoted interprofessional liaison in the areas of prescribing advice and formulary development:

‘GPs are encouraged to liaise with their local community pharmacist about general rational prescribing issues. This liaison is especially encouraged during formulary development’ (Nottinghamshire FHSA).
In addition, the pharmaceutical advisers in post at a further eight FHSAs and Health
Commissions reported knowledge of developed working relationships between
individual community pharmacists and local general practitioners or practices,
although they could not give examples of specific initiatives:

'Many community pharmacists have already developed fairly close
relationships with their local practices' (Salford FHSA).

'In some cases, particularly in more rural parts of the county, general
practitioners and community pharmacists have had close working
relationships for a number of years' (Berkshire FHSA).

'There are examples locally where general practitioners and a community
pharmacist work very closely - usually where there is only one pharmacy
servicing the surgery' (Southampton and South West Hampshire Health
Commission).

'In some areas there is an encouraging level of co-operation between
community pharmacists and general practitioners' (Norfolk FHSA).

3.3.4 Further interprofessional collaboration

The prescribing incentive scheme

Non-fundholding general practitioners receive payment from their FHSAs/Health
Commissions through the prescribing incentive scheme if they fulfil set criteria related
to achieving improvements in prescribing. Three pharmaceutical advisers reported
that they had used the prescribing incentive scheme as a tool to increase collaboration
between general practitioners and community pharmacists. In West Sussex FHSA,
for example, part of the prescribing incentive scheme related to a target saving in
prescribing costs and part involved attaining three quality markers. One of these
markers was an increase in generic prescribing, the second was the development and
audit of a repeat prescribing protocol and the third involved establishing quarterly
meetings with a community pharmacist to discuss prescribing issues.

**Strategies for the development of pharmaceutical services**

The pharmaceutical advisers at eight FHSAs/Health Commissions had written or were in the process of developing a strategy for the advancement of pharmaceutical services. A key area outlined in the strategies was ensuring greater interprofessional collaboration. In the strategy developed by Dorset Health Commission one of the objectives was:

> 'To develop the role of the community pharmacist as a key member of the wider primary health care team'.

The pharmaceutical adviser at Croydon FHSA reported:

> 'At the moment we are writing a strategy for community pharmacy and will be considering how we can bring community pharmacists and general practitioners more closely together'.

**The investigation of collaborative issues**

Six FHSAs/Health Commissions had held meetings with or sent questionnaires to their community pharmacist and/or general practitioner contractors to explore one or more of the following issues, in order to develop initiatives for community pharmacist /general practitioner collaboration.

- The extent of current communications between community pharmacists and general practitioners.
- The level of interest in working together amongst community pharmacists and general practitioners.
- The ways in which the two professions would like to work together.
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- The difficulties that community pharmacists were facing in trying to build links with local general practices.
- The areas in which the community pharmacists felt that they could aid general practitioners.
- The areas in which the community pharmacists would like to have further training in order to be able to work with general practitioners.
- The extent of the current provision of prescribing advice by community pharmacists to general practitioners.

3.4 Discussion

The level of interprofessional collaboration reported by the pharmaceutical advisers throughout England and Wales was encouraging from the point of view that the need for a formal structure to promote the development of the general practitioner and community pharmacist working relationship has been recognised and implemented by local and regional health authorities and individual practitioners, although in each case initiatives were small scale. All the survey respondents were able to provide some information about interprofessional collaboration in their areas, possibly leading to the conclusion that all the non-responders may have had nothing to report with regards to collaboration. However, reports of interprofessional collaboration in the pharmaceutical press (Anon, 1994d; Anon, 1995e; Anon 1995f) have shown that collaborative initiatives are taking place in FHSAs and Health Commissions that did not respond to the survey, although in some cases initiatives may have started subsequent to the survey.
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At the local level, general practitioners and community pharmacists were being brought together through meetings, seminars and workshops, pilot projects and training initiatives. All these methods have been reported previously (Campbell, 1989; Roddick et al., 1993; Stewart and Drury, 1991b) as useful tools to improve interprofessional collaboration and it is encouraging that FHSAs and Health Commissions are using their resources and expertise to develop the working relationship by employing methods that have been shown to be successful at encouraging communication and helping to break down interprofessional barriers.

The most frequently reported local initiative was the meeting/seminar/workshop, although pilot projects followed as a close second. In the interviews with the randomly selected community pharmacists and general practitioners, meetings, workshops and study days were also the most frequently attended formal collaborative initiative, possibly illustrating their popularity not only with the FHSAs/Health Commissions, but also with the practitioners. Locally organised meetings, seminars and workshops are useful because they allow members of the two professions to meet on neutral territory, they can act as an ‘ice-breaking’ exercise and they do not involve any major commitment. Free exchange of ideas is possible during discussions, allowing an understanding and even an appreciation of the issues and problems facing the other profession in their day to day practice, an ideal starting point when trying to develop the interprofessional relationship. A series of identical joint meetings could be held by an FHSA/Health Commission, with each meeting targeting a specific locality. The aim of the meetings would be to bring together
those community pharmacists and general practitioners all working in the same
defined area and serving the same sector of the local population, an extension of the
successful liaison groups reported by Blenkinsopp et al. (1993b). An exercise like
this would allow introductions to be made, both interprofessional and
intraprofessional if necessary, and would allow the opportunity for specific issues to
be raised in a non-threatening way, through FHSA/Health Commission mediation.

Pilot projects are valuable for their intent to bring community pharmacists and general
practitioners closer together through the development of extended roles for the
pharmacist, but the value of such extended roles needs to be demonstrated. The pilot
projects reported were all very small scale, making the measurement of any benefits
not only difficult but also statistically insignificant. Regionally organised pilot
projects may be more successful in this respect, because of the potential to recruit a
larger number of project participants and address issues of both local and regional
importance. On an even larger scale, collaborative pilot projects aiming to investigate
the value of a particular extended role for the community pharmacist could be co-
ordinated nationally.

Training initiatives were reported by the pharmaceutical advisers at 20 FHSAs/Health
Commissions, although the majority of the events reported were only for community
pharmacists. A programme of joint training events could help the development of the
interprofessional relationship and joint skills training would be a valuable place to
start. Pharmacist/general practitioner role play scenarios to practice new
communication and negotiating skills would be particularly authentic. If prior to a particular collaborative initiative, relevant skills training sessions were held for all the initiative participants, potential interprofessional difficulties could be anticipated and resolved through FHSA/Health Commission facilitation.

The pharmaceutical advisers in post at 27 FHSAs and Health Commissions reported close working relationships between individual community pharmacists and general practitioners/practices. It is interesting to note that these relationships have evolved over time, in some cases taking a number of years to develop, and appear to predate attempts to formalise collaboration through local initiatives. The advisers at 19 of the 27 FHSAs/Health Commissions provided details of individual involvement in specific collaborative initiatives in the areas of prescribing and formulary development, indicating that a good working relationship may predispose individual practitioners to collaborate in more formal way. Collaboration in other practice areas may have been taking place without the knowledge of the pharmaceutical advisers and hence was not reported. The fact that only these two areas were reported may simply reflect the areas promoted by the FHSAs/Health Commissions for their collaborative potential.

Comments made by the pharmaceutical advisers in reference to the collaboration of individual practitioners (one of which was quoted above), referred to fundholding practices paying community pharmacists for their help and advice in formulary development, highlighting two points. Firstly, general practitioners in fundholding practices may be more enthusiastic about working closely with community
pharmacists in practice areas where they can make financial savings because they can benefit from any savings made. The second point is that fundholders have the freedom and the finances to pay for support and advice from community pharmacists, whereas non-fundholders do not. The prescribing incentive scheme may be the solution to this problem and FHSAs/Health Commissions could make regular interprofessional meetings one of the criteria to be met in order to receive additional payments.

FHSAs and Health Commission have their own agenda for developing the working relationship between general practitioners and community pharmacists, largely based on the need to meet their financial targets. The cost reduction agenda for collaboration is based on the premise that the drugs bill can be reduced through the rationalisation of prescribing practices and that there is a role for the community pharmacist in improving the cost effectiveness of prescribing. The fact that the majority of the pilot projects reported focused on prescribing issues, as did a number of the areas covered at joint meetings, demonstrated that financial considerations are driving the agenda for local collaborative initiatives. Furthermore, the majority of the community pharmacist training initiatives reported aimed to enable community pharmacists to work effectively with general practitioners to rationalise their prescribing practices.

The original remit of the pharmaceutical adviser was to work with general practitioners on clinical and prescribing issues and it is, therefore, not surprising that
this remit has been carried over to collaborative initiatives. Furthermore, clinical and prescribing fields will be areas of practice that most pharmaceutical advisers will be familiar with, due to their background in hospital pharmacy (Mason, 1996a) and they may be encouraged by the success of interprofessional collaboration in the hospital setting.

In the community, however, this collaborative agenda may not be appropriate for a number of reasons. Firstly, whilst prescribing may be a logical starting point for collaboration because the prescription is the interface between the community pharmacist and the general practitioner, there may be general practitioners who are sceptical about the value that the community pharmacist can add to the prescribing process. Attempts by FHSAs/Health Commissions or even individual community pharmacists to engage local general practitioners in collaboration of this type may face cynicism, conflict or criticism. Initial collaboration based on alternative extended roles for the community pharmacist may be perceived as less threatening to the core role of the general practitioner and could be more successful in fostering good working relationships. Once general practitioners have worked in a formal structure with community pharmacists in areas such as health promotion or the treatment of minor ailments, the foundations will have been laid for further collaboration, including working together on prescribing issues. Furthermore, community pharmacists are unfamiliar with clinical and prescribing issues in general practice, illustrated by the need to provide appropriate training for community pharmacists to be able to work effectively with general practitioners in these areas. Community pharmacists may,
Chapter 3 - Formal Collaboration

due, therefore, prefer to build up their relationships with local general practitioners in areas of their own expertise first. The appointment of community pharmacist facilitators by FHSAs and Health Commissions to liaise with community pharmacists and work closely with the pharmaceutical adviser, together with the appointment of prescribing advisers to enable the pharmaceutical adviser to expand his/her role, should enable interprofessional collaboration to focus on a wider range of patient orientated issues.

The current focus on prescribing costs and the lack of 'patient orientation' in collaborative initiatives highlights another problem with the current local collaborative agenda. FHSAs and their professional advisers were charged with the challenging task of 'improving the quality and cost effectiveness of prescribing' (Department of Health, 1990) but quality issues seem to have been neglected in favour of a wholly cost conscious approach. The balance of interprofessional collaborative initiatives needs to be redressed so that the quality of patient care is considered together with, if not prior to, cost issues.

Responses to this survey were received up to the end of 1994 and reports throughout 1995 (Anon, 1995g; Anon, 1995h; Anon, 1995i; Anon, 1995j) have shown an increase in FHSA/Health Commission commitment to interprofessional collaboration, although prescribing issues and costs remained a strong priority. A report published in the pharmaceutical press early in 1996 (Mason, 1996b) illustrated ongoing developments in the working relationship between general practitioners and community pharmacists and, importantly, emphasised that interprofessional
collaboration was gradually moving away from issues directly related to prescribing costs and focusing more on the issue of quality.

A good working relationship between general practitioners and community pharmacists may be hampered by a structural barrier; patients registered with one general practice will patronise different, albeit mainly local, pharmacies and each pharmacist will have a day to day relationship with a number of different local general practitioners. The structural barrier will present practical problems both for individuals trying to establish a formal working relationship (one of the pharmaceutical advisers noted that good interprofessional relationships were particularly evident when a practice was serviced by only one local pharmacy) and for the organisation of local joint initiatives. The enthusiastic individual may have to face accusations of favouritism and directed prescriptions, possibly inhibiting the development of a close working relationship between one practice and one local community pharmacist. A general practitioner who chooses to develop his/her working relationship with one local community pharmacist may also be conscious of a possible deterioration in relations with other local community pharmacists and a lower level of service provided for a proportion of their patients, if the benefits of a particular alliance exclude patients who patronise different pharmacies. Working closely with more than one local community pharmacist could be explored, but intraprofessional competition may prevent an individual general practitioner or practice from trying to do so. At the local level, these structural issues also need to be considered and FHSAs/Health Commissions may be prevented from encouraging
close working arrangements between general practitioners and their local community pharmacist by both the local medical committee (LMC) and the LPC. However, it is the local working relationships that need to be developed and the presence of a structural barrier is a further indication that facilitation, at least initially, is the way forward for the development of interprofessional collaboration.

Pharmaceutical advisers and facilitators have an essential role to play in structuring and co-ordinating collaborative activities to prevent professional conflict, both within and between professions, to ensure that local needs are met and to maximise the benefits to patients of an increase in formal collaboration between local community pharmacists and general practitioners. In order to investigate the effect that a formally organised, local collaborative initiative can have on patient care and on the interprofessional relationship, set against the background of extended roles for the community pharmacist, the following chapter describes a pilot domiciliary pharmaceutical care project, established in Barnet FHSA.
4.1 Introduction

A central theme throughout health care provision in the 1990s has been the move towards community care. One of the key objectives in the Government’s White Paper ‘Caring for People’ (1989), is:

‘...to promote the development of...domiciliary services to enable people to live in their own homes, wherever feasible and sensible’.

A wide range of care homes exist to provide accommodation and support tailored to the needs of the elderly, those with learning and physical disabilities and those with psychiatric care requirements. However, with particular respect to the elderly, it has been suggested that the majority would prefer to remain in their own homes, with support from community services, rather than move to unfamiliar institutional settings (Anon, 1991a). Greater support from community services, through the introduction of domiciliary facilities, will enable those who are not as mobile and able as the rest of the population to benefit from first-hand professional advice and care.

The need for pharmaceutical home services was recognised in the Department of Health and Royal Pharmaceutical Society of Great Britain Joint Working Party Report (1992), which states that:

‘...arrangements should be introduced to provide domiciliary pharmaceutical services for patients who are unable to use the pharmacy in person’.
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The number of people in the community who rely heavily on medication to maintain physical and mental health is rising. The increasing number of people aged 75 and over is set to continue into the next century (Office of Population Censuses and Surveys, 1990) and as a result of the closure of many psychiatric hospitals, large numbers of people with mental illness have been transferred to the community (United Kingdom Psychiatric Pharmacy Group, 1995). Excessive prescribing (Price et al., 1986), inadequate review of treatment (Gryfe and Gryfe, 1984) and medication mismanagement (Parkin et al., 1976) are all factors which have been shown to contribute to iatrogenic illness and studies have demonstrated that iatrogenic illness can result in institutionalisation. A study by Williamson and Chopin (1980) found that 10.5% of acute geriatric hospital admissions were wholly or partly as a result of drug treatment. Col et al. (1990) interviewed 315 consecutive elderly patients admitted to an acute care hospital and found that 89 (28%) of the admissions were drug related. Thirty six were due to non-compliance and 53 were due to adverse drug reactions. There is the potential for medication related problems to be recognised by pharmacists providing a domiciliary service and for working towards reducing their frequency by collaborating with the patients’ general practitioners, so helping to maintain patients in their own homes.

The role for community pharmacists in providing a domiciliary service fulfils the concept of pharmaceutical care as defined by Hepler and Strand (1990):

'Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life'.
In their feature on pharmaceutical care, the authors advocated an essential role for pharmacists in the reduction of drug related morbidity and mortality through the identification of potential and actual drug related problems and their respective prevention/resolution. Furthermore, the authors stated that the provision of pharmaceutical care had to be carried out with the effective co-operation of other health care professions, as professional equals.

General practitioner and community pharmacist collaboration is central to the success of extended pharmaceutical services; extended services can also serve to increase the level of interprofessional collaboration. A domiciliary pharmaceutical service is a new role for community pharmacists and may be viewed as trespassing into the general practitioner's domain. It is, therefore, vital to promote interprofessional understanding enabling successful collaboration, effective service delivery and resulting acceptance by general practitioners of the extended role activity based on evidence of patient benefit. Interprofessional collaboration in an accepted area of extended practice could, in turn, contribute to the further development of the working relationship between the general practitioners and community pharmacists involved.

The present chapter describes a pilot study with the following objectives:

- To identify and quantify the problems associated with drug use by housebound people in the community.
- To explore the contribution that community pharmacists can make to improve that drug use, through the implementation of a domiciliary service.
• To investigate the professional interface as a result of the extended pharmacy role.

4.2 Method

The pilot domiciliary study was carried out in the London Borough of Barnet, in conjunction with Barnet FHSA and North West Thames RHA. Barnet FHSA had a history of active involvement in the development of the role of the community pharmacist, as demonstrated by the High Street Health scheme (Anon, 1991b). (High Street Health was a scheme set up by the FHSA to provide training and accreditation of community pharmacists as health promoters). The FHSA had also discussed the recommendations made in the Pharmaceutical Care Report (1992), with regard to the future of pharmaceutical services, and wanted to implement the recommendations locally, as appropriate; the establishment of a domiciliary pharmaceutical service had been given a high priority. Barnet FHSA wanted to formalise and extend the pharmaceutical domiciliary service that already existed through the provision of oxygen therapy to patients in the community and through the provision of an informal prescription collection and medication delivery service for the housebound. To this end, a multidisciplinary steering group of nine members was set up to administer a pilot domiciliary pharmaceutical service. The members were: the FHSA pharmaceutical adviser, primary care manager and the director of professional support services; the chair and secretary of the LPC; the North West Thames Regional pharmacy services development manager; a general practitioner; a pharmacy practice lecturer and a practice research pharmacist (JS).
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The practice research pharmacist was responsible for the overall management of the project, with the exception of project funding, ethical approval and community pharmacist and general practitioner recruitment. The management responsibilities included: determining the patient referral criteria; developing and piloting the data collection instruments; requesting the patient referrals; allocating the patients to the visiting pharmacists; the project evaluation process and analysing and interpreting the results.

4.2.1 Approval and funding

Ethical approval for the domiciliary pharmaceutical pilot study was obtained by the FHSA pharmaceutical adviser from the local Ethics Committee.

Barnet FHSA was awarded a regional primary care development grant of £5000 in order to carry out the pilot study. The grant was to be spent on community pharmacist involvement, including locum fees to cover participation in a six hour training event and a fixed fee per patient visit of £15, as well as on the training event costs. A further sum of £2000 was allocated by the regional pharmacy services development manager to cover research costs.

4.2.2 General practitioner and community pharmacist participants

A letter was sent by the FHSA pharmaceutical adviser to all the community pharmacists (approximately 90) and all the general practices (approximately 90) in contract with the FHSA, informing them about the study and inviting them to
participate. The general practitioners were asked if they would be prepared to refer suitable patients for a domiciliary visit by a pharmacist and the pharmacists were asked if they would be willing to take part in the study.

4.2.3 Patient selection and allocation

Patient referral criteria were developed by means of a preliminary investigation with the general practitioners who agreed to participate in the study. The general practitioners were asked what criteria they would use in order to identify 'suitable' patients for a domiciliary visit. The referral criteria finally decided on, after a steering group discussion, were that the patients should be (a) housebound and (b) having some difficulty with their medication due to a medical, physical or psychological condition. 'Elderly' was not used as one of the explicit referral criteria because the steering group felt that some non-elderly members of the community may not have access to pharmaceutical services and would, therefore, benefit from a domiciliary visit. No exclusion criteria were proposed on the grounds that, by definition, housebound patients were living in their own homes and, therefore, by implication, were patients who would be able to cope with a domiciliary visit.

Each general practice agreeing to participate in the study was asked to refer up to fifteen patients for a domiciliary visit, using the above criteria. The general practitioners were asked to provide the following information for each referred patient: the patient's name, address, telephone number and a current patient medication record. The general practitioners were also asked to complete and send a
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proforma letter (see Appendix 4.1) to each of the patients they referred for a visit, by way of an introduction to the service.

Referred patients were allocated to one of the community pharmacists who had volunteered to participate in the study on the basis of locality, and patients were contacted by telephone to arrange the visit appointment. As a result of the way that the pharmacists were recruited (anyone interested in participating was welcome to do so) it was not possible to allocate patients to their own dispensing pharmacist. Allocation on the basis of locality meant that the participating pharmacists would not have long distances to travel in order to visit their allocated patients and it would possibly result in some participating pharmacists visiting patients for whom they dispensed.

4.2.4 Development of the interview schedules

Two structured patient interview schedules were developed as the instruments of data collection, as each patient was to receive an initial visit from a pharmacist and a follow-up visit one month later. A third 'no follow-up visit' schedule was designed as a feedback report to be used if necessary. The three schedules are presented in condensed form in Appendices 4.2, 4.3 and 4.4. The interview schedules were developed in two stages, searching the literature and piloting.

4.2.4.1 Literature survey

Initially, the two interview schedules were developed by gathering the main questions
to be included from the literature, focusing on those medical papers reporting on patient medication management in the home. The majority of the papers focus on elderly patients and although patient age was not one of the referral criteria used in the pilot study, the areas of patient medication management covered in the literature were considered to be applicable to all patients with medication difficulties. Furthermore, it was felt that the chosen referral criteria would probably select for elderly patients on the whole.

In a number of studies reporting on assessments of patient medication management, an initial inspection of all the patient's prescription and non-prescription medication was made (Shimp et al., 1985; Hammarlund et al., 1985; Wandless et al., 1979; Cochrane et al., 1992) and information was recorded from container labels (Kieman and Isaacs, 1981; Ostrom et al., 1985). Patients were asked a set of questions relating to their ability to understand and cope with their medication safely and accurately in their own homes (Cugley et al., 1993; Sweeney et al., 1989) and questions covered the following specific areas: help received with medication (Law and Chalmers, 1976); ability to collect prescriptions and medication (Forbes et al., 1989); hoarding, storage and disposal of medication (Shimp et al., 1985; Kiernan and Isaacs, 1981); allergies (Shimp et al., 1985) and adverse drug reactions (Darnell et al., 1986). Potential drug interactions were also identified (Cartwright 1990). Assessment of patients' ability to understand and carry out instructions (Stewart and Caranasos, 1989), read labels and open containers (Botelho and Dudrak, 1992) and their level of compliance with dosage regimens (Darnell et al., 1986) were carried out
and the use of administration aids was also investigated (Hammarlund et. al., 1985).

Bebee et al. (1991) advocated that in research into drug problems in the community, general practitioners should be informed of problems detected in the course of domiciliary visits and that documentation should include patient medication profiles and a list of problems. The referring general practitioners, therefore, needed to be informed about the visits made to their patients and provided with relevant information. Interventions made in the process of monitoring prescriptions for completeness and accuracy are fundamental to the clinical pharmacy service in hospitals (Batty and Barber, 1991) and problems identified are usually noted and dealt with by reference to the patients themselves, their notes, the nursing staff or the prescribing doctor (Eadon, 1992). Therefore, as well as informing the general practitioner about problems detected during a domiciliary visit, it was necessary for the visiting pharmacists to be able to request the active intervention of a patient's general practitioner when appropriate.

A literature review by Tett et al. (1993) looked at the impact of pharmacist interventions on medication management, by reviewing nine studies that evaluated interventions designed to assist older people in managing their medication regimens. The follow-up visit interview schedules, therefore, needed an element of assessment of the interventions made during and as a result of the initial domiciliary visits.
4.2.4.2 Piloting

The second stage in the development of the interview schedules involved testing the schedules for patient acceptability and validity by carrying out pilot home visits. Initial visits were made to the first seven patients referred to the study in order to pilot the initial visit interview schedule and two of the seven patients received a follow-up visit one month later. Following the pilot visits, the interview schedules were altered to remove ambiguity, bias, repetition and any irrelevant questions.

4.2.5 Final visit schedules

The issues raised in the literature survey were formulated into groups of questions for the visiting pharmacist to ask the patient and into tables for documentation and summary of information gathered. The initial visit interview schedule consisted of four sections. The first section was for basic personal details: those of the patient, the visiting pharmacist, the patient's general practitioner and the patient's dispensing pharmacist, who was to be identified from container labels in the patient's home. In some cases it would only be possible to identify the dispensing pharmacy and not the actual pharmacist, depending on the printed details on the medication labels. The second section covered help with medication in the home, help with prescription collection and medicine delivery and whether the last prescription had been issued during a consultation or if it had been a repeat prescription.

At the start of the third section the pharmacist was to ask the patient to bring out all their medication, including prescription and over the counter medicines. The
pharmacist was to complete a drug chart for all the prescribed medicines in the patient's possession noting: name, form, strength, dose and frequency of administration of each medicine; whether the patient was currently taking the medicine; whether the patient should be taking the medicine and whether the medicine had been previously prescribed, but was now discontinued. The pharmacist was to gather the information from three sources: the patient, the medication containers and the patient medication record provided by the referring general practitioner. A second drug chart was to be completed for purchased medication, including any alternative remedies.

After completing the two drug charts, the pharmacist was to discuss medication related issues with the patient: medication hoarding, storage and disposal; patient allergies and hypersensitivities; potential adverse drug reactions; potential drug interactions; administration difficulties and compliance with dosage instructions. The pharmacist was also to make an assessment as to whether the patient would benefit from a compliance device. The pharmacist was to record any points highlighted by the discussion and where relevant, any advice they had given to the patient and any action taken.

The final section of the initial visit interview schedule was a visit summary report consisting of three tables and was to be completed after the visit. The first table was for a summary of any medication problems the patient was having that had been highlighted as a result of the visit, together with any advice given and action taken by
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colorful text

the visiting pharmacist. The second table was for the visiting pharmacist to request an intervention by the patient’s general practitioner when appropriate. The third table was for the pharmacist to request an intervention by the patient’s dispensing pharmacist when appropriate.

The follow-up visit interview schedule covered three areas: medication management, intervention assessment and feedback. The pharmacist was to discuss the same medication related issues that had been covered during the initial visit, to determine in which areas, if any, the patient was still experiencing problems. Assessment of the interventions was to be carried out in two stages; firstly by determining the extent to which the patient had followed any advice s/he had been given by the visiting pharmacist during the initial visit. Secondly, the pharmacist was to record the extent to which any general practitioner and/or dispensing pharmacist intervention requests had been acted on between the visits. The visiting pharmacist was encouraged to phone the patient’s general practitioner after the initial visit, if there was an urgent query or item of major concern to either the pharmacist or the patient that needed to be resolved immediately, and details of any such telephone contacts and their outcomes could be included with the assessment of the general practitioner intervention requests. Finally the pharmacists were asked to provide some feedback on the domiciliary service, firstly in terms of the ways (if any) in which they felt the visits had been of benefit to those involved and secondly, by the addition of their personal views and feelings about the visits they had made. After the follow-up visit, the pharmacist was to complete the personal details section and the visit summary

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The 'no follow-up visit' schedule was to be completed after the initial visit, if the patient was not going to receive a follow-up visit. The 'no-follow-up' schedule contained the same feedback questions asked in the last section of the follow-up visit interview schedule.

4.2.6 Training event

A six hour training event, spanning one weekday afternoon and evening, was organised for the pharmacists participating in the study and was led by three members of the steering group: the pharmacy practice lecturer, the research pharmacist and the general practitioner. The training event was divided into three sections. The first section focused on the reasons for setting up a domiciliary pharmaceutical service, the role of the pharmacist in providing such a service and problems that might be encountered during a visit. The second section focused on the need for effective communication between the community pharmacist, general practitioner and patient and how to resolve interprofessional problems. The final section was dedicated to discussing the visit report forms and how to complete them, facilitated by means of pharmacist/patient role play scenarios.

There was no specific clinical training given to the community pharmacists during the training event, on the grounds that their knowledge and expertise in community pharmacy practice should ensure that all the medication related issues to be discussed
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during the domiciliary visit, could be covered appropriately. However, the pharmacists were advised to scrutinise the patient’s medication record provided by the practice prior to the visit, in conjunction with standard reference texts, for example the current British National Formulary, in order to be aware of potential adverse drug reactions and drug interactions.

The pharmacists were informed that each patient should receive an initial home visit and a follow-up visit one month later. An appropriate date for the follow-up visit was to be set with the patient at the end of the initial visit. However, there were three exemptions to making a follow-up visit. In the event that during an initial visit the pharmacist did not request action to be taken by anyone (ie. the patient, their general practitioner or their dispensing pharmacist) then it was not necessary to make a follow-up visit to that patient. The second exemption to making a follow-up visit arose if the community pharmacist felt that a patient would not benefit from a follow-up visit, for example due to confusion. The third exemption occurred if a patient requested not to have a follow-up visit.

At the end of the training event, an official identification letter was produced for each pharmacist with an attached passport photograph, to be shown to the patient when making a home visit, as proof of identity.

4.2.7 Completed interview schedules

After each initial visit the completed initial visit interview schedule was sent to the
research pharmacist. A copy of the personal details section and the visit summary were sent to the patient’s general practitioner and/or dispensing pharmacist for action, as appropriate. A copy of the personal details section, the drug charts and the visit summary were returned to the visiting pharmacist, so that the information gathered at the initial visit was available for consultation during the follow-up visit. If the patient was not going to receive a follow-up visit, then the visiting pharmacist returned the feedback ‘no follow-up visit’ schedule together with the completed initial visit interview schedule. After a follow-up visit, the completed interview schedule was returned to the research pharmacist and a copy of the personal details section and the visit summary were sent to the patient’s general practitioner and/or dispensing pharmacist for action, as appropriate.

4.2.8 Domiciliary study evaluation

Evaluation of the pilot study was received from the participating pharmacists, the dispensing pharmacists and the general practitioners. A focus group meeting was held for the participating pharmacists together with members of the steering group, when all the visits had been completed. The pharmacists were asked to make any general comments about the visits and to discuss the following areas: problems encountered during the visits; how the pharmacists felt about making clinical recommendations to the general practitioners and recommendations for future domiciliary pharmaceutical services. The discussion was tape recorded, transcribed, coded and analysed.
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The patients' dispensing pharmacists were individually interviewed as part of the evaluation process. The interviews were tape recorded, transcribed, coded and analysed. The semi-structured interview schedule consisted of three sections and a copy can be found in Appendix 4.5. The first section asked the pharmacists about two aspects of their practice, maintaining patient medication records and providing a prescription collection and/or medicine delivery service. The second section asked the pharmacists for their general opinions on the provision of a domiciliary pharmaceutical service. Thirdly, the pharmacists were asked for their views on the Barnet domiciliary study, with particular reference to the visit summaries they had received and the interventions that they had been requested to make.

The evaluation process was completed by interviewing the general practitioners who had referred patients to the study for a domiciliary visit. The general practitioner interviews were also tape recorded, transcribed, coded and analysed. The general practitioner semi-structured interview schedule consisted of five sections and a copy of the schedule can be found in Appendix 4.6. The first section aimed to gather background information about two aspects of practice, patient records and repeat prescribing. The second section asked the general practitioners about patient referral and the referral criteria they had been requested to use. Section three of the interview schedule covered aspects of informing the patient and making the visits. In section four the general practitioners were asked for their opinions on the visit summaries they had received and the interventions they had been requested to make. The final section asked for general opinions as to the value of a domiciliary pharmaceutical
4.2.9 Data analysis

The prescription drug charts, completed by the visiting pharmacists, were analysed for each patient in conjunction with the patient’s medication record provided by the referring general practitioner for discrepancies between the medicines in possession, those currently being taken and those listed on the patient’s medication record. Reasons for the observed discrepancies were attributed to one or more of three factors, non-adherence, inaccurate medication records and hoarding, as defined below:

**Non-Adherence:** A patient was said to be non-adherent if s/he omitted one or more prescribed medicines or administered one or more discontinued medicines.

**Inaccurate medication record:** A patient’s medication record was termed ‘inaccurate’ if one or more prescribed medicines were missing from the record or if one or more discontinued medicines were still listed.

**Hoarding:** A patient was said to be hoarding if s/he stored one or more discontinued prescribed medicines or an excess quantity (ie. a greater quantity than would have been obtained on the current prescription) of one or more currently prescribed medicines.

A judgement was made as to which of the three factors, either alone or in combination, was responsible for the observed discrepancies between one or more of the three categories of medicines for each patient.
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The interventions that the general practitioners and dispensing pharmacists were requested to make were classified into groups of interventions of a similar nature, and the number of interventions made in each group was calculated.

