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# Ending the Global Tobacco Pandemic

Opportunities for enhancing community pharmacy's world-wide  
contribution to smoking cessation in the twenty-first century





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This paper was researched and written by Dr Tina Brock, Professor David Taylor and Ms Tana Wuliji of The School of Pharmacy, University of London. They thank Johnson & Johnson for a grant to The School that covered the costs of researching and producing this report. Editorial responsibility and control was vested exclusively with the authors. Ending the Global Tobacco Pandemic is published by The School of Pharmacy, University of London. The authors have no income from or other financial interests in the sale of any smoking cessation product or service.

# Key Recommendations

1. Governments and all other stakeholders in better public health – including national and international level pharmacy – should work globally to ensure that due emphasis is placed on smoking cessation service provision via strong and comprehensive interpretations of Article 14 of the WHO's Framework Convention for Tobacco Control.
2. Public and private health care providers should put in place adequate smoking cessation service funding mechanisms, commensurate with rationally defined local health improvement priorities.
3. All health professionals should recognise the still growing importance of tobacco use as a threat to health world-wide, and work in partnership with other groups – including pharmaceutical industry and voluntary sector agencies – to promote smoking cessation.
4. Pharmacy leaders and regulators ought to encourage appropriate investments in professional training, to allow pharmacists to play a full role in ending the global pandemic of tobacco related harm.
5. Pharmacists should seek to ensure an optimally accessible supply of NRT and other cessation support medicines, and give evidence based advice to customers seeking to quit smoking. Wherever possible they should pro-actively offer more sophisticated and effective cessation support.
6. People seeking to take a responsible approach to their own health and that of their families and communities should support public health programmes aimed at preventing smoking and, as tobacco use declines, the provision of universally available services to help tobacco users free themselves of their life threatening condition.
7. Governments, health care professionals and citizens living in the mature industrial economies with long-term experience of tobacco related harm should share their smoking cessation service experience with communities with less exposure to the health costs of smoking, while respecting the fact that development priorities change as societies become wealthier.

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## Summary

The early stages of the present global tobacco pandemic were associated with the beginnings of greater wealth, and a rapid spread of the smoking habit in relatively advantaged individuals and communities. Its end stages are seeing tobacco use concentrated in relatively poor, less educated and more vulnerable populations.

Tobacco use remains the single greatest avoidable threat to public health worldwide. Total consumption of tobacco products is now falling in the mature industrial nations. But it is still increasing in many rapidly expanding economies. Without more effective action to curb global tobacco use, smoking will kill in the order of a billion people in the twenty first century.

Public health campaigns to prevent and reduce tobacco related harm are primarily based on controlling tobacco product prices and advertising, and limiting smoking in public places. But as smoking rates decline the requirement for individual cessation support services, aimed at helping individual tobacco users quit smoking, rises. Governments, professionals and the public should recognise the growing need for stop smoking support services as countries develop.

There is robust evidence that community pharmacies and pharmacists can be effective providers of smoking cessation support. Pharmacy can play a key role in ending the global tobacco pandemic.

All pharmacists should supply smoking cessation and reduction products and give advice in response to customers' questions. But more sophisticated pharmaceutical care further increases quit rates. Appropriate professional training and the service funding mechanisms necessary to ensure extended public access to smoking cessation support should be put in place by professional bodies and health care providers.

Important examples of enhanced pharmacy based smoking cessation services already exist in countries such as Denmark, the UK, the US, Canada and Singapore. In Northern Ireland there is a nationally funded system, based on a flat rate fee for supporting attempts. All nations will need to develop further their approaches to supporting citizens' efforts to stop smoking, tailored to fit local traditions and development priorities.

Pharmacists are strengthening their contribution to improving public health. This will require enhanced partnerships with other private and public stakeholders in smoking related harm reduction, and increased professional self confidence. Government departments, public and private health care providers, pharmaceutical companies, non-governmental bodies and health care professionals should seek innovative ways of working together to extend public access to smoking cessation support.

The WHO's Framework Convention for Tobacco Control (FCTC) is promoting global progress towards the elimination of mass tobacco use. Pharmacy as a national and international force for better health should support governments and other agencies in the ongoing implementation of the Convention, so that in future greater emphasis is placed on cessation service via a comprehensive interpretation of Article 14 of the FCTC.

# Introduction

Tobacco use remains the single largest avoidable threat to public health in the 'mature' industrialised nations,<sup>1</sup> even though its prevalence is now declining because of the implementation of prevention and control policies. Smoking is also gaining a similar significance in the faster expanding economies of the world, such as those of Asia. In many of the latter the use of cigarettes and other tobacco products is already high and, among many groups, still rising.

The reductions in population level life expectancy caused by tobacco use during the twentieth century were, in Europe and the United States, on a scale broadly comparable to the longevity gains generated by modern medicines. Globally, smoking is today responsible for in the order of 5 million premature deaths a year. In addition, it is a major cause of disability associated with cardiovascular and cerebrovascular disease and conditions such as chronic obstructive pulmonary disease (COPD). In China alone (where around a third of today's smokers currently reside) in the order of 50 million people have already been impoverished because of the direct and indirect costs of tobacco related ill health.<sup>2</sup> Such data have profound implications for pharmacists and other health and social care professionals seeking to maximise their contributions to health improvement. If unchecked current smoking trends will lead to the premature deaths of one billion people during the twenty first century, the majority of whom will be Asian.

In the United Kingdom – which was among the first countries to suffer large scale harm to public health due to cigarette use – mass awareness of the scale of smoking related morbidity and mortality was first promoted in the 1950s and early 1960s by pioneering public health doctors such as Professor Sir Richard Doll – Figure 1. In fact, overall smoking levels peaked at about the time the Royal College of Physicians published *'Smoking and Health'*, a key report that also marked a tipping point in British medical opinion. From 1962 onwards most British doctors have accepted the fact that smoking is a major cause of cancer and heart disease. Medical leadership in this field, and the visible reality that doctors themselves began to quit in large numbers, in time opened the way to government action aimed at tobacco harm control (see Box 1) and the fuller involvement of other health professionals in smoking cessation and prevention.

Against this history, this report highlights the potential of pharmacy and pharmacists to make an enhanced global contribution to smoking cessation and tobacco harm prevention. Key questions explored relate to the financial and professional incentivisation of pharmacists. This should enable them to take a pro-active role in promoting smoking cessation and encouraging the effective use of pharmaceutical aids such as nicotine replacement therapy (NRT), alongside other forms of behavioural change support. Present structural and cultural barriers to pharmacists' involvement in this field are also considered.

As tobacco control policies take effect smoking becomes seen as an unhealthy – pathological, rather than normal and socially accepted – habit. The provision of services aimed at enabling individuals to stop should then emerge as an

increasingly important political and health service priority. There is evidence that accelerating the introduction of quit support provisions world-wide could (over and above the impact of other interventions to prevent smoking) save some 10 million lives by 2050.<sup>3</sup> Growing international awareness of the importance of this opportunity is reflected in current attempts to implement comprehensively Article 14 of the WHO's Framework Convention on Tobacco Control (the FCTC). The latter addresses smoking cessation support, but is not (at least as yet) always seen as obliging WHO member states that have signed the FCTC to ensure that their populations have access to effective services.<sup>4</sup>

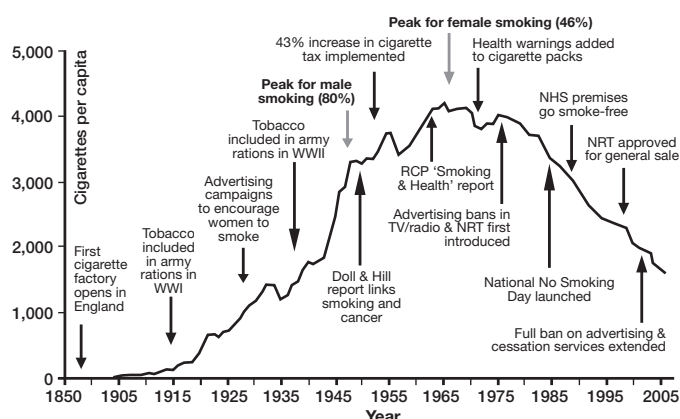


Figure 1. Cigarette smoking in the United Kingdom per capita per annum, 1905-2005

There is also extensive evidence that pharmacists are able cost effectively to provide smoking cessation support to individuals and communities.<sup>5-22</sup> The available research indicates that specialised training increases the likelihood of pharmacists discussing tobacco use with their patients/customers and that this leads to enhanced service user satisfaction.<sup>23-25</sup> But the extent of pharmacists actual involvement in the delivery of stop smoking services is often very limited.<sup>26-28</sup> Even in 'developed' national settings it may frequently involve no more than the supply of brief ad-hoc advice on NRT and/or other medicines use. This does not optimise quit rates, or the contribution of pharmacy to health improvement.

Facilitating good access to products such as NRT is beneficial at both an individual and a population level.\* Even without additional support for tobacco users this will either reduce smoking amounts (through substitution) or, in a proportion of cases, facilitate quitting.<sup>30,46</sup> However, well designed pharmacy smoking cessation services – incorporating appropriate forms of remuneration and professional practice support and management – are needed to provide the best outcomes for service users. Given this, a secondary question addressed during the research for this report was *'to what extent can and should the relatively comprehensive systems for incentivising and supporting pharmacy/pharmacist provision of smoking cessation services in countries such as England, Scotland and Northern Ireland serve as models for similar developments elsewhere?'*

\* Hu et al (2007) have recently estimated in the US context that a 10 per cent increase in over-the-counter sales of NRT can be expected to lead to a 0.04 per cent decrease in tobacco sales. Given that in cash value terms the US tobacco market is over 100 times that of the NRT market, this on an equivalent scale basis suggests that a 10 per cent increase in NRT use corresponds with a 4 per cent cut in tobacco spending.

## Box 1. Controlling Tobacco Related Harm

During the last two decades bodies such as the WHO and the World Bank have emphasised the overall economic as well as the specific health benefits of diverting resources away from the production and use of tobacco towards more productive goods and services. The main options available to policy makers to help communities prevent and reduce smoking and smoking related harm include:

- **Informing the public.** In addition to providing appropriate education to children and other sections of the public, clear health warnings on tobacco products can help reduce their consumption.
- **Raising prices.** In higher income countries a ten per cent increase of cigarette prices should lead to a four to five per cent decrease in volume consumption. This makes taxation aimed at maximising public health (as distinct from state revenues) a central tool of tobacco harm control. But to be effective in any given national or regional context such measures need to be backed by effective controls over threats such as the illegal importation of tobacco products from lower price areas
- **Regulating effectively tobacco sale and advertising.** This may involve the prevention of cigarette supply to minors, and controls over – and bans on – tobacco advertising. The use of misleading product descriptors such as ‘mild’ and ‘light’ may be prohibited, as can sponsorship programmes aimed at, say, associating smoking with sport and health or health research.
- **Implementing environmental controls.** Bans on smoking in enclosed places protect the wider public as well as smokers themselves, and also serve to reduce indirect risks such as those of fire.

These and similar measures all represent relatively low cost ways of influencing the behaviour of entire populations. As such it is typically the case that governments often prioritise such action over and above the public provision of smoking cessation support. But as overall tobacco consumption rates fall, the needs of sections of the community less able (for social and/or biological reasons) to stop using nicotine containing products become more apparent. The impact of additional tax rises and other control measures will decline, unless complementary treatment based interventions are made. At the same time wider social values change, so that people using facilities such as pharmacies become more likely to expect and welcome inquiries about their use of tobacco.

The first main section below provides further information on the course of the global smoking pandemic, and the ways in which communities across the world have so far responded to the public health threat it represents. The next reports the results of a survey of UK National Health Service (NHS) community pharmacy based smoking cessation service provision. The third presents findings of a second survey on the international development of pharmacy based smoking cessation services. The final section discusses a range of factors that may influence the world-wide capacity of pharmacy to fulfil its potential in this key area of health protection and improvement.

Financial payments alone are by no means the only factors relevant to the involvement of pharmacists in smoking cessation support. Pharmacists’ education and training, and the expectations and motivation of the public and other health service providers and their funders, need adequately to be appreciated. In time pharmacists may well – with the ongoing computerisation and mechanisation of the physical supply of medicines – no longer be needed to dispense in a narrow sense of that term. Rather, their twenty first century role is likely to focus more on promoting clinically and socially optimal patterns of medicines use, along with other forms of health behaviour change.

Hence the viability of the profession may in future rest much more than is presently the case on its ability to adapt and lead in areas like supporting smokers who wish to quit. Seen from this perspective, developing smoking cessation services represents a bridge to tomorrow’s practice that pharmacists can ill-afford to neglect. If pharmacy is successful in becoming a leading global source of smoking cessation support the profession will have helped to secure not only its own survival, but that of many millions of people who will otherwise – unless further action is taken – die prematurely.

## National and professional stages of change

To open the way for pharmacists and other health professionals to provide tobacco cessation services that have a population level impact a series of interlinked social, political, professional and public health developments are likely to have first taken place. Figure 2 highlights several of these necessary phenomena. They are all closely associated with the processes that accompany socio-economic development. In its early stages industrialisation has often been linked with increased tobacco use. But as economies continue to mature populations tend to become more health aware, and increasingly concerned to prevent illness wherever possible. Hence tobacco use declines.

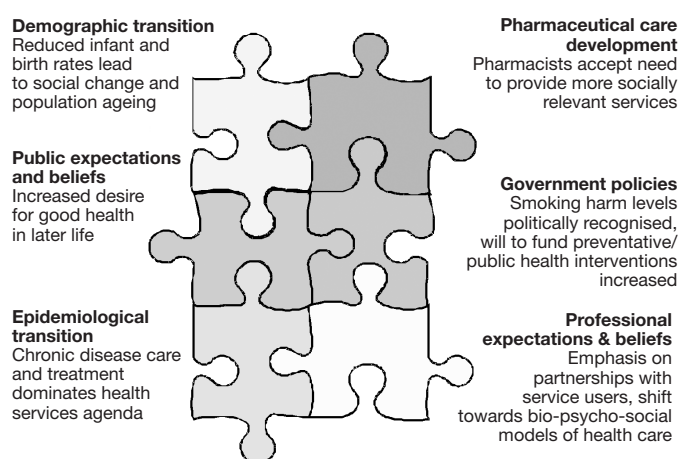


Figure 2. Factors influencing pharmacy-based cessation service development

## Tobacco use and demographic and epidemiological transition

Tobacco use in Europe dates back to the mid 16th century. But it only became a mass habit with substantive effects on public health in the twentieth century, initially during the later stages of North Western European demographic transition (Figure 3). In the context of countries such as Britain and the United States (the demographic and social development of which has largely coincided with that of Western Europe) the introduction of efficient cigarette manufacturing technologies and the impacts of the two twentieth century 'World Wars' were significant contingent factors in the early history of (male) mass tobacco use. Because of social factors, women's smoking rate increases (and eventual declines) tend typically to be moderated in scale, and to lag behind those observed in men by a few decades.

Demographic transition normally starts as a result of early stage industrialisation and increases in agricultural efficiency. Populations become better fed, and in time gain increased access to other goods and services. This is initially protective, and is associated with falling infant mortality rates and rapid population growth. However, as wealth continues to increase and birth rates in time fall, populations age (that is, the proportion of older people rises) and gain greatly increased access to diets rich in animal fats and sugars. They also typically increase their consumption of other potentially harmful items, such as alcohol and tobacco products. Countries like Britain and France went through this development phase in the nineteenth and twentieth centuries: China and India are in the process of following them towards a state of very low mortality balanced by very low birth rates.

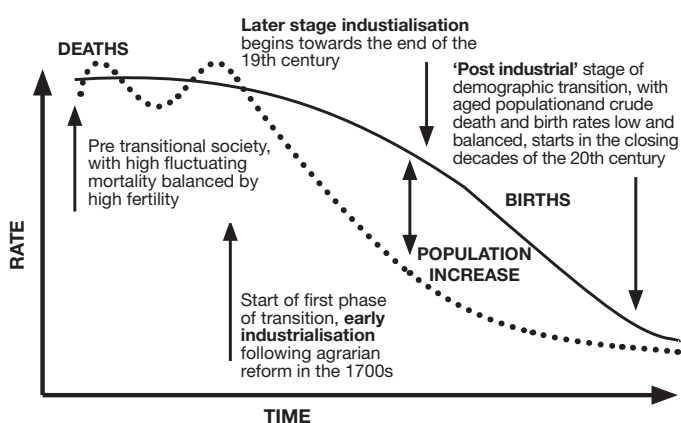


Figure 3. Demographic transition in North Western Europe and the United States

Decreased physical activity and increased food and tobacco consumption for a period tend to offset the health gains of the transition process in older people, until the latter become more aware of lifestyle threats to their long term survival. There is a clear public health opportunity for emergent economies and transforming societies such as that of, say, modern China to learn from the past harm experienced in Europe and North America, and seek rapidly to cut short the smoking pandemics that threaten their citizens' future wellbeing.