The data gathered in the patient, general practitioner and dispensing pharmacist interviews and the data gathered from the feedback provided by the visiting pharmacists were analysed by the development of a coding frame and a coding form for each data set. Each response was recorded in its coded version on the appropriate coding form and frequencies of responses were obtained.

4.3 Results

4.3.1 Pilot study participants

Seven general practices agreed to participate in the domiciliary study, giving an approximate response rate of 8%. Four general practices volunteered to participate; three 'friendly' practices were encouraged to participate by the FHSA pharmaceutical adviser. Table 4.1 illustrates the number of general practitioners involved in the patient referrals in each participating general practice and the total number of patients referred from each practice.

A total of 48 patients were allocated to the 16 community pharmacists (13 male and three female) who volunteered to participate in the pilot study. Seven of the 56 referred patients were visited in order to pilot the interview schedules and one patient was excluded from the study because she could not be contacted by telephone. One
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Table 4.1: The number of general practitioners involved in patient referral and the number of patients referred/practice

<table>
<thead>
<tr>
<th>Practice</th>
<th>No. of participating general practitioners per practice</th>
<th>No. of patients referred/practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>10</td>
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<td>3</td>
<td>3</td>
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<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>14</td>
<td>56</td>
</tr>
</tbody>
</table>

pharmacist was allocated only one patient to visit, due to the low number of referrals received for patients in the pharmacist’s locality. One pharmacist was allocated two patients to visit, eleven pharmacists were each allocated three patients and three pharmacists were each allocated four patients to visit.

4.3.2 Results from the initial domiciliary visits

Thirty nine patients, 26 women and 13 men, received an initial visit. Four referred patients refused a visit, four were in hospital at the time of the study and one patient was admitted to a nursing home at the time of the study. The average length of an
initial domiciliary visit was 56 minutes (range 30 minutes to 1 hour 45 minutes). One patient was in the 41 - 55 years age band, four were in the 56 - 70 years age band and 33 patients were over 70 years old, including five over 90 years (data missing for one patient). Thirty patients were living alone. Half of all the patients visited were affected by a physical disability such as poor vision and arthritis. Fourteen patients received help with their medication at home, eight from lay carers, four from a district nurse and two from their community pharmacist. At the receipt of their last prescription, 16 (41%) patients had seen their general practitioner - 13 at home and three at the surgery. Twenty-three (59%) patients had, therefore, received a repeat prescription without seeing their general practitioner. Thirty-five patients relied on someone to deliver their medication, one third of these using their community pharmacist.

The patients had an average of eight (range 2 - 16) prescribed medicines in their possession, were currently taking an average of six (range 1 - 13) and had an average of five medicines (range 2 - 13) listed on their current surgery patient medication record. Discrepancies between the medicines in possession, those currently being taken and those on the patient medication records affected 35 (90%) patients. Non-adherence was judged to be the reason for the discrepancies for three patients, inaccurate records for six patients and hoarding for three patients. A combination of two factors was judged to account for the discrepancies for 15 patients - a combination of non-adherence and inaccurate records for six patients and a combination of inaccurate records and hoarding for nine patients. All three factors
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were judged to be responsible for the observed discrepancies for eight patients. Appendix 4.7 gives an explanation of the discrepancies between the medicines in possession, those currently being taken and those listed on the patients’ medication records and explains how the judgements as to which factors were responsible for the discrepancies were made.

Hoarding was judged to be the factor, either alone or in combination with one or both of the other two factors, responsible for the observed discrepancies for 20 (51%) patients. The accuracy of this judgement is supported by the findings of the visiting pharmacists who identified hoarding as a problem for 18 patients; sixteen of the patients were identical in both categories. Seventy two incidences of hoarding were recorded for the 20 patients, involving 60 different medications (different strengths and forms of the same drug were treated as different medicines). Thirteen hoarding incidences (18%) involved the storage of excessive quantities of currently prescribed medication by six patients. The rest of the hoarding incidences could be attributed to discontinued medication. Fifteen of the hoarding incidences involved expired medication. Table 4.2 classifies the hoarded medicines into their therapeutic categories, according to the British National Formulary classification.

Thirty three (85%) patients had an average of two (range 1 - 13) purchased medicines in their possession; the majority of these were being taken on an ‘as required’ basis. Storage was generally satisfactory, but half the patients were using unsatisfactory methods of disposal, such as flushing medication down the toilet and throwing it in
Table 4.2: BNF classification of the hoarded prescribed medicines

<table>
<thead>
<tr>
<th>Drugs acting on/used in the treatment of/used in the treatment of diseases of:</th>
<th>Number of hoarding incidences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central nervous system</td>
<td>19</td>
</tr>
<tr>
<td>Gastro-intestinal system</td>
<td>11</td>
</tr>
<tr>
<td>Skin</td>
<td>10</td>
</tr>
<tr>
<td>Cardiovascular system</td>
<td>7</td>
</tr>
<tr>
<td>Ear, nose and oropharynx</td>
<td>7</td>
</tr>
<tr>
<td>Respiratory system</td>
<td>6</td>
</tr>
<tr>
<td>Infections</td>
<td>3</td>
</tr>
<tr>
<td>Nutrition and blood</td>
<td>3</td>
</tr>
<tr>
<td>Eye</td>
<td>2</td>
</tr>
<tr>
<td>Endocrine system</td>
<td>2</td>
</tr>
<tr>
<td>Musculoskeletal and joint diseases</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total number of incidents</strong></td>
<td><strong>72</strong></td>
</tr>
</tbody>
</table>

the dustbin. No patient was taking any medication to which they had a known allergy. Adverse drug effects to current medication were reported by sixteen (41%) patients. The majority of these were gastrointestinal effects: nausea, constipation, diarrhoea and upset stomach, caused by non-steroidal anti-inflammatory drugs (NSAIDs), opioid analgesics or iron. Incontinence with diuretics and drowsiness with benzodiazepines were also reported. Eleven potential drug interactions were identified by the community pharmacists for nine (23%) patients. These included three reports of potential paracetamol overdose, where patients were taking two
products each containing paracetamol and three reports of potential ulcer exacerbation. Patients taking an H$_2$-receptor antagonist for the treatment of an ulcer were concurrently taking an NSAID. Twenty-one (54%) patients had one or more medication problems which could have led to non-adherence and administration errors. These included difficulty reading container labels, problems opening child resistant closures, the possession of multiple containers of the same medication and mixing or transferring medication.

Patients’ adherence to their drug regimens was assessed by asking them whether they managed to take all their medicines according to the instructions given by their doctor and/or on the container label. Twenty-five (64%) patients stated that they ‘always’ followed the instructions; fourteen (36%) stated that they ‘sometimes’ did. Forgetfulness, confusion, poor understanding of dosage instructions and side effects were cited by the patients as the main reasons for not always following the instructions.

The pharmacists felt that 15 patients would benefit from a compliance device. A monitored dosage system was recommended for 12 patients, a monitored dosage system used in conjunction with a drug chart was recommended for two patients and a device to facilitate the administration of eye drops was recommended for one patient.

Advice was given by the community pharmacists to 32 (82%) patients on a variety of
topics including hoarding, storage, disposal, incontinence and diet. Explanations about dosage instructions, purpose of medication, correct method of administration, the importance of adherence and the significance of leaving medication in original, labelled containers were also given, together with general reassurance.

In the initial visit summaries, the visiting pharmacists requested general practitioner intervention for 25 (64%) patients. Dispensing pharmacist interventions were requested for 17 (44%) patients. Two patients were visited by their own dispensing pharmacist. The classification of the interventions requested, together with examples and frequencies are reported in Tables 4.3 and 4.4 on the following pages.
<table>
<thead>
<tr>
<th>Intervention Classification</th>
<th>Number of Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmation of therapy</td>
<td>12</td>
</tr>
<tr>
<td>eg. Should patient be taking Zantac 150mg tablets?</td>
<td></td>
</tr>
<tr>
<td>Could GP confirm the dose of temazepam patient should be taking?</td>
<td></td>
</tr>
<tr>
<td>Review of therapy</td>
<td>9</td>
</tr>
<tr>
<td>eg. Could GP review patient’s antidepressant therapy?</td>
<td></td>
</tr>
<tr>
<td>What medication should patient be taking in response to allergic reaction?</td>
<td></td>
</tr>
<tr>
<td>Review of symptom(s)</td>
<td>5</td>
</tr>
<tr>
<td>eg. Patient is breathless after a short walk</td>
<td></td>
</tr>
<tr>
<td>Patient has an itchy scalp and is suffering hair loss</td>
<td></td>
</tr>
<tr>
<td>Alteration of medication due to adverse effects or potential interactions</td>
<td>4</td>
</tr>
<tr>
<td>eg. Patient is taking temazepam and lorazepam at night and feels drowsy the next day.</td>
<td></td>
</tr>
<tr>
<td>Prochlorperazine tablets are making the patient more nauseous. Buccal cinnarizine may be a helpful alternative.</td>
<td></td>
</tr>
<tr>
<td>Addition of medication for a poorly controlled condition</td>
<td>3</td>
</tr>
<tr>
<td>eg. Patient is taking Indocid 25mg capsules three times a day and is still experiencing severe knee pain.</td>
<td></td>
</tr>
<tr>
<td>Update of patient’s medication record</td>
<td>3</td>
</tr>
<tr>
<td>eg. Could patient’s medication record be amended? Discontinued items are still listed.</td>
<td></td>
</tr>
<tr>
<td>Provision of additional advice</td>
<td>2</td>
</tr>
<tr>
<td>eg. Advice from the prescriber on how patient should take medication may help with adherence.</td>
<td></td>
</tr>
</tbody>
</table>

continued.....
<table>
<thead>
<tr>
<th>Intervention Classification</th>
<th>Number of Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Review of repeat prescribing procedure</strong>&lt;br&gt;eg. Patient has excessive quantities of current medication in stock arising from repeat prescription requests. Can this situation be rectified?</td>
<td>2</td>
</tr>
<tr>
<td><strong>Miscellaneous requests</strong>&lt;br&gt;1) A blood test to measure patient's potassium levels may be in order, due to potential hypokalaemia with bumetanide and prednisolone and the resulting risk of digoxin toxicity.</td>
<td>5</td>
</tr>
<tr>
<td>2) Could GP write dosage instructions for all prescription items? Otherwise they are labelled 'As directed', but patient does not remember how to take them.</td>
<td></td>
</tr>
<tr>
<td>3) Could GP prescribe Frumil for patient and not co-amilofruse, because the different generics available are causing confusion?</td>
<td></td>
</tr>
<tr>
<td>4) Could patient's indwelling catheter be changed to one which can be replaced every four to five weeks? The current one is blocking after about four weeks of use.</td>
<td></td>
</tr>
<tr>
<td>5) Diabetic patient has no knowledge as to how to manage diet; would benefit from a visit from a dietician.</td>
<td></td>
</tr>
</tbody>
</table>

**Total number of interventions requested** 45
<table>
<thead>
<tr>
<th>Intervention Classification</th>
<th>Number of Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container related requests</td>
<td>10</td>
</tr>
<tr>
<td>eg. Could CP provide non-child resistant closures for all containers?</td>
<td></td>
</tr>
<tr>
<td>Could CP dispense medicines in large containers for easy handling?</td>
<td></td>
</tr>
<tr>
<td>Labelling Related Requests</td>
<td>7</td>
</tr>
<tr>
<td>eg. Could CP provide large print labels?</td>
<td></td>
</tr>
<tr>
<td>Could CP ensure all labels have clear dosage instructions?</td>
<td></td>
</tr>
<tr>
<td>Could CP label all containers and original packs?</td>
<td></td>
</tr>
<tr>
<td>Medication Related Requests</td>
<td>5</td>
</tr>
<tr>
<td>eg. Could CP accept returned medication for disposal?</td>
<td></td>
</tr>
<tr>
<td>Could CP keep all patient’s medication in stock, so that there are no items owing?</td>
<td></td>
</tr>
<tr>
<td>Patient would benefit from a prescription collection / medication delivery service.</td>
<td></td>
</tr>
<tr>
<td>Advice for Patient / Carer</td>
<td>5</td>
</tr>
<tr>
<td>eg. Patient is blind and would benefit from advice when any new medicines are dispensed.</td>
<td></td>
</tr>
<tr>
<td>Advice is needed about medication disposal.</td>
<td></td>
</tr>
<tr>
<td>Advice on the action of his drug’s would help the patient’s adherence.</td>
<td></td>
</tr>
<tr>
<td>Patient would benefit from advice on inhaler technique / use of Volumatic.</td>
<td></td>
</tr>
</tbody>
</table>

**Total number of interventions requested**

27
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4.3.3 Results from the follow-up domiciliary visits

The follow-up visits were conducted one month after the initial domiciliary visits in order to reinforce important aspects of medication management and to assess the interventions made by the visiting pharmacists. Twelve community pharmacists made a total of 18 follow-up visits and the average length of a follow-up visit was 37 minutes (range 10 minutes to one hour). The visiting pharmacists did not make follow-up visits to 21 patients for the following reasons (two reasons were given for each of five patients). Twelve patients did not receive a follow-up visit because their visiting pharmacists felt that they would not benefit from one - nine of the patients were well organised with their medication, two received full medication supervision and one patient was confused. Five patients did not receive a follow-up visit because they had not been given any advice to act on and no intervention requests had been made on their behalf. Five patients did not want a follow-up visit, two patients could not be contacted to confirm the follow-up visit appointment, one patient was abroad when the follow-up visits were conducted and one pharmacist was unable to carry out one follow-up visit.

In terms of medication management, the follow-up interviews highlighted that patients were still experiencing problems in the following areas: confusion over dosage instructions (one patient); problems with adherence due to forgetfulness (three patients); difficulty in opening child resistant closures (one patient) and problems reading medication container labels (three patients).
The 18 patients who received a follow-up visit had been given a total of 38 pieces of advice to act on by the visiting pharmacists at the initial visit, an average of two (range one to three) pieces of advice per patient. The advice concerned returning expired and unwanted medication to the pharmacist and aspects of administration, for example taking medication at the correct dosing intervals and taking medication after food. At the follow-up visits it was possible for the visiting pharmacists to determine that 19 (50%) pieces of advice had been acted on, resulting in improved adherence to dosage instructions (five patients), improved administration (one patient), improved medication storage (two patients) and a decrease in the number of hoarded medicines (nine patients). Patients had not acted on four pieces of advice concerning regimen adherence, diet and the return of unwanted medicines to their dispensing pharmacist. It was not possible to assess whether the remaining 15 pieces of advice had been acted on or not, covering the return of unwanted medicines, the discontinuation of medication without seeking general practitioner advice and dietary alterations.

Two pharmacists each telephoned one general practitioner in order to clarify a point for a particular patient, following the initial domiciliary visit. One patient was confused as to whether he should be taking frusemide 40mg tablets or Frumil tablets and what the correct dose was. The general practitioner confirmed that the patient should be taking two frusemide 40mg tablets every morning and this was explained to the patient at the follow-up visit. The second telephone clarification concerned whether a patient with diarrhoea should be taking loperamide regularly or not. However, the general practitioner was waiting for a hospital discharge letter to
confirm current treatment for the patient.

A total of 27 general practitioner interventions were requested on the initial visit summary reports for 12 of the 18 patients who received a follow-up visit, an average of 2.25 (range one to five) interventions per patient. Ten (37%) of the general practitioner interventions, requested for six patients, had been acted on by the time the follow-up visits were conducted and included confirmation of patients' drug therapy, review of patients' drug therapy and alteration of medication due to adverse effects. Seventeen (63%) general practitioner intervention requests for 11 of the 12 patients were, therefore, outstanding at the end of the follow-up visits. Six new general practitioner interventions were requested on the follow-up visit summaries, two for each of three patients including one patient for whom no general practitioner interventions had been requested on the initial visit summary. A total of 23 general practitioner interventions were, therefore, outstanding after the follow-up visits and included requests to: review symptoms; review drug therapy; confirm dosage and alter medication due to adverse effects.

A total of 12 dispensing pharmacist interventions had been requested on the initial visit summaries for nine of the 18 patients who received a follow-up visit, an average of 1.3 (range one to two) requests per patient. Six of the dispensing pharmacist interventions, requested for five patients, had been acted on between the visits. The dispensing pharmacists agreed to accept returned medication for disposal from two patients, expired medicines had been collected from one patient, non-child resistant
closures had been supplied for two patients and all containers and original packs were now fully labelled for one patient. It was not possible to determine whether two of the dispensing pharmacist interventions had been acted on. One was a request to keep all medicines in stock for a particular patient, so that each prescription could be filled completely and the second was a request to provide further explanations of drug action to one patient. At the end of the follow-up visits there were, therefore, four outstanding dispensing pharmacist interventions and one new one, covering the provision of large print labels, non-child resistant closures, a prescription collection and medicine delivery service and monitored dosage systems.

4.3.4 Feedback from the visiting pharmacists

The visiting pharmacists provided feedback on the visits they had made. Feedback was provided on the 'no follow-up visit' schedule for patients who only received an initial visit. Feedback was provided on the follow-up visit interview schedule for patients who received an initial and a follow-up visit. The benefits of a domiciliary service to those involved, as perceived by the visiting pharmacists, are summarised in Table 4.5.

Additional personal comments made by the visiting pharmacists about the domiciliary visits included:

'I felt I achieved something here. My role was fully utilised'.

'The pharmacist has a potential role in the health of housebound patients, who would benefit a great deal from regular visits'.

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'This is a good professional role, helping the patient to understand the importance of compliance, discuss side effects, hoarding, expiry dates etc'.

'I feel it was a worthwhile visit. The patient now feels she can call a pharmacist to help her'.

'I feel this is a good way of offering reassurance to the patient'.

Table 4.5: Benefits of a domiciliary service as perceived by the visiting pharmacists

<table>
<thead>
<tr>
<th>Benefits to the Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Patients received a full explanation of their medication, including advice on administration and dose regimen</td>
</tr>
<tr>
<td>• Patients' understanding of adverse drug effects improved</td>
</tr>
<tr>
<td>• Patients' appreciated how to store their medicines and dispose of unwanted or expired medicines</td>
</tr>
<tr>
<td>• Patients' adherence improved</td>
</tr>
<tr>
<td>• Patients' confidence improved</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefits to the General Practitioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The general practitioners were made aware of specific patients’ problems</td>
</tr>
<tr>
<td>• The feedback they received was valuable for patient assessment</td>
</tr>
<tr>
<td>• It was helpful for the general practitioners to have another health care professional visiting patients at home</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefits to the Visiting Pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The visits gave the pharmacists a greater understanding of patients’ medication problems</td>
</tr>
<tr>
<td>• The visits helped to improve professional role satisfaction</td>
</tr>
<tr>
<td>• The visits helped to raise the profile of the pharmacist in the community</td>
</tr>
</tbody>
</table>

4.3.5 Visiting pharmacist evaluation

The visiting pharmacists evaluated the pilot domiciliary study during a focus group
meeting. Fourteen (88%) of the pharmacists who had made the domiciliary visits attended, together with five members of the steering group.

The pharmacists made a number of general points in relation to patient medication management. One point was the confusion arising over the prescribing of generic and proprietary versions of the same medicine, possibly resulting in patients taking at least twice their normal dose, thinking that the items were different medicines on the grounds that they were labelled differently and often looked different. Vague dosage instructions, for example ‘as directed’ and ‘when required’ proved to be very confusing for patients. The pharmacists commented that they had been surprised by the fact that some of the patients seemed to have a complete disregard for their medication, storing it all over the place, having several started containers of the same medicines and mixing medicines in a single container. They also reported cases where patients had not considered purchased medicines to be medicines:

"One patient had Lemsip - I could see it in the kitchen and when I asked "Do you take that ?" she said "Oh, it's just Lemsip".

The focus group was asked to discuss any problem areas they had encountered in the course of their visits. One initial problem was the frustration involved in trying to arrange a visit, partly caused by the fact that a number of patients had not been informed about the visit by their general practitioners and, therefore, knew nothing about it. Another source of frustration was arriving at the appointed hour to find no-one at home. The fact that the visiting pharmacist was, in the majority of cases, not
the patient’s own dispensing pharmacist and hence a ‘stranger’, caused confusion in
some cases and some patients were concerned that their medication was going to be
altered.

The group discussed how they felt about making clinical recommendations to the
patients’ general practitioners. One pharmacist summed up the situation:

’I found it very difficult to put forward views because you don’t know the
background of the patient or why the patient was referred. You don’t want to
step on their toes. You have to take great care with the words you use with
the patient and with your advice to the general practitioner’.

Finally the pharmacists discussed the future provision of a domiciliary pharmaceutical
service. Reservations were expressed on the following: the need for further clinical
training to be able to carry out the visits with maximum benefit, the length of time and
lack of remuneration involved and the necessity for patients to be visited by their own
dispensing pharmacist. Comments raised with regard to the latter point included:

’I feel that it is hard to visit under circumstances where one cannot be
personally responsible for changes’.

’The patient had great loyalty and confidence in her own pharmacist and felt
disloyal and apprehensive by my visit’.

The focus group stressed that the success of a community pharmacy domiciliary
service was dependent on the referring general practitioners acting on the
interventions requested by the visiting pharmacist whenever applicable. One
pharmacist explained:
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'If you go in and you find a problem, you refer it back to the general practitioner and the problem is resolved in some way, then it is absolutely worthwhile. If you go in and find a problem - which you will do - and nothing is done about it, this is out of your hands and it is a waste of time'.

4.3.6 Dispensing pharmacist evaluation

An evaluation of the pilot study, by the patients’ dispensing pharmacists, was gathered during semi-structured interviews. Nineteen community pharmacists (including the two pharmacists who had participated in the study and visited patients for whom they dispensed) were identified as the regular dispensing pharmacist for one or more of 37 of the 39 patients who were visited. A regular dispensing pharmacist could not be identified for two patients. Eighteen of the dispensing pharmacists were interviewed (14 male, four female). One pharmacist was not interviewed because he had not been the pharmacist at the identified pharmacy during the study period.

The dispensing pharmacists gave their general opinions on the value and benefit of domiciliary visits. Sixteen of the dispensing pharmacists felt that pharmaceutical domiciliary visits were a good idea, one pharmacist felt that they would increase his workload and one pharmacist was unsure as to the value of visits. Fifteen of the pharmacists felt that visits would be beneficial to patients; three were unsure of the patient benefits. Sixteen pharmacists felt that domiciliary visits were a suitable role for community pharmacists; one pharmacist felt that they were not (data missing for one pharmacist). Eleven pharmacists felt that visits would be beneficial to the visiting pharmacist; three felt that there would be no benefit to the visiting pharmacist (data
Potential pharmacist benefits included getting to know your patients and their problems, raising the profile of the pharmacist in the community and improving professional role satisfaction - the same beneficial areas expressed by the visiting pharmacists. Two barriers to providing a domiciliary service were mentioned by all the dispensing pharmacists, the time involved and the lack of remuneration. All the dispensing pharmacists felt that elderly and housebound patients would benefit the most from a domiciliary visit and sixteen said that they would be prepared to visit such local patients. Two pharmacists said they would not be prepared to make domiciliary visits. Seventeen of the dispensing pharmacists felt that a domiciliary service would have a positive effect on their relationships with the general practitioners of the patients they visited; one pharmacist felt that the relationships would be unaffected.

In evaluating the Barnet domiciliary study, nine of the dispensing pharmacists thought that it had been useful; four thought that the study had been quite basic (data missing for five pharmacists). Seven pharmacists said that they had found the visit summaries useful; six said that they had not (one pharmacist was not sent any visit summaries; data missing for four pharmacists). Thirteen pharmacists felt that the visit summaries would have been useful to the patients’ general practitioners; two pharmacists did not (one pharmacist was not sent any visit summaries; data missing for two). Eleven of the eighteen pharmacists had been requested to make an intervention on the visit summaries. Seven of those eleven dispensing pharmacists (data missing for four) felt that the interventions requested had been appropriate and had been acted on when
possible. Twelve pharmacists felt that the majority of the general practitioner interventions requested had been appropriate (one pharmacist was not sent any visit summaries; data missing for five).

4.3.7 General practitioner evaluation

Semi-structured interviews were carried out with ten (six male, four female) of the fourteen general practitioners who had participated in the domiciliary study. Three general practitioners said that they had not been directly involved in the patient referrals and one general practitioner was unavailable at time the interviews were conducted. The ten general practitioners represented six of the seven general practices involved in the study and had referred 38 of the 39 patients who were visited.

Practice background information was gathered about patient records and repeat prescribing to establish possible reasons for the discrepancies between the medicines in possession, those currently being taken and those listed on the patients' medication records. Five of the six practices kept computerised patient records, including a record of the patients' medication. Computerised medication records were, therefore, held for 32 of the 38 patients who were visited (data missing for one patient). The general practitioners explained that inaccuracies in patient records were due to a combination of factors including: poor communication with hospital; record updating by receptionists; the use of locum general practitioners; the time taken to amend records and home visits. Home visits introduce an extra step into the record keeping
process because paper notes made during a visit have to be transferred onto the computerised system on return to the practice.

The information gathered on repeat prescribing showed that patients on long term medication were given an average of two months supply of their medication on each prescription and received an average of six to 12 months supply in total, through repeat prescriptions, before they were due for a medication review. At each surgery repeat requests were required in writing, using the tear off slip from the computer generated prescriptions, printed request slips or a patient note. Repeat requests were dealt with by the receptionists in five surgeries and a computer clerk in one. Nine general practitioners (data missing for one) said that the receptionist/computer clerk would notice any unusual repeat requests, early or late, and would query it with the prescriber. The general practitioners said that the receptionists were very disciplined where repeat prescribing was concerned and followed the house rules when any difficulties arose. The point was raised, however, that patients may request a repeat prescription for all their medication, when in fact they only required one or two items.

The next section of the interview looked at the pilot study referral criteria and the possibility of patient referral from other sources. Nine general practitioners (data missing for one) agreed that the referral criteria were comprehensive; seven (data missing for three) agreed that the criteria were easy to use. Seven general practitioners had identified patients who fitted the referral criteria from their own knowledge of their patients, two general practitioners had identified patients at
opportunistic consultations and two general practitioners had relied on the knowledge of their practice staff (one general practitioner gave two answers). None of the general practitioners had used their patient records to identify suitable patients and no surgery had in place a system by which certain categories of patient could be highlighted. One general practitioner raised the point that those patients who would probably benefit most from a domiciliary pharmaceutical service were possibly those patients already being targeted for home visits, in particular by the district nurses who were usually contacted first when a general practitioner suspected a patient was having problems at home. The different visitors and possibly the different advice given could lead to patient confusion.

All the general practitioners felt that it was appropriate for other health care professionals to refer suitable patients for a pharmaceutical domiciliary visit and only two general practitioners expressed reservations about patient referral by lay carers. Nine general practitioners (data missing for one) felt that referral from more than one source was a good idea, as others may be more aware of patients’ problems due to greater knowledge of and contact with the patient.

All the general practitioners said that patients should be visited by their own dispensing pharmacist because patients often had a good relationship with their dispensing pharmacist. Dispensing pharmacists who held patient medication records would already know about the patients’ medication and there would be continuity of care.
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In their evaluation of the visit summaries and the intervention requests, all the general practitioners felt that the first table on the visit summary, summarising the nature of the patient’s problems, together with any advice given and action taken by the visiting pharmacist, had been useful. Five of the general practitioners found the quality and depth of information good; three found it variable (data missing for two). Five general practitioners felt that important points had been highlighted through the visits; two more agreed and also felt that new information had been received. Three general practitioners felt that no important points had been highlighted. Nine general practitioners (data missing for one) felt that the intervention requests had been appropriate. However, they felt that not all the interventions required action, when taking into account the patient’s whole clinical picture. Four general practitioners felt, in general, that no action was required, three general practitioners felt that some of the interventions required action and some did not and two felt that, in general, action was required. A number of interventions were to be acted on at the next patient visit or at the issue of the next prescription and, therefore, had not been completed before the follow-up visit. All the general practitioners said that they were willing to accept clinical suggestions made by the visiting pharmacists, although three did express concern that the final prescribing decisions should be left to the doctors.

Nine general practitioners felt that a domiciliary pharmaceutical service was a good idea; one general practitioner was unsure. The general practitioners expressed patient benefits as a result of the scheme:

'The more professional input, the better for the patient'.

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'Community pharmacists are the medication experts and can pick up on points that we may miss'.

Personal benefits were also raised:

'The feedback was valuable and raised my awareness of patients' problems'.

Six general practitioners felt that some of their patients had benefitted from the visits, two general practitioners felt that the majority had and two general practitioners were unsure. Seven general practitioners expressed a wish for an ongoing domiciliary service, with the frequency of follow-up visits tailored to the patients' needs, two felt it was unnecessary for an ongoing service and one was unsure. Eight general practitioners felt that the scheme could improve relationships between themselves and their local community pharmacists; two general practitioners felt that their interprofessional relationships were already very good.

4.4 Discussion

The participation rates in the pilot study were approximately 8% for the general practices and 18% for the community pharmacists. The low participation rates can possibly be explained by the fact that domiciliary pharmaceutical services are not established practice and the uptake of new initiatives is known to follow a broadly similar pattern, led by a few innovators (Stocking, 1992).

The steering group recognised that patients could be referred for a domiciliary visit by a variety of sources including pharmacists, district nurses, health visitors, social
services and lay carers. However, for the pilot study, general practitioner referral was felt to be the most appropriate because referral from other sources would introduce an extra step in the referral process - seeking general practitioner approval for the visit - whereas general practitioner patient referrals were, in themselves, confirmation of visit consent. Furthermore, it was not possible to predict whether the general practitioners would have approved of patient referral from other sources, possibly hampering the progress of the pilot study.

Despite the fact that the majority of the general practitioners had found the referral criteria comprehensive, nearly a quarter of the patients receiving an initial visit did not receive a follow-up visit on the grounds that they were well organised with their medication, demonstrating that the general practitioners possibly did not target the most appropriate patients. The point raised by one general practitioner concerning district nurses, may indicate that the district nurses could be a more appropriate source of patient referral in future domiciliary services. A further point made concerning differing advice given by different domiciliary service providers indicates the need for the co-ordination of domiciliary services to define roles and prevent service duplication.

The community pharmacists who visited the patients at home unearthed a range of problems contributing to sub-optimal drug therapy. Despite the fact that the results from the selected group of patients visited cannot be generalised to the population at large, the same problems have been well documented in previous studies and findings
are comparable. Fifty per cent of the patients receiving an initial visit were found to use unsatisfactory methods of medicine disposal and 20 patients were judged to be hoarding 72 medicines. Similarly Kiernan and Isaacs (1981) found that 50% of patients in their study disposed of medicines in the toilet or sink and 35 patients were hoarding 92 drugs. These results indicate that patients' lack of knowledge about how to dispose of unwanted medicines may contribute to hoarding.

Sixteen (41%) patients receiving an initial domiciliary visit reported an adverse drug effect; Kellaway and McCrae (1973) reported that 36% of those aged 60 to 70 years may suffer from adverse drug effects. Eleven potential drug interactions were noted for nine (23%) patients by the visiting pharmacists. In her study Cartwright (1990) found that 17% of those aged 65 or more were taking medicines with potentially harmful interactions. Difficulties reading container labels and problems opening child-resistant closures which could have led to non-adherence and administration errors have been reported to contribute to non-adherence in other studies (Hammarlund et al., 1985; Murray et al., 1986). The possession of multiple containers of the same medication has been documented by Law and Chalmers (1976) and transferring medication has also been reported previously; Kiernan and Isaacs (1981) found that 20% of patients removed drugs from their original containers.