Demographic transition leads on to epidemiological transition. There is a shift from infectious illnesses amongst the relatively

young as the major cause of death to a situation in which most people die in later life from conditions such as cancer and heart disease. One consequence of this pattern of events has been that in Europe and America better health and increased survival resulting from economic progress in the first half of the twentieth century paradoxically tended to conceal the true level of harm being caused by increased smoking, because the ill health it caused was mistakenly taken to be a normal consequence of ageing. That is why the publicly funded (as distinct from private, self purchase based) provision of interventions such as quit support services has only recently become seen as a public and political priority, decades after the 'mature' industrial societies first began devoting massively increased resources to the treatment of conditions like late stage cancers, heart failure and obstructive lung disease

The spread and then eventual decline of tobacco smoking can therefore be regarded as a reflection of fundamental development processes. At a population level tobacco use typically begins among relatively affluent males in communities that are emerging from poverty. In modern Europe smoking as a mass habit is now starting to end: it remains most prevalent amongst the last social groups to become relatively wealthy and empowered, who by definition tend to be poorer women and men. Problems such as obesity and smoking related harm do not differentially affect less advantaged people in very poor countries. It is as populations become more affluent that they have to face problems associated with increased access tobacco and other health hazards. This is especially challenging when combined with the ongoing relative social and cultural poverty experienced by less successful groups within wealthier communities.

Following on from this, Figure 4 reflects the lagged sequence of events that characterises the current phase of global tobacco pandemic. While countries such as the UK, the US, Australia, New Zealand and Canada are now seeing reductions in smoking and declining male (but typically still rising female) tobacco-related mortality, those of southern and eastern Europe and nations like China, India and Japan (which entered demographic transition surprisingly late) have not yet fully experienced the health impacts of increased smoking rates in men, or indeed women.

It remains to be seen whether or not there will in today's emergent economies eventually be a surge in smoking-related harm in women on a scale like that presently observable in North West Europe. It might be possible to avoid this hazard as new patterns of social development progress. In the case of China, for instance, reported rates of female smoking remain low. But this may be partly due to the stigma attached to women smoking.\* In younger more educated women true smoking rates may already be in the order of 30 per cent,<sup>31</sup> compared with around 70 per cent in all adult men.

## International Policy Development

Against such global trends in smoking and social development, the WHO Regional Committee for Europe approved its European Action Plan on Tobacco in 1987. This was followed by the 1988 'Charter Against Tobacco' which identified strategies for achieving a tobacco-free Europe. It described a phased approach to tobacco control. Following

\* Chinese research also shows male smoking rates to be relatively high in rural as opposed to urban communities. Although the available data indicates – as elsewhere in the world – a positive elasticity of demand for tobacco products of around 0.5 (that is, if prices rises by 10 per cent consumption will fall by about 5 per cent), higher levels of education (and by implication income) are already in men becoming associated with lower levels of tobacco consumption. This may imply that with regard to tobacco use China's social development, at least in city and allied settings, is capable of proceeding very much more rapidly than might on occasions be assumed.



proposals led by the WHO's EuroPharm Forum (European Forum of Pharmaceutical Associations) the second stage of this programme included a project aimed at encouraging 'pharmacies to become smoking cessation centres'.

A third phase was initiated in 1997, at which time the value of the work undertaken by EuroPharm group was formally recognised. Shortly after this, work on the development of the WHO's Framework for Tobacco Control (FCTC) began in earnest. The FCTC was adopted in 2003, at the 56<sup>th</sup> World Health Congress. Despite some possible weaknesses, it provides a legally based international template for the introduction of comprehensive policies aimed at promoting a world-wide decline in tobacco use.

Such policy developments are important, and should be taken further forward. From a smoking cessation perspective a robust and comprehensive implementation of Article 14 of

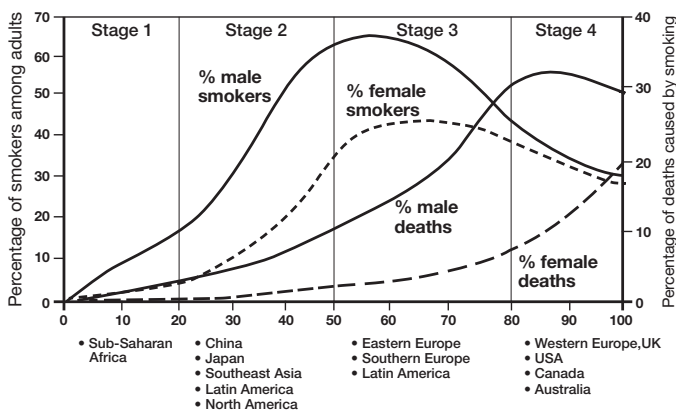


Figure 4. Stages of the present tobacco pandemic<sup>32</sup>

the FCTC (the only part of the Convention which mentions cessation service provision) could in future facilitate the development of new quit services. This may cost effectively complement the impact of more traditional public health interventions such as increasing public knowledge of the harm caused by tobacco products, increasing their price, restricting their advertising and preventing their use in circumstances where the inhalation of tobacco smoke could cause harm to non-smokers.

It would be naïve, and perhaps counter-productive, to regard any form of fundamental social development as being primarily driven by high level international policy interventions. National and community level priority setting processes need to be respected, and it ought to be recognised that in some parts of the world (such as sub-Saharan Africa countries with high rates of HIV/AIDs and tuberculosis) supporting smoking cessation may not immediately seem to be a key objective. However, even in settings such as these stopping smoking can bring unexpected gains. For example, it can help to enhance overall treatment outcomes for conditions such as pulmonary tuberculosis. It would also be unwise to underestimate the extent to which country level policies may be driven by international comparisons of their performance in high profile areas of health and social care provision and measurable public health status.

## Towards a staged model of tobacco control development

In the European context a recently published study by Joosens and Raw has attempted to quantify the introduction and implementation of tobacco control policies at the

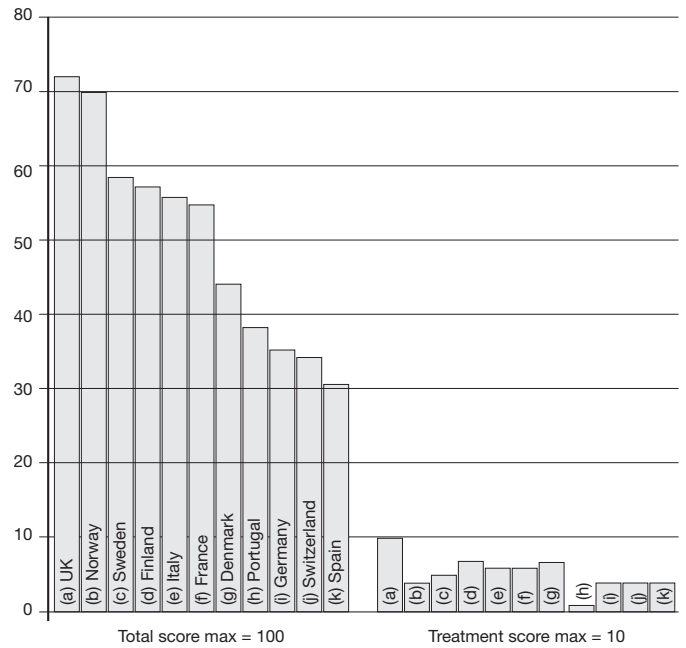


Figure 5. Tobacco control scale performance data for 2005<sup>33</sup>

national level through the use of a comprehensive evaluative instrument.<sup>33</sup> Figure 5 presents data from this study. It contrasts selected country scores (which were the sum of sub-scores for action on tobacco prices, public place smoking bans, spending on public information campaigns, advertising bans, health warnings, and treatment provision) with the treatment provision scores alone. The latter are based on the availability of quitlines, funding for cessation networks and funding for pharmaceutical smoking cessation aids.

Although the design and application of this scale might be further improved, these results provide a valuable overview of the extent of the progress already achieved in European countries. In the context of international pharmacy policy and pharmaceutical care improvement one challenge to address is whether or not a global tobacco use cessation support development assessment instrument could be produced. The aim of this would be to identify and prioritise the actions needed to improve 'stop smoking' services and allied public health activities in given national contexts. Figure 6 outlines what such an instrument might seek to measure.

The use of 'stages of change' (SoC – TransTheoretical Model based) in the care and support of individual smokers has – despite its popularity with many health practitioners – been criticised, partly for encouraging deterministic thinking.<sup>34, 35</sup> Assumptions that people have to go through a fixed sequence of cognitive adaptation in order to stop smoking can lead to professional time being wasted on unproductive attempts to 'stage' potential quitters. A simplistic approach to applying systems level SoC models could also have unwanted consequences.

Nevertheless, the national level introduction of smoking cessation services can in the context of this report usefully be perceived as an incremental social process, divided into four main stages. As Figure 6 indicates, these encompass multiple processes of preparation, development and implementation of public health policies for tobacco control. Complementary smoking cessation support becomes more important as the smoking habit becomes 'pathologised' – that is, as it becomes regarded more as a sickness to be treated than as a normal behaviour. This sequence of development is part of wider

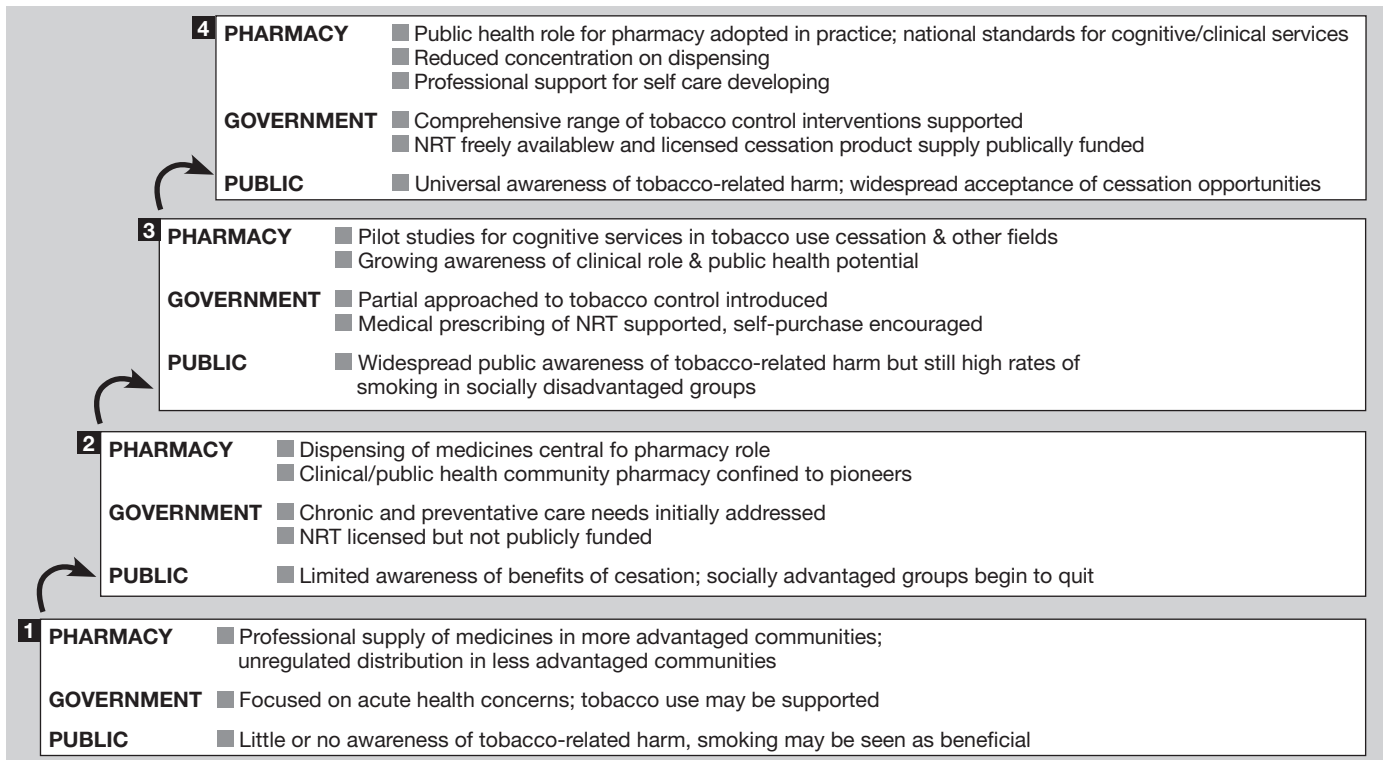


Figure 6. A preliminary step systems model – public, regulatory and pharmacy progress towards tobacco use cessation

long term shifts in the balance of health care’s focus between acute treatment, chronic condition care and health protection and promotion.

Pharmacy can also be seen as progressing in a step-wise or staged manner, in parallel with regulatory action and reaction, albeit that an unduly mechanistic or simplistic interpretation of this process should once again be avoided. In Europe, for instance, Denmark is a country where pharmacist provided smoking cessation services is highly developed. A pilot study to generate evidence on the role of pharmacists in smoking cessation commenced there in 1986. By contrast, in Norway (another advanced Scandinavian country) an equivalent pilot study was not initiated until 2006. This limited example illustrates the larger point that local ‘contingent’ variables influence the timing and nature of specific national events, albeit that underlying trends are normally relatively consistent across world regions.

details of the services available vary between and within the four UK nations. But broadly, in addition to self care support supplied by community pharmacists during the supply of NRT and other quit aid products, the services now in place range from the local provision of brief (level 1) advice by general medical practitioners (GPs) and pharmacists offered as part of their core NHS role through to the provision of specifically funded (level 2 and 3) individual and group support provided by specialists working in community and clinic settings.

The scale of these activities is illustrated by the fact that in England alone NHS providers operating at level 2 and above encouraged more than 500,000 quit attempts in 2004/05, of which some 250,000 were successful at four weeks. It is likely that these figures will have translated into 40,000 successful quit attempts at one year. Both published sources and research undertaken during the preparation of this report (see below) indicate that at least 20 per cent of such cessation service

## Stop Smoking Services in the United Kingdom

In the UK the development of publicly funded smoking cessation support services delivered via community pharmacy, including both free or low cost NRT supply for limited periods and ‘item of service’ fees to pharmacists for providing behavioural change support, reflects the fact that Britain is in an advanced stage of its historical experience of the tobacco related harm pandemic. It has also evolved because of specific factors relating to the structure and ethos of Britain’s NHS, and the functioning of the public health arm within it.

As noted in the introduction, British mass awareness of smoking related harm was first promoted in the 1950s and early 1960s by individual leaders and professional bodies such as the Royal College of Physicians. But it was not until 1998 that the government policy White Paper, *Smoking Kills*,<sup>36</sup> initiated the public funding of the organised tiered system of smoking cessation support outlined Figure 7. The precise

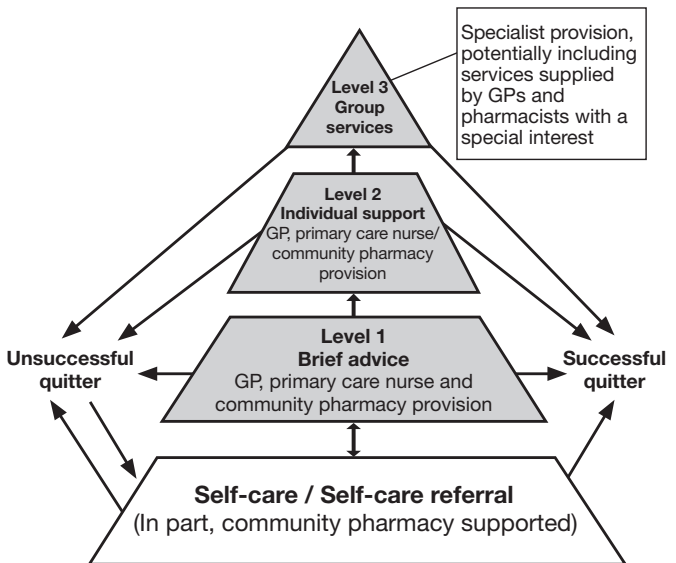


Figure 7. Levels of tobacco cessation service in the UK

provision – and in some instances substantially more – was and is delivered by community pharmacists.

The Royal Pharmaceutical Society of Great Britain (RPSGB) has recognised health promotion as a core pharmacy activity for many years. Since 1995, for instance, British community pharmacists have been required to display health education materials. Since 1999 they have been encouraged by their professional body to provide structured packages of behavioural support to aid smoking cessation, in addition to *ad hoc* help regarding the use of pharmacotherapies such as NRT and bupropion.