Patients were asked about their ability to adhere to their drug regimens. The use of interviews has been validated as a practical and reasonably accurate means of determining whether a patient has adhered to a medication regimen or not (Rudd,
Chapter 4 - A Domiciliary Service

1979; Inui et al., 1981). The main reasons the patients gave for not always following regimen instructions have been reported elsewhere. In a study by Stromme and Botten (1993) 71% of home carers reported they often or sometimes discovered patients who did not take their medicines as prescribed. The most frequently reported error was forgetting to take medicines. Misunderstanding directions (Palmieri, 1991) and adverse effects of medication (Stewart and Caranasos, 1989) have also been reported as major causes of regimen non-adherence.

Discrepancies between the medicines that patients had in their possession, those that they were currently taking and those listed on their patient medication records appear to be partly due to unsatisfactory systems in general practice, namely medication record and repeat prescribing systems. The medication records of 29 (74%) patients provided by the referring general practices were found to be inaccurate, correlating with a study by Price et al. (1986) where general practitioners' manual records differed from the information obtained by interviewing patients with their medication for 70% of the patients. Inaccurate records resulting in discrepancies between general practitioners' and patients' knowledge of prescribed medication have also been documented in other studies (Gilchrist et al., 1987; Burns et al., 1990; Ross, 1991). In the pilot study, however, the majority (32 out of 38) of all the patients' records were computerised, possibly leading to an expectation of a high level of record accuracy, although the reasons given by the general practitioners to explain their inaccurate records can be applied equally to manual and computerised records, with the exception of home visits. A further reason given by Price et al. (1986) to
account for discrepancies in medication knowledge between general practitioners and patients was repeat prescribing that takes place without a consultation, resulting in infrequent medication review. In the domiciliary study, 59% of the patients had received their most recent repeat prescription without seeing their general practitioner, so infrequent medication review may have contributed to the medication discrepancies. A study by Anderson (1980) reported that 54% of repeat prescriptions were obtained without the patient seeing their doctor.

Inaccurate records together with repeat prescribing systems may have contributed to hoarding and non-adherence. Hoarding of discontinued medicines and/or the administration of discontinued medicines may have been possible if discontinued items were still listed on the patients' medication records, enabling the patients to receive repeat prescriptions for discontinued medication. Those patients who were aware that such items had been discontinued may have hoarded them; others may have administered them. The hoarding of excess current medication may have been possible because patients were able to make early requests for repeat prescriptions. The general practitioners, however, seemed satisfied that systems in place would prevent patients from receiving early repeat prescriptions. If so, the hoarding of excess current medication could be attributed to non-adherence, in terms of non-administration and to patients requesting all their items with every repeat request, when they only required one or two. The latter point highlights the problem of inequivalence; patients are not, on the whole, given equivalent quantities of each medication on a prescription. Patients will, therefore, not run out of all their
medication at the same time, yet may request all their medicines on every repeat prescription. It may be possible to greatly improve the accuracy of general practice patient medication records by implementing more efficient record updating systems and by improving communication at the interface between primary and secondary health care providers. Furthermore, repeat prescribing systems need to be examined to ensure that patients can only receive repeat prescriptions for the current medicines that they require, together with an attempt to prescribe equivalent quantities of medication, in conjunction with regular patient reviews.

Less than half of the general practitioner interventions had been acted on by the time the follow-up visits were conducted, although the general practitioners did say that they intended to act on a number of the interventions when the patient was next seen or at the issue of the next prescription highlighting two points. Firstly, the follow-up visits were possibly timed too close to the initial visits, a month not being a long enough time period to allow for all the appropriate interventions to have been acted on. A more suitable follow-up period may, therefore, be the length of the prescribing period, an average of two months. The second point raised is that, on the whole, the general practitioners did not consider the majority of the interventions to be urgent; they were content to act on them at a future time.

Despite the fact that the general practitioners referred patients for a domiciliary visit and expressed a general willingness to accept clinical suggestions made by the community pharmacists during their study evaluation, there may have been a certain
lack of acceptance of the new role in practice. Studies (Spencer and Edwards, 1992; Nathan and Sutters, 1993a) of the attitudes of general practitioners towards a variety of extended roles for the community pharmacist have demonstrated less acceptance of pharmacist involvement in clinical areas of practice than in non-clinical areas. Furthermore, the visiting pharmacists said that they had found it difficult to decide how and to what extent they could make clinical suggestions to the general practitioners. The above points highlight the need for further clinical training for the pharmacists making domiciliary visits and for a joint general practitioner and community pharmacist meeting prior to the establishment of a domiciliary pharmaceutical service to explain the role of the pharmacist and possibly to produce joint guidelines on accepted roles and responsibilities of those involved. Following a patient visit, it would be appropriate for the visiting pharmacist and general practitioner to discuss the intervention requests and jointly decide on appropriate action to be taken, when and by whom.

The steering group had appreciated that ideally patients should be visited by their own dispensing pharmacist, but it was not practicable for the pilot study. The general practitioners felt that patients often had a good relationship with their dispensing pharmacist and visits by him/her would ensure continuity of care. A good relationship and continuity of care would only occur if patients patronised a single pharmacy, as was the case in the pilot study, demonstrated by the ability of the visiting pharmacists to identify a single dispensing pharmacist for the majority (95%) of the patients. Although the group of patients visited are not representative of the population at

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large, a study by Smith and Sharpe (1984) found that 90% of the respondents patronised a single pharmacy for their prescriptions. Visits by patients’ own dispensing pharmacists would remove the need to request dispensing pharmacist interventions and problems with containers and labels could be resolved easily. Furthermore, if patients were visited by their own community pharmacist, it would present an opportunity to develop the interprofessional working relationship, particularly if post visit meetings to discuss interventions became the norm.

There have been other studies of domiciliary pharmacy services that have differed from this work in a number of ways. In a study by Fairbrother et al. (1993) patients referred by three general practitioners had to be over 65 years of age and taking at least three oral medicines regularly. The patients were interviewed once and the questionnaire was designed to provide information on factors influencing adherence including patient knowledge of the names and uses of their medicines, labelling, packaging and efficacy of treatment. In a study by Roberts (1987) emphasis was placed on the ability of community pharmacists to improve drug regimen adherence by patients with medication problems. Patients were identified for a visit using a number of referral sources - pharmacy held patient medication records, district nurses, the pharmacy department of the local district general hospital and their general practitioners.

The following recommendations for the future provision of a domiciliary pharmaceutical service, draw on the results of the Barnet pilot study and the
Chapter 4 - A Domiciliary Service

evaluation provided by the community pharmacists and general practitioners involved.

- Referral for a domiciliary visit could be extended to other sources, in particular district nurses.

- Collaboration between all the health care professionals providing domiciliary services to the same population needs to be established. Roles and responsibilities need to be defined to prevent duplication of services.

- Channels of communication between the primary and secondary health care sectors need to be opened, particularly with regard to the transfer of information.

- The revision of a number of procedures in general practice may be appropriate and could develop into separate projects. Procedures that require particular attention are those for updating patients' medication records, repeat prescribing and regular medication review.

- Patients should be visited by their own dispensing pharmacist.

- Further clinical training is required for the pharmacists providing the service.

- Following a visit, the patient's general practitioner and dispensing pharmacist should discuss appropriate interventions.

The visiting pharmacists and the dispensing pharmacists both expressed concerns about the lack of remuneration for providing the service and the length of time involved in preparing for and making the visits. Further recommendations are, therefore, that:

- The remuneration package for community pharmacists needs to be agreed and
Chapter 4 - A Domiciliary Service

sources of funding sought.

- The possibility of the FHSA or Health Commission employing a pharmacist to provide locum cover for pharmacists making domiciliary visits should be investigated.

The service piloted in this study has since been expanded (Anon, 1995k) following a successful bid for primary care development funding. The extended service will provide the opportunity to carry out more work on aspects of pharmacy home visits including: the criteria for referral to ensure that appropriate patients are targeted; evaluation of the service provided; patient benefits; economics of the service and the effect on the interprofessional relationship.

The Barnet domiciliary pilot study was an FHSA organised collaborative initiative, focusing on improving the care of a specific group of patients, through the provision of an extended pharmaceutical service in collaboration with general practitioners. The study showed that a formally organised, local initiative has the potential to contribute to the development of the interprofessional relationship, although in practice there was no evidence of better working relationships. In the pilot study the community pharmacists did not visit patients for whom they dispensed and they had virtually no contact with the patients’ general practitioners, who were, on the whole, not the pharmacists’ local general practitioners. Facilitation has already been advocated as the way forward in the development of the working relationship between general practitioners and community pharmacists, but the facilitator must
ensure that collaboration is between local general practitioners and community pharmacists if the benefits of working together are to be felt by the professionals involved and their patients.

Despite the fact that patient care was a strong focus for the domiciliary pharmaceutical project, the initiative was based on the FHSA’s agenda for interprofessional collaboration and the initiative’s professional interface concerned prescribing practice. There was an indication of some resentment on the part of the general practitioners at this role encroachment and the community pharmacists felt that they needed more clinical training to ensure that they could carry out the new role effectively. FHSAs, therefore, need to ensure that their collaborative agendas are acceptable to their general practitioner and community pharmacist contractors, that there is a mutual understanding and acceptance of roles and responsibilities within a particular initiative and that those roles and responsibilities can be carried out effectively, to ensure maximum patient benefit. Failure to do so could result in the poor acceptance of new roles for the community pharmacist, fragmentation of collaboration in carrying out new roles and few resulting patient benefits, serving only to reinforce the opinions of those who oppose new roles and are reluctant to be involved in the development of the interprofessional relationship.

The following chapter investigates the potential for the development of the interprofessional relationship and resulting patient benefits through a facilitated initiative involving individual pairs of general practitioners and community
pharmacists choosing to work together and setting their own agendas for interprofessional collaboration.
CHAPTER FIVE - INTERPROFESSIONAL COLLABORATION: GENERAL PRACTITIONER AND COMMUNITY PHARMACIST PAIRS.

5.1 Introduction

The Barnet domiciliary pharmaceutical pilot study, in common with the majority of the collaborative initiatives reported by the FHSA and Health Commission pharmaceutical advisers, was driven by an FHSA agenda for interprofessional collaboration. General practitioners and community pharmacists who agree to participate in a formally organised local initiative, either on a voluntary basis or following selection, are presumably interested in the practice area being addressed through the initiative. The individuals, however, may have very little information prior to the start of the initiative and may not be fully aware of their role within the initiative or the role of their professional colleagues as the Barnet study showed, possibly resulting in a lack of commitment because the element of ownership is missing.

Ownership in collaborative initiatives is more likely to occur when the individuals involved set their own agenda. In FHSA/Health Commission collaborative initiatives involving groups of practitioners this may not be feasible, partly because of the predetermined agenda and partly because of the difficulty in reaching a consensus, although proposed collaborative initiatives could be ranked by the community pharmacist and general practitioner contractors. In setting their own collaborative agendas, general practitioners and community pharmacists can mutually agree on
appropriate practice areas for collaboration, establishing ownership and mutual acceptance of roles and responsibilities within the initiative.

Nineteen FHSA/Health Commission pharmaceutical advisers reported knowledge of individual practitioners participating in specific formal collaborative initiatives, where local practitioners had built up close working relationships over a period of time. The full extent and nature of interprofessional collaboration by individuals is difficult to determine without interviewing all the community pharmacists and general practitioners in the country, but in order for individuals to make an approach with a potential idea or initiative for collaboration, it would appear that the pair would need to have a well developed working relationship. However, if a general practitioner and a community pharmacist pair, who communicate regularly on a day to day basis, can be brought together to jointly determine their own collaborative initiative of mutual interest and patient benefit, then their working relationship may develop as a result.

In this study an interdisciplinary group consisting of pairs of community pharmacists and general practitioners was established in Redbridge and Waltham Forest FHSA by the research pharmacist, with the support of the FHSA pharmaceutical advisers, in order to investigate the potential to develop the interprofessional relationship through individual collaborative initiatives. The Method section that follows describes how the group was established and the first meeting arranged, followed by the results and discussion from the first interdisciplinary group meeting, when areas with the potential for interprofessional collaboration were investigated.
Chapter 5 - GP and CP Pairs

Three community pharmacist and general practitioner pairs chose their own collaborative initiatives at the end of the first interdisciplinary group meeting and with external facilitation, proceeded to carry out their own initiatives over a period of approximately one year. Each initiative is described separately in the next three sections (5.4, 5.5 and 5.6). Discussion sections throughout discuss the immediate results presented and a final discussion section at the end of this chapter (5.7) addresses the wider issues raised by the whole collaborative initiative.

5.2 Method

In order to establish the interdisciplinary group, the chair of the MAAG was approached and asked to identify potential general practitioner participants. The general practitioners proposed by the MAAG chair were then invited to participate in the interdisciplinary group and to each nominate a community pharmacist partner.

The introductory letter sent to the general practitioners can be found in Appendix 5.1. The community pharmacists were asked if they would be willing to participate in the group once their nominations had been received.

The first group meeting was arranged for the most convenient date and time for the majority of the group’s participants. The meeting was held on a weekday evening at the FHSA premises and was also attended by the FHSA pharmaceutical advisers and the Professor of the Practice of Pharmacy at the School of Pharmacy, University of London. The participants were given an introduction to the group in terms of its aim to investigate the development of the working relationship between the general
practitioner and community pharmacist members of each pair, through participation in their own collaborative initiatives. The pairs were told that their initiatives should be achievable and that they should choose to collaborate in an area of practice that was of mutual interest, benefit and of potential patient benefit. An ideas session allowed for areas with the potential for collaboration to be raised for group discussion and then each pair was given the opportunity to discuss the practice area on which to base their own collaborative initiative.

5.3 Results and Discussion

The MAAG chair was willing to participate in the initiative and proposed a further five general practitioners whom he felt may be interested in participating. Two of the five proposed general practitioners, the MAAG chair and their nominated community pharmacists agreed to participate in the group. An additional pair who had heard about the group from their colleagues volunteered to participate, giving a total of four general practitioner and community pharmacist pairs. Two of the proposed general practitioners were unable to recruit a community pharmacist partner and the third general practitioner did not want to participate. Seven of the eight group members attended the first interdisciplinary group meeting, four community pharmacists and three general practitioners. (The pharmacist who attended the meeting without his general practitioner partner withdrew from the group after the first meeting for personal reasons. The general practitioner did not nominate another pharmacist partner and also withdrew from the group, leaving three interprofessional pairs).
The general practitioners and community pharmacists raised a diverse range of areas with the potential for interprofessional collaboration during the ideas session at the first group meeting. A number of problem areas were also raised and discussed, indicating that the group participants felt that collaboration in such areas could serve to reduce and possibly resolve the problems. The practice areas have been grouped into the following four categories: prescribing, medication, patients and costs, although in each category there is a strong focus on patient care and patient benefits. The areas are discussed below.

5.3.1 Prescribing related areas

In this category, collaboration was discussed in the areas of prescription queries and repeat prescribing and review. The community pharmacists felt that it was sometimes difficult to determine whether it was appropriate to refer certain prescription queries back to the general practitioner or not. For example, was a change in dose of a regularly prescribed drug for a particular patient intentional or not? One solution would be the use of abbreviations by the prescriber to alert the pharmacist to any intentional changes, as advocated by the Royal Australian College of General Practitioners and the Pharmaceutical Society of Australia (Anon, 1994b).

Problematic prescription queries also arose when prescribing had not been initiated by the patient's general practitioner. Local policies to ensure the efficient transfer of information from hospitals and deputising services to the general practitioner could involve the pharmacist as the accessible middle-man, thus delays in information
transfer would be reduced as well as the incidence of resulting prescription queries.

Repeat prescribing was mentioned as an area with the potential for collaboration and community pharmacists could work with their local general practitioners to develop efficient repeat prescribing protocols, incorporating a system to ensure the regular review of patients on long-term medication. Repeat prescribing and review protocols could be monitored through the pharmacy held patient medication records.

5.3.2 Medication related areas

Drug interactions, drug information, patient medication records and OTC medication were the medication related topics raised and discussed as areas with the potential for collaboration in this category.

A problem was highlighted with pharmacy computer systems that flagged drug interactions on the screen and graded them according to severity. It was difficult for the pharmacist to know at what level of severity an interaction would affect a patient, whether the general practitioner was aware of the interaction and at what level of severity the general practitioner should be contacted to confirm his/her intentions.

Development of a joint protocol detailing the action to be taken by the community pharmacist in response to given drug interactions would be beneficial to the pharmacist, general practitioner and the patient.

The general practitioners raised the issue of the drug information held on their
computer systems, which was not always up to date and led to the generation of inaccurate or incomplete prescriptions. Community pharmacists could alert general practitioners to changes, for example changes in pack sizes and possibly help to update the practice's computer held drug information; a point that is particularly relevant with the patient pack dispensing initiative (Anon, 19951).

Regular comparisons of the patient medication records held by the general practitioner and the community pharmacist would be possible where both cared for the same patients and could be particularly useful for certain patient groups, for example those taking multiple medications, to ensure that both sets of records were accurate and up to date.

The current Government drive to re-classify prescription only medicines to pharmacy only medicines means that there will be an increase in the number of effective drugs available OTC. Community pharmacist and general practitioner collaboration in this area could involve the development of protocols for specific conditions, particularly when products to treat those conditions have been recently re-classified, for example cold sores and dyspepsia (Anon, 1993b; Anon, 1994e). The protocols could cover advice to be given to the patient, treatment options and when to refer the patient to their general practitioner. As a result of re-classification, general practitioners may also find it valuable to ask patients presenting with an acute condition whether they have already used an OTC medication to prevent treatment duplication.
5.3.3 Patient related areas

Adherence was discussed as a patient related area with the potential for interprofessional collaboration, and dosage aids, the needs of ethnic groups and domiciliary visits were raised as adjuncts in this area.

Difficulties arose when trying to assess a patient’s adherence to their medication regimens and a number of areas of concern were raised:

- Complicated medication regimens could be a cause of non-adherence.
- Adherence may be affected by a patient’s level of understanding about their medication.
- Infirmity will make medication administration difficult in terms of physical limitations.

Adherence could be improved by joint medication reviews to simplify drug regimens, the production of medication leaflets in a number of different languages and the provision of dosage aids. Domiciliary visits by a community pharmacist could help to identify and resolve patients’ medication related problems affecting adherence, for example by the removal of discontinued and expired medication and changing child resistant closures and could reinforce the importance of adherence.

5.3.4 Cost related areas

The cost related areas raised were: the reduction of prescribing costs, private prescriptions for NHS patients and prescription items available OTC.
Reducing prescribing costs through an increase in generic prescribing was discussed, with the possibility of one or two items being introduced into prescribing practice every month and changes in practice could be monitored by the pharmacist and the results reported to the general practitioner.

The point was raised that the Department of Health had consented to general practitioners offering NHS patients who were not exempt from the NHS prescription charge the choice of an NHS prescription or a private one, when the private prescription charge would be less than the NHS charge. Patients who were not exempt from NHS prescription charges would also be able to purchase certain medicines, that were not prescription only medicines, for less than the prescription charge. Collaboration to produce a list of frequently prescribed medicines that could be obtained on a private prescription for less than the NHS charge could be jointly drafted and referred to by the general practitioner when prescribing for non-exempt patients. A second list of frequently prescribed items costing less to buy OTC than the NHS prescription charge could also be drafted and would be useful to both the general practitioner and the community pharmacist when advising non-exempt patients.

5.4 Collaborative Initiative 1: OTC Advice and Referral

5.4.1 Introduction

One of the general practitioner and community pharmacist pairs, an independent proprietor and a single handed general practitioner, proposed to collaborate in the
area of OTC advice and referral. The aim of the initiative was to produce a joint protocol for OTC advice to be given by the pharmacist to patients presenting with acute symptoms and to define the nature of acute symptoms requiring patient referral to another health care professional. Initially the pair proposed to focus on acute symptoms affecting the vagina, skin, eye and upper respiratory tract. The pair felt that the use of a client questionnaire to collect appropriate data would help with the development of the protocol and would allow symptoms to be traced from presentation at the pharmacy to improvement or resolution (or not).

Joint working in the area of OTC advice and referral could be beneficial to the community pharmacist, the general practitioner and the patient. In the current climate of medicine re-classification, the community pharmacist will be unfamiliar with the counter prescribing of a number of products now available OTC. The general practitioner, however, will have had experience in prescribing such products and, therefore, general practitioner input into developing guidelines for OTC advice would be particularly beneficial when a newly re-classified product could be one of the treatment options for the presenting symptoms. Joint community pharmacist and general practitioner guidelines covering patient referral would also be of value to confirm to the pharmacist the appropriateness of a decision to refer.

The general practitioner would benefit from involvement in the area of OTC advice as an educational initiative because general practitioners may not be aware of the range of advice community pharmacists are called on and able to provide, nor the full range
of products that are available for patients to purchase. General practitioners may spend considerable time in consultation with patients presenting with minor acute symptoms, who have been referred to them unnecessarily. Joint guidelines covering ‘when to refer’ may, therefore, help to reduce the number of unnecessary general practitioner consultations.

The patient would benefit from his/her general practitioner and community pharmacist collaborating in the areas of OTC advice and referral because the advice will be of a consistently high standard, reflect the opinions of both the community pharmacist and the general practitioner and should reduce unnecessary practice visits for the treatment of minor acute symptoms.

In order to develop a joint protocol for OTC advice and referral, preliminary data needed to be gathered. Firstly it was necessary to investigate whether it was appropriate to concentrate on acute symptoms affecting the vagina, skin, eye and upper respiratory tract, in terms of the frequency of symptom presentation and referral. An observational study of the pharmacist’s involvement in OTC advice, counter prescribing and referral was, therefore, conducted in the pharmacy and is described below in section 5.4.2. In order to build up a more complete picture of the role of the community pharmacist in OTC advice, product recommendation and referral, client interviews were then conducted in the pharmacy (section 5.4.3). To complete the picture, patient interviews were also conducted in the general practice by the general practitioner, to investigate the frequency with which patients presented
with acute symptoms and whether those patients had previously consulted their pharmacist (section 5.4.4). Section 5.4.5 describes the last stage of the preparatory investigations when a two-part questionnaire was used to follow patients' experiences from the presentation of their acute symptoms to the pharmacist through to symptom improvement or resolution (or not). Part of the questionnaire was to be completed by the pharmacist at the time of the consultation and the second part was to be completed by the patient two weeks later. The appropriateness of the current provision of OTC advice, product selection and referral was then to be audited from the completed questionnaires and used as the basis for the joint protocol for OTC advice and referral.

5.4.2 Observational study in the pharmacy

5.4.2.1 Method

The observational study was carried out in the pharmacy by the research pharmacist on different days of the week and at different times of the day, over a two week period in January 1995. A data collection form was used to record the details of client consultations involving the community pharmacist responding to presented acute symptoms.

5.4.2.2 Results

During the two week study period, a total of 20 hours of observation were made over five days. The daily periods of observation ranged from three hours to seven hours.
Twenty client consultations involving the community pharmacist responding to symptoms were recorded during the observational period. In eight cases clients initially presented their symptoms to a counter assistant and were then referred to the pharmacist. In four cases the pharmacist intervened following symptom presentation and in three cases the pharmacist was the first person that the client spoke to. In a further three cases a counter assistant responded to the presented symptoms and then included the pharmacist in the consultation to ensure appropriate product recommendation. In the last two cases clients requested to speak to the pharmacist.

The 20 client consultations involving responding to symptoms by the community pharmacist resulted in the sale of 25 medicinal products - 11 clients purchased one product, seven purchased two and two clients did not make a purchase. The products purchased were classified as 13 pharmacy only (P) medicinal products, eight general sales list (GSL) medicinal products and four related products. The products have been classified into their therapeutic categories in Table 5.1, according to the system used in the OTC Directory 94/95 (1994), produced by the Proprietary Association of Great Britain.

In each of three consultations involving the community pharmacist, clients were conditionally referred to their general practitioner. The referrals were all dependent on whether the presenting symptoms - a chesty cough, an itchy eye and a friction burn - improved or not. No unconditional referrals were made.
Table 5.1: Classification of the OTC medicinal and related products purchased following consultation with the community pharmacist

<table>
<thead>
<tr>
<th>Therapeutic Category</th>
<th>Number of Products Purchased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough, colds and sore throat</td>
<td></td>
</tr>
<tr>
<td>• Cough</td>
<td>6</td>
</tr>
<tr>
<td>• Cold and flu</td>
<td>5</td>
</tr>
<tr>
<td>• Nasal congestion</td>
<td>1</td>
</tr>
<tr>
<td>• Sore throat</td>
<td>1</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td></td>
</tr>
<tr>
<td>• Antidiarrhoeals</td>
<td>3</td>
</tr>
<tr>
<td>Vitamins, minerals and other nutritional supplements</td>
<td>3</td>
</tr>
<tr>
<td>Hair and scalp</td>
<td></td>
</tr>
<tr>
<td>• Psoriasis</td>
<td>2</td>
</tr>
<tr>
<td>Analgesics</td>
<td></td>
</tr>
<tr>
<td>• General pain relief</td>
<td>1</td>
</tr>
<tr>
<td>Eye care</td>
<td>1</td>
</tr>
<tr>
<td>Smoking cessation</td>
<td>1</td>
</tr>
<tr>
<td>Dressings and bandages</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
</tr>
</tbody>
</table>

5.4.2.3 Discussion

The small scale pilot study showed that conditions of the upper respiratory tract were suitable to concentrate on for the collaborative initiative, due to their frequency of presentation, although this could have been attributed to a seasonal influence. The presenting symptoms that were conditionally referred covered three of
the four original acute symptom areas of interest: upper respiratory tract, eye and skin.

A total of twenty consultations involving the pharmacist were made over the 20 hour period of observation. The community pharmacy owned by the participating pharmacist is open for ten hours a day and, therefore, it is likely that there are an average of ten consultations involving the pharmacist responding to symptoms each day; a figure supported by the literature (Boylan, 1978; Smith and Salkind, 1990; Smith, 1993). However, both the community pharmacist and general practitioner had expected a higher symptom consultation rate. As a result of this finding, the pair decided not to concentrate on specific acute symptoms for their collaborative initiative, but to include all acute symptoms presented to the pharmacist.

5.4.3 Client interviews in the pharmacy

5.4.3.1 Method

Client interviews in the pharmacy were conducted by the research pharmacist over a four day period in February 1995, using a short structured interview schedule. A copy of the schedule can be found in Appendix 5.2. Clients over the age of 17 years were approached as they were leaving the pharmacy and asked if they would be willing to participate in a short interview investigating people’s experiences of ill health and buying medicine over the counter.

The first question asked was:
The clients who responded ‘no’ to the above question were then asked who they would usually consult about illness. The clients who responded ‘yes’ to the above question were then asked to give details of one or more specific occasions when a pharmacist had been consulted. The clients were asked to provide the following information for each incident related: the identity of the patient; the nature of the symptoms; the content of any advice given by the pharmacist; the name of any medicinal product(s) recommended by the pharmacist; the name of any products purchased; the name of any products taken/used by the patient; whether the patient subsequently visited their general practitioner and, finally, the outcome of the illness episode.

5.4.3.2 Results

Over a period of 16 hours, 120 clients were invited to participate in the interview; 81 (68% response rate) agreed to do so. Sixty four (79%) of the participating clients were female and 17 (21%) were male. Thirty two female clients and seven male clients refused to participate in the interview. The participating clients were grouped into age bands, illustrated in Table 5.2.

Twenty six (32%) of the participating clients responded that they had never spoken to a pharmacist regarding an illness episode. The majority of these clients said that they would consult their general practitioner about illness. One client said that she
Table 5.2: Classification of the participating clients according to age band

<table>
<thead>
<tr>
<th>Age band (years)</th>
<th>Number of participating clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 - 20</td>
<td>1</td>
</tr>
<tr>
<td>21 - 30</td>
<td>27</td>
</tr>
<tr>
<td>31 - 40</td>
<td>19</td>
</tr>
<tr>
<td>41 - 50</td>
<td>11</td>
</tr>
<tr>
<td>51 - 60</td>
<td>11</td>
</tr>
<tr>
<td>61 - 70</td>
<td>6</td>
</tr>
<tr>
<td>71 - 80</td>
<td>6</td>
</tr>
</tbody>
</table>

would consult a homoeopath, another said that she would consult her father who was a general practitioner and three clients said that they would not consult anyone, but would self-select any medication required.

Fifty five (68%) clients responded that they had consulted a pharmacist about an illness episode. Eleven (14%) clients (nine female and two male) were then unable to recall any specific occasions when they had consulted a pharmacist. Forty four (54%) clients (34 female and ten male) gave one or more accounts of specific occasions when they had consulted a pharmacist. A total of 50 specific occasions were reported.

The flow chart in Figure 5.1 maps out the route recalled by the clients, in the 50 incidents described during the client interviews, from pharmacist consultation to symptom improvement/resolution - or not. The term ‘patient’ has been used throughout, although not all patients consulted the pharmacist in person.
Figure 5.1: Flow chart mapping out the events following accounts of 50 client/pharmacist consultations

1. Patient purchases recommended product - no referral
   - 13 Patient visits GP
   - 9 Patient is given a prescription
     (3 clients had just purchased products)

2. Patient purchases recommended product + conditional referral
   - 2 Patient purchases recommended product + conditional referral
     - 1 Patient visits GP
     - 1 Patient is given a prescription
     - 1 Patient is referred to a specialist
     - 2 Patient is not given a prescription

3. Total referrals
   - 1 Patient is referred to a specialist
   - 3 Patient is given a prescription
   - Total 46
The patient in 22 of the reported incidents was a child. In 19 incidents the client was the patient and in nine incidents the patient was another adult. The nature of the symptoms presented to a pharmacist on the 50 occasions have been classified into their therapeutic categories in Table 5.3.

Table 5.3: Therapeutic classification of the symptoms presented to a community pharmacist on 50 specific occasions

<table>
<thead>
<tr>
<th>Therapeutic Category</th>
<th>Number of Occasions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper respiratory tract</td>
<td>25</td>
</tr>
<tr>
<td>Skin</td>
<td>12</td>
</tr>
<tr>
<td>Eye</td>
<td>3</td>
</tr>
<tr>
<td>Analgesia</td>
<td></td>
</tr>
<tr>
<td>• General Pain</td>
<td>2</td>
</tr>
<tr>
<td>• Mouth Ulcers</td>
<td>2</td>
</tr>
<tr>
<td>Gastrointestinal Tract</td>
<td></td>
</tr>
<tr>
<td>• Constipation</td>
<td>2</td>
</tr>
<tr>
<td>• Diarrhoea</td>
<td>1</td>
</tr>
<tr>
<td>Ear</td>
<td>1</td>
</tr>
<tr>
<td>Urinary Tract</td>
<td>1</td>
</tr>
<tr>
<td>Vagina</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
</tr>
</tbody>
</table>

5.4.3.3 Discussion

It was possible to trace the outcomes of 46 of the 50 specific incidents, when a pharmacist was consulted about a patient’s symptoms, as related by 44 clients
participating in the interview. Twenty nine patients did not visit their general practitioner after the pharmacist consultation, including one patient who had been conditionally referred. Two patients who visited their general practitioners after the pharmacist consultation did not receive a prescription. All 31 patients had administered a recommended medicinal product and symptom improvement/resolution was reported on each occasion. It, therefore, may seem possible to conclude that the products recommended by the pharmacist had been appropriate for the presenting symptoms. However, it is difficult to say with certainty that the purchased products were directly responsible for symptom improvement in each case, due to the fact that a number of OTC medicinal products are of questionable efficacy (British National Formulary, 1996) coupled with the self-limiting nature of minor, acute symptoms. The placebo effect could also have played a part in symptom improvement.

The four patients who were unconditionally referred to visit their general practitioner all did so, as did one of the two patients who were conditionally referred. A further 13 patients, who had not been referred during the pharmacist consultation, also visited their general practitioners. The length of time between the two consultations ranged from two days to two months, reflecting a great variation in the length of time that people will 'suffer' with acute symptoms before visiting their general practitioner. However, symptoms may have resolved and then returned, at which point the patient decided to visit their general practitioner. Alternatively, a number of patients possibly tried several OTC preparations in the hope of preventing a visit to the general
practitioner, before finally giving up on self-medication.