Recent reforms in community pharmacists' contractual arrangements with the NHS have confirmed that supporting 'self care' level smoking cessation attempts via, for instance, offering brief advice to pharmacy users presenting with respiratory problems or spontaneously purchasing NRT is regarded as a 'core' or 'essential' service. All pharmacists receiving any dispensing or other fee from the NHS should

### Box 2. No Ifs, No Buts

The Healthcare Commission analysed the performance of PCT smoking cessation services according to their levels of social and economic deprivation. Excellent services were identified at all levels. For instance, more affluent areas with effective provisions included Richmond (where community pharmacists are responsible for 50 per cent of positive results) and Worthing (where pharmacy contributions appear not to be so extensive). At the other end of the spectrum high quality services were also found in poorer localities such as Newcastle, North Tees and Islington. Once again the level of pharmacy involvement varied between these sites, but was judged by School of Pharmacy researchers to be important in some. However, respondents in the best performing PCTs universally acknowledged the potential of pharmacy to play an extended role, despite noting budgetary restraints as a key limitation in many instances. Appendix 1 offers reports based on a total of 16 localities, derived from telephone and personal interviews and documentation provided by respondents.

Good practice in smoking cessation service provision was, as noted in the main text, found to be positively associated with active stakeholder consultation on the part of the provider PCTs. Illustrations of the actions taken as a result of consultation encompass:

- increasing the number of community venues offering stop smoking services;
- increasing the provision of out of normal working hours access options;
- piloting drop in sessions in hospital wards, such as cardiac care and prenatal care facilities;
- arranging group reunion sessions to share success experiences;
- improving written information supplied by the NHS;
- addressing the weight gain problems experienced by some quitters;
- providing additional training for some staff;
- adjusting the range of NRT products supplied to meet user preferences; and
- enhancing the monitoring NRT prescribing and spending.

automatically offer such pharmaceutical care, albeit that the quality of this general provision is not normally effectively monitored. However, smoking cessation services offered at levels 2 and 3 are classified as 'locally enhanced' interventions. The Primary Care Trusts (PCTs) in each area are responsible for purchasing (or, in NHS terminology, commissioning) more intensive forms of smoking cessation support from pharmacists and other providers, and that additional locally negotiated item of service fees are paid for its provision.

### Lessons from Local Service Development

The Healthcare Commission is an inspectorate charged with assuring the quality of NHS services in England and Wales. In 2007 it published an evaluation of Primary Care Trust (PCT) provided smoking cessation services.<sup>37</sup> Nationwide, a third of these were rated as excellent and more than half as good overall. Those that scored most highly were said to collaborate with and work effectively with partner organisations and local authorities, to have promoted patient and public involvement, and to have invested in workforce development. This analysis suggested that the relative success of tobacco control efforts in the UK is related to the optimisation of public-private partnerships, a finding which might have international relevance.

For the purposes of the work presented here, the Commission's report (which was entitled '*No Ifs, No Buts*')<sup>37</sup> provided a useful starting point for a further investigation of the roles and experiences of pharmacists in giving smoking cessation support in the NHS setting – see Box 2. A tabulated description of the observations made as a result of a brief survey of English PCT and other selected smoking service co-ordinators' and participants' views is contained in Appendix 1 of this report. Some of the most important examples of high quality pharmaceutical care provision were offered by respondents in Northern Ireland and Scotland.

For example, an in large part community pharmacy based smoking cessation service in Northern Ireland has been in place since December 2006. Building on previous innovations in service provision pioneered by pharmacists such as Dr Terry Maguire, this operates with a uniform structure across the whole of the country, which has a population of approximately 1.7 million. In addition to the cessation services uniform national structure it embodies a number of other important characteristics, such as:

1. Offering pharmacists a flat rate 4-week course payment of £28 (circa \$55 US, £40) per patient/user regardless of whether or not a successful quit is recorded, coupled with an additional £7 for a 52 week cessation (cotinine-based) monitoring check.
2. The introduction of what is in effect a pharmacy prescribing budget, running parallel with, but separate from, the GP prescribing budget.<sup>38,39</sup> This is an important innovation, which might in time serve to take forward other forms of pharmacy prescribing.

Internationally significant points to draw from the Northern Irish model relate to the advantages of simple and robust item of service payment mechanisms, and the potential benefits of introducing pharmacy specific budgets for the provision of 'pharmaceutical public health' services. The latter may be defined as forms of extended pharmaceutical care and behavioural change support that receive public (either in addition to or in place of private) funding because they are aimed at achieving population level health gains in contexts where significant numbers of the intended beneficiaries

cannot afford, or may be unwilling to self purchase, relevant goods and services.

Other important opportunities for reducing tobacco related harm identified by agencies such as the National Institute for Health and Clinical Excellence (which has taken on an extended public health role) include reducing smoking rates during pregnancy and enhancing work place based access to cessation support. Respondents to The School of Pharmacy's UK survey reported NHS local service initiatives in these and other fields.

An illustration of a successful Scottish approach to supporting quit attempts is that of Glasgow's *Starting Fresh* smoking cessation project. Like the recent Northern Ireland initiative, this serves a relatively large area/region. Greater Glasgow has population of over 2 million. A third of adults there smoke. In some less advantaged communities in the city more than 50 per cent of adults smoke, and one in every five persons dies of the habit. (For comparison, only about 20 per cent of US and Australian adults now smoke. This is well below the UK and European average rates.)

The project has created a network of over 150 accredited community pharmacies across Greater Glasgow. It aims to offer an easily accessible, cost effective, system for providing NRT and other forms of smoking cessation support. The Glasgow scheme offers pharmacy based counselling services and funds appropriate forms of medicines supply over 12- week periods. The *Starting Fresh Glasgow Stop Smoking Project* involves both qualified pharmacists and counter assistants, and has systems for ensuring interventional quality and relevant process and outcome data recording. Its scale and approach once again has the potential to serve as an international example, albeit that countries and/or regions lacking nationally financed health care systems must foster alternative (social insurance system based or local taxation supported) ways of funding and co-ordinating 'free at the point of use' pharmacy based cessation support.

Turning to The School of Pharmacy's survey findings in England, pharmacy policy and service development points worth particular attention include the following:

- **Most UK pharmacists/pharmacies appear broadly satisfied with relatively modest payments for stop smoking service provision, although their motivation is complex and influenced by a wide range of additional factors**

The financial incentives offered to community pharmacists in England vary from around £20 (\$39, E29) per successful quitter to £90 (\$177, E32). The median community pharmacy payment is circa £45 (\$88, E66) per quitter. Remuneration is markedly less for an unsuccessful quit attempt in some schemes. But there appears to be no significant link between the amounts paid and the level of pharmacy commitment and performance observed. One respondent commented '*the money is a hygiene factor, not a key driver. It has to be there, but factors such as professional and personal commitment are in my view more important*'. This conclusion is endorsed here, albeit that if more significant sums were offered this could well have an appreciable (and perhaps on occasions perverse) behavioural impact. Some small pharmacies operating on the margins of economic viability might change their behaviour more markedly than others in response to a large increase in payment. A London chain store manager with responsibility for around 100 outlets said '*there is no need for more money – we'll take it, of course, but [providing level 2 smoking cessation services in pharmacies] is already economically viable*'.

- **Requiring pharmacists/pharmacies to invest in quit support service establishment can increase the likelihood of their sustaining their effort to provide appropriate pharmaceutical care in the medium to long term**

The Charnwood and Northwest Leicestershire PCT scheme differs from many others in that it requires community pharmacies to initially invest £300-£400 (up to \$790, E590) into the set-up of the service before being invited to sign a contract. This covers the costs of training and the purchase of carbon monoxide (CO) monitors. PCT funds freed by this have been used to double the payment for a successful quit attempt from £25 to £50. It appears that due to the initial investment by community pharmacies in the scheme, there is greater commitment and hence more consistent provision of services. One individual involved in developing this arrangement said that it was in the past disheartening to see the level of commitment wane when new services were introduced, as compared to the enthusiasm expressed at the time of planning. It was commented that '*if the NHS pays for everything upfront, they will all say yes*' and noted that two types of pharmacists exist – those who see the economic opportunity associated with supporting smoking cessation and provide the service effectively and those who are neither financially nor professionally motivated, but attend the initial training because '*it looks good*'.

- **A majority of English pharmacists appear to favour flat rate payments rather than variable schedules which give a lower payment for failed quit attempts and a higher one for successful attempts, even though the latter may in aggregate terms offer greater profit**

A manager based in Haringey noted that introducing a supplementary payment to community pharmacists of £150 (\$295, E220) per group of 10 service users who quit for four or more weeks (in addition to the overall fee of £45 paid per case handled, and returns associated with supply of NRT) had failed to provide additional motivation. In 2006/07 this PCT offered community pharmacists an additional £750 (\$1,470, E1,100) per set of 50 four-week quitters achieved. But concerns remain about the impact of this enhanced incentive. The respondent also explained that an alternative Haringey scheme involving a payment of £70 per successful four-week quitter, but with no payment at all for failed quitters, successfully motivated practice nurses. But it was not favoured by community pharmacists. The latter apparently prefer the security of a lower level incentive payable independently of the case outcome. This would be consistent with the hypothesis that they tend to be financially (and perhaps otherwise) risk averse.

- **Large as opposed to smaller pharmacy chains and independently owned pharmacies may respond differently to given incentives, because of their contrasting business models and operational requirements and capabilities.** (NB: in the UK pharmacies can be owned by corporate bodies as well as individuals, with a single pharmacy superintendent taking ultimate responsibility for the professional governance of a large number of community pharmacies.)

One experienced PCT cessation service manager commented that the apparent lack of success of individual incentivisation programmes may be in part due to the reality that many pharmacy chains do not normally enable individual pharmacist employees to receive personal bonuses from the NHS. This respondent reported that this is sometimes – rightly or wrongly – regarded as 'company theft'. Others were critical of super-market based pharmacy (some professionals located in such

settings were said to be motivated more by in house product sales targets than cessation rates *per se*) and concerned about the performance large national chain pharmacies as compared with smaller 'local chain' and larger fully independent pharmacies. Staff located in the latter may be more likely than others to enjoy more robust local links, and values seen (at least by lower level staff) as being more consistent with those of the NHS and PCT based service commissioners. However, some pharmacists in large chain pharmacies were also said by interviewees to have exceptionally high professional standards. Continuous staff movement between stores in different localities is commonly seen as a problem for large chain pharmacies because of its impact on local professional and allied relationship building.

Against this, multiple outlet pharmacy managers questioned appeared to be adequately motivated by the availability of PCT payments for smoking cessation service provision. But local variations in paper work and service requirements from their perspective act as a barrier to deploying their staff in an optimal manner. The implication of this is that bigger pharmacy groups would favour the introduction of larger scale, Northern Irish or Glasgow type, models in England and other countries where chain pharmacies are permitted. Respondents working in such settings also argued that greater uniformity in service provision would empower service users, by enabling them to develop clearer knowledge of consistently available service entitlements.

Although (as already noted) employee pharmacists do not normally directly receive NHS incentive payments for smoking cessation service provision, respondents also stressed that they may in larger organisations enjoy group and/or individual bonus payments linked to collective and/or individual performance. Further, one PCT manager noted that the most enthusiastic pharmacist in her locality is an employee pharmacist who receives no direct reward for his activities. He is a member of an ethnic community with high smoking rates that he is personally committed to reducing.

#### ■ **Effective incentives need not be directly financial**

A pharmacist involved in tobacco cessation services at the PCT level, and who is currently part of a programme (in Islington) to mentor other local pharmacists in relation to their involvement in cessation, commented that providing pharmacies with equipment that could be used for tobacco cessation and other cognitive services can on occasions be a better motivator than offering direct cash incentives. This observation might be taken to conflict with one made previously on requiring pharmacies to invest in the establishment of cessation services. But in complex and variable fields incentivisation strategies should be tailored to specific circumstances. For example, in less well funded community pharmacies the only available computer may, with its printer, be exclusively dedicated to supporting the dispensing function. In such circumstances it could well be cost effective to provide pharmacies with additional equipment to document cessation service delivery, and provide tailored educational materials for potential quitters.

#### ■ **Some pharmacists lack the self confidence needed pro-actively to ask people about their tobacco use, and face other perceived barriers to involving themselves in smoking cessation support**

Despite some apparent exceptions (as, for instance, in the case of Newcastle) it is a commonly observed pattern that even in areas with a strong focus on developing pharmacy based smoking cessation services and robust systems for

providing relevant training and professional support, only a few community pharmacists – representing typically only 10 per cent or less of the total number practicing locally – can be said to be fully engaged in smoking cessation service provision. This 'motivated minority' often accounts for the great majority of the quitters achieved via pharmacy interventions. (A large urban PCT with a population of 500,000 might have an annual target of 3,000 four-week quitters, approaching a third of whom might be gained via pharmacy support.)

The suggested reasons for disappointing levels of active practitioner involvement in cessation support offered by School of Pharmacy survey respondents included the possibility that some pharmacists reject opportunities in this area because they do not see health behaviour change as the central role of pharmacy; the fact that notwithstanding the availability of cessation service payments the owners of many smaller pharmacies still believe that they and their staff lack the time for anything else but dispensing and direct sales activities; and a reluctance on the part of some pharmacists pro-actively to question pharmacy users about smoking because of emotional and allied barriers. They may, for instance, fear that they will alienate their customers by behaving 'intrusively'. In addition, pharmacists have also reported concerns relating to a low perceived probability of success associated with smoking cessation activities (see Box 3), poor communication with GPs, low public expectations of pharmacy and a lack of relevant prescribing rights and/or budgets in some areas.

## **Recommendations for the UK**

Many other issues were raised during the course of this investigation of UK smoking cessation provisions. They ranged from the risk of corrupt claims being made by pharmacists for work that has not actually been undertaken (this type of hazard is universally present across all fields of human activity – despite concerns reported by one PCT involved in The School's survey the possibility of incorrect payment claims being made cannot be said to especially affect community pharmacy) to the fact that as communities move towards giving up smoking it becomes harder for practitioners to find and help new quitters. This may be because residual smokers are more heavily addicted, or lack the social and allied forms of support which help others to give up the habit.

Aspects of these and other relevant matters are explored further later in this report. But the conclusions offered here relate primarily to the importance of examples of good practice such as the Northern Irish and Glasgow schemes described earlier. Their desirable characteristics, which may be regarded as recommendations for the UK as a whole to take up, include:

- sufficient scale and uniformity to allow pharmacy groups of all sizes to use their staff members in an optimally effective manner;
- the employment (in the case of Northern Ireland) of a simple flat level economic incentive, that pays the same for all individuals (quitters and non-quitters) completing a 4-week course, regardless of the outcome;
- the effective establishment of an independent pharmacy prescribing budget for products such as NRT, to enable their appropriate free supply for the purposes of individual care oriented towards public health improvement; and

### Box 3. Cessation Support Success Rates

The effectiveness of interventions aimed at stopping smoking varies in different cultural contexts, and with factors such as the extent of the addiction to nicotine experienced by individuals and groups. The way in which quitting is defined and measured is also significant. However, the available literature indicates that success rates will typically vary from only 1-2 per cent at six months or over in populations given no professional or pharmacological support, through to approaching 20 per cent amongst groups given intensive sustained psychological support backed with appropriate medicines.

There is robust evidence from European and US sources that brief advice from a physician can increase the basic quit rate to around 4 per cent,<sup>40</sup> and that the use of NRT approximately doubles the probability of a quit attempt succeeding in any setting, regardless of other variables. Hence an average individual seeking to quit after being given brief medical advice and NRT should have a 7-8 per cent chance of stopping smoking (see also text). More intensive behavioural support, including at the higher end group cessation therapy, can – as indicated above – produce significantly better outcomes.

The evidence base on the extent to which brief pharmacist advice will enhance quit rates is not as robust as that for physicians. The relative efficacy of pharmacists might perhaps be highest in social settings where they are regarded as having a status equal to that of doctors, and in situations where people expect pharmacists to have a general concern for their health rather than being exclusively concerned with dispensing. But taking into account experience in more intensive cessation service delivery settings, there is good overall reason to believe that both pharmacists and nurses can be as technically effective in delivering smoking cessation support as members of the medical profession. In practice pharmacy based services may also enjoy additional advantages, such as ease of access.

- a capacity for monitoring and verifying longer term quit rates, rather than simply using the four week self reported quit rate indicator employed in many English schemes.

Other recommendations that may add value to current British programmes include the suggestions that:

- all pharmacy provided Medicine Use Reviews (MURs) and other pharmacotherapeutic evaluations should as a matter of routine include smoking behaviour assessments and follow up intervention planning; and
- the smoking cessation service education and training available to community pharmacists and their staff is interesting, intellectually well-grounded, and delivered at a level and in a way likely to promote increased participant self-efficacy in the context of approaching potential quitters and asking about their smoking habits.

Looking beyond the United Kingdom, there is good reason to believe that – notwithstanding the differing funding systems underpinning other national health care systems, and the fact that national health improvement priorities vary between more and less affluent countries – an understanding of the NHS' experience to date with pharmacy based smoking

cessation support provision could help guide service formation elsewhere. It is to the world-wide development of pharmacy's role in controlling, and ultimately ending, the global tobacco related harm pandemic that this study now turns.