The information gathered during the client interviews gave an insight into the pharmacist's involvement in symptom episodes and was used to develop the two-part client questionnaire, to follow patients' experiences from the presentation of their acute symptoms to the pharmacist through to symptom improvement or resolution (or not).

5.4.4 Patient interviews conducted by the general practitioner

5.4.4.1 Method

The general practitioner volunteered to conduct a short structured interview with patients consulting him about acute symptoms. The interview questions were formulated into a data collection form by the research pharmacist for the general practitioner to use. After an initial data collection period of three weeks the form was revised to make it easier for the general practitioner to complete, notably by re-orientating the original landscape format to a portrait format. A copy of the final data collection form can be found in appendix 5.3. The general practitioner asked patients presenting with acute symptoms whether they or their representative had already been to a pharmacy in connection with the same symptoms and if so, the nature of any advice given and by whom. The general practitioner also enquired about the use of any OTC medication for the acute symptoms and for how long any products had been used.
Results and Discussion

During the initial three week data collection period, the general practitioner recorded data for 22 patients presenting with acute symptoms. Following revision of the data collection form, data was recorded for a further five patients over a two week period.

Seven (26%) of the 27 patients (or their representatives) had been to a pharmacy prior to the patient presenting at the practice, regarding the same acute symptoms. All seven had purchased a medicinal product at the pharmacy, which had been administered by the patient for a period ranging from half a day to two weeks before visiting the general practitioner. The acute symptoms were three cases of chesty cough, one case of sinusitis, one case of acne, one case of waxy ears and one case of psoriasis.

The general practitioner had experienced considerable difficulty in conducting the patient interviews. A few of the initial problems had been resolved by revising the data collection form. However, the general practitioner reported that he had still experienced difficulties in the following areas:

- The general practitioner had found it difficult to define what was and what was not an ‘acute symptom’.
- The data collection form was often hard to complete during a patient consultation because the interview questions could not be included naturally into the conversation.
- Patients presenting at the surgery for the review of a chronic condition would
sometimes ask the general practitioner to consider acute symptoms at the very end of the consultation, at which point it seemed inappropriate to start the patient interview.

- Patients could not always remember the details asked for, for example the name of the medication they had taken.
- Patients often did not know who had given them or their representative advice at the pharmacy.

As a result of these difficulties, the general practitioner did not dedicate a fixed period of time to data collection, but recorded data sporadically. Although data was collected for 22 patients over a three week period, this was not a period of solid data collection and some patients presenting with acute symptoms during that time may have been missed. Subsequent data collection was again sporadic and, therefore, no conclusions can be drawn about the frequency with which patients presented at the practice with acute symptoms.

Despite the fact that data collection was sporadic and few patients had been interviewed, an insight into the situation at the practice with regards to acute symptoms was provided. The general practitioner could confirm a point that he had initially suspected: very few patients consulted him about acute symptoms. He could not explain why this was so, but three factors could be responsible. Firstly, the local community pharmacists may be very good at responding to symptoms and counter prescribing appropriate medicinal products. Secondly, patients may be satisfied with
self-medication for the treatment of acute symptoms and, therefore, do not need to consult their general practitioner. Thirdly, patients may be reluctant to waste their own time and possibly that of the general practitioner, if they feel that they are unlikely to receive a prescription for their symptoms.

5.4.5 Patient ‘Illness and Medication’ questionnaire

5.4.5.1 Method

The data and information gathered during the first three preliminary investigations - the observational study, the client interviews in the pharmacy and the patient interviews by the general practitioner - were used in the development of the ‘Illness and Medication’ questionnaire by the research pharmacist, the final preliminary investigation.

The questionnaire consisted of two main sections; the first section was to be completed by the pharmacist and the second section was to be completed by the patient or their representative, as appropriate. A copy of the questionnaire can be found in Appendix 5.4.

The patient or their representative was asked to complete the second part of the questionnaire two weeks after the consultation with the pharmacist. Two weeks was felt to be an appropriate period of time to allow for any further action to have been taken by the client regarding the symptoms and/or to be able to record whether there had been any improvement in the symptoms or not.
Clients presenting any acute symptoms to the pharmacist were to be invited to participate in the initiative and were given an introductory letter providing an explanation of the initiative, the reason for conducting the initiative and the nature of the client’s involvement. A copy of the client introductory letter can be found in Appendix 5.5.

At the beginning of May 1995, 20 copies of: the 'Illness and Medication’ questionnaire, the introductory letter and postage paid envelopes were given to the community pharmacist for the questionnaire pilot. Following receipt of completed questionnaires, it was intended to review the questionnaire and alter it to remove any ambiguous, irrelevant and unnecessary questions.

Contact with the participating community pharmacist was maintained on a monthly basis to determine whether there were any problems with the ‘Illness and Medication’ questionnaire and to encourage use of the questionnaire at every opportunity.

An initiative feedback meeting was held with the community pharmacist and general practitioner pair in October 1995.

5.4.5.2 Results

Five clients were asked to participate in the initiative over the six month facilitated period. All five clients agreed to participate and were given a questionnaire to complete. Two completed questionnaires were returned.
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One of the clients, a female adult, had asked to speak to the pharmacist. The client was the patient and had been suffering from a muscular shoulder pain for three days. She had no other related symptoms and had not yet tried any medication for the presenting symptoms. The pharmacist recommended ibuprofen controlled release capsules for the patient, having established that the patient had no other medical conditions and was not taking any other medication. The patient was conditionally referred to her general practitioner if the symptoms did not improve within three days. The patient bought the ibuprofen capsules and was still taking them two days later when she completed Part 2 of the questionnaire. The patient reported that she felt that the medication had worked and that she felt better. The patient had not been to see another health care professional about the same symptoms.

The second client who returned a completed questionnaire was also a female adult and had asked to speak to the pharmacist. She presented with a rash on the lower part of her leg, which she had noticed the previous day. She had no other related symptoms and had not yet tried any medication. The pharmacist recommended an antihistamine tablet (chlorpheniramine) and 1% hydrocortisone cream, having established that the patient had no other medical conditions and was not taking any other medication. The patient bought both of the recommended products. The pharmacist did not refer the patient to another health care professional. In Part 2 of the questionnaire the patient recorded that she had visited her general practitioner the day after the consultation with the pharmacist, who diagnosed a severe allergic reaction of unknown cause. The general practitioner prescribed prednisolone tablets.
for the patient and advised her to continue to take the antihistamine tablets and to
apply the hydrocortisone cream. The patient recorded that she administered/applied
the medication for a total of 14 days and was no longer suffering from the condition
presented to the pharmacist.

Results from the feedback meeting

At the feedback meeting, the general practitioner and community pharmacist pair
discussed their initiative and how to proceed. They raised the possibility of
continuing with the initiative and fulfilling the original aim by developing a joint
protocol for OTC advice and referral. The general practitioner reported:

'...the initiative got us talking and thinking around areas that we can be
involved in together'.

The pair went on to discuss the possibility of a second joint initiative, a joint
polypharmacy review clinic. The pair felt that such an initiative would be a big step in
the right direction to develop a closer working relationship and could be very
beneficial to patients, particularly those taking multiple medications. As a starting
point, it was suggested that surgery and pharmacy held computer medication records
could be used to highlight patients prescribed multiple medications and the pair could
then assess the therapeutic needs of each patient. Patients for whom a reduction in
the number of medications seemed feasible, would then be invited to attend the joint
review clinic.
5.4.5.3 Discussion

The low number of clients asked to participate in the initiative was disappointing and the opportunity to gather considerable data about the pharmacist’s role in and the appropriateness of OTC advice, product selection and patient referral was lost. The initiative could not be continued to develop a joint protocol for OTC advice and referral because it was not possible to audit the appropriateness of the current provision of OTC advice, product selection and referral from the two returned questionnaires.

One main reason that could possibly account for the disappointing number of questionnaires handed out is that the pharmacist participating in the initiative only works in his pharmacy for approximately 30 hours a week. A locum pharmacist is present the rest of the time. The initiative was explained to the locum pharmacist during the observational study and again during the client interviews in the pharmacy and she had agreed to participate in the part of the initiative involving the ‘Illness and Medication’ questionnaire. However, the locum pharmacist had not been involved in setting up the joint general practitioner/community pharmacist initiative, which may have resulted in a lack of interest and commitment.

A further reason possibly contributing to the low participation rate, may have been the time taken to explain the initiative to each client consulting the pharmacist about acute symptoms and to complete the first section of the questionnaire. This may have made it difficult to invite clients to participate in the study, particularly if the
pharmacist was very busy. The time commitment may have been a further disincentive for the locum pharmacist.

The format of Section 2 of the ‘Illness and Medication’ questionnaire may have been too complicated for patients to follow, but insufficient questionnaires were given out to be able to draw any conclusions from the response rate about difficulties that patients may or may not have had in completing the questionnaire.

Although the initiative was small scale and the final aim was not realised, the comment made by the general practitioner and quoted above illustrated that the initiative had been successful in bringing individuals from the two professions together with a resulting positive effect on their interprofessional relationship. Furthermore, the fact that one joint facilitated initiative prompted the general practitioner and community pharmacist to discuss the feasibility of another joint project, with the potential for considerable patient benefits, showed the value of the facilitated initiative in developing the interprofessional working relationship.

5.5 Collaborative Initiative 2: A Private Prescription Scheme

5.5.1 Introduction

The second general practitioner and community pharmacist pair, a small chain proprietor with two pharmacies and a general practitioner partner in a fundholding, three partner general practice, proposed to collaborate in a private prescription scheme for their joint initiative. The aim of the initiative was to provide private
prescriptions for low cost prescription only medicines for those NHS patients who were not exempt from the NHS prescription charge, when the private prescription charge would be less than the NHS prescription charge. The rationale behind the initiative is as follows.

In the UK patients who are not exempt from prescription charges - 16% of patients in 1990 (Colwell and Chansarkar, 1993) - have to pay an NHS prescription charge per item dispensed. The charge is a form of taxation and the sum of the charges collected by a pharmacist in each month is deducted by the Government from the total cost of dispensing in that month, when payment is calculated by the prescription pricing authority (PPA). The NHS prescription charge has fluctuated since its introduction in 1952, but a significant increase coincided with the Conservative party taking office in 1979, when the charge was raised from 20p to 45p, an increase of 125% (Colwell and Chansarkar, 1993). There have been regular increases ever since, at least once each year, well above the rate of inflation and the charge is currently £5.50 per item.

There has been a public and professional outcry over the current charge, which rose from £4.75 on 1st April, 1995 to £5.25 and again on 1st April, 1996.

The charge per item on a private prescription is at the discretion of the community pharmacist. No guidance is issued to pharmacists with regard to appropriate private prescription charges because that would be considered a restrictive practice and as such would be classed as a constraint of trade (Tapster, 1995). As a result, private prescription charges can vary widely, some pharmacists charging the NHS
prescription charge as a standard minimum payment per item. Pharmacists may employ a formula to calculate their private prescription charges, such as the one below:

Private prescription charge = Net Ingredient Cost (NIC) + 50% + Professional fee

However, employing such a formula does not lead to the standardisation of the private prescription charge for a given medicine because pharmacists may all charge a different professional fee. If a pharmacist employs a formula such as the one above and adds on a professional fee of £2, for items with a low NIC the private prescription charge will work out to be considerably less than the current NHS prescription charge. Therefore, if NHS patients who are not exempt from prescription charges can still see their general practitioner as NHS patients, but can receive private prescriptions for low cost medicines, then there will be resultant cost benefits for the patient and potentially for the pharmacist.

In November 1993 the then Minister for Health Dr Brian Mawhinny said in a Parliamentary written reply that doctors could write private prescriptions for their NHS patients (Anon, 1994f). The British Medical Association (BMA) officially responded in Spring 1995 (Dyer, 1995), saying that general practitioners who did write private prescriptions for their NHS patients could be in breach of their terms of service by doing so. The controversial situation is unlikely to be resolved until the issue of private prescriptions for NHS patients is officially raised by means of a patient complaint, forcing a ‘legal resolution’.
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The Method that follows describes how the private prescription scheme was established and monitored. The Method also explains the theoretical economic model forming the basis for the calculations presented in the Results section. The outcome from a feedback meeting with the community pharmacist and general practitioner pair are also presented and a discussion of the initiative follows in section 5.5.4.

5.5.2 Method

5.5.2.1 Establishing and monitoring the private prescription scheme

The initiative required the community pharmacist to compile a list of low cost prescription only medicines, together with the prices that he would charge for dispensing those medicines on a private prescription. The pharmacist generally employed the formula stated previously (NIC + 50% + professional fee) when calculating his private prescription charges, including a £2 professional fee to cover his professional time, the container cost and the extra paperwork involved in recording private prescriptions. The initial list of low cost prescription only medicines consisted of the 10 most frequently prescribed items and was drawn up in November 1994 when the NHS prescription charge was still £4.75. The list is shown in Table 5.4. The pharmacist gave the list to his general practitioner partner in the initiative, who circulated it to the other two general practitioners in her practice.

At the end of January 1995, data was collected from the pharmacist’s private prescription register by the research pharmacist and the list of ‘medicines cheaper on private prescription’ was updated to a total of 19. The new list included the original
10 medicines, a further six low cost medicines that the general practitioners had, on their own initiative or following the advice of the pharmacist, started to prescribe on private prescriptions and a further three items that the community pharmacist felt it was appropriate to add because they had a low NIC and were frequently prescribed. Following a further period of data collection, the list of low cost prescription only medicines was again updated in April 1995 in light of the increased NHS prescription charge and a further 11 medicines were added. The additional 20 items are shown in table 5.5.

Final data collection was carried out in of August 1995 and a feedback meeting was held with the community pharmacist and general practitioner pair in October.
Table 5.5: Items added to the initial list of low cost prescription only medicines

<table>
<thead>
<tr>
<th>Drug name, strength and form</th>
<th>Quantity</th>
<th>Private prescription charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allopurinol 100mg tablets</td>
<td>60</td>
<td>£3.49</td>
</tr>
<tr>
<td>Aminophylline 225mg S/R tablets</td>
<td>20</td>
<td>£3.25</td>
</tr>
<tr>
<td>Bendrofluazide 2.5mg tablets</td>
<td>60</td>
<td>£3.00</td>
</tr>
<tr>
<td>Betnesol/N eye drops</td>
<td>10ml</td>
<td>£3.99</td>
</tr>
<tr>
<td>Buccastem 3mg tablets</td>
<td>10</td>
<td>£4.00</td>
</tr>
<tr>
<td>Dothiepin 25mg capsules</td>
<td>60</td>
<td>£4.55</td>
</tr>
<tr>
<td>Dicyclomine 10mg tablets</td>
<td>30</td>
<td>£2.99</td>
</tr>
<tr>
<td>Hydrocortisone 0.5% cream / oint.</td>
<td>30g</td>
<td>£2.99</td>
</tr>
<tr>
<td>Hydrocortisone 1% cream / oint.</td>
<td>30g</td>
<td>£2.99</td>
</tr>
<tr>
<td>Hydrocortisone 2.5% cream / oint.</td>
<td>30g</td>
<td>£3.75</td>
</tr>
<tr>
<td>Lomotil tablets</td>
<td>20</td>
<td>£4.25</td>
</tr>
<tr>
<td>Metronidazole 200mg tablets</td>
<td>15</td>
<td>£2.99</td>
</tr>
<tr>
<td>Metronidazole 400mg tablets</td>
<td>15</td>
<td>£3.25</td>
</tr>
<tr>
<td>Prednisolone 5mg E/C tablets</td>
<td>60</td>
<td>£2.99</td>
</tr>
<tr>
<td>Prochlorperazine 5mg tablets</td>
<td>21</td>
<td>£2.58</td>
</tr>
<tr>
<td>Propranolol 10mg tablets</td>
<td>60</td>
<td>£2.99</td>
</tr>
<tr>
<td>Quinine sulphate 200mg tablets</td>
<td>30</td>
<td>£4.46</td>
</tr>
<tr>
<td>Salbutamol 2mg tablets</td>
<td>20</td>
<td>£2.99</td>
</tr>
<tr>
<td>Salbutamol 4mg tablets</td>
<td>20</td>
<td>£2.99</td>
</tr>
<tr>
<td>Trimethoprim 200mg tablets</td>
<td>10</td>
<td>£2.99</td>
</tr>
</tbody>
</table>

5.5.2.2 A theoretical economic model

A theoretical economic model was developed in order to be able to calculate the cost savings made by patients, the increase in the community pharmacist’s income and the loss of Government revenue per item dispensed as a result of the private prescription
The first step was to determine the economic consequences for the three parties involved.

**Patient cost savings**

When the private prescription charge for a particular item is less than the NHS prescription charge per item then there will be resultant cost savings for the patient if that item is dispensed on a private prescription, calculated as follows:

\[
\text{Patient cost savings} = \text{NHS prescription charge} - \text{Private prescription charge}
\]

**Increase in community pharmacist’s income**

The increase in the community pharmacist’s income due to the private dispensing of one item can be calculated as:

\[
\text{Increase in income} = \text{Income from private dispensing} - \text{Income from NHS dispensing}
\]

where:

\[
\text{Income from private dispensing} = \text{Private prescription charge} - \text{Expenditure}
\]

and

\[
\text{Income from NHS dispensing} = \text{NHS payment} - \text{Expenditure}
\]

Therefore,

\[
\text{Increase in income} = \text{Private prescription charge} - \text{NHS payment}
\]

In dispensing a low cost medicine on an NHS prescription, the payment made to the community pharmacist can be calculated as follows, on the assumption that no additional fees can be claimed:
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NHS payment = Expenditure + Professional fee (a fixed fee/item dispensed)

(Pharmacists can claim additional fees for a variety of reasons including extemporaneous dispensing and emergency dispensing. It is unlikely that a pharmacist would be able to claim any additional fees for the dispensing of the low cost medicines in question).

The pharmacist’s expenditure can be calculated from the following formula:

\[
\text{Expenditure} = (\text{NIC} - \% \text{ discount}) + \text{Container allowance}
\]

where:

- \(\text{NIC}\) is the net ingredient cost of item dispensed. The NIC for a generic item can be calculated from the basic price listed in the Drug Tariff and the NIC for a proprietary item can be calculated from the listed trade price.
- \(\% \text{ discount}\) is the percentage discount received from the wholesaler or manufacturer. The percentage discount deducted each month is dependent on the sum of the NIC of the items dispensed by the pharmacist, excluding those items for which the pharmacist can claim zero discount, for example controlled drugs.
- \(\text{Container allowance}\) is a fixed amount paid for each item dispensed to cover the cost of supplying a container.

Loss of Government revenue

In NHS dispensing, the revenue generated by the dispensing of one item for a non-exempt patient can be calculated as follows:
Government revenue = NHS prescription - NHS payment to charge pharmacist

In private dispensing the Government loses the above revenue and that money is shared between the patient in terms of cost savings and the community pharmacist in terms of increased income.

5.5.2.3 Feedback

At the end of the facilitated initiative period a meeting was arranged with the general practitioner and community pharmacist pair to discuss the results of their collaborative initiative to date, to examine any problem areas and to investigate ways in which the pair would like to continue to collaborate.

5.5.3 Results

Table 5.6 below shows the number of private prescriptions dispensed by the community pharmacist in each month of the facilitated scheme. The table also shows the sum of the NIC of the items dispensed in each month of the scheme, calculated for generic items by using the basic prices listed in the appropriate Drug Tariff and for proprietary items by using the listed trade prices in the appropriate Chemist and Druggist price list. The sum of the private prescription fees charged in each month has also been calculated.
Table 5.6: The number of items dispensed, the sum of the NIC of the items and the sum of the private prescription charges in each month of the facilitated initiative.

<table>
<thead>
<tr>
<th>Month and Year</th>
<th>No. of items dispensed on private prescriptions</th>
<th>Sum of the NIC of the items dispensed £</th>
<th>Sum of the private prescription charges £</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 1994</td>
<td>16</td>
<td>12.35</td>
<td>50.91</td>
</tr>
<tr>
<td>January 1995</td>
<td>16</td>
<td>11.21</td>
<td>46.98</td>
</tr>
<tr>
<td>February 1995</td>
<td>26</td>
<td>21.00</td>
<td>79.74</td>
</tr>
<tr>
<td>March 1995</td>
<td>45</td>
<td>30.77</td>
<td>135.04</td>
</tr>
<tr>
<td>April 1995</td>
<td>42</td>
<td>25.76</td>
<td>128.06</td>
</tr>
<tr>
<td>May 1995</td>
<td>61</td>
<td>45.74</td>
<td>199.23</td>
</tr>
<tr>
<td>June 1995</td>
<td>41</td>
<td>31.94</td>
<td>132.58</td>
</tr>
<tr>
<td>July 1995</td>
<td>14</td>
<td>13.17</td>
<td>41.15</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>261</strong></td>
<td><strong>191.94</strong></td>
<td><strong>813.69</strong></td>
</tr>
<tr>
<td><strong>Mean / month</strong></td>
<td><strong>33</strong></td>
<td><strong>23.99</strong></td>
<td><strong>101.71</strong></td>
</tr>
<tr>
<td><strong>Mean / item</strong></td>
<td>-</td>
<td><strong>0.74</strong></td>
<td><strong>3.12</strong></td>
</tr>
</tbody>
</table>

5.5.3.1 Following the economic model

During the eight months of the facilitated initiative an average of 33 items were dispensed on private prescriptions in each month, with an average NIC of £0.74 per item and an average private prescription charge of £3.12 per item. During the first four months of the initiative the NHS prescription charge was £4.75 and during the last four months the NHS prescription charge was £5.25, giving an average NHS
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prescription charge of £5.00 during the initiative.

The average cost saving for the patient per item dispensed can be calculated as follows:

\[
\text{Av. cost saving for the patient/item} = £5.00 - £3.12
\]

\[
= £1.88
\]

In order to calculate the increase in income for the community pharmacist per item dispensed, the average NHS payment per item must be calculated first. Since:

\[
\text{NHS payment} = (\text{NIC} - \% \text{ discount}) + \text{Container} + \text{Professional allowance fee}
\]

the following need to be calculated:

- The average percentage discount deducted over the eight months of the scheme.
- The average container allowance per item paid over the eight months.
- The average professional fee per item paid over the eight months.

In referring to the appropriate Drug Tariffs, it was noted that the percentage discount deducted, the container allowance per item and the professional fee per item did not change during the eight month period of the initiative. The sum of the NIC of the items that the community pharmacist dispensed in each month of the scheme fell within the £35 001 to £40 000 bracket (Personal Communication, 1995), giving a discount deduction of 8.6% in each month of the facilitated initiative. The container allowance per item was £0.058. During the initiative there was a two-tiered
professional fee system, whereby pharmacists were paid £1.29 per item dispensed up to the first 1800 items and then £0.938 for each item dispensed thereafter. The community pharmacist dispensed an average of 6000 items each month (Personal Communication, 1995) and so the average professional fee paid per item can be calculated as follows:

\[
\text{Average professional fee/item} = \frac{(1800 \times 1.29) + (4200 \times 0.938)}{6000}
\]

\[
= £1.04
\]

Therefore;

\[
\text{Av. NHS payment/item} = (0.74 - 8.6\%) + 0.058 + 1.04
\]

\[
= £1.75
\]

The average increase in community pharmacist's income per item dispensed can now be calculated as:

\[
\text{Av. private prescription charge/item - Av. NHS payment/item}
\]

\[
= 3.12 - 1.75
\]

\[
= £1.37
\]

The average loss of Government revenue per item dispensed on a private prescription can be calculated as follows:

\[
\text{Av. NHS prescription fee/item - Av. NHS payment/item}
\]

\[
= 5.00 - 1.75
\]

\[
= £3.25
\]

In employing a formula to calculate private prescription charges based on the NIC of 226
the item, as the NIC increases there is a corresponding increase in the private prescription charge, resulting in a decrease in the patient’s cost saving per item and the growth of the pharmacist’s income increase per item. Figure 5.2 illustrates the split between a patient’s cost savings and the pharmacist’s increase in income with increasing NIC, when private prescription charges were based on the addition of a 50% mark up and a £2 professional fee to the NIC. The sum of the patient’s cost savings per item and the pharmacist’s increase in income represents the loss of Government revenue per item. At an NIC of £2.17, the private prescription charge is the same as the NHS charge, resulting in no patient cost savings and prescribing items with a higher NIC on private prescriptions will result in an increase in costs for
5.5.3.2  Feedback meeting

The general practitioner and community pharmacist pair attended the feedback meeting, as well as one of the other general practitioner partners in the practice. The general practitioners were asked for their comments on the scheme and they highlighted a number of potential problem areas, as follows:

- The general practitioner has to check whether each patient is entitled to free prescriptions or not.

- In offering patients the choice of an NHS prescription or a private one, the general practitioner may need to explain why the private prescription will cost less.

- The general practitioner has to refer to a list of ‘items cheaper on private prescription’ before deciding what sort of prescription form to use.

- Patients with multiple medications may require an NHS and a private prescription to cover all the items they take, that is, those that fall within the scheme and those that do not.

- There is little incentive for general practitioners to participate.

- The data from private prescriptions will not be included in PACT data, resulting in some figures being skewed towards more expensive items, although overall costs in some therapeutic categories may be reduced.

Each of the above points was then discussed in turn to determine how problematic
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each area had been in terms of running the private prescription scheme. The general practitioners had not found it difficult to check with patients whether they paid for their prescriptions or not and explaining why a private prescription would be cheaper for some items had not presented any problems. A poster in the practice, explaining about the scheme, had helped to raise patients understanding of why they may be offered a private prescription. However, both general practitioners reported that they had found it difficult to always remember to check the list of ‘items cheaper on a private prescription’ before they started to prescribe.

A further difficulty with prescribing occurred when repeat prescriptions were generated by another member of staff. When signing repeat prescriptions, the general practitioners said that they could have re-written low cost items on private prescription forms, but this was too time consuming. Patients who needed private and NHS prescriptions also presented difficulties for the general practitioners and an easy solution had not been found. The participating community pharmacist suggested that it may be possible to use the computer generated repeat request form as the private prescription, preventing any re-writing in both the case of repeat prescribing and for patients requiring both types of prescription form. The items that were less on a private prescription could then be deleted from the NHS prescription and vice versa for the repeat form. The general practitioners felt that this was a good idea and could reduce the problem.

The general practitioners both stated that the main incentive for participation was
being able to help to reduce prescription charges, with resulting patient costs savings. The point was raised that for fundholding general practices participation in such a scheme may have the benefit of reducing their drugs bill because items written on private prescriptions are not included. The general practitioner partner in the initiative explained, however, that there was no real financial incentive for fundholding practices to participate because if writing private prescriptions led to a significant reduction in the practice’s drugs bill then the drugs budget for the following year would be cut. It was, therefore, necessary to balance a small reduction in the drugs bill against maintaining an adequate drugs budget.

The fact that data from private prescribing is not included in PACT data concerned the FHSA pharmaceutical advisers, particularly because they were trying to monitor antibiotic prescribing in the area and a number of the low cost items included in the scheme were antibiotics. The general practitioners suggested that they would be able to make a record of the items that they had prescribed privately, so that information from private prescribing could be included in PACT data analysis.

The community pharmacist and general practitioners were pleased that the initiative had been able to demonstrate cost savings for the patients. The general practitioners expressed surprise that there could be patient cost savings in having private prescriptions written for items with a NIC of up to approximately £2; they had assumed that only items with a much lower NIC would realise any patient cost savings. As a result, the general practitioners and community pharmacist discussed
the possibility of extending the scheme to include a range of prescription only medicines with a slightly higher NIC.

5.5.4 Discussion

The initial increase in the number of items dispensed on private prescriptions may be explained by an increase in familiarity with the scheme by both the general practitioners involved and their patients. The increase in familiarity on the part of the general practitioners was demonstrated by the writing of private prescriptions for low cost items that were not included in the original list and by phone calls to the community pharmacist to confirm whether it was appropriate to privately prescribe certain items. The poster in the waiting room of the practice to inform patients about the scheme could have contributed to the increase in patient awareness and may have led some patients to request a private prescription if they were not automatically offered one. The decrease in the number of items observed in July may be explained by the fact that the participating practice relocated on July 1st to premises further away from the pharmacy and patients may have taken their prescriptions to pharmacies nearer to the new practice premises.

The initiative was able to demonstrate cost benefits to the patients who received private prescriptions and cost benefits for the pharmacist involved. The pharmacist gained in two ways, firstly in terms of an increased income and secondly because payment was received immediately for the items dispensed. The general practitioners felt that they would not benefit financially because they had to balance a reduction in
their drugs bill against maintaining an adequate drugs budget. However, the items that were being dispensed on private prescriptions were those with a very low NIC and the average monthly NIC during the scheme was £23.99 (figure taken from Table 5.6). Therefore, unless the initiative was undertaken on a larger scale, it seems feasible for a fundholding general practice to secure a small reduction in their drugs bill with no effect on their drugs budget.

The general practitioners suggested that they could keep records of the items that they had prescribed on private prescriptions so that information from private prescribing could be included in PACT data analysis. Whilst in theory this would help to prevent the loss of prescribing data, in practice it would be time consuming and difficult to maintain.

The issue of fraud in the NHS has recently been raised following publication of the Audit Commission’s report (1994). Fraud by community pharmacists could involve the destruction of prescriptions for low cost items dispensed for non-exempt patients or false exemption claims by pharmacists on NHS prescription forms (Anon, 1994g). (In order to try and reduce false exemption claims the NHS prescription forms have been redesigned and were introduced on 1st April, 1995 (PPA Matters, 1995)). Patients do not benefit from fraud by pharmacists because they would still have to pay the NHS prescription charge. The pharmacist’s income in fraud, however, is greatly increased. A private prescription scheme such as the one described here reduces the temptation for fraud involving the destruction of NHS prescription forms for low cost
items because such items would be written on private prescriptions.

The private prescription scheme detailed above, together with the activities of other community pharmacists and general practitioners reported recently (Anon, 1995m; Anon, 1995n; Anon, 1995o) demonstrate the dissatisfaction of patients, community pharmacists and general practitioners with the current NHS prescription charge and the urgent need for a review. One of the recommendations of the Audit Commission's report (1994) was to investigate the arrangements for paying community pharmacists for low value prescriptions. Furthermore, the House of Commons Health Committee's inquiry (1994) into the NHS drugs budget recommended the introduction of a system by which a patient receiving a prescription of lower financial value than the prescription charge should be able to pay the actual cost as a private prescription. The second recommendation may be the answer to the first, as this private prescription scheme has shown, and such a scheme could resolve some of the current dissatisfaction with the NHS prescription charge and the payment system for community pharmacists. However, the potentially large loss of Government revenue that could result if a private scheme was widely publicised and formally organised means that, at present, the Department of Health will not discuss the matter further (Anon, 1995p). Whilst the BMA is against general practitioners writing private prescriptions for their NHS patients, it would approve of a system that would allow the general practitioner to write 'a prescription' and then for the decision as to whether the item would cost less by paying a private charge to be taken by the pharmacist in discussion with the patient (Personal communication, BMA, 1995).
The private prescription scheme was of mutual interest to both the general practitioner and the community pharmacist; it demonstrated the general practitioner’s support for both her patients and the community pharmacist’s position and resulted in financial benefits for patients and for the community pharmacist. The scheme possibly also resulted in a small reduction in the drugs bill for the fundholding practice. The value of the facilitated initiative in developing the working relationship was partially demonstrated by the fact that the participants were enthusiastic to continue working together and also by their ability to share ideas about how to proceed with the scheme and reduce the initial problems. Working together the general practitioner and community pharmacist pair were able to collaborate in an initiative with a demonstrable positive outcome for their patients. The initiative further demonstrated that initial facilitation of individual initiatives may be the way to encourage collaboration between individual practitioners.

5.6 Collaborative Initiative 3: Asthma Patients and the Asthma Clinic

5.6.1 Introduction

The third general practitioner and community pharmacist pair, an independent community pharmacist proprietor and the senior partner in a fundholding, three partner general practice, proposed to collaborate in an initiative centred around their asthma patients. At the first interdisciplinary group meeting, the general practitioner had expressed concern that one sector of his patients, namely young asthmatic men, were regular non-attenders at the clinic and he felt that a collaborative initiative
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involving the local community pharmacist could be the way forward. The aim of the initiative was to encourage patients to comply with their asthma medication and to encourage patients to attend the practice’s asthma clinic on a regular basis to ensure periodic review of the disease and its management.

The general practitioner and community pharmacist pair decided that the way to proceed with the initiative was for the pharmacist to discuss various aspects of asthma and asthma medication with the general practitioner’s asthma patients by means of a structured interview, when they presented a prescription at the pharmacy. The pharmacist could also give patients appropriate advice and answer any questions at the same time.

5.6.2 Method

The research pharmacist held an initial meeting with the project community pharmacist to discuss the practice areas to be covered in the structured patient interview and a draft interview schedule was drawn up. The researcher then held a meeting with the general practitioner and the practice nurse responsible for running the asthma clinic in order to discuss the draft schedule and alterations were made accordingly. Table 5.7 lists the areas covered in the patient interview schedule; the schedule itself can be found in Appendix 5.6.

In order to assess the patient’s inhalation technique during the patient interview, an inhalation technique assessment form was developed from work done by Taylor and
Table 5.7: Areas to be included in the asthma patient interview

<table>
<thead>
<tr>
<th>Medication</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name, form, strength and dose of each asthma medication</td>
<td>How long on current medication</td>
</tr>
<tr>
<td>Previous information given about asthma medication - when, by whom</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inhalers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhaler technique; use of spacer devices</td>
<td>Regular and/or ‘when required’ use</td>
</tr>
<tr>
<td>Order of use, if more than one inhaler</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monitoring</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of peak flow meter</td>
<td>Record of best peak expiratory flow</td>
</tr>
<tr>
<td>Value of peak expiratory flow at which to take action</td>
<td>Action to be taken</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Review</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of last appointment with general practitioner/clinic for review</td>
<td>Referral to asthma clinic</td>
</tr>
<tr>
<td>Attendance at clinic or not</td>
<td>Frequency of attendance</td>
</tr>
<tr>
<td>Reason for non-attendance</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aspirin and NSAIDs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of OTC aspirin and/or ibuprofen</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Further Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Further information requested by the patient on asthma/their medication/ the clinic</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient’s name, address, telephone number and date of birth</td>
<td></td>
</tr>
</tbody>
</table>

Tunstell (1991) and Elfellah et al. (1994) to be completed by the community pharmacist. The assessment form can be found in Appendix 5.7.
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A practice leaflet about the asthma clinic was also developed, to be handed out to the general practitioner's asthma patients by the community pharmacist. The two sides of the leaflet are illustrated in Appendix 5.8. The actual leaflet was double sided and printed on yellow paper.

The patient interview schedule and the inhalation technique assessment form were piloted with eight of the general practitioner's patients. Following the pilot period the structured patient interview was reduced and the phrasing of a number of questions was altered to ensure patient understanding.

5.6.2.1 Patient self-complete questionnaire

During the pilot stage the community pharmacist found that it was very time consuming to complete one patient interview. A short patient self-complete questionnaire was, therefore, developed by the researcher to be completed by the general practitioner's asthma patients in the pharmacy, whilst they waited for their prescription to be dispensed. The purpose of the self-complete questionnaire was to enable the pharmacist to carry out a screening process and select appropriate patients to participate in the structured interview, based on their level of knowledge and understanding about their asthma medication and their further information needs. The patient self-complete questionnaire can be found in Appendix 5.9.

5.6.2.2 Data collection and feedback

The pharmacist was sent copies of the patient self-complete questionnaire, the
structured patient interview schedule, the inhaler technique assessment form and the asthma clinic leaflet in April 1995 and in July all the completed questionnaires were collected.

A feedback meeting was held with the pair involved in the initiative in September 1995 and ways to proceed with the initiative were also discussed.

5.6.3 Results

A total of 12 patients were interviewed during the facilitated initiative, including the eight pilot patients. Two of the 12 patients had also completed the self-complete questionnaire. Two further patients had only completed the self-complete questionnaire, bringing the total number of patients involved in the initiative to 14. The results presented below include the results from the interviews with the eight pilot patients and, where relevant, data collected from the self-complete questionnaires has also been included.

5.6.3.1 Asthma medication

Questions relating to the patients’ asthma medication found that the 14 patients had been taking their current medication for a median of five years (range two days to 20 years). The patients were taking an average of two medications for their asthma (range one to four) and the majority were being administered by the inhaled route; only one patient was also taking bronchodilator tablets. Eleven of the 14 patients said that they had been given information about their asthma medication; three said that
they had not. The information sources included: medication leaflets (four patients); their general practitioner (three patients); the hospital (two patients) and the clinic nurse (two patients).

5.6.3.2 *Inhaled Medication*

The type and number of inhalation devices being used by the 14 patients are shown in Table 5.8.

**Table 5.8: The type and number of inhalation devices being used by the patients**

<table>
<thead>
<tr>
<th>Type of Device</th>
<th>No. of Inhalers</th>
<th>No. of Patients (n = 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDI</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Rotahaler</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Diskhaler</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Turbohaler</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>MDI + Diskhaler</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Turbohaler + Diskhaler</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

One patient was using a bronchodilator only, eleven patients were using a bronchodilator and a corticosteroid and two patients were using two bronchodilators and a corticosteroid.
The inhaler technique of 10 of the 12 patients who were interviewed was good. Two patients using metered dose inhalers (MDIs) made errors on four and five of the 11 check points respectively. Four of the points were identical for both patients and errors were made taking a slow deep inhalation when releasing the medication, continuing to inhale after the dose had been released, holding one's breath for 10 seconds before slowly breathing out and waiting one minute between doses. The second patient also failed to breathe out before putting the mouthpiece in his mouth.

Eleven of the 12 patients interviewed were using two or more different inhaled medications. Nine patients reported regular use of their steroid inhaler and regular or 'when required' use of their bronchodilator. One patient admitted infrequent use of their steroid inhaler and very frequent use of their bronchodilator and one patient was not using their steroid inhaler. Six of the 11 patients used their inhalers in the correct order; four patients said that they did not use their inhalers in any particular order; one patient was administering his medication in the wrong order.

### 5.6.3.3 Patient monitoring

Nine of the 12 patients who were interviewed had a peak flow meter. Frequency of use of the peak flow meters ranged from twice daily (two patients) to very rarely (three patients). Five of the nine patients had a record of their best peak flow and six knew the value of their peak flow below which they needed to take some action. Actions that the patients would take included contacting their general practitioners and increasing the dose of their bronchodilator medication.
5.6.3.4 Clinic attendance

Five of the 12 patients had last seen their general practitioner about their asthma medication; six had seen the practice nurse at the clinic (data missing for one patient). Three of the five patients who had seen their general practitioner were referred on to the asthma clinic; only one of those three patients had attended the clinic before. Two patients were not referred to the clinic, one patient because she was a regular clinic attender and the other because she was a temporary resident. A total of eight patients had, therefore, been to the clinic previously and the reported frequencies of attendance ranged from every two to three months to occasionally. The median frequency of attendance was every six months.

5.6.3.5 Feedback meeting

At the feedback meeting the pair discussed the initiative and both agreed that despite the length of the interview schedule, they did not want to alter it for the continuation of their initiative because each question had the potential to gather essential information. The general practitioner further commented that even the limited results gathered to date had provided more information than previous audits of the asthma clinic. The general practitioner was surprised that so few of his patients had been involved in the initiative and wondered if this reflected the pattern of use of the pharmacy by his patients. The pharmacist felt, however, that time had been the major factor responsible for limiting the number of patients involved in the initiative, rather than a lack of patients.
At the feedback meeting the topic of repeat prescribing was raised by the community pharmacist, who felt that there was no mechanism in place to prevent patients receiving endless repeat prescriptions and, therefore, patients were not forced to attend the clinic for a review due to lack of medication. The general practitioner explained that there was a repeat prescription system in the surgery but patients could 'slip through the net' on occasions and would be able to receive repeat prescriptions without a review. The general practitioner further commented that it was very difficult to withhold prescriptions from asthma patients because of the potentially fatal consequences and so patients who refused to attend the practice for a review were still given their prescriptions. The pair felt that through the initiative the pharmacist should be able to identify patients who have not had a condition and medication review for a long time. The general practitioner could then be notified and a personal letter could be sent to the patient asking them to attend the practice asthma clinic. A personal letter would possibly have a greater impact on the patient than a note attached to their repeat request form informing them that it was time for a review.

Two further patient concerns were raised by the pharmacist during the feedback meeting. Firstly, the pharmacist raised the point that patients who were happy with their medication and felt that their asthma was well controlled did not want to go to the clinic because they were concerned that the nurse would initiate an alteration to their medication. Secondly, the pharmacist had found that some patients would prefer to see their doctor rather than the practice nurse, a point highlighted by the fact that nearly half the patients interviewed had seen their general practitioner and had
not attended the asthma clinic. The first point raised by the pharmacist highlighted
the need for patients to be better informed about the asthma clinic, a matter that the
pair had hoped to address through the practice leaflet and would address again as the
initiative continued. Patients also needed to be informed that they were still able to
see their general practitioner for a review if they wished, especially if it meant that
clinic non-attenders would be reviewed.

The general practitioner had been surprised by the fact that a few patient had reported
that they had never received information about their asthma medication. The general
practitioner felt that patient education was essential in asthma management to
encourage the patient to take responsibility for themselves. The general practitioner
felt that at the root of the education problem was the fact that asthma patients did not
view their asthma as an illness and, therefore, as long as patients were symptom free,
they were not interested in finding out more about their condition, their medication or
in attending the practice for a review.

The general practitioner felt that there would always be patients who could be ‘lost in
the system’, but hoped that the continuation of the joint initiative with the community
pharmacist may help to discover some of them. The pair proposed to specifically
target two patient groups in the next stage of their initiative: asthmatic patients whose
first language is not English and parents of asthmatic children.

As a final point the general practitioner expressed concern that the role of the
community pharmacist in primary health care was still not fully recognised by some members of the primary health care team and this was something that needed to be addressed. He proposed that the possibility of a primary health care team project should be discussed at the next primary health care team meeting.

5.6.4 Discussion

During the initiative the pharmacist had found that it was very time consuming to complete the structured interview with one patient and, therefore, interviews could not take place when the pharmacist was busy or when the patient was in a hurry. Revision of the interview schedule after the pilot phase had helped to some extent, but in order to reduce the time further the pharmacist had not asked every question on the interview schedule nor had she recorded the nature of any advice given. There was, therefore, missing data and explains why the results were not as detailed as may have been expected from the depth of the interview schedule.

At the feedback meeting the pharmacist and general practitioner said that they were interested to continue with the initiative and despite the length of time involved, they agreed not to alter the patient interview schedule. The general practitioner may have felt quite strongly about this because he felt that all the questions were able to provide valuable information. The pharmacist, however, may have had more concerns about the time commitment but did not voice them because she was enthusiastic to continue to work closely with the general practitioner and did not want to jeopardise their working relationship.
The patient self-complete questionnaire was developed after the pilot phase to reduce the time problem caused by the detailed interview by allowing the pharmacist to screen and select appropriate patients. The value of the self-complete questionnaire as a targeting tool was limited, however, due to the low number of patients asked to complete it. The pair may be able to continue to use the patient self-complete questionnaire as a means to target appropriate patients in the continuation of the initiative, relieving some of the time pressures on the pharmacist.

Interviewing patients will only be of value if something can be done to improve the care of those patients identified as needing help in some way, either through further education or condition/treatment review. The community pharmacist and general practitioner pair decided that the general practitioner should be notified when the pharmacist had identified such a patient and a personal letter to the patient may encourage an appointment at the clinic. Patients need to be informed that regular reviews are for their own benefit, although the obvious concern of their pharmacist and general practitioner may be the motivation that some patients need.

Although the results of the facilitated initiative were on a small scale, important points were raised that could lead to the general practitioner being able to provide better care for his asthmatic patients. The initiative also highlighted key roles for the community pharmacist in contributing to the care of asthma patients by working closely with the primary health care team, particularly through education. The value of the facilitated initiative in developing the working relationship between an
individual general practitioner and community pharmacist was demonstrated by the pair discussing the possibility of a wider primary health care team project, initial facilitation providing a firm collaborative basis on which the pair could build.

5.7 Overall Discussion

The results from the first interdisciplinary group meeting are very interesting when comparing the areas with the potential for collaboration discussed by the group and the areas chosen for interprofessional collaboration by the FHSAs and Health Commissions reported in Chapter 3. The majority of all the FHSA pilot projects and joint meetings had been based on clinical and prescribing issues, yet very few of the areas raised by the interdisciplinary group coincided with the FHSAs' agendas for collaboration. Cost issues were raised by the group, but patient cost savings seemed to have a higher priority than drugs budget savings and, on the whole, improved patient care was given priority over prescribing costs. The difference in areas with the potential for interprofessional collaboration shows that the agenda of the individual is very different from that of the health authorities and serves to reinforce the problems already discussed with the current FHSA agenda and the need to re-focus on areas of interprofessional interest and patient benefit.

An initiative to encourage interprofessional collaboration by individual practitioners undoubtedly presented a challenge. One of the major difficulties for the participants was finding the time to recruit patients, a difficulty experienced in two of the three initiatives. Community pharmacists and general practitioners have very busy and full
working days and good intentions may not be realised because the commitment is too
great. Although the pairs were advised to select an initiative that was achievable,
they may not have realised quite how much work and hence time would be involved
until their initiative was under way. In trying to encourage collaboration between
individual practitioners it is essential to help the pair to select a methodology that
does not cause a major disruption to the usual working routine and all necessary
interventions must be of short duration.

A further problem found in trying to develop the working relationship between
individual practitioners concerns the balance of work involved. In the first initiative
the facilitator carried out two of the four preliminary investigations and developed the
patient interview schedule and the client questionnaire for the second two, involving a
considerable amount of work. As well as being time consuming for the facilitator,
this may have led to a reduction in ownership for the project participants and possibly
an assumption that their major commitment involved the use of their premises for the
investigations, rather than active participation. The pharmacist in particular, may,
therefore, not have been fully prepared for his role in the project or the commitment
that inviting clients to participate would involve.

In the second and third initiatives there was also an imbalance of work, although this
was between the community pharmacists and the general practitioners. In the second
initiative the general practitioner had a much greater responsibility for the progression
of the initiative, as did the community pharmacist in the asthma initiative. In trying to
encourage interprofessional collaboration between individual practitioners it is, therefore, essential to ensure that the practice area chosen for the collaborative initiative and the chosen methodology allow for an equal input from the community pharmacist and the general practitioner, that there is a shared responsibility for the workload and that the initiative can be run between the pair involved, with minimal ‘hands on’ involvement of the external facilitator. An initiative that fits all of the above criteria should allow a high level of ownership and a strong commitment to the outcome, in terms of a demonstrable patient benefit.

A further problem in this initiative to encourage collaboration between individuals may have been the lack of resources available to the pairs of practitioners. The external facilitator was able to provide the pairs with appropriate interview schedules and questionnaires, but no other resources were available. The initiative participants, although selected to participate, did agree to do so, showing that they were enthusiastic about the initiative, at least initially. However, the participants may not have been fully aware of the commitment involved before the start of the initiative - a problem highlighted with locally organised initiatives - and their enthusiasm may have waned with time due to the lack of incentive to continue. Enthusiasts may be prepared to participate in initiatives that are not reimbursed, but if there are no definite outcomes, in terms of patient and participant benefits, because initiatives are difficult to complete then those enthusiasts may be reluctant to participate in other similar future initiatives. Once again, the FHSAs and Health Commissions may be able to help in this respect and could provide the resources to facilitate a collaborative
initiative for pairs of general practitioners and community pharmacists, where each pair is responsible for setting their own collaborative agendas, possibly based on a local needs assessment. The FHSAs/Health Commissions could assist the pairing process and use their resources to encourage all their contractors to participate.

The development of the interprofessional relationship between individual pairs of general practitioners and community pharmacists is an unexplored area. Although it was difficult to demonstrate patient benefits in two of the three collaborative initiatives, all three pairs were interested in continuing their initiatives and two pairs discussed the possibility of starting another joint project. The potential to develop the working relationship between pairs of practitioners, who have regular contact with each other, was realised through this initiative, when pairs were allowed to select and manage their own collaborative projects.
CHAPTER 6 - DISCUSSION

The starting point in the investigations into the development of the interprofessional working relationship between general practitioners and community pharmacists was to examine the extent and nature of current interprofessional collaboration. Data gathered during semi-structured interviews with a random sample of 20 community pharmacists and 20 general practitioners found that the majority of ad hoc, day to day contacts were pharmacist initiated, made by telephone and concerned queries on individual prescriptions, although general practitioner initiated contacts and face to face contacts were also reported. The participation rate in formally organised meetings, workshops and study days was low and very few of the pharmacists and general practitioners were involved in joint projects. Only one pharmacist was currently involved in individually organised joint initiatives. The majority of all the community pharmacists and general practitioners interviewed were positive about their interprofessional working relationships, although positive attitudes were expressed by a much larger majority of the general practitioners (85% vs. 55%). The variation in response draws attention to a possible difference between the general practitioners’ and community pharmacists’ attitudes towards their current interprofessional relationships. The general practitioners appeared to be either very content with their interprofessional relationships or to have low expectations about their relationships with the local community pharmacists. The pharmacists, however, felt that interprofessional relationships could be improved. The pharmacists lower level of satisfaction with their current relationships may have been responsible for the higher percentage who were interested in participating in joint meetings or projects.
Chapter 6 - Discussion

compared to the general practitioners, although the pharmacists seemed reluctant to initiate further contact.

The extent and nature of formal interprofessional collaboration was further investigated by means of a survey of all the pharmaceutical advisers in England and Wales. All the advisers who responded to the survey were able to provide information about current or planned joint initiatives in their FHSA or Health Commission, although the majority of the initiatives reported were small scale.

FHSA/Health Commission organised joint meetings, seminars and workshops, pilot projects and training initiatives were all reported, as well as two regional collaborative initiatives and joint meetings between individual practitioners. The FHSA/Health Commission agendas for interprofessional collaboration had a strong focus on prescribing issues, possibly based on a need to meet financial targets and encouraged by the success of interprofessional collaboration in the hospital setting. In community practice, however, there may be more appropriate areas of practice for joint initiatives, both in terms of the level of interest and benefit to the participants and in terms of patient benefits.

In order to investigate the effect of a formally organised, local collaborative initiative on patient care and on the interprofessional relationship, a project on an extended role for the community pharmacist, the provision of a domiciliary pharmaceutical service, was piloted in Barnet FHSA. The initiative showed that collaboration by general practitioners and community pharmacists in a domiciliary service has the potential to
reduce the number and frequency of medication related problems experienced by the housebound patients, through general practitioners acting on appropriate community pharmacist intervention requests. The pilot study also served to highlight a number of deficiencies in some systems in general practice, for example, the updating of patients’ medication records and the issuing of repeat prescriptions and there is potential for interprofessional collaboration in these areas to further benefit the housebound patient. Furthermore, the pilot study showed that there is the potential for the development of the working relationship through collaboration in joint initiatives, provided that the extended roles and responsibilities of the community pharmacist are accepted by the general practitioner.

The potential for the development of the interprofessional relationship through formally organised, individual collaborative initiatives, when the individuals involved in the initiatives were responsible for setting their own agendas, was investigated by establishing an interdisciplinary group of general practitioner and community pharmacist pairs. At their first meeting the pairs raised a variety of areas with the potential for interprofessional, collaboration and each pair chose one area as the basis of their own collaborative initiatives. Data collection was minimal for two of the three projects, but all three initiatives served to bring the two professions together on a one to one basis and helped to develop the individual working relationships. All three pairs discussed how their collaborative initiatives could either be continued or extended; two pairs discussed the possibility of a second collaborative initiative. Each project had potential patient benefits and these were realised to the greatest extent in
the private prescription scheme, in terms of cost savings.

The development of the working relationship between general practitioners and community pharmacists is essential for the provision of good quality patient care and the efficient use of resources. Developing the working relationship must also realise benefits for the professionals involved in order to be successful. Community pharmacists may benefit from collaborating with general practitioners in two ways, firstly as they are incorporated into the primary health care team, serving to increase their professional status and secondly through the greater utilisation of their expertise, resulting in increased professional role satisfaction. Financial rewards may be a further benefit in certain collaborative initiatives. General practitioners may also find that interprofessional collaboration leads to greater role satisfaction, partly as they are able to concentrate on their clinical role in primary health care and partly through the information and advice they can receive about aspects of their practice, prescribing and patient care from the community pharmacist.

Developing the working relationship is dependent on interprofessional collaboration; only by working together can general practitioners and community pharmacists understand and appreciate each other’s roles and, as a result, develop mutual trust and respect. In order for community pharmacists to work closely with general practitioners in ensuring good quality patient care, community pharmacists need to collaborate with general practitioners in extended professional roles. Potential extended roles for the community pharmacist cover a wide range of practice areas and
Chapter 6 - Discussion

Initially, in order to ensure successful collaboration, general practitioners and community pharmacists should collaborate in areas of practice that have valuable outcomes for the patient, are non-threatening to the core role of the general practitioner and focus on the expertise of the community pharmacist.

The reason for the need to focus initial efforts at developing the working relationship on practice areas that fulfil the above three criteria is to reduce and, if possible, remove some of the barriers to successful interprofessional collaboration. One barrier could be the attitude of the general practitioner. General practitioners who are unsure about the value of collaboration with community pharmacists, in terms of resulting patient and personal benefits, may be reluctant to participate in joint initiatives. However, if the value of collaborative initiatives can be demonstrated, then sceptical general practitioners may be encouraged to participate. Two of the four general practitioners interviewed who were unsure about whether they would like to have meetings with a local community pharmacist or not, said that they would be prepared to have a joint meeting if the meeting had a definite purpose.

The scepticism of some general practitioners may extend to a negative attitude towards interprofessional collaboration in areas of practice that have traditionally been the domain of the general practitioner, especially if the general practitioner feels that his/her core roles are being challenged. The pilot domiciliary service showed that there was some reluctance by the general practitioners to accept a clinical role for the community pharmacist. Furthermore, studies investigating attitudes towards
Chapter 6 - Discussion

extended roles for the community pharmacist found that general practitioners were less accepting of clinical and patient orientated roles than those involving responding to symptoms and giving non-prescription related advice (Spencer and Edwards, 1992; Nathan and Sutters, 1993a). A study by Sheppard et al. (1995) also showed that whilst community pharmacists and FHSAs were enthusiastic about a role for the pharmacist in patient management, the Royal College of General Practitioners was against pharmacist involvement in this area of practice. Vree (1991) in his article on pharmacist-physician interactions stated:

'Trespassing in another's domain will never foster the ideal interaction. If we do not trespass, but, rather, realistically focus on our areas of expertise, co-operation will be realised'.

Initial collaboration in practice areas that are perceived as non-threatening to the core role of the general practitioner may, therefore, be more successful, both in terms of developing the working relationship and in terms of achieving positive outcomes for patient care.

Collaborative initiatives should also focus on extended roles that fall within the community pharmacist's field of expertise, so that optimum patient benefits can be achieved. The interprofessional working relationship does not have to be restricted to these areas, but if the initial focus concentrates on the unique aspects of the community pharmacist's practice, then there should be greater acceptance and understanding by general practitioners of the role that community pharmacists can play in patient care and general practitioners should not feel that their role is being challenged but rather enhanced. Furthermore, if community pharmacist and general

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practitioner collaborative initiatives do not initially focus on areas of the community pharmacist’s expertise, then community pharmacists may find themselves challenged by other health care professionals, particularly those who may already have a close working relationship with general practitioners and may feel that the community pharmacist is encroaching on their own domains.

The community pharmacist’s area of expertise - prescription and over the counter medication - distinguishes him/her from other health care professionals. Furthermore, community pharmacists have close contact with their patrons and do, on the whole, know their patients. Pharmacists may even have greater contact with some sectors of the population than general practitioners. A study based in the West Midlands showed that 62% of the general population visited the same community pharmacy for their prescriptions (Milburn et al., 1990) and in a study by Smith and Sharpe (1984), 90% of a sample of those over 60 years used a single pharmacy for their prescriptions. Patients will, therefore, benefit most from interprofessional collaboration in initiatives where close contact with the general public is required and prior knowledge of the patient is beneficial if not essential. Examples of potential collaborative initiatives include: the provision of drug information; medication management; responding to symptoms; the treatment of minor ailments; health promotion and health education. Building up the working relationship through collaboration in an accepted area of the pharmacist’s expertise may lead to collaboration in other practice areas, previously unacceptable to general practitioners.
Chapter 6 - Discussion

The research carried out with community pharmacists, general practitioners and pharmaceutical advisers indicates that the development of the working relationship is dependent on facilitation, at least initially. Facilitators can be from FHSAs, Health Commissions or independent bodies, locally organised and individual initiatives benefitting from the available expertise and resources. Facilitation should ensure that interprofessional collaboration is structured and co-ordinated so as to maximise patient benefits, maximise participant benefits, minimise interprofessional barriers, minimise intra-professional conflicts and ensure the efficient use of resources. One further way that FHSAs/Health Commissions can be involved in the development of the interprofessional relationship is by ensuring that all general practices throughout the FHSA/Health Commission are participating in interprofessional collaboration. In the case of non-fundholding general practices this could be achieved through the prescribing incentive scheme, with extra payments being made to those general practitioners having a regular meeting with a local community pharmacist. FHSAs/Health Commissions are also responsible for setting the budgets for fundholding general practices and could earmark a small percentage of the budget to be used by the general practitioners solely for the payment of advice from a community pharmacist.

Community pharmacy needs to reprofessionalise. Community pharmacists have lost their traditional professional role as compounders of medication and currently are possibly perceived as no more than dispensers of medicines, a task that could be delegated to suitably trained support staff. Developing the working relationship
between general practitioners and community pharmacists will help to reprofessionalise community pharmacy and enthusiasts from both professions will already be involved in collaboration. The future development of the interprofessional working relationship on a large scale, however, is going to depend on major changes to community pharmacy practice.

The concept of pharmaceutical care could be the mandate that will help to reprofessionalise community pharmacy, just as clinical pharmacy helped to professionalise hospital pharmacy practice (Cotter et al., 1994b). The concept of pharmaceutical care was first introduced by Hepler and Strand (1990) and emphasises the direction that pharmacy should be taking:

'Pharmacists must...adopt patient-centred pharmaceutical care as their philosophy of practice...to ensure the safe and effective drug therapy of the individual patient'.

The reprofessionalisation of community pharmacy practice, through a commitment to the improvement of patient care, should allow pharmacists to be integrated into the primary health care team and shake off their 'shopkeeper' image.

The conflict between the community pharmacist's professional and commercial roles has served to reduce the professional status of the community pharmacist and has undoubtedly been a barrier to interprofessional collaboration (Turner, 1986). However, it is the current NHS remuneration system that has forced the community pharmacist to develop the commercial aspect of his/her practice because the payment system is based almost solely on the number of prescriptions dispensed, presenting
two barriers to the development of the working relationship. Firstly, from the point of view of the general practitioner, if the community pharmacist has a commercial interest in the general practitioner's prescribing, is advice from a local community pharmacist about practice issues truly neutral? Secondly, if there is no provision for the payment of pharmacists for carrying out extended role activities in collaboration with general practitioners, then it appears that little value is attached to extended roles and furthermore participation in extended role activities will take the pharmacist away from the only valued role - dispensing. The remuneration system is slowly changing, with a small percentage of the annual global sum now being devolved to local purchasers of pharmaceutical services (Anon, 1994h) and this percentage is likely to increase annually. However, there needs to be a total restructuring of the NHS payment system for community pharmacists, to allow for the payment of extended role activities and reduce the conflict between professionalism and commercialism.

The extended role for the community pharmacist as an adviser to the general practitioner on prescribing practice was advocated in the report to the Nuffield Foundation (1986). The need for the initial development of the working relationship between general practitioners and community pharmacists in non-prescribing related areas of practice has already been discussed at length. In terms of future interprofessional collaboration, however, it is necessary to address the question of the role of the community pharmacist in prescribing and clinical practice. Two barriers to the community pharmacist's role in these areas of practice are the attitude of the general practitioner and the paucity of the community pharmacist's clinical knowledge.
and training. In the future, however, as drug therapy further increases in complexity, each general practitioner will need a readily accessible source of drug information and advice. The majority of pharmacists are employed in the community sector (Anon, 1995d) and could be primary health care's most important resource. Taylor (1986) in his article on pharmacists and primary health care states:

'The potential of pharmacists as a health service resource is much underestimated by the medical profession'.

In order to address this future need, clinical training of the community pharmacist is essential and should start at undergraduate level, followed by mandatory clinical training for all pre-registration pharmacy graduates. Ongoing clinical training seminars will then allow community pharmacists to collaborate effectively with general practitioners in areas of clinical practice, with resulting positive effects on the quality of medicines management and the quality of patient care.

Further changes in community pharmacy practice will help the reprofessionalisation process and in turn, the development of the interprofessional working relationship. One change could be the move towards a two pharmacist per pharmacy system. One pharmacist would be available on the pharmacy premises at all times to supervise the dispensing of prescriptions and to deal with prescription related aspects of medication management in collaboration with the patient's general practitioner. The other pharmacist would be available to provide advice and information for those patients who request it and would be able to offer unsolicited advice to patients who choose to self-select medication. A two pharmacist system would also allow for one
Chapter 6 - Discussion

pharmacist to be involved in extended role collaborative activities in the community, away from the pharmacy premises, without compromising the pharmaceutical care received by the patients visiting the pharmacy at that time. Furthermore, a two pharmacist system will provide the necessary professional support for the Government's drive to encourage patients to take responsibility for their own health care, demonstrated by the re-classification of prescription only medicines to pharmacy only medicines. Although this agenda is based on the need to reduce the NHS drugs bill, the care of the patient can be enhanced through interprofessional collaboration, ensuring that patients receive the right advice and information from the easily accessible community pharmacist to ensure the safe and effective use of OTC medication, coupled with appropriate referral to the general practitioner.

The general practice is the physical centre of the primary health care team and the physical separation of the community pharmacist may represent a further barrier to interprofessional collaboration. Bruce (1980) said that physical closeness does not automatically result in a close working relationship. However, work done by Harding and Taylor (1989) on pharmacies in health centres together with the model in the hospital setting where the pharmacist has access to the doctor, the patient and the patient's notes both illustrate that physical proximity certainly helps the development of close interprofessional relationships. One way to bring the community pharmacist into the heart of the primary health care team, without removing the structural barrier, may be through the registration of patients. Registration may not be appropriate for all patients, but could possibly be confined to those with certain conditions, those
over a certain age and those taking multiple medications. If patients fulfilling these criteria were required to register with one particular local pharmacy - the majority of patients already using the same pharmacy for their prescriptions (Milburn et al., 1990) - then it would be possible to enhance the quality of the patient’s care. All prescription and purchased medicines could be recorded for each patient and accurate and up-to-date information could easily be relayed between the community pharmacist and the general practitioner and vice versa, possibly leading to a shared on-line database. Community pharmacists would then also be able to liaise more effectively with other members of the primary health care team for the benefit of each individual patient. A future extension of patient registration will be the development of contracts between general practitioners and community pharmacists for the provision of pharmaceutical care.