## Pharmacy's international contributions to stopping smoking

A second central component of The School of Pharmacy work reported here involved an international survey of smoking cessation service development, conducted in collaboration with the International Pharmaceutical Federation (FIP). The findings of this exercise, which involved respondents in thirteen countries outside the UK, are described in tabular format in Appendix 2. They can usefully be considered within the general framework of the analysis set out in the first main section of this paper. This is, from a pharmaceutical care development perspective, further elaborated in Figure 8.

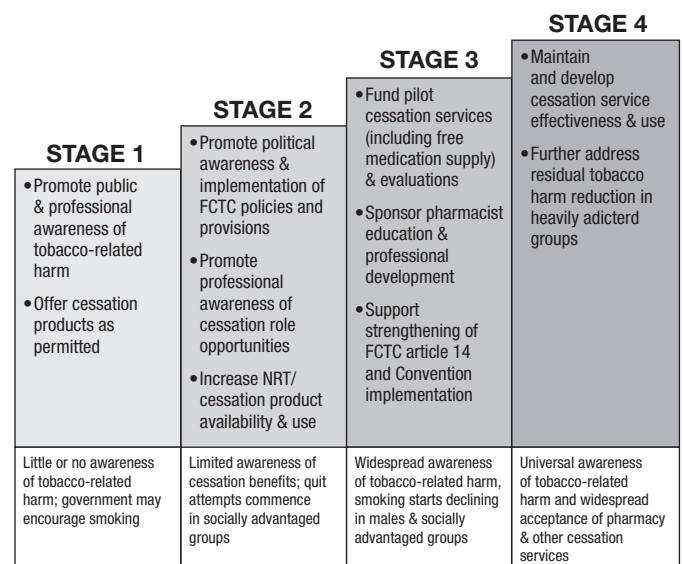


Figure 8. Stages of cessation support service development – a guide for stakeholders in global pharmaceutical care improvement

Globally, effective tobacco control efforts involve three main elements.<sup>41</sup> They comprise:

- influencing the behaviour of current and potential tobacco users, by encouraging or obliging them to avoid, reduce and quit smoking;
- limiting and preventing tobacco industry attempts to promote smoking; and
- reducing the harm from use of tobacco/nicotine products, where possible and desirable by facilitating the use of safer alternatives.

The potential for pharmacy to effect lasting change in this arena is a function of the relationship between the profession as social and functional entity and the wider social, economic and health infrastructures of the countries in which pharmacists practice. It is also affected by the quality of individual professional contributions, and of the leadership of the profession at all levels. Even at similar stages of economic development, contingent variables such as these can have an important influence. For instance, in

some national environments (such as that of Malaysia) there have been notable attempts to improve pharmacy training in the context of smoking cessation service delivery. Elsewhere this has not been the case: pharmacists have on occasions somewhat passively adopted a role in this field in response to pharmaceutical industry initiatives, changing consumer demands and, on occasions, political leadership.

General self care support forms the mainstay of global pharmacy tobacco cessation activities. Despite significant work over the last 30 years to highlight extended role opportunities, community pharmacy practice world wide remains largely tied to product dispensing rather than cognitive service provision and/or preventative health care. But the instance of tobacco use cessation illustrates how an initially supply based role can evolve to include more sophisticated interventions, with the potential to make significant contributions to better health outcomes at both the individual/clinical and population/public health levels.

In countries at stage 1 of the progression illustrated in Figure 8, merely optimising the delivery of brief advice and counselling associated with the sale/dispensing of NRT products and other cessation medicines can represent a significant improvement over the *status quo*. This requires actions within the scope of even the most traditional laws and assumptions governing pharmacy practice. In very poor countries, such as many of those in sub-Saharan Africa, the opportunities for pharmacists (who are few in number compared with the total population) to practice in this way may well be restricted to private service settings used by urban elites. But as it is members of the latter who are most likely to smoke tobacco in the initial stages of the pandemic, this is not necessarily inappropriate. If the groups offering role models for the wider communities of less economically developed nations can be persuaded to quit early, then others may be exposed to less risk of starting to smoke as they become wealthier.

Pharmacists working in stage 2 settings are more often in a position to address the needs of the general public. They should be encouraged to ask patients/pharmacy users proactively about their tobacco use, and to advise them that support of various types is available to help stop smoking. The available research indicates that referring pharmacy users to a programme such as a quit line typically adds less than 3 minutes to a patient encounter. Further, such interventions can be delivered by technical staff during virtually any visit, including picking up prescriptions for other health needs.

India is an example of a nation that might reasonably be considered to be in this developmental phase. It would be unwise (as with China) to generalise too much about a country with a total population twice the size of that of the European Union that has a large, well educated, professional middle class balanced by some 300 million people living in absolute poverty. The traditional patterns of tobacco use seen in India are in a number of respects unique, as also is the structure of the pharmaceutical profession (and the wider pharmaceutical sector) there.<sup>42,43</sup> Nevertheless, the potential for Indian pharmacy and pharmacists to make a definitive contribution to public health protection through tobacco use control and quit related interventions should be recognised.

In countries at stage 3 (most EU member nations, the United States, Canada, Australia and New Zealand) studies of enhanced pharmacy based provision combining brief interventions and more intensive individual support programmes typically show good outcomes for those accessing such services, but disappointingly limited uptake rates. The implication of this

observation is that more effective marketing of services to patients and referring medical practitioners would be in the public's interest.

Overall, the picture derived from The School of Pharmacy's international survey, particularly as it applies to Europe, is consistent with that presented by Joosens and Raw in their work on applying their experimental Tobacco Control Scale<sup>33</sup> (see Figure 5). Western European countries tend, not unexpectedly, to be more advanced than those in the Eastern areas of the continent. But within this pattern each nation state has its own local history and structures, within which the specific opportunities available for pharmacy based smoking cessation service development need to be understood.

## The role of professional organisations and pilot studies

Pharmacy's professional bodies have vital role to play in forming and applying strategies for achieving greater recognition for the profession in the sphere of tobacco control (and wider public health) leadership and cessation service provision. They can also, as countries move through to the later stages of the smoking pandemic, help support the introduction of adequately funded services aimed at reducing social class related inequalities in tobacco use, and the ill-health it engenders. This could in the immediate future demand high level pharmacy inputs into strengthening the implementation of the WHO's Framework Convention on Tobacco Control, particularly in the context of article 14. Robust interpretations of the latter should include due emphasis on the importance of supporting pharmacy based and other smoking cessation services.

In countries where the pharmacists' public health role is not well established, professional bodies may initially need to focus on developing awareness amongst pharmacists themselves of their interests and capabilities in this field. For example, many nations celebrate Pharmacy Week, during which professional organisations promote the role of their members through (public) health and allied campaigns. The Indian Pharmaceutical Association (IPA) has organised action programmes for both World No Tobacco Day and National Pharmacy Week. Smoking cessation promotion kits were sent to individual pharmacists and pharmacies, state and local professional branches, and pharmacy education institutions. A similar campaign recently undertaken in Singapore was also aimed at encouraging the public to access community pharmacies for relevant advice.

Once awareness is generated amongst pharmacists and public expectations start to rise, professional bodies can seek to build on this bridgehead via further political, professional and public communications. They may also promote capacity building. In Malaysia, for example, there has been a focus on further skilling and certifying pharmacists for the delivery of smoking cessation services, despite there being as yet no formal public-private tobacco cessation scheme in place. To date, one third of community pharmacists in the country have been so certified.

Such investments ought to open the way to ongoing processes of negotiation and partnership formation with other groups interested in achieving better individual and national health. These can involve evidence gathering and the organisation of pilot projects aimed at helping ensure that pharmacists are appropriately positioned to make viable, cost effective, contributions to tobacco use cessation in given settings. But

the value of some recent initiatives undertaken in countries such as Australia, Norway and Portugal appears to have been limited. This has in large been part due to the fact that uptake of services has been low. Insufficient attention is often paid to the task on enabling community pharmacists and their colleagues to actively find potential quitters.

Conducting and publishing pilot studies can contribute to the development of effective funding systems. In many countries, public (and/or universally accessible social insurance based) funding of tobacco cessation services and other cognitive services in pharmacies is not as yet available. Yet even in a prosperous highly developed nation like Norway more than half of the customers enrolled in a 2006 stop smoking pilot stated that they would not be willing to pay directly for pharmacy based tobacco cessation services. This emphasises the importance of the part that professional bodies can play in bringing the need to create effective financial support systems to the attention of governments and other health sector stakeholders.