In the future, interprofessional collaboration may be further enhanced by the development of Managed Care within the NHS. Managed Care is a concept that developed in the United States to manage the whole patient care process from prevention onwards. The aims of Managed Care are to improve quality, rationalise utilisation, contain costs and use market power to obtain discounts on medical services and products (Wertheimer, 1995). Managed Care Organisations (Health Maintenance Organisations - HMOs - in the US) manage the whole care a patient receives. Through a set of incentives and penalties to patients and doctors, the optimal quality and efficacy of care is obtained at the lowest price. In the NHS, the structure is in place to develop Managed Care, with Health Authorities as the lead
purchasers together with fundholding practices, who are strongly motivated to make services as clinically orientated and cost effective as possible (Panton et al., 1995). The development and adherence to clinical guidelines are central to Managed Care for both doctors and patients and there could be a role for the community pharmacist in helping to develop those guidelines and in monitoring adherence, through audits of prescribing and compliance with treatment (Panton et al., 1995). Furthermore, the community pharmacist could take on the responsibility for patient education and the provision of information as relevant to the Managed Care Plan. The development of Managed Care in the NHS offers the opportunity to develop the interprofessional relationship. The knowledge and skills of the community pharmacist will be utilised, thus increasing their professional role satisfaction; the pharmacist will be providing a service valued by the general practitioner as part of the primary health care team and the community pharmacist will be directly contributing to the quality, rationality and cost effectiveness of patient care.

The changing face of primary health care and in particular, the shift to patient centred care, means that all health care professionals must adapt their roles to the new environment and participate in extended role activities. In order for community pharmacists to be involved in extended role activities, the working relationship between general practitioners and community pharmacists needs to be developed to allow for successful interprofessional collaboration. FHSAs and Health Commissioners can help with that initial development by facilitating interprofessional collaboration in practice areas that are non-threatening to the core role of the general practitioner,
focus on areas of the community pharmacist's expertise and contribute to patient care. In the future, the development of the interprofessional relationship will be dependent on the reprofessionalisation of community pharmacy through the adoption of the pharmaceutical care mandate and the restructuring of systems in community pharmacy practice, ensuring a niche for the community pharmacist within the primary health care team. Failure to do so, in the long term, may result in the deprofessionalisation of community pharmacy, as traditional roles continue to be eroded and new roles are taken over by other health care professionals in both primary and secondary care.

6.1 Recommendations

On the basis of the investigations carried out with community pharmacists, general practitioners and FHSA pharmaceutical advisers, the following recommendations are made in order to develop the working relationship between community pharmacists and general practitioners.

Communication

Interprofessional communication needs to be developed in order to extend topics of conversation to practice areas beyond individual prescription queries and requests for supply. Community pharmacists, during their day to day contacts with local general practitioners, should take the initiative to demonstrate their interest in collaboration and their ability to contribute to patient care as a member of the primary health care team. In turn, general practitioners should take the initiative to invite their local
community pharmacists to primary health care team meetings at the practice and
should utilise their local pharmacists as an accessible source of drug information.

A joint national campaign, run by the Royal Pharmaceutical Society and the Royal
College of General Practitioners, to encourage interprofessional communication and
promote the community pharmacist as a valuable resource to both the general
practitioner and the patient, could be invaluable in encouraging interprofessional
discussion of a wide range of patient focused issues. A joint statement on
interprofessional communication, similar to the one produced by the Royal Australian
College of General Practitioners and the Pharmaceutical Society of Australia (Anon,
1994b) could be the starting point for the national initiative and should incorporate
guidelines on:

• The use of suitable abbreviations on prescriptions to relay information about
the prescribed medication to the community pharmacist to facilitate patient
counselling.

• The use of pharmacy referral forms to relay information about a patient’s
symptoms to the general practitioner.

Facilitation

All FHSAs/Health Commissions need to accept responsibility for the initial
development of the interprofessional relationship and facilitate collaborative initiatives
that focus on extended roles for the community pharmacist in practice areas that are
both non-threatening to the core role of the general practitioner and centre on the
Chapter 6 - Discussion

community pharmacist's expertise. Initiatives must also realise demonstrable patient benefits. Collaborative agendas need to be based on a local needs assessment and on areas of interest and benefit to the practitioners involved. Initiatives must also be structured and co-ordinated to minimise intra-professional conflicts and ensure the efficient use of resources. Furthermore, FHSAs/Health Commissions should utilise their influence over drugs budgets, to ensure fundholding and non-fundholding general practitioners collaborate with local community pharmacists.

Education

In order to allow community pharmacy to reprofessionalise, changes need to be made to the training provided for pharmacists at the undergraduate, pre-registration and postgraduate levels. At the undergraduate level, pharmaceutical care should be a central feature of the three (soon to be four) years at University and it would be highly appropriate, whenever possible, for medical and pharmacy students to have joint lectures. Courses introducing the concept of good quality prescribing should also be brought into the curriculum and could include rational prescribing, PACT data analysis and formulary development.

A change to the structure of the pre-registration year would help with the clinical training of all pharmacists and it may be possible to introduce a mandatory split pre-registration year, with all pre-registration graduates spending six months in a hospital pharmacy and six months in either a community pharmacy or on an industrial placement. Conducting the pre-registration year in this manner would be taking a
step towards the way doctors are trained, spending a requisite period of time in hospital practice. Pre-registration graduates who then choose to spend their second six month period in a community pharmacy would be required to spend time in a local general practice, shadowing a general practitioner and similarly, all general practice trainees should spend a period on secondment to a local community pharmacy.

At postgraduate level, joint continuing educational programmes should be organised on a regular basis for community pharmacists and general practitioners. Courses could be run on a rotating basis, inviting community pharmacists and general practitioners who practice in a specific locality to attend each rotation, to ensure that those practitioners who serve the same sector of the local population attend together.

**Remuneration**

The remuneration system for community pharmacy must be investigated and a new system implemented that removes the conflict between the pharmacist’s professional and commercial roles and allows for the payment of extended role activities. A working party should be established in order to: gather proposals for an alternative system of remuneration; assess the feasibility of each proposal; determine the most appropriate system of remuneration that fulfils the above criteria and, finally, negotiate with the Department of Health.

**Further Investigation**

Further investigations need to be carried out in the following practice areas to aid the
future development of the interprofessional relationship: the feasibility of a two pharmacist per pharmacy system; registration of patients with a particular pharmacy; contracts between general practitioners and community pharmacists for the provision of pharmaceutical care and potential roles for the community pharmacist in Managed Care.

6.2 The Way Forward

Large scale studies need to be carried out that will measure the effectiveness of a closer working relationship between community pharmacists and general practitioners both in terms of improved patient care and in terms of the efficient use of resources. If widespread patient benefits can be demonstrated as well as benefits to the two professions, then large scale development of the interprofessional relationship will be assured, resulting in the acceptance of the pharmacist as a member of the primary health care team and a giant step towards the reprofessionalisation of community pharmacy practice.
Appendix 2.1: Letter sent to the randomly selected general practitioners

THE SCHOOL OF PHARMACY
UNIVERSITY OF LONDON

DEPARTMENT OF PHARMACEUTICS
PROFESSOR J.M. NEWTON
B.Pharm.,Ph.D., D.Sc.,F.R.Pharm.S.

29-39 BRUNSWICK SQUARE
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Telephone (switchboard) 0171 753 5800
Julia Schneider (direct line) 0171 753 5860
Facsimile 0171 753 5920

Nick Barber B.Pharm., Ph.D., M.R.Pharm.S., C.H.S.M.
Professor of the Practice of Pharmacy.

Date

Dr’s Name
Practice Address

Dear Dr (Name),

My name is Julia Schneider and I am a research pharmacist, studying for a PhD at the School of Pharmacy, University of London. The aim of my research is to study the potential for collaborative work between general practitioners and community pharmacists; in order to be able to do this it is very important for me to find out about current working relationships. To this end, I want to interview a random sample of general practitioners and community pharmacists and you have been selected. The interview will investigate the extent and nature of any current contacts between yourself and your local community pharmacists and will ask about areas that you think have the potential for collaboration.

You were randomly selected from your FHSA’s list of general practitioner contractors, along with a further four general practitioners. In addition five community pharmacists were selected from the chemist contractor list. Interviews will also be taking place in other FHSA's.

The data gathered in the interviews will be used in my PhD thesis and may be published as a paper in the literature. However, at no time will individuals, surgeries or pharmacies be identifiable.

I understand that you are very busy, but your participation is truly needed and will be very much appreciated. I require approximately 20 minutes of your time and will come to your surgery whenever it would be convenient for you. The enclosed card asks for the name of someone in your practice that I could contact in order to arrange a suitable interview date. I would be very grateful if you could complete it and return it to me (Freepost) as soon as possible.

Yours sincerely,

Julia Schneider
Appendix 2.2: Letter sent to the randomly selected community pharmacists

THE SCHOOL OF PHARMACY
UNIVERSITY OF LONDON

DEPARTMENT OF PHARMACEUTICS
PROFESSOR J.M. NEWTON
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Nick Barber B.Pharm., Ph.D., M.R.Pharm.S., C.H.S.M.
Professor of the Practice of Pharmacy.

Date

Name of Pharmacy
Pharmacy Address

Dear Pharmacist,

My name is Julia Schneider and I am a research pharmacist, studying for a PhD at the School of Pharmacy, University of London. The aim of my research is to study the potential for collaborative work between general practitioners and community pharmacists; in order to be able to do this it is very important for me to find out about current working relationships. To this end, I want to interview a random sample of community pharmacists and general practitioners and you have been selected. The interview will investigate the extent and nature of any current contacts between yourself and your local general practitioners and will ask about areas that you think have the potential for collaboration.

You were randomly selected from your FHSA's list of community pharmacist contractors, along with a further four pharmacists. In addition, five general practitioners were selected from the general practitioner contractor list. Interviews will also be taking place in other FHSAs.

The data gathered in the interviews will be used in my PhD thesis and may be published as a paper in the literature. However, at no time will individuals, pharmacies or surgeries be identifiable.

I understand that you are very busy, but your participation is truly needed and will be very much appreciated. I require approximately 20 minutes of your time and will come to your pharmacy whenever it would be convenient for you. I will telephone you in the next two weeks to discuss this and hopefully arrange an interview date, if you are willing to participate.

Yours faithfully,

Julia Schneider
Appendix 2.3: Community pharmacist semi-structured interview schedule

Community Pharmacist Interview

Your name and the name of this pharmacy will not be mentioned in connection with this work; all sources of information are confidential.

The aim of my research is to study the potential for collaboration between general practitioners and community pharmacists ie. those who work in retail. To be able to do this, I really need to find out about current working relationships, so I am interviewing randomly selected GPs and CPs in a number of FHSAs in London. You were selected from your FHSA’s list of CP contractors. The interview will investigate the extent and nature of any contacts that you have with local general practitioners and will ask about areas that you think have the potential for collaboration.

Section 1 - Local general practices

To start:
Where do your prescriptions come from?

Prompts
- How many surgeries are involved?
- How many GPs in each surgery?
- Where is each surgery in relation to your pharmacy?

If not covered:
What about surgeries out of this area ie. more than a mile from your pharmacy?

Prompts
- How many surgeries?
- How many GPs in each?
- Where?

Could you say what percentage of your prescriptions you get from local surgeries and what percentage from more distant ones (ie. more than a mile away)?

Could you say what percentage you get from each surgery?

Could you say what percentage of your prescriptions you get from each GP?

Which of the local GPs/surgeries do you deal with most frequently? (Rank both, if possible)
Appendix 2.3 (continued...)

Do you know how many other pharmacies there are in this locality (ie. within a square mile of this pharmacy)?

Section 2 - Relationship with local GPs

How would you describe your relationship with each of your local GPs?

Probe fully for each one:
What makes it?...
What do you mean by?...
What is about it?

Do you have any social contact with any of your local GPs?
Probe How often?
Of what nature?

Section 3 - Professional Communications

In your role as a pharmacist, would you say that you initiated most contacts with GPs or do the GPs usually initiate contact with you or is it a bit of both?

How do you usually contact the GPs?
Any other ways?

How do the GPs usually contact you?
Any other ways?

How often do you contact 1) a GP in general? 2) each local GP (or surgery)?

How often does 1) a GP contact you, in general? 2) each local GP (or surgery) contact you?

Details of contacts that you have initiated today; in the preceding week; any others? (As many examples as possible and with different GPs).
Appendix 2.3 (continued...)

Are these fairly typical examples? (Other examples if they are not.)

How do you feel about contacting (phoning) the surgeries?
Explore

How do the GPs respond?
Explore

Details of GP initiated contacts today; in the preceding week; any others?

Are these fairly typical examples? (Other examples if they are not.)

How do you feel when they contact (phone) you?
Explore

If not mentioned:
Do you have face-to-face contact with any of your local GPs?
Which ones?
How often?
Where?
Most recent examples.

Section 4 - Working Together

Some people think that there should be greater collaboration between GPs and CPs; others think that the current situation is very satisfactory. I would like to ask you about your views and experience on this subject.

Have you ever been to any meetings, workshops or study days attended by GPs and CPs?

Prompts

<table>
<thead>
<tr>
<th>Prompt</th>
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<tbody>
<tr>
<td>When?</td>
</tr>
<tr>
<td>What on?</td>
</tr>
<tr>
<td>Format?</td>
</tr>
<tr>
<td>Organised by whom?</td>
</tr>
<tr>
<td>Attendance of GPs and CPs?</td>
</tr>
<tr>
<td>Benefits / Barriers?</td>
</tr>
</tbody>
</table>

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Appendix 2.3 (continued...)

Have you been invited to a meeting - formal or informal - by any of your local GPs?

Which GPs?
When?
What about?
Outcomes?
One off/continual?

Have you organised a meeting and invited a local GP or GPs to attend?

Which GPs?
When?
What about?
Outcomes?
One off/continual?

If do not have meetings:
Would you like to have meetings with one or more of your local GPs or not?

If YES to wanting meetings:
What would you want to discuss?

If NO to wanting meetings:
Why not?

Are you involved in any projects with any of your local GPs?
Details

If NOT:
Would you like to work on a particular project with any of your local GPs?

If YES:
What area(s)?

Prompt Anything particularly frustrating that you would like to discuss and work on with one or more of your local GPs or perhaps a particular patient group that you feel you could provide a better service for by collaborating?

Probe Which GPs?
If NO:
Why not?

Do you think any of your local GPs would be interested in participating in meetings or specific projects?
Probe Why?

Advantages or benefits of working closely with local GPs?
Probe fully.

Disadvantages of or barriers to working closely with local GPs?
Probe fully.

In general, in which areas do you think there is potential for GPs and CPs to collaborate?

Section 5 - Background (Demographics)

Reference number Sex M / F

Where did you study pharmacy?

What year did you qualify as MRPharmS?

Have you always worked in community pharmacy?
If NO, describe where else you have worked, when and for how long?

Number of years practising in community pharmacy?

Position held eg. manager, owner, second pharmacist etc

Number of pharmacists on the premises at one time (and positions)

Number of supporting staff and positions

Classification of pharmacy eg. independent, small chain, multiple?

Location of pharmacy: city centre, inner city, suburban or rural?

Special services provided eg. oxygen, diagnostic screening, health promotion etc.
Appendix 2.3 (continued...)

How many prescriptions do you dispense per month, on average?

Which other health care professionals do you have contact with?

That completes all the questions that I wanted to ask you.
Have you any comments that you would like to add?
Is there anything that you would like to ask?
Thank you so much for your time.
Appendix 2.4: General practitioner semi-structured interview schedule

General Practitioner Interview

Your name (and the name of this surgery) will not be mentioned in connection with this work; all sources of information are confidential.

The aim of my research is to study the potential for collaboration between general practitioners and community pharmacists i.e. those who work in retail. To be able to do this, I really need to find out about current working relationships, so I am interviewing randomly selected GPs and CPs in a number of FHSAs in London. You were selected from your FHSA’s list of GP contractors. The interview will investigate the extent and nature of any contacts that you have with local community pharmacists and will ask about areas that you think have the potential for collaboration.

Section 1 - Local community pharmacies

To start:
Do you know where your prescriptions are dispensed?

Prompts  How many pharmacies are involved?
         Where is each pharmacy in relation to your surgery?

If not covered:
What about pharmacies out of this area i.e. more than a mile from the surgery?

Prompts  How many?
         Where?

Could you say what percentage of your prescriptions go to local pharmacies and what percentage to more distant ones (i.e. more than a mile away)?

Could you say what percentage of your prescriptions go to each local pharmacy?

Which of the local pharmacies do you deal with most frequently? (Rank)

Do you know how many other surgeries there are in this locality (i.e. within a square mile of this surgery)?

Prompt  How many GPs in each?
Appendix 2.4 (continued...)

Section 2 - Relationship with local CPs

How would you describe your relationship with each of your local CPs?

Probe fully for each one:
What makes it .......?
What do you mean by .......?
What is ....... about it?

Do you have any social contact with any of your local CPs?
Probe How often?
Of what nature?

Section 3 - Professional Communications

In your role as a Dr. would you say that you initiated most contacts with CPs or do the CPs usually initiate contact with you or is it a bit of both?

How do you usually contact the CPs?
Any other ways?

How do the CPs usually contact you?
Any other ways?

How often do you contact:
1) a CP in general?
2) each local CP?

How often does
1) a CP contact you, in general?
2) each local CP contact you?

Details of contacts you have initiated today; in the preceding week; any others?
(As many examples as possible and with different CPs).

Are these fairly typical examples? (Other examples if they are not.)

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Appendix 2.4 (continued...)

How do you feel about contacting (phoning) pharmacists?
Explore

How do the CPs respond?
Explore

Details of CP initiated contacts today; in the preceding week; any others?

Are these fairly typical examples? (Other examples if they are not.)

How do you feel when they contact (phone) you?
Explore

If not mentioned:
Do you have face-to-face contact with any of your local CPs?

Which ones?

How often?

Where?

Most recent examples.

Section 4 - Working Together

Some people think that there should be greater collaboration between GPs and CPs; others think that the current situation is very satisfactory. I would like to ask you about your views and experience on this subject.

Have you ever been to any meetings, workshops or study days attended by GPs and CPs?

Prompts

When?

What on?

Format?

Organised by whom?

Attendance of GPs and CPs?

Benefits/Barriers?
Appendix 2.4 (continued...)

Have you been invited to a meeting - formal or informal, by any of your local CPs?

Which CP(s)?
When?
What about?
Outcomes?
One off/continual?

Have you (or other GPs in your surgery) organised a meeting and asked a local CP or CPs to attend?

Which CP(s)?
When?
What about?
Outcomes?
One off/continual?

If do not have meetings:
Would you like to have meetings with one or more of your local CPs or not?

If YES to wanting meetings:
What would you want to discuss?

If NO to wanting meetings:
Why not?

Are you involved in any projects with any of your local CPs?
Details

If NOT:
Would you like to work on a particular project with any of your local CPs?

If YES:
What area(s)?

Prompt Anything particularly frustrating that you would like to discuss and work on with one or more of your local CPs or perhaps a particular patient group that you feel you could provide a better service for by collaborating?

Probe Which CPs?
Appendix 2.4 (continued...)

**If NO:**

Why not?

Do you think any of your local CPs would be interested in participating in meetings or specific projects?

Probe Why?

Advantages or benefits of working closely with local CPs?

Probe fully.

Disadvantages of or barriers to working closely with local CPs?

Probe fully.

In general, in which areas do you think there is potential for GPs and CPs to collaborate?

**Section 5 - Background (Demographics)**

Reference Number

Sex M / F

Where did you study medicine?

Number of years in general practice

Surgery list size

Position in surgery (eg. partner, trainee GP etc)

Number of GPs in surgery (and positions)

Number of supporting staff (and positions)

Location of surgery: city centre, inner city, suburban or rural?

Specialist clinics/treatments available

Is practice fundholding or not?

If no Do you think that you will apply to become fundholders in the future?
Appendix 2.4 (continued...)

Do you use a formulary?
If YES Is it your own? Who did you develop it with?
If not own Where did you get it from?

What levels of PACT data do you receive?
Do you use them?
What for?

Which other members of the primary health care team do you work closely with?

Are there any other health care professionals that you work closely with?

That completes all the questions that I wanted to ask you.
Have you any other comments you would like to add?
Is there anything that you would like to ask?
Thank you very much for your time.
Appendix 2.5: Detailed description of the development of the community pharmacist and general practitioner interview schedules.

Section 1 - Local general practices/community pharmacies

The first question on the community pharmacist interview schedule asked:
Where do your prescriptions come from?

The above question was originally phrased as a closed question:
Are your prescriptions from local surgeries?

Further questions then followed to allow the pharmacists to elaborate on their response:
- How many local surgeries are involved?
- How many general practitioners in each surgery?
- Where is each surgery in relation to your pharmacy?

The above three questions were subsequently used as prompts for the first question, removing the word ‘local’ from the first prompt in order to allow the pharmacists’ responses to cover all the surgeries that they received prescriptions from, not just the local ones.

If a pharmacist’s response only covered local surgeries, s/he was then asked:
What about surgeries out of this area ie. more than a mile from your pharmacy?

The issue of non-local surgeries had been covered in an earlier version of the interview schedule by:
The rest (of your prescriptions) are from....(explore)

However, this question was difficult question for the pharmacists to answer because it followed on from the closed question about prescriptions from local surgeries and so it was revised.

The first question on the general practitioner interview schedule asked:
Do you know where your prescriptions are dispensed?

The question was originally a closed question:
Are your prescriptions dispensed at local pharmacies?
followed by a further two questions about the number of local pharmacies involved and their locations. The two follow-on questions were subsequently used as prompts for the first question, again removing the word ‘local’.

The pharmacists and general practitioners were asked:
Do you know how many other pharmacies/surgeries there are in this locality?

In the community pharmacist interview schedule the above question was originally
phrased as:

Do you know how many other pharmacies receive prescriptions from each of the same surgeries as you?

The question was re-phrased to make it easier for the community pharmacists to answer and to build a more accurate picture of the number of local pharmacies, some of which may have been excluded when the question concentrated on pharmacies receiving prescriptions from the same surgeries.

Section 2 - Relationship with local general practitioners/community pharmacists

The community pharmacists and general practitioners were asked:

How would you describe your relationship with each of your local general practitioners/community pharmacists?

Probe fully for each one:
What makes it...?
What do you mean by ...?
What is...about it?

‘Each of’ was included in the main question during the pilot phase in order to evoke any different responses applicable to different local general practitioners/community pharmacists. The probes were added to the main question to ensure a more detailed response was given, including a reason for the nature of the relationship described.

The community pharmacists and general practitioners were then asked about social contact:

Do you have any social contact with any of your local general practitioners/community pharmacists?

Probe How often?
Of what nature?

Social contact was initially investigated by the following question:

Is that relationship/are those relationships (with local general practitioners/community pharmacists): Professional/social/mixture of both?

The above question was altered because it was poorly phrased, difficult to answer for each general practitioner/community pharmacist and did not investigate the extent and nature of any social contact.

Section 3 - Professional Communications

The first question that the community pharmacists and general practitioners were
Appendix 2.5 (continued...)

asked in Section 3 was:
   In you role as a pharmacist/doctor would you say that you initiated most
   contacts with general practitioners/community pharmacists or do the general
   practitioners/community pharmacists usually initiate contact with you or is it a
   bit of both?

The above question was originally phrased as:
   Who usually initiates the professional contacts?

The question did not clearly indicate which professional contacts it was asking about
and so it was revised in order to remove any ambiguity and also to present the
community pharmacists and general practitioners with three clear response options.

The community pharmacists and general practitioners were then asked about the
extent and nature of their professional contacts. In an earlier version of the interview
schedules the questions pertaining to community pharmacist initiated contacts were
all grouped together and so were the questions regarding general practitioner initiated
contacts. The community pharmacists and general practitioners were then asked one
or both groups of questions depending on their response to the question about who
usually initiated the professional contacts. However, even if one of the two groups of
professionals was reported to be the group that usually initiated the professional
contacts, the other group may still have initiated some professional contacts. The
schedules were, therefore, altered and questions that asked for the same information,
for example frequency of contact, about community pharmacist initiated contacts and
general practitioner initiated contacts, were grouped together.

The community pharmacists and general practitioners were asked:
   How do you usually contact general practitioners/community
   pharmacists?
   Any other ways?

   How do general practitioners/community pharmacists usually contact
   you?
   Any other ways?

The word 'usually' was inserted during the pilot phase in order to determine the main
method of contact and the prompt question was added to ensure that all possible
methods of contact that were used had been explored.

The next question concerned the frequency of contacts:
   How often do you contact 1) a general practitioner/community
   pharmacist in general?
   2) each local general practitioner (or surgery)
   /community pharmacist?
Appendix 2.5 (continued...)

How often does 1) a general practitioner/community pharmacist contact you in general?
2) each local general practitioner (or surgery) /community pharmacist contact you?

The above two questions originally only asked the second part of each question - frequency of contact made by each local general practitioner and community pharmacist. The first part was added in order to obtain a general picture of the frequencies of community pharmacist and general practitioner initiated contact. Some community pharmacists and general practitioners may also have found it difficult to answer the ‘each local’ questions, so at least they could provide a general response.

The community pharmacists and general practitioners were asked to provide details of contacts that they had initiated and details of contacts initiated by general practitioners/community pharmacists.

- Details of contacts that you have initiated today; in the preceding week; any others?
- Details of general practitioner/community pharmacist initiated contacts today; in the preceding week; any others?

In an earlier version of the interview schedules the question was phrased as:
- Details of most recent contacts you have initiated.

‘Today; in the preceding week; any others?’ was added to the question to try to ensure that specific examples of actual contacts were given rather than generalised areas of, or reasons for contact.

The community pharmacists and general practitioners were asked:
- How do you feel about contacting (phoning) the surgeries/pharmacists?
  Explore
- How do the general practitioners/community pharmacists respond?
  Explore
- How do you feel when they contact you?
  Explore

The above three questions were originally phrased along the lines of:
- How did you feel about contacting (phoning) the surgeries/pharmacists on these occasions?

The aim of the above question was to encourage any different feelings and responses to be mentioned for the specific examples given. However, during piloting very few specific examples were given. Therefore, it seemed more appropriate to alter the
questions by removing ‘on these occasions’ to cover general feelings and responses and to include an ‘explore’ probe to ensure the inclusion of any different feelings and responses in different situations.

Section 4 - Working Together

In Section 4 the community pharmacists and general practitioners were asked about meetings.

Have you been invited to a meeting - formal or informal - by any of your local general practitioners/community pharmacists?

Have you organised a meeting - formal or informal - and invited a local general practitioner(s)/community pharmacist(s) to attend?

The above two questions were originally combined into one:

Do you have or have you ever had meetings with any of your local general practitioners/community pharmacists?

This question, however, did not distinguish between joint meetings at the invitation of the general practitioner and those at the invitation of the community pharmacist. It was, therefore, split into two questions. The phrase ‘have you ever’ was removed because it was considered superfluous, ‘have you been invited...’ and ‘have you organised...’ adequately covering past and present occasions. The phrase ‘formal or informal’ was included to cover any joint meetings that may have taken place.

The community pharmacists and general practitioners who responded that they would like to work on a particular project with one or more local general practitioners/community pharmacists were asked:

What areas?

Prompt: Anything particularly frustrating that you would like to discuss and work on with one or more of your local general practitioners/community pharmacists or perhaps a particular patient group that you feel you could provide a better service for by collaborating?

The second part of the prompt from ‘or perhaps a particular patient group...’ was included during the pilot phase to encourage the pharmacists and general practitioners to think widely about areas that a joint project could investigate.

The community pharmacists and general practitioners were asked two questions covering the advantages/benefits and the disadvantages/barriers of working closely with local general practitioners/community pharmacists. In an earlier version of the interview schedules the questions specifically asked about the advantages and disadvantages of working together through meetings and projects. However, in order
to make the question open and not to restrict 'working closely' to having joint meetings or participating in joint projects, the two questions were revised.
Appendix 3.1: Letter sent to the FHSA and Health Commission pharmaceutical advisers

THE SCHOOL OF PHARMACY
UNIVERSITY OF LONDON

DEPARTMENT OF PHARMACEUTICS
PROFESSOR J.M. NEWTON
B.Pharm., Ph.D., D.Sc., F.R.Pharm.S.

29-39 BRUNSWICK SQUARE
LONDON WCIN 1AX

Telephone (switchboard) 071 753 5800
Julia Schneider extension 4885
Facsimile 071 753 5920

Nick Barber B.Pharm., Ph.D., M.R.Pharm.S., C.H.S.M.
Professor of the Practice of Pharmacy.

Date

Name of Pharmaceutical Adviser
FHSA/Health Commission Address

Dear M/r/s/rs (Name),

I am a research pharmacist based at the Centre for Pharmacy Practice, The School of Pharmacy, University of London. My research area is the development of working relationships between general practitioners and community pharmacists and as part of this work I am interested to hear about your FHSA. I am interested in any information that you have on current joint interprofessional initiatives, together with any plans for future collaboration. I would also like to know about any training programmes for pharmacists (or general practitioners), that aim to improve communication and professional interaction.

Any information that you have will be most appreciated and I look forward to hearing from you in the near future. If you do not have time to put this information in a letter, I will be happy to talk to you on the telephone. Please do not hesitate to contact me on the number above if you have any queries.

Yours sincerely,

Julia Schneider
Research Pharmacist
Appendix 4.1: Patient proforma letter, completed by the referring general practitioner.

BARNET
FAMILY
HEALTH

Barnet Family Health
Services Authority
313 Ballards Lane
London N12 8NQ

Date as postmark.

Dear .............................,

In Barnet, we are looking at the possibility of pharmacists providing a home visiting service to our patients, where a pharmacist will call on you at home, and discuss your medicines with you. I have recommended you for such a visit, which I hope will be beneficial.

You will receive a telephone call from a pharmacist who is providing this service, to arrange a convenient date to visit you. The pharmacist will bring identification when s/he calls.

If you have a carer or relative you wish to have present during the visit, they are more than welcome.

Yours sincerely,

Dr (Name)
Appendix 4.2: Initial visit interview schedule

THE INITIAL VISIT

PERSONAL DETAILS
Please complete this section in BLOCK CAPITALS.

Visiting Pharmacist Details.
Name .................................................................
Pharmacy Address ...................................................................................................
Telephone Number ...........................................................
Date of Visit .............................................................
Time Visit Started .........................................................
Time Visit Ended .........................................................Length of visit ............... hours .......... mins

Dispensing Pharmacist Details. (Use the dispensing label details)
Name ..........................................................................
Pharmacy Address ..................................................................................
Telephone Number ...........................................................

Doctor Details.
Name ..........................................................................
Surgery Address ...................................................................................
Telephone Number ...........................................................

Patient Details. (* - please ring the correct option)
Name .............................................................................Male/Female *
Address ..........................................................................

Patient’s age(approx) < 40yrs 41-55yrs 56-70yrs 71-90yrs >90yrs*

Does the patient have any physical disabilities ? Please state any here ..............

Is the patient present at this visit ? YES / NO *

Is there a carer/relative/friend present, during this visit ? YES / NO *
If so, what is their relationship to the patient .....................................................

Date of follow up visit (Arrange at the end of this visit) ..................................
BACKGROUND INFORMATION

To the Pharmacist.

Please fill in this section as follows:

• Follow all directions eg. continue, skip.
• Where the question lists a number of options, these may be read out to prompt the patient, if necessary.
• Where the question lists a number of options, please place a tick(✓)in the box next to the chosen option.
• Where the question asks for a YES or NO answer, please ring the option chosen.
• Where the option 'other' is relevant, please answer in the space provided, in BLOCK CAPITALS.

Please ask the patient the following:

1. Do you live with someone ? 
   YES / NO

If YES continue with the indented Qus 2 and 3; if NO skip to Qu.4.

2. Who do you live with ?
   Husband/wife [ ]
   Relative [ ]
   Other(please state)

3. Does (the person you live with) help you to take your medication ? If so, how ?
   YES / NO

4. Do any of the following people visit you ?

<table>
<thead>
<tr>
<th>People</th>
<th>Approximately how often ?</th>
<th>Do they help you to take your medication ?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-5 x / week</td>
<td>2-4 x / month</td>
</tr>
<tr>
<td>Relative</td>
<td>[ ] [ ] [ ] [ ] [ ]</td>
<td></td>
</tr>
<tr>
<td>Friend/neighbour</td>
<td>[ ] [ ] [ ] [ ] [ ]</td>
<td></td>
</tr>
<tr>
<td>Home help</td>
<td>[ ] [ ] [ ] [ ] [ ]</td>
<td></td>
</tr>
<tr>
<td>Social worker</td>
<td>[ ] [ ] [ ] [ ] [ ]</td>
<td></td>
</tr>
<tr>
<td>Health visitor</td>
<td>[ ] [ ] [ ] [ ] [ ]</td>
<td></td>
</tr>
<tr>
<td>District Nurse</td>
<td>[ ] [ ] [ ] [ ] [ ]</td>
<td></td>
</tr>
<tr>
<td>Pharmacist</td>
<td>[ ] [ ] [ ] [ ] [ ]</td>
<td></td>
</tr>
<tr>
<td>Other(please state)</td>
<td>[ ] [ ] [ ] [ ] [ ]</td>
<td></td>
</tr>
</tbody>
</table>

If the answer to the question ‘Do they help you to take your medication?’ was YES, ask the patient

How are you helped with your medication ?

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Appendix 4.2 (continued...)

5. Please write down the most recent dispensing date from the container labels. If the patient did not receive all their prescription medicines on the same prescription, please write down the two most recent dispensing dates below.

1. / / 2. / /

*Approximately when did you get your last prescription medicines?* (You can use the most recent date on the container labels to answer this question).

- Three days ago or less [ ]
- Between four and fourteen days ago [ ]
- Between fifteen and thirty days ago [ ]
- Between thirty one and sixty days ago [ ]
- More than sixty days ago [ ]
- Other (please state)

6. *When you got your last prescription, did you see your doctor (GP) in person?*  
   YES / NO

   If YES continue with the indented Qu. 7; if NO skip to Qu. 8.

7. *Where did you see your doctor (GP)?*  
   - At home [ ]
   - At the surgery [ ]
   - Other (please state)

   Skip to Qu. 9.

8. *Who picked up your repeat prescription from the surgery?*  
   - Husband/wife [ ]
   - Relative [ ]
   - Friend/neighbour [ ]
   - Other (please state)

   Who took your prescription to a pharmacy?  
   [ ]

   Who collected your medicine from the pharmacy?  
   [ ]

   Husband/wife  
   Relative  
   Friend/neighbour  
   Other (please state)  

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THE PATIENT AND THEIR MEDICATION

To the Pharmacist.

If you have not already done so, please ask the patient to bring out all the medication in their possession, including prescription, over-the-counter, herbal and any others.

Please fill in the following drug chart in BLOCK CAPITALS, for all the prescribed medicines in the patient's possession, as the examples at the beginning of the chart illustrate. If you run out of space, please continue on the reverse of the page.

In order to be able to fill in the 'currently taking' column, you will have to ask the patient:

Which of these medicines are you taking at the moment?

As you ask this question, point to each of the medicines in front of you.

The 'should be taking' column can be filled in using the patient's current medication record, that has been provided by the doctor.

The 'previously prescribed, now discontinued' column can be filled in, to identify those prescribed medicines which have been discontinued.

Please fill in these columns as follows:
Y = Yes; N = No; DK = don't know.

<table>
<thead>
<tr>
<th>Drug name</th>
<th>Formulation</th>
<th>Strength</th>
<th>Dose and frequency</th>
<th>Currently taking</th>
<th>Should be taking</th>
<th>Previously prescribed now discontinued.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAVISCON</td>
<td>LQD</td>
<td>20ml</td>
<td>TDS &amp; ON</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>SENOKOT</td>
<td>TABS</td>
<td>2 ON</td>
<td></td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>CIMETIDINE</td>
<td>TABS</td>
<td>400mg</td>
<td>2 BD</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>
Appendix 4.2 (continued...)

Does the patient have any over-the-counter, herbal or any other medicines at home, which have been purchased as opposed to prescribed? (Do not include food supplements and vitamins). YES / NO

If so, please list them in the table below, in BLOCK CAPITALS. If you run out of space, please continue on the reverse of this page. If the patient has a vast number of purchased medicines, please use your professional judgement in deciding which to include here.

Ask the patient:

*Which of these medicines do you ever take?*

As you ask this question, point to each of the medicines in front of you. Use the patient’s answers to complete the column ‘Ever take?’ as follows: Y = Yes; N = No; DK = don’t know.

*How often do you take each one?*

The answers to this question should give an indication of continuity of use, as well as a daily frequency, if applicable.

<table>
<thead>
<tr>
<th>Drug name</th>
<th>Formulation</th>
<th>Ever take/use?</th>
<th>Frequency of self administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robitussin Expectorant</td>
<td>Liquid</td>
<td>Y</td>
<td>Three times a day; every day.</td>
</tr>
<tr>
<td>Glycerin</td>
<td>Supps.</td>
<td>Y</td>
<td>Only when constipated</td>
</tr>
</tbody>
</table>
Appendix 4.2 (continued...)

To the Pharmacist.

Please check the above drug chart and the patient’s medication before answering the following questions. You may need to confirm some details with the patient.

- Where the question asks for a YES or NO answer, please ring the option chosen.
- Spaces have been left for you to fill in problems encountered, action taken and advice given. Please fill these in where appropriate and if there is insufficient space continue overleaf.

1. Does the patient have any out-of-date, never or partly used, discontinued or damaged medicines? YES / NO

If so, please state here those that you remove for disposal (with the patient’s consent) and why. If there are any medicines that the patient does not want you to remove, please give details here as well.

2. How does the patient dispose of any medicines that are out-of-date, discontinued etc?

Please give details here, together with any advice you give on medicine hoarding and disposal.

3. Does medication hoarding seem to be a problem? YES / NO

If so, please state approximate excessive medication quantities and possible reasons for this.

4. Where does the patient store his/her medicines?

Please answer the above question in the space provided and for those medicines you feel are stored incorrectly, please state here any advice that you give on correct storage.

The following list may help you to cover a number of areas: cool, dry place protected from direct light, accessible to the patient; fridge medications.
Appendix 4.2 (continued...)

5. Does the patient have any allergies or hypersensitivities? YES / NO

If so, please give details here.

6. Is the patient taking (or does the patient possess) any medicines to which they have an allergy or hypersensitivity? YES / NO

If so, please state which medicine(s), the nature of the adverse drug reaction, any action that you take and advice you give.

7. Are there any drug-drug or drug-disease interactions? YES / NO

If so, please state here the nature of the interaction(s), any action that you take and advice you give.

8. Ask the patient to demonstrate and/or explain how they take each of their medications. This should highlight whether the patient has any:

- Physical problems eg. reading labels, opening containers/blister packs, pouring liquids.
- Administration problems eg. use of inhaler, swallowing tablets, self-injection.
- Understanding dosage instructions eg. with food, as before, as directed, at night.

Please state here any problems that you discuss with the patient, and any advice that you give.

9. Ask the patient the following:
   *It is not always possible to take your medicines as the doctor tells you to. Do you feel that you manage to take all your medicines according to the instructions on the label?*  
   Always / Sometimes / Never

If the patient answers ‘always’, try a probe such as:
*Are you sure? I just want to help you to understand the importance of your medication.*

If the patient answers ‘sometimes’ or ‘never’ (or changes their ‘always’ answer on further questioning), then ask them:
*Can you explain why?*
Appendix 4.2 (continued...)

The following may be helpful probes - forgetful, confused, do not understand the instructions, do not think that medicines help.

Please indicate the patient’s answers here, together with any advice that you give.

10. Ask the patient:
    *Do you feel as though you suffer from medication side effects?*

The patient may not readily identify medication side effects as such, so you may need to be more specific in the light of the medication that they are taking. Please state here any side effects you discuss with the patient and any advice that you give.

11. In your opinion, if they were readily available, would the patient benefit from a compliance device such as a monitored dosage system or a medication chart? YES / NO

Please explain your answer here, and if the answer is YES, what would you recommend and why.

12. Please circle the number below that indicates how well you feel the patient manages his/her medication.

Placing a circle around number 1 indicates that the patient can manage all their medicines correctly and placing a circle around number 5 indicates that the patient is unable to manage any of their medicines.

Manages all medicines correctly

1 2 3 4 5 Is unable to manage any medicines

Please tick one of the boxes below to show whether the level of patient management you have indicated is with or without the help of a carer/friend/relative.

With help [ ] Without help [ ]

If you have any further comments you wish to add about the patient's ability to manage their medicines, please do so here.
13. What level of support does the patient already receive from his/her doctor and dispensing pharmacist?

If the patient has no further questions, then you have completed the domiciliary visit.

The following information should be added to Page 1 - Personal Details:

Please now arrange a suitable date with the patient for a follow-up visit, unless one of the exemptions applies. The follow-up date should be made approximately one month from the date of this visit.

Please add the time the visit finished and the length of time the visit took.

If you have not yet identified the dispensing pharmacist, please do so now. If there is more than one, try to determine which one is used most often. If this is not possible, then include the names of up to three pharmacists who dispense for this patient.

Please thank the patient for their time and co-operation.

PLEASE REMEMBER TO COMPLETE THE DOMICILIARY VISIT SUMMARY OVERLEAF
DOMICILIARY VISIT SUMMARY

To the Pharmacist.
This section may be filled in after the domiciliary visit, when you have returned to the pharmacy. If there is insufficient space, please continue on a separate sheet of paper.

Please fill in the Summary Table, from your questionnaire.

The following suggestions may be suitable as problem categories:
Medication hoarding, medication storage, patient allergy, patient hypersensitivity, drug interaction, physical problem, administration problem, patient understanding, patient compliance, drug side effects.

This should be followed by a more detailed description of the problem, the action that you took and advice that you gave, during the domiciliary visit, as illustrated below.

Example of the Summary Table.

<table>
<thead>
<tr>
<th>Problem Category</th>
<th>Nature of Problem</th>
<th>Any Action Taken</th>
<th>Any Advice Given</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine disposal</td>
<td>Antacid tablets out-of-date</td>
<td>Removed for disposal</td>
<td>Check the expiry date on old medicines. Should be returned to pharmacy for disposal.</td>
</tr>
<tr>
<td>Patient understanding</td>
<td>Ambiguous ‘as directed’ instruction on three recently prescribed medicines. Patient not sure exactly how to take.</td>
<td>Told patient I would confirm with Dr. And get back to her.</td>
<td>Advised to carry on taking as before until I can confirm the dosage directions.</td>
</tr>
</tbody>
</table>

If you feel that the prescribing doctor and/or the dispensing pharmacist need to take some action, please fill in the tables under “Request for Intervention”. If there is no need for an intervention, then please delete the “Intervention Requested” options.

Please return the whole report as soon as it is completed, to Julia Schneider, the research pharmacist, in one of the reply-paid envelopes provided. A copy of the personal details section, the patient drug chart and the visit summary will be sent to you, for your records, and should be taken to the follow-up visit.

Thank you very much for your participation.
### Domiciliary Visit Summary

#### The Summary Table

<table>
<thead>
<tr>
<th>Problem Category</th>
<th>Nature of Problem</th>
<th>Any Action Taken</th>
<th>Any Advice Given</th>
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</tr>
</tbody>
</table>

* - Please delete the incorrect option.

**Request for Prescriber Intervention.**

Intervention Requested / No Intervention Requested *

**ACTION TO BE TAKEN BY THE PRESCRIBER**

|                  |                  |                  |                  |
|                  |                  |                  |                  |
|                  |                  |                  |                  |
|                  |                  |                  |                  |

**Request for Dispensing Pharmacist Intervention.**

Intervention Requested / No Intervention Requested *

**ACTION TO BE TAKEN BY THE DISPENSING PHARMACIST**

|                  |                  |                  |                  |
|                  |                  |                  |                  |
|                  |                  |                  |                  |
|                  |                  |                  |                  |

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Appendix 4.3: Follow-up visit interview schedule

THE FOLLOW-UP VISIT

Date of visit........................................................................................................

To the Pharmacist
Using the patient's medication record and the initial visit summary sheet to help you,
please answer the following questions.

• Where the question asks for a YES or NO answer, please ring the option
  chosen.
• Spaces have been left for you to fill in the answers to the questions. If there is
  insufficient space please continue overleaf.

1. Did you give any advice and counselling to the patient during your initial
   visit? If so, please state here what advice you gave and to what extent the
   patient is following it (or not).

   You may have to run through each piece of advice with the patient, in order to
   determine to what extent they have been compliant.
   For example:
   During my last visit I gave you some advice about how to use your inhaler
   properly. Can you show me how you have been using it?

2. Please note here any medication changes since your initial visit and any
   matters arising from these changes.

3. Explore the following areas with the patient to determine whether any
   previous problems remain or new problems have arisen.
   • Out-of-date, never or partly used, discontinued or damaged medicines to be
     disposed of.
   • Problems with medicine storage.
   • Adverse drug reactions.
   • Drug-drug or drug-disease interactions.
   • Medication side effects.
   • Physical problems.
   • Administration problems.
   • Understanding dosage instructions.
   • Compliance.

   If this highlights any problems please detail here together with any advice that you
   give.
4. If you telephoned the patient, their doctor or the dispensing pharmacist after the initial visit, to confirm a query, please give details here.

5. On the initial visit summary:
   Did you ask the prescriber to take any action? YES / NO
   Did you ask the dispensing pharmacist to take any action? YES / NO

   If the answer is YES to either of these questions continue with the indented Qu. 6.
   If the answer is NO to both of them skip to Qu. 7.

6. Please detail here what interventions you requested, from whom and to what extent your advice has been followed.

7. Please explain in what ways (if any) you feel the domiciliary visit has been beneficial to the patient, the doctor, the dispensing pharmacist and you.

8. Please detail here your personal views and feelings about the visits you have made to this patient.

If the patient has no further questions, you have finished the follow-up visit. The pages overleaf can be filled in when you have returned to the pharmacy.

Length of time visit took................hours......................mins

Please thank the patient for their time and co-operation.
Appendix 4.3 (continued...)

PERSONAL DETAILS

To the Pharmacist.

Please complete this section in BLOCK CAPITALS.

Patient's Name ...................................................................................................

Doctor's Details
Name ...................................................................................................

Surgery Address ..................................................................................................

Telephone Number ..........................................................

Visiting Pharmacist Details
Name ...................................................................................................

Pharmacy Address ..................................................................................................

Telephone Number ..........................................................

Dispensing Pharmacist Details. (Use the dispensing label details)

Name ...................................................................................................

Pharmacy Address ...................................................................................................

Telephone Number ..........................................................

DOMICILIARY FOLLOW - UP VISIT SUMMARY

To the Pharmacist.

Please fill in the follow - up visit summary overleaf and if there is insufficient space,
please continue on a separate sheet of paper.

If you feel that the prescribing doctor and/or the dispensing pharmacist need to take
some action, please fill in the tables under ‘Request for Intervention’. If there is no
need for an intervention, then please delete the ‘Intervention Requested’ options.

Please return the whole report as soon as it is completed, to Julia Schneider, the
research pharmacist, in one of the reply-paid envelopes provided. A copy of the visit
summary will be sent to you, for your records.

Thank you very much for your participation.
DOMICILIARY FOLLOW-UP VISIT SUMMARY

Patient Name

The Summary Table

<table>
<thead>
<tr>
<th>Problem Category</th>
<th>Nature of Problem</th>
<th>Any Action Taken</th>
<th>Any Advice Given</th>
</tr>
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</tbody>
</table>

* - Please delete the incorrect option.

Request for Prescriber Intervention.

Intervention Requested / No Intervention Requested*

ACTION TO BE TAKEN BY THE PRESCRIBER

Request for Dispensing Pharmacist Intervention.

Intervention Requested / No Intervention Requested *

ACTION TO BE TAKEN BY THE DISPENSING PHARMACIST
Appendix 4.4: ‘No follow-up visit’ schedule

NO FOLLOW-UP VISIT REPORT.
This report should only be completed when a follow-up visit is not going to be made for one or more of the following reasons:

- The patient was not requested to take any action at the initial visit and no general practitioner and/or dispensing pharmacist intervention requests were made.
- The patient would not benefit from a follow-up visit.
- The patient did not want a follow-up visit.

Patient's Name

Doctor's Name

Visiting Pharmacist

Dispensing Pharmacist

Please explain in what ways (if any) you feel the domiciliary visit was beneficial (or not) to the patient, the doctor, the dispensing pharmacist and yourself.

Please detail here your personal views and feelings about the visit you made to this patient.

Please return this report with the patient's completed initial visit schedule.
Thank you for your participation.
Appendix 4.5: Dispensing pharmacist interview schedule.

Interview Schedule for the Dispensing Community Pharmacists

I am planning to visit all the pharmacists who were identified during the domiciliary visits, as being the regular dispensing pharmacist for one or more of the patients who were visited during the study.

PMRs, prescription collection and medicine delivery.
I would like to start by asking you a few questions about aspects of your practice.

Do you keep PMRs?

*If YES:*
Are these manual or on computer?

If COMPUTER: Which computer system do you use?

Is every patient entered onto your PMR system, or do you select which patients to enter?

If SELECT: Which patients do you select?

Can you enter patient specific information other than medication? eg. chronic illnesses, allergies, need for non-CRCs?

*If YES:* Do you do this?

When you receive a prescription for repeat medication would you be able to compare it with what was previously prescribed?

Have your PMRs ever highlighted issues that you have needed to raise with a patient’s GP?

Probe: Discrepancies between medication previously prescribed and currently prescribed?

Give examples if possible.

*If YES or NO to having PMRs, continue with:*
Do you ever collect prescriptions or deliver medication for your patients?

*If YES:*
Which do you do?
Do you do this yourself or is it another member of staff?
Appendix 4.5 (continued...)

If YES to collect prescriptions, if self and/or member of staff:
Where from? e.g. patient, surgery.
For how many patients?
Regular basis or occasionally?

If YES to medication delivery, if self and/or member of staff:
For how many patients?
Regular basis or occasionally?

If self:
Do you give the patient any medication advice when you call?

If YES:
What on?
Probe Current prescription medication/medication being delivered/all medication.

If NO to prescription collection and medicine delivery:
Would you be willing to provide a prescription collection and medicine delivery service to patients who requested it? /GP requested?

Do you think you could identify patients who need such a service?
Probe: Which classes of patients would they be?

Domiciliary visits - in general.

I would like to continue with domiciliary visits by community pharmacists and your general opinions on these.

What are your feelings about CPs making domiciliary visits?
Probe: Benefits - to you and the patient?
Disadvantages/problems - to you and the patient?

Do you think that it is a suitable role for CPs? Why?

Which groups of patients, if any, do you think would benefit from domiciliary visits?
Do you dispense for patients that you know fit into these categories?

If YES:
Do you think that they would benefit from a domiciliary visit?
Would you be prepared to visit them?

If YES or NO to the above:
Would you be prepared to visit patients referred to you by their GP?

If NO:
Why not?
Would you be willing to under certain circumstances? eg. free locum cover

Domiciliary pilot study.
I would like to move on the Barnet pilot study and ask you a few questions about that.

Do you remember the Barnet study?

If NO:
Sixteen volunteer CPs visited 39 housebound patients who were having difficulty with their medication. The patients were referred to the study by their GPs, who provided a patient medication record for each patient that they referred. The CPs reviewed the patient's medication and discussed any problems during the visit. Eighteen patients received a follow-up visit approximately one month later.

What did you think about the Barnet domiciliary study?

Do you remember receiving (a) visit summaries (y) for your patients?

If YES:
Do you remember what the summaries were about?
Prompt: General areas covered or details?

If YES and correct: That's right......

If YES and incorrect or NO:
The visit summaries gave details of any problems discussed with the patients, together with action taken and advice given by the visiting pharmacist and intervention requests were made to the patient's GP or you, their dispensing pharmacist, as appropriate.

(Show them the sheets for their patients and continue:)

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Appendix 4.5 (continued...)

What did you think about the visit summaries (in general)?
Probe: Were they useful to you?
   *If YES:* In what way(s)?

Do you think they would have been useful to the patients' GPs?

What did you think of the interventions you were requested to make?

Did you act on them?

   *If NO:*
   Why not?

What did you think of the interventions that the GPs were requested to make?
Probe: Useful/appropriate/interesting/don't know?

What do you think the GPs receiving these interventions would have thought about them?
Probe: Useful in patient care/inappropriate role for CP?

Do you feel that a pharmaceutical domiciliary scheme would have an effect on the relationship with the GPs of those patients that you visit?

   *If YES:*
   In what way?

   *If NO:*
   Why not?

The initial domiciliary visits took an average of one hour to complete. This did not include time spent before the visit reviewing the patients' medication, time to travel to and from their pharmacy (or home, if the visit was made after working hours) or time spent completing the summary, after the visit. The total time spent on one visit was, therefore, approximately two and a half hours.

What do you consider to be acceptable remuneration/per visit?

That is all the questions that I have.
Do you have anything you wish to add?
Thank you very much for your time.
Appendix 4.6: General practitioner interview schedule

Interview Schedule for the Referring GPs

You and Your Practice
I am not too familiar with the systems used in general practice, so to start I would like to ask you some questions about this surgery and your prescribing patterns including PMRs and repeat prescribing.

a. Each long term prescription is for approximately how long a time period?
   Prompt: Two weeks, one month, three months etc

b. Do you have your own patients, or can a patient see any GP in the practice?

c. How do you keep records of your patients' medication?
   (If computer PMRs: Do you keep notes as well?
   Does every GP have their own computer terminal?)
   Probe: Is their medication part of their notes or do you make a separate medication summary sheet and put that with their notes?
   Do you keep separate PMRs for your patients either on cards or on a computer?
   Does the surgery have a computer system? If so, what is it used for?
   Where did you get the information from for the PMRs you supplied for the domiciliary visits?

d. When are your patients' records updated:
   ........following a surgery consultation?
   Prompt: Are the patients' records (notes) completed during the consultation, immediately post consultation or are they completed at the end of that surgery session?
   ........following a home visit?
   Prompt: Do you take the patient’s notes with you?
   Do you complete their records there or do you wait until you return to the surgery?
Appendix 4.6 (continued...)

If GP holds separate PMRs, ask:

e. When are the PMRs updated following a consultation/home visit?
   Probe: Immediately afterwards?
           At a later stage from the notes?
           Who are they updated by?

f. When are records (and PMRs if relevant) updated, if (another GP in this practice or) a locum prescribes for one of your patients?
   Probe: As before?
           Who does the updating?

g. What do you think of your medication record system?
   Probe: Is it easy to use?
           Can you easily identify which medications your patients are currently taking?
           Do the PMRs hold backdated medication - items which have been discontinued?
           Do you feel your records are up to date?
           Do you think the system could be improved?
           *If so:* How would you improve it?
           *If no:* Why not?

Moving on to repeat prescribing:

h. How many repeat prescriptions can a patient receive before requiring a check-up or medication review?
   Probe: Is this for all patients or only those on new medication?
           Are those patients taking medication ‘for life’ reviewed as frequently?
           Is this for certain medication/condition groups?

i. How are repeat prescription requests made?
   Probe: By telephone?
           By letter?
           By returning the computer generated repeat request form?

j. When are your patients’ records updated following a repeat prescription request?
   Probe: As soon as the request is received?
           At the end of surgery?
           Who are they updated by?
Appendix 4.6 (continued...)

k. What method do you use to control repeat prescription requests?
   Rephrase: How do you prevent patients receiving a three month supply prescription one week and asking for another two weeks later?

   Probe: Is this effective?
   Do you know if your patients hoard medication?
   Do patients return discontinued/expired medication to you?

Referral Criteria
The criteria that you were asked to use, when referring a patient for a domiciliary visit were that the patient should be both housebound and have some difficulty with their medication due to a medical, physical or psychological condition.

a. What did you think about these referral criteria?
   Probe: Were they comprehensive?
   Were they easy to use?
   Were they too general?
   How did you define ‘housebound’?
   How did you define ‘difficulty with medication’?

b. How did you go about identifying patients who fitted the referral criteria?
   Probe: What methods did you use?
   Was it easy for you to do this? Why?
   Would it be possible with your record system to mark certain patients eg. provide an asterisk next to every housebound patient, to help you to identify them?
   Would you consider doing this?

c. If you had not been given any referral criteria to use, in selecting patients who you felt would benefit from a domiciliary visit, what criteria would you have used to help you to select them?

   Rephrase: In other words, which patients do you feel would benefit most from a domiciliary visit?
   How would you identify them?

d. Could you identify further patients, with your criteria in place, who you would consider referring for a domiciliary visit?

   If YES: Would you be happy to refer them?
   If NO: Why not?
Appendix 4.6 (continued...)

If the following criteria have not been mentioned ask:

e. Do you think that the criteria ‘elderly’ and ‘taking a minimum of 5 oral medications’ should have been included?
   
   \textit{If YES:} Would this have helped you to refer more patients?
   \textit{If NO:} Why not?

f. Did you refer patients with known problems, or just suspected ones?
   
   Probe: Do you think that problems which may have led you to refer a particular patient, should be noted on the patient referral form? (Show various patient referral forms)

g. How did you feel about supplying a PMR for each patient?
   
   Probe: How did you feel about pharmacists using your PMRs? Did you feel that the pharmacists needed the patient's PMR prior to the home visit?

Referral from other Sources

The steering group that managed this pilot project appreciated that patients could be referred for a domiciliary visit from a number of sources, but chose to use GP referral only in this study.

If you were fully informed about any referrals made to the domiciliary scheme and could decide if a visit was appropriate or not, how would you feel if one of your patients was referred by:

...... another health care professional eg. pharmacist, district nurse?

...... a lay carer, such as a friend, neighbour, home help etc?

Probe: Do you think referral from more than one source is a good idea?
   
   \textit{If YES:} Why?
   \textit{If NO:} Why?
   
   Would you want to be the only source of referral?

Do you have any other comments to make or issues to raise on patient referral?
Informing the Patient and Who should Visit?

In the letter I sent to you, asking for the patient referrals, I enclosed copies of a proforma letter that you were requested to send to each patient referred to the study. This letter informed the patient that their GP had referred them for a domiciliary visit and introduced the community pharmacist who would be contacting them shortly to arrange the visit date. (Show a copy of the proforma).

a. Do you remember seeing copies of this letter?
   
   If YES: What happened to them?
   Did they get sent to your patients?
   
   If NO: What happened to them?
   Did you inform your patients by another method?
   If SO: What method?
   Did patients complain that they had not been told about the pharmacist’s visit?

b. What would have been the best method of informing your patients’ about the visits?
   Probe: Letter on own headed paper (as opposed to the FHSA)?
   A telephone call?
   Personal contact with the patient?
   A letter from the visiting pharmacist?

c. How important is it that the pharmacist is introduced to the patient by their GP?
   ........ in this study, where the patient did not know the pharmacist?
   ........ in a study where the patient did know the pharmacist, but had never received a home visit?

d. Do you feel that it would be better for patients to be visited by a pharmacist that they know ie. their own regular dispensing pharmacist?
   Probe: Why?
   What do you think your patients would prefer?

e. If the patients were visited by their dispensing pharmacist, who held their own PMRs for all their patients, they would be able to compare their PMR with the one provided by the surgery. What do you think about this?
   Probe: Would it pose any problems?
   Would it be of any benefit?
   Could this help you?
Appendix 4.6 (continued...)

Summary Sheets and Interventions
You were informed about each visit made to your patients and sent a visit summary report. This contained two sections, one giving you feedback on the areas that the patient and pharmacist had discussed, as well as any advice given and action taken by the pharmacist. The second section requested an intervention or action by you, if necessary.

a. Do remember seeing the summary sheets for your patients?
   If YES: What did you do with this information?
   Where did you put the summary sheets after reading them?
   
   If NO: Did you receive the feedback from the visits made to your patients?

   (Show copies of the summary sheets.)

b. What did you think about the feedback provided on the visit summaries?
   Probe: Was it useful?
   What did you think of the quality/depth of information you were given?
   Did the feedback give you any new information?
   Were any important points highlighted through the visit?
   Did it help you with patient management?

   (Remind GP of the interventions s/he was asked to make.)

c. What did you think of the interventions you were requested to make?
   Probe: Did you find the intervention requests inappropriate, appropriate but did not require action or appropriate and did require action?
   Approximately how many were in each category?
   If 'inappropriate', why do you think this?

   Did you act on those interventions that required action?
   If YES: How did you go about this?
   If NO: Why not?

d. How did you feel about accepting clinical suggestions made by pharmacists?
   Probe: What do you think the pharmacist's role in the domiciliary visits should be?
   How well do you feel that they approached this new role?
   Did you find the intervention information valuable and of patient benefit or not?
Appendix 4.6 (continued...)

Conclusion

Part 1
To conclude I would like to ask you what you feel, in general, about these visits and the future provision of a domiciliary service provided by community pharmacists.

a. Do you think that the service is a good idea or not?
   Prompt: Why?

b. Would you like the service to operate any differently? If so, how?

c. Do you feel that your patients' benefitted from their visits or not?
   Prompt: Why?

d. Would you want an ongoing domiciliary service for those patients who did benefit?
   Prompt: Why?

e. Do you feel domiciliary visits could be beneficial to you?
   If YES: In what ways?
   If NO: Why not?

f. Would such a service have any effect on your workload?
   Probe: Increase/decrease it?
          Why do you think this?

Part 2
Do you feel that it could improve communication and relationships between GPs and their local CPs?

If YES: In what ways?
If NO: Why not?

That completes all my questions.
Thank you very much.
Do you have any more points you wish to add about this pilot study?
Any questions?

Finally review with the GP any patient/medication issues that were not brought to their attention on the visit summaries.

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Appendix 4.7: An explanation of the discrepancies between medicines in possession, those currently being taken and those listed on the patients' medication records.

The following table explains the basis of the 'reason(s) for the discrepancies' judgements, where:

For possession (P): ✓ = item in possession  X = not in possession

For currently taking (CT): ✓ = item currently taking  X = not currently taking

For medication record (PMR): ✓ = item listed on PMR  X = not listed on PMR

For discontinued (DIS): ✓ = discontinued item  X = not discontinued

Key: OK = no discrepancy; NA = non-adherence; IR = inaccurate record; H = Hoarding; NO = impossible combination of discrepancies.

<table>
<thead>
<tr>
<th></th>
<th>P</th>
<th>CT</th>
<th>PMR</th>
<th>DIS</th>
<th>Reason(s)</th>
</tr>
</thead>
<tbody>
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<td>✓</td>
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<td>OK</td>
</tr>
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<td>✓</td>
<td>✓</td>
<td>NO</td>
</tr>
<tr>
<td>15</td>
<td>X</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
<td>NO</td>
</tr>
<tr>
<td>16</td>
<td>X</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>NO</td>
</tr>
</tbody>
</table>
A total of 16 combinations are feasible, as illustrated above, however, the last five are impossible combinations. In Combinations 11 and 12 it would not be possible to have an item 'not in possession, not currently being taken and not listed on the PMR' because such an item would never be discovered, if the patient did not have any and it was not recorded on the PMR. The last four combinations (13 to 16) are not possible, because you could not have an item not in possession and currently being taken!!

For the other 10 combinations, the reasons for the discrepancies between items in possession, currently being taken and listed on the PMR are shown; explanations now follow.

Combinations 1 and 2

If a patient is currently taking an item in their possession, which is also listed on their PMR and the item has not been discontinued (combination 1), then there is no discrepancy (OK). If, however, discussion with the patient or the date on the container label, leads the visiting pharmacist to conclude that the item has been discontinued, then the discrepancies can be attributed to non-adherence (administering a discontinued medicine), hoarding (of a discontinued medicine) and an inaccurate record (the discontinued item was listed on the PMR).

Combination 3

If the patient is currently taking an item in their possession, which has not been discontinued, but the item is not listed on the PMR, the discrepancies can be attributed to an inaccurate record.

Combination 4

If the patient is not currently taking an item in their possession, which has not been discontinued and is listed on the PMR, then the discrepancies can be attributed to non-adherence (patient is not taking a currently prescribed item).

Combination 5

If the patient is not currently taking an item in their possession, which is not listed on the PMR, but has not been discontinued, the discrepancies can be attributed to non-adherence and an inaccurate record.

Combination 6

If the patient has a discontinued item in their possession, which they are not taking and is not listed on the PMR, then the discrepancies can be attributed to hoarding.
Combination 7

If the patient is currently taking an item in their possession, which has been discontinued and is not listed on the PMR, then the discrepancies can be attributed to non-adherence and hoarding.

Combination 8

If the patient has a discontinued item in their possession, which they are not taking, but it is listed on their PMR, the discrepancies can be attributed to hoarding and an inaccurate record.

Combination 9

If the patient has a discontinued item listed on their PMR, then the discrepancies can be attributed to an inaccurate record.

Combination 10

If the patient has an item listed on their PMR and it has not been discontinued, but the patient does not have a supply of the item and, therefore, is not taking it, the discrepancy can be attributed to non-adherence. This is going strictly by the definition of non-adherence, the patient is omitting a currently prescribed medicine. There could be a number of reasons for the patient not having a supply of the item including:

- The patient forgot to request it, when asking for a repeat prescription.
- The surgery missed the item off the repeat prescription.
- The patient has mislaid the item.
- The patient has only just run out and has been unable to obtain a new prescription.
- The patient has not yet had the new prescription dispensed.

Examples follow to illustrate how the 'reason(s) for the discrepancies' judgements were made for the patients, using the above chart as the theoretical model. The 'discontinued' column has only been completed for those items where it helped the research pharmacist to make the judgement. The information, for each patient, was gathered from the drug chart completed by the visiting pharmacist. For each patient the number of items in possession (P), currently being taken (CT) and listed on the patient's medication record (PMR) are given initially.

Patient 1

\[
\begin{array}{ccl}
P & = & 10 \\
CT & = & 9 \\
PMR & = & 4 \\
\end{array}
\]
### Appendix 4.7 (continued...)

<table>
<thead>
<tr>
<th>P</th>
<th>CT</th>
<th>PMR</th>
<th>DIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paracetamol tablets</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Stemetil 5mg tablets</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Propine eye drops</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Pilocarpine eye drops</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Triludan 60mg tablet</td>
<td>✔</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Prednisolone EC 5mg tablets</td>
<td>✔</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Chlorpheniramine 4mg tablets</td>
<td>✔</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Betnovate scalp application</td>
<td>✔</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>E45 cream</td>
<td>✔</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Frusemide 20 mg tablets</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

The patient was taking all but one of the medicines in possession, frusemide 20mg tablets, which were not listed on the PMR, but had not been discontinued according to the drug chart. Further discussion revealed that the patient had thought that the Stemetil tablets were the frusemide tablets and she had stopped taking the real frusemide tablets. Therefore, the discrepancies between possession, currently taking and listed on the PMR for frusemide were attributed to non-adherence and an inaccurate record (combination 5).

A further five items that the patient was currently taking were also not listed on the PMR, but none of them had been discontinued according to the drug chart. These discrepancies were, therefore, attributed to an inaccurate medication record (combination 3).

### Patient 2

<table>
<thead>
<tr>
<th>P</th>
<th>CT</th>
<th>PMR</th>
<th>DIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paracetamol tablets</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Propranolol LA 160mg capsules</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Temazepam 10mg capsules</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Aspirin 75mg tablets</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Co-danthrusate capsules</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Lactulose syrup</td>
<td></td>
<td>✔</td>
<td>X</td>
</tr>
<tr>
<td>Cerumol ear drops</td>
<td></td>
<td>X</td>
<td>✔</td>
</tr>
<tr>
<td>Co-proxamol tablets</td>
<td></td>
<td>X</td>
<td>✔</td>
</tr>
<tr>
<td>Ibuprofen 600mg tablets</td>
<td></td>
<td>X</td>
<td>✔</td>
</tr>
<tr>
<td>Co-codamol tablets</td>
<td></td>
<td>X</td>
<td>✔</td>
</tr>
<tr>
<td>Calamine lotion</td>
<td></td>
<td>X</td>
<td>✔</td>
</tr>
<tr>
<td>Chloraseptic spray</td>
<td></td>
<td>X</td>
<td>✔</td>
</tr>
<tr>
<td>GTN 500mcg tablets</td>
<td></td>
<td>X</td>
<td>✔</td>
</tr>
</tbody>
</table>

321
The patient was only taking five of the medicines in his/her possession, of these four were also listed on the PMR. Paracetamol tablets were not listed on the PMR, so this can be attributed to an inaccurate record, as the tablets were not listed as ‘previously prescribed now discontinued’ on the patient’s drug chart (combination 3).

The patient was not taking Lactulose, which was listed on the PMR and had not been discontinued according to the drug chart. This was, therefore, non-adherence (combination 4).

All the other medicines (seven) were ‘previously prescribed now discontinued’ according to the PMR (ie they were not listed on it) and the drug chart, so these were being hoarded (combination 6).

**Patient 3**

\[
P = 2 \\
CT = 1 \\
PMR = 2
\]

<table>
<thead>
<tr>
<th>P</th>
<th>CT</th>
<th>PMR</th>
<th>DIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ibuprofen 400mg tablets</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Paracetamol 500mg soluble tablets</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>Nefopam 30mg tablets</td>
<td>✓</td>
</tr>
</tbody>
</table>

The patient had paracetamol tablets in possession which s/he was not taking; they were not listed on the PMR and they had not been discontinued according to the drug chart. Therefore, the discrepancies for this item were attributed to non-adherence and an inaccurate record (combination 5).

Nefopam tablets were listed on the PMR but these had been discontinued. The discrepancies here were, therefore, attributed to an inaccurate record (combination 9).

**Patient 4**

\[
P = 4 \\
CT = 4 \\
PMR = 4
\]

<table>
<thead>
<tr>
<th>P</th>
<th>CT</th>
<th>PMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timoptol 2.5% eye drops</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Betagan eye drops</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Senokot granules</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Aspirin EC 300mg tablets</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

There were no discrepancies for this patient (combination 1).
Patient 5

P = 9
CT = 6
PMR = 8

<table>
<thead>
<tr>
<th>P</th>
<th>CT</th>
<th>PMR</th>
<th>DIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bricanyl 2.5mg respules</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Atrovent 250mg nebules</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Pilocarpine 2% eye drops</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Aminophylline SR 225mg tablets</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Frumil tablets</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Becloforte inhaler</td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Becotide nebuliser solution</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Beconase nasal spray</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Betopic 0.5% eye drops</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The patient was not taking/using three items: Becotide nebuliser solution, Beconase nasal spray and Betopic eye drops. These were all listed on the PMR, but were recorded as ‘previously prescribed now discontinued’ on the drug chart. The discrepancies for these items were, therefore, attributed to hoarding and an inaccurate record (combination 8).

The Becloforte inhaler was not listed on the PMR, but should have been; the patient was using it and it had not been discontinued. The discrepancies for this item were, therefore, attributed to an inaccurate medication record (combination 3).

The above ‘judgement’ process was carried out for each patient in order to determine which factor or factors had been responsible for the observed discrepancies in each case.
Appendix 5.1: Letter sent to the proposed general practitioner participants

THE SCHOOL OF PHARMACY
UNIVERSITY OF LONDON
DEPARTMENT OF PHARMACEUTICS
PROFESSOR J.M. NEWTON
B.Pharm., Ph.D., D.Sc., F.R.Pharm.S.

DEPARTMENT OF PHARMACEUTICS
PROFESSOR J.M. NEWTON
B.Pharm., Ph.D., D.Sc., F.R.Pharm.S.

29-39 BRUNSWICK SQUARE
LONDON WC1N 1AX

Telephone (switchboard) 0171 753 5800
Julia Schneider (direct line) 0171 753 5860
Facsimile 0171 753 5920

Nick Barber B.Pharm., Ph.D., M.R.Pharm.S., C.H.S.M.
Professor of the Practice of Pharmacy.

Dr (Name)
Practice Address
Date

Dear Dr (Name),

I am a research pharmacist based at the Centre for Pharmacy Practice, The School of Pharmacy, University of London. My area of research involves the development of working relationships between general practitioners and community pharmacists and to this end, I am hoping to set up an interdisciplinary group in Redbridge and Waltham Forest, with the backing of the FHSA and the Medical Audit Advisory Group (MAAG), to investigate the development of the working relationship between individual pairs of general practitioners and community pharmacists. Your name was given to me by the MAAG chair, on the grounds that you may be interested in participating.

The group will consist of pairs of general practitioners and community pharmacists who have regular day-to-day contact with each other and hence serve the same sector of the population. The group will be given the opportunity to discuss areas with the potential for collaborative work and each pair will then be asked to select an area of mutual interest and potential patient benefit for their own collaborative initiative. I will be acting as group facilitator and will provide support for each initiative. The proposed time scale for the study is one year and although it is intended to hold a number of group meetings to allow for feedback and the sharing of ideas, it is envisaged that most of the work for the initiatives can be incorporated into the daily work routine.

If you are interested in participating please complete the attached form, nominating a community pharmacist partner, with whom you have regular contact, to work with in this group and return the form to me by (date) in the SAE provided. I have enclosed an introductory letter for you to pass on to the pharmacist you nominate and I will be contacting them once I have received your nomination. The pharmacist will then be invited to participate as your partner.

If you have any questions or would like any more information, please do not hesitate to contact me on the number above.

Yours sincerely,

Julia Schneider
Research Pharmacist

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Appendix 5.2: Client interview schedule

Client Interview in the Pharmacy

Client........... Sex............... Age band............... 

Have you ever spoken to a pharmacist when you or a member of your family were unwell, other than in connection with a prescription?

If NO:

Who would you usually consult about illness?

*For a specific incident when a pharmacist was consulted can you tell me:*

Who was unwell?

What were the symptoms?

Were you given any advice by the pharmacist?

Was a product recommended?

If so: What was it?

Did you buy it?

Did you use it?

How long for?

What happened?

Did you then visit your GP for the same symptoms?

If YES: When was that in relation to your visit to the pharmacy?

What happened?

Thank you very much.

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### Appendix 5.3: Data collection form used by the general practitioner

<table>
<thead>
<tr>
<th>Information to be gathered</th>
<th>Patient 1</th>
<th>Patient 2</th>
<th>Patient 3</th>
<th>Patient 4</th>
<th>Patient 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the patient (or their representative) been to a pharmacy before presenting with the current condition?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has the patient used a pharmacy product for the current condition?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| *If a product has been used:*  
  What was it?                                                                 |           |           |           |           |           |
| Was it bought specifically to treat this condition or already in the home?                |           |           |           |           |           |
| How long was it used for?                                                                |           |           |           |           |           |
| *If the patient (or their rep.) went to a pharmacy regarding the current condition:*     |           |           |           |           |           |
| Who went to the pharmacy?                                                                |           |           |           |           |           |
| How long ago?                                                                            |           |           |           |           |           |
| Did the patient (or their rep.) ask for advice and/or self-select a product?             |           |           |           |           |           |
| What advice, if any, was given?                                                           |           |           |           |           |           |
| Who was the advice given by?                                                              |           |           |           |           |           |
| Diagnosis and comments on current condition                                               |           |           |           |           |           |
| Patient reference number                                                                 |           |           |           |           |           |
Appendix 5.4: ‘Illness and Medication’ questionnaire

Section 1 - To be completed by the pharmacist

How did your interaction with this client start?

*Please circle a, b, c, d or e.*

a. The client asked to speak to me.

b. The client was referred to me by a counter assistant.

c. I intervened when I heard the client’s request.

d. I was the first person the client spoke to.

e. Other (please give details)

If you do not find out the answers to any of these questions please write D/K (do not know) or if a question is irrelevant please write N/A (not applicable).

The Patient

a. Is the patient an adult or a child?

b. Is the patient male or female?

c. Is the person you are talking to the patient?

If NO: Is the patient present in the pharmacy?

How is the patient related to the client (eg the client’s husband, the client’s baby)?

d. What symptoms does the patient have?

e. How long has the patient had these symptoms?

f. Any other related symptoms?

g. Has the patient tried any medication yet for these symptoms?

If YES: What?

With what result?

h. Has the patient already seen a health care professional (eg. doctor, dentist, nurse etc) about these symptoms?

If YES: Which health care professional(s)?

When?

What happened?
i. Does the patient have any other medical conditions?

**If YES:** What conditions?
Is the patient taking any medication for the condition(s)?

**If YES:** What medication?

**Over - The - Counter Medication**
a. Have you recommended a medicinal product (or products) to the client?

**If YES:** What product(s)?
Did the client buy it (them)?

*If you did not recommend a product or the client did not buy the product(s) you recommended:*

b. What medicines, if any, did the client buy?

**The Advice**
a. What advice (if any) did you give the client?

b. Did you refer the patient on to another health care professional?

**If YES:** Who to?

Was the referral **unconditional** (eg. the patient should visit their doctor) or **conditional** (eg. the patient should visit their doctor if their symptoms do not improve within 5 days)?

*If 'conditional':* What were the conditions?

Please give here any further information that is relevant to this patient and has not been covered by the above questions.

*Thank you very much.*

*Please now fill in the date on the front of this questionnaire and then follow these instructions. If the client is the patient's representative, please ask the client to give this questionnaire to the patient to complete. If, however: a) the client is the patient OR b) the patient would not be able to complete the questionnaire (eg. if the patient is a child) then please ask the client to complete the questionnaire.*

*Please also give the client the introductory letter.*
Appendix 5.4 (continued...)

Section 2 - To be completed by the patient or their representative

Please tick one box:

*Are you:*

The patient [ ]

The patient's representative [ ]

Two weeks ago you visited the pharmacy, or someone went there on your behalf, and discussed symptoms with the pharmacist.

This questionnaire asks about what has happened to the patient and their symptoms. You may be completing this questionnaire for yourself, if you were the patient, or you may be completing it on behalf of someone else (for example a child).

There are three main questions printed in bold. Please complete all the questions that are relevant and return the whole questionnaire in the envelope provided.

Thank you very much.

1. **Has the patient taken or used a medicine for the same symptoms discussed with the pharmacist at the pharmacy two weeks ago?** (This could be a medicine bought at the visit to the pharmacy or a product already at home. Remember that medicines include tablets, capsules, creams, eye drops, lotions, liquids etc)

   NO [ ] Go to Question 2

   YES [ ] Continue with the following questions a) to e).

   a) Which medicine or medicines has the patient taken?

   b) Is the patient still taking any of these medicines?

      NO [ ] Go to part c) below.

      YES [ ]

      If YES:
      Which medicines is the patient still taking?

   c) How many days has the patient taken the medicine(s) for?
Appendix 5.4 (continued...)

d) Does the patient feel that the medicine(s) worked or not?
   (If you are the patient’s representative and the patient is unable to
   answer this question, please give your opinion).

e) Does the patient feel better?
   (If you are the patient’s representative and the patient is unable to
   answer this question, please give your opinion).

2. Has the patient visited a doctor, dentist, nurse, chiropodist, optician, another
   pharmacist or other health care professional for the same symptoms that were
discussed with the pharmacist at the pharmacy two weeks ago?

   NO [ ] Go to Question 3

   YES [ ] Continue with the following
   questions a) to f).

   a) Which health care professional(s) did the patient see?

   Please tick all the relevant boxes

   Doctor [ ]

   Nurse [ ]

   Pharmacist [ ]

   Dentist [ ]

   Optician [ ]

   Chiropodist [ ]

   Other [ ]

   If you have ticked Other, please specify who:

   b) How long after the visit to the pharmacy did the patient visit that/
those professional(s)?

   c) What advice was the patient given?
Appendix 5.4 (continued...)

d) Was the patient given a prescription for the same symptoms as those discussed with the pharmacist at the pharmacy?

NO [ ] Go to Part e) below.

YES [ ] Continue with the following questions 1) to 4).

1) What medicine(s) was the prescription for?

2) Is the patient still taking any of those prescribed medicines?

NO [ ] Go to Part 3) below.

YES [ ]

If YES:
Which medicine(s) is the patient still taking?

3) How many days has the patient taken the prescribed medicine(s) for?

4) Does the patient feel that the prescribed medicine(s) worked or not? (If you are the patient's representative and the patient is unable to answer this question, please give your opinion)

e) Was the patient given any treatment for those symptoms by the health care professional visited, other than a prescription?

NO [ ] Go to Part f) below.

YES [ ] Continue with the following questions 1) and 2).

1) What treatment was the patient given?

2) Does the patient feel that the treatment worked or not? (If you are the patient's representative and the patient is unable to answer this question, please give your opinion).
Appendix 5.4 (continued...)

f) Does the patient feel better? (If you are the patient’s representative and the patient is unable to answer this question, please give your opinion)

3. Is the patient still suffering from the symptoms that were discussed with the pharmacist?

   NO [ ] Go to Final Points

   YES [ ] Continue with the following question.

What is the patient planning to do about the symptoms now? (If you are the patient’s representative and the patient is unable to answer this question, please give your opinion)

Final Points

Please note here any other information about the patient and their symptoms which has not been covered in the questions above, for example if the patient has seen a specialist or if the patient went to hospital.

If you have any general comments you wish to make about the symptoms, medication, the pharmacist, other health care professionals or this questionnaire, please do so here. They will be treated confidentially (please continue on the back of this sheet if you wish).

The patient’s year of birth .............................

Thank you very much for taking the time to participate in this questionnaire. Please now return it in the envelope provided. If you have lost the envelope, you can drop the questionnaire into the pharmacy (address).
Dear Patient/Patient's Representative,

My name is Julia Schneider and I am a research pharmacist based at the School of Pharmacy. I am doing some work with Mr X, your pharmacist, who is very interested in peoples' experiences of illness and medication. He is trying to improve the services that he and his staff at the pharmacy (address) provide for you. He would, therefore, appreciate it very much if you could spare a little time to complete Part 2 of the enclosed Illness and Medication Questionnaire.

You recently visited the pharmacy or someone went there on your behalf and discussed symptoms with the pharmacist. We would like you to complete Part 2 of the questionnaire two weeks after that visit to the pharmacy (the date on which you should complete the questionnaire is written on the front page). The questionnaire asks about the patient and their symptoms during the two weeks since the visit to the pharmacy. You may be completing the questionnaire for yourself (whether you went to the pharmacy or not) or you may be completing it on behalf of someone else (for example a child). The information that you provide will be very valuable to us and it will be totally confidential.

Please return the completed questionnaire in the envelope provided, which does not need a stamp. If you lose the envelope you can return the questionnaire to the pharmacy.

If you have any questions, please feel free to call me on 0171 753 5860 or the pharmacy on 0181 989 3353.

Thank you very much for taking the time to complete the questionnaire.

Yours faithfully,

Julia Schneider
Research Pharmacist
Appendix 5.6: Asthma patient interview schedule

Asthma Patient Interview

Your Doctor and I are working together to provide the best service for our asthma patients. You can help us to do this by answering a few questions about your asthma. This is not a check-up on you, but to help us to provide a better service. It will take approximately 15 minutes.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>How long have you been taking your current asthma medicines?</td>
</tr>
<tr>
<td>2.</td>
<td>Please name each asthma medicine you are taking.</td>
</tr>
</tbody>
</table>

*Please record name and form of each asthma medication as reported by the patient.*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Have you ever been given information on asthma?</td>
</tr>
<tr>
<td></td>
<td>If YES:</td>
</tr>
<tr>
<td></td>
<td>When was that?</td>
</tr>
<tr>
<td></td>
<td>Who gave you the advice?</td>
</tr>
<tr>
<td></td>
<td>What advice were you given?</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>How do you use your inhaler(s)?</td>
</tr>
<tr>
<td></td>
<td>You can show me or explain the steps involved.</td>
</tr>
</tbody>
</table>

*Please use the inhaler technique assessment form at this stage and note any advice that you give the patient on the reverse of that form. For patients using MDIs, please note if you used the Vitalograph Aerosol Inhalation Monitor and the results.*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>When do you use your inhaler(s)?</td>
</tr>
<tr>
<td></td>
<td><em>Explore this area with the patient to get details of regular use and dosage instructions, 'prn' use and use in response to symptoms.</em></td>
</tr>
</tbody>
</table>

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6. **If the client uses more than one inhaler, please ask:**
   Do you use your inhalers in any sort of order?

   **a) If YES:**
   - What order?
   - Do you know why?

   **b) If NO:**
   - Did you know that you should use them in a particular order?

   *Please note any advice that you give in this area.*

7. **Do you have a peak flow meter?**

   **a) If YES to having a peak flow meter:**
   - How often do you use it?
   - Do you have a record of your best peak flow rate somewhere?
   - At what peak flow level below your best value would you take action?
   - What action would you take?

   **b) If NO to having a peak flow meter:**
   - Have you ever had your peak flow measured?

   **ii) If YES:**
   - Where?
   - When was the last time?
### Appendix 5.6 (continued...)

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Who did you last see at the surgery about your asthma?</td>
<td></td>
</tr>
<tr>
<td>When was that?</td>
<td></td>
</tr>
<tr>
<td><strong>ai)</strong> For patients who saw their GP:</td>
<td></td>
</tr>
<tr>
<td>Were you referred to the asthma clinic?</td>
<td></td>
</tr>
<tr>
<td><strong>If YES:</strong></td>
<td></td>
</tr>
<tr>
<td>Have you made an appointment yet?</td>
<td></td>
</tr>
<tr>
<td><strong>a(ii)</strong> If YES or NO to being referred to the clinic:</td>
<td></td>
</tr>
<tr>
<td>Have you been to the clinic before?</td>
<td></td>
</tr>
<tr>
<td><strong>If YES:</strong></td>
<td></td>
</tr>
<tr>
<td>When was the last time?</td>
<td></td>
</tr>
<tr>
<td>How often do you go?</td>
<td></td>
</tr>
<tr>
<td><strong>b)</strong> For patients who saw the nurse:</td>
<td></td>
</tr>
<tr>
<td>How often do you go to the asthma clinic?</td>
<td></td>
</tr>
<tr>
<td>Have you made your next appointment?</td>
<td></td>
</tr>
<tr>
<td><strong>c)</strong> For patients who have never been to the clinic or are not attending regularly:</td>
<td></td>
</tr>
<tr>
<td>Why don’t you go?</td>
<td></td>
</tr>
<tr>
<td>9. Have you ever taken ibuprofen (eg Nurofen) or aspirin tablets?</td>
<td></td>
</tr>
<tr>
<td>Did you know that these medicines may affect on your asthma?</td>
<td></td>
</tr>
<tr>
<td>Please note any advice that you give.</td>
<td></td>
</tr>
<tr>
<td>10. Would you like any more information about asthma, your medication or the clinic?</td>
<td></td>
</tr>
<tr>
<td>Please note any questions the patient asks and any advice that you give.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5.6 (continued...)

Patient's details

Name: .................................................................................. Sex: M / F
Address: ..................................................................................
Tel. No.: ..................................................................................
D.O.B: ..................................................................................

Please tell the patient:
It is very important that you have regular check-ups on your asthma and medication; that means approximately every six months. Here is a leaflet about the surgery's asthma clinic; you can read it at home and ask me any questions next time you come in. Thank you very much for your time. This information will be very useful.

Now:
Please complete this section for all the patient's asthma medication (including devices eg peak flow meter) using the current prescription and your patient medication record.

Patient name: ........................................................................

<table>
<thead>
<tr>
<th>Name</th>
<th>Form</th>
<th>Strength</th>
<th>Dosage</th>
<th>Number of units prescribed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ventolin</td>
<td>MDI</td>
<td>100mcg/puff</td>
<td>PRN</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please note overleaf if there are any discrepancies between your PMR and the information given to you by the patient, in the following categories, and what those discrepancies are:
Name and form of medication
Dosage instructions
Peak flow meter
Any others
Appendix 5.7: Inhaler technique assessment form

<table>
<thead>
<tr>
<th>Checkpoints</th>
<th>MDIs Turbohaler</th>
<th>Autohaler</th>
<th>Rotahaler</th>
<th>Diskhaler</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Remove dust cap.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Shake inhaler well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Hold inhaler upright/level (as appropriate).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Load inhaler with one dose.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Breathe out gently, as far as is comfortable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Place mouthpiece correctly in mouth (with lips sealed round it).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Take slow, deep inhalation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. At or near beginning of inhalation press down top of inhaler to release dose.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Continue to inhale after dose is released, until lungs refill.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Hold breath for about 10 seconds, then breathe out slowly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. If a second dose is prescribed, wait one minute before repeating from step 2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5.8: Asthma clinic leaflet

Names of the General Practitioners in the Practice
Surgery Address and Telephone Number

In the past week:
Have you been more wheezy than usual?

In the past month:
Has your asthma disturbed your sleep?
Has your asthma prevented you from taking exercise?
Has your asthma made you unwell, so that you could not
go to school or work?

If your answer to ANY of these questions is YES, then you should make an appointment for the surgery's asthma clinic.

In the past six months:
Have you had an asthma check-up at the surgery?

If your answer is NO to this question, then you should make an appointment for the surgery's asthma clinic.

Names of the General Practitioners in the Practice
Surgery Address and Telephone Number

Regular check-ups on your asthma and your medication are very important and you should be attending the asthma clinic at least EVERY SIX MONTHS.

You can make an appointment for the asthma clinic at your surgery by phoning the receptionist on the number above. The usual appointment period is Friday mornings, but if you are unable to attend at that time, an alternative appointment can be made to suit you, morning or evening.

The clinic is run by one of the practice nurses, who will give you a general check-up on your asthma and answer any questions that you may have.

If you have any questions about the clinic, please ask your pharmacist, who will be happy to help you.
Appendix 5.9: Patient self-complete questionnaire

Patient Asthma Questionnaire

Your doctor and pharmacist are working together to provide the best service for their asthma patients. You can help them to do this by answering a few questions about your asthma. This is not a check-up on you, but to help them to provide a better service.

Name ..............................................................................................................................

1. How long have you been taking your current asthma medicines?

2. Please name each asthma medicine you are taking.

3. Have you ever been given any information on asthma?
(Please tick one box only)

   YES [ ]

   NO [ ]

   If you have ticked the YES box, please answer the following question:
   What information were you given?

4. When do you use your asthma inhalers?

5. Do you have a peak flow meter?
(Please tick one box only)

   YES [ ]

   NO [ ]

   If you have ticked the YES box, please answer the following question:
   How often do you use it?

6. Have you ever taken ibuprofen or aspirin tablets?
(Please tick one box only)

   YES [ ]

   NO [ ]

   Don't Know [ ]

   Did you know that these medicines may affect your asthma?
(Please tick one box only)

   YES [ ]

   NO [ ]

7. Do you want any more information about asthma?

   YES [ ]

   NO [ ]

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References

Doctor/pharmacist relationships.

The use of repeatedly prescribed medicines.

What should we tell patients about their medicines?

Anon (1991a).
Who cares about homecare?

Anon (1991b).
FHSA to launch High Street Health scheme.
*Pharm. J.*, 247: 76.

Doctor/pharmacist drug liaison meetings hailed as a success.
*Pharm. J.*, 249: 356.

Anon (1993a).
Working together: Benefits and barriers.

Anon (1993b).
Over-the-counter Zovirax from August 23.

Anon (1994a).
Pharmacists tell Commons committee about high cost of doctor dispensing.
*Pharm. J.*, 252: 8.
Anon (1994b).  
General practitioners and pharmacists interprofessional communication.  

Anon (1994c).  
Health authorities to all change in 1996.  

Anon (1994d).  
Large grant made in Wales to develop pharmacy role.  
*Pharm. J.*, 252: 847.

Anon (1994e).  
OTC Cimetidine by early April.  
*Pharm. J.*, 252: 393.

Anon (1994f).  
PSNC to challenge NHSME on private script advice.  

Anon (1994g).  
Detecting NHS fraud.  

Anon (1994h).  
FHSAs receive guidance on local pay determination for pharmacy contractors.  

Anon (1995a).  
Doctors' review body seeks change to rural dispensing again.  

Minister rejects claim that patients suffer under rural dispensing rules.  
Anon (1995c).
Liberal democrat support for doctor dispensing.
*Pharm. J.*, **255**: 757.


Anon (1995e).
London pharmacists in medicines review study.
*Pharm. J.*, **254**: 537.

Anon (1995f).
IoW repeat project.
*Pharm. J.*, **255**: 74.

Anon (1995g).
Funding of £190,000 for pharmacy development work in north of England
*Pharm. J.*, **254**: 44.

Anon (1995h).
17 FHSAs get funds for pilot projects.
*Pharm. J.*, **254**: 385.

Anon (1995i).
Repeat prescribing pilot for East Sussex.
*Pharm. J.*, **254**: 538.

Anon (1995j).
Call for all round support for pharmacist/GP projects.
*Pharm. J.*, **255**: 78.

Anon (1995k).
Barnet and Brent pharmacists win over £100,000 for development projects.
*Pharm. J.*, **254**: 75.
Programme for patient packs by 1999 unveiled.  
*Pharm. J.*, **254**: 679.

Anon (1995m).  
Television news reports pharmacy opposition to prescription charge increase.  
*Pharm. J.*, **254**: 281.

Anon (1995n).  
Society calls for prescription charge review as pharmacist undercuts the NHS.  
*Pharm. J.*, **255**: 198.

Anon (1995o).  
Photocopying being used to make NHS prescriptions “private”.  
*Pharm. J.*, **255**: 344.

Private dispensing would cost over £90m.  
*Pharm. J.*, **255**: 605.

Anon (1996).  
*Pharm. J.*, **256**: 784 - 786.

*Protecting the public purse 2. Ensuring probity in the NHS.*  
London, HMSO.

Hospital computer prescribing: Opportunity or threat.  
*Pharm. J.*, **244**: 786.

What constitutes good prescribing?  


Advisory role of the pharmacist. 
*Pharm. J.*, **221**: 328.

London, BMA and Royal Pharmaceutical Society of Great Britain.

*Teamwork for preventive care.*
Chichester, Research Studies Press.

Documenting the influence of clinical pharmacists.

Elderly patients’ understanding of their drug therapy: The effect of cognitive function.

Communication between general medical practitioners and community pharmacists. 

Medicine taking by people aged 65 or more. 

Changes in drug treatment after discharge from hospital in geriatric patients.

The role of medication noncompliance and adverse drug reactions in hospitalizations 
of the elderly. 
*Arch. Intern. Med.*, **150**: 841 - 845.


Survey of prescription anomalies in community pharmacies: (2) Interventions and outcomes. 

Development and validation of an instrument to measure physicians’ attitudes towards the clinical pharmacist’s role. 

Drug therapy of the aged: The problem of compliance and the roles of physicians and pharmacists. 

The effects of drug counselling and other educational strategies on drug utilisation of the elderly. 

Measuring blood pressure in an inner city pharmacy: An attempt at co-ordination with general practice. 

Pharmacies in health centres. 

The interface between pharmacists and general practitioners in English health centres. 

The pharmacist’s contribution to medical audit: Perceptions of doctors and pharmacists in the North West Thames Regional Health Authority. 


351


*OTC directory 94/95.*
London, PAGB.

Working Together.
*Openmind,* 58: 28.

Effect of exposure on physicians' attitudes toward clinical pharmacists.

A domiciliary clinical pharmacy service.
*J. R. Soc. Health,* 5: 172 - 177.

Communication with general practitioners.
*Pharm. J.,* 251: 816 - 819.

Clinical interventions by community pharmacists using patient medication records.

Patient compliance - Whose responsibility?

In search of the gold standard for compliance measurement.

Prescribing problems and pharmacist interventions in community practice.


Impact of pharmacist interventions on medication management by the elderly: A review of the literature.  

*Pharmacy in history.*  
London, Balliere, Tindall and Cox.

The Nuffield report: A signpost for pharmacy.  

Community Care: Pharmaceutical care for people with enduring mental health needs.  

Errors of complex prescribing.  

Pharmacist-physician interaction: A battle of genes.  

Compliance with prescribed medicines: A study of elderly patients in the community.  

Clinical pharmacy: Uncovering the hidden dimension.  

Managed Care pharmacy in the USA.  