Similarly significant examples of the international challenge to be overcome in relation to publicly funding adequate cessation services can be drawn from other affluent Scandinavian nations. In Finland, for instance, it is also the case that no cognitive pharmacy services are as yet funded via the Government. Pharmacies charge fees of up to 80 Euros (£55, \$107) to the customer for cessation counselling, in addition to the cost of NRT. The evidence available indicates that this is an important barrier to service access.

In Sweden, the government presently (via the currently nationalised chain, the Apoteket) holds a unique monopoly over the ownership of community pharmacies. While there has been investment in training primary healthcare providers of all types in the use of motivational interviewing techniques and encouraging them to support quit smoking attempts, the Swedish system has lacked specific mechanisms for the economic incentivisation of such forms of service provision. Customers who wish to have individual face-to-face counselling by pharmacists must pay a user fee of 60 Euro, in addition to the cost of NRT or other purchases. The Apoteket has recognised this as a barrier for many to accessing what is in health outcome terms one of the most cost effective of all forms of health care (Box 4). The organisation has stated that without specific government funding the expansion of smoking cessation service provision will be very difficult.

## Translating research and experimentation into mass provision

The above survey findings do not necessarily mean that private market oriented and allied independent insurance based solutions to the problem of stopping smoking at a population level cannot be developed. There are, for example, promising pharmacy and related schemes in place in parts of the US, and present overall trends throughout the mature industrialised economies suggest that in time educated people and communities will naturally elect to quit tobacco use.

But if policy makers wish to facilitate rapid change, and protect those least able (by virtue of their situations and/or personal attributes) to stop smoking before they suffer major harm, then the case for direct (or mandatory indirect) public funding is strong. It is also a fact that, although overall smoking rates in the US are low, some pharmacies and pharmacists working in unsupported market competition are discouraged from providing non-funded smoking cessation help. They may fear that their customers will accept uncharged advice

### Box 4. The cost effectiveness of smoking cessation services

Compared with providing virtually all forms of curative and long term health and social care, the provision of smoking cessation services is highly cost effective. In England, for instance, Stapleton estimated (in 2001) that the then relatively new cessation services available there via community pharmacists and other providers generate additional life years for treated smokers aged 35-44 for just over £600 per life year gained. The equivalent figure for those aged 45-54 was £750.<sup>44</sup>

Such figures are consistent with a cost per quality of life adjusted life year gained of in the order of £1,000. The UK National Institute for Health and Clinical Excellence's operational limit on the affordability of additional quality of life adjusted life years for NHS treatments is by contrast about £30,000. Other sources<sup>15,29</sup> also offer encouraging findings as to the cost effectiveness of both pharmacotherapies and pharmaceutical care for tobacco users in other European countries and the US, albeit that in some instances Qaly costs are significantly higher.

In currently less affluent nations the relative costs of labour as opposed to medicines will differ. Given other priorities the case for publicly funded cessation support may not be as strong as it now is in the mature industrialised economies. But as national economies strengthen and wider public health measures begin to curb the smoking habit and restrict it to less advantaged groups, the case for individual level tobacco addiction treatment will become increasingly robust.

and counselling, yet subsequently buy products like NRT medicines from lower cost sources that do not invest in cessation support.

Denmark is a country that, like the UK, has a central taxation based health care funding tradition. Although some commentators argue that aspects of its national approach to tobacco harm control could be strengthened, Danish pharmacy-led tobacco cessation services have been in place for some twenty years. For the period 2005-2008 Danish pharmacies have been allocated over 400,000 Euros per year to further enhance cessation services for the country's population, which numbers just over 5 million people. The majority of the latter are covered via a system that offers pharmacies 170 Euros (\$230, £115) for each customer completing a six month programme, followed up at one year.

Pharmacists are currently the most active providers of tobacco cessation services in Denmark. As with the UK examples provided previously, it would be unhelpful to suggest that the Danish system represents a model which all other countries could or should seek to emulate in exactly the same manner. But as across the world health care systems and tobacco control programmes continue to develop, the Danish arrangements provide a useful indication of what pharmacy might reasonably aspire to achieve.

## Realising the pharmacy opportunity

This report does not attempt to explore comprehensively all the issues that policy makers concerned with developing pharmaceutical care must take into account if they are to



enable the profession to play its full potential role in ending the global tobacco pandemic. Rather, three main themes are addressed here. They relate to the need to:

- build pharmacists' sense of self efficacy in relation to smoking cessation support, and their abilities to pro-actively encourage pharmacy customers to address quitting;
- resolve professional uncertainties about the safety and positive value of NRT and other medicines used to support quit attempts and tobacco use reduction; and
- facilitate – through collective professional action and ethical partnerships with public agencies, the pharmaceutical industry and other groups – recognition of the growing global importance of smoking cessation support in tobacco control programmes.

## Extending pharmacists' competence and confidence

The international literature shows that many community pharmacists in the US, the UK and elsewhere say they feel qualified to provide tobacco cessation services. But there is also evidence that most do not routinely seek to identify smokers and act as first movers in opening dialogues with them about the possible benefits of quitting. This is vital for the provision of services with a significant public health impact. Pharmacists are currently much more likely to respond to smokers' requests for advice than to initiate conversations about smoking habits and how they might be changed.

Even when NRT is being purchased, pharmacists may in many instances either be remote from the transaction or fail to communicate pro-actively with the customer about their experience with the product and how to use it to best effect. Making spontaneous interventions may be perceived by many pharmacists as being unduly invasive. There is also evidence that in, for example, the UK context, a proportion of pharmacists are – perhaps due to ingrained cultural assumptions – reluctant to take the initiative in communicating with GPs and asking them to refer potential quitters to the pharmacy for support. In parts of the world where there are higher numbers of doctors available, and there are less firmly established traditions of community and public health pharmacy, such problems may be even more acute.

However, specific education about tobacco cessation support can improve the quality and intensity of cessation counselling offered to patients. For example, a controlled study by Anderson (1995) showed that pharmacists who had received training were more likely to ask key questions, to use written information appropriately and/or when necessary (in the setting of that study) to refer to a medical practitioner.<sup>23</sup> This and subsequent research suggests that pharmacy practice could be changed radically, and relatively easily. The key to achieving more effective patterns of pharmacy intervention may be raising the average pharmacist's sense of self efficacy in relating to people, in addition to specifically facilitating the safe supply of pharmaceutical products.

There is also limited research indicating that pharmacy assistants working in US and perhaps other settings may on occasions be better able to take the initiative in asking pharmacy users about their smoking habits than are pharmacists. It could therefore be argued that counter staff should be encouraged to make pro-active contact with potential quitters, and as necessary refer them on to

a pharmacist or other suitable cessation services providers. However, too great a reliance on such a strategy could prove counter-productive, were it to draw attention away from the need to ensure that twenty first century pharmacists must have the confidence and skills needed for effective communication and clinical care delivery.

From today's perspective tobacco dependence shows many of the features characteristic of a chronic condition. Its alleviation may require sustained care and attention. More vulnerable tobacco users typically cycle through multiple periods of relapse and remission. Although a minority of tobacco users achieve permanent abstinence via a single quit attempt, others persist in tobacco use for many years after they first try to stop.

By recognising that tobacco dependence often takes the form of a long term illness, pharmacists can better understand its nature and become more confident in meeting service user requirements for continuing, rather than fragmented episodic, support. This suggests that, from a professional development perspective, increased pharmacist involvement in smoking cessation support ought to prove a useful stepping stone to other forms of role extension. Arguably, the profession's members will best be able to meet future 'post transitional' public requirements by enhancing their capacity to combine their knowledge of medicines with improved insight into medicine users' psychological and social needs. This should enable them to facilitate health behaviour change, in order to support better patterns of medicine taking alongside other forms of health promotion and protection.

## Resolving uncertainties and informing practice

Several respondents to The School of Pharmacy's surveys mentioned concerns relating to the fact that NRT contains nicotine, the addictive component of tobacco smoke, rather than any other active ingredient. A proportion of pharmacists appear to fear that supplying NRT without careful professional control and counselling could do little or nothing to 'cure' patients of their addiction, and may even be seen as undesirably perpetuating the latter. Others may be worried about safety. It appears that some believe that NRT could, for instance, harm people with cardio-vascular conditions or babies if it is used by women in pregnancy. It may also be thought that patients who use more than one type of NRT risk 'overdosing' on nicotine.

If unchecked, such dissonance could reinforce negative attitudes towards the provision of smoking cessation support services of all types, from the over-the-counter sale of appropriate aids through to more intensive support activities and other pharmacological treatments. Such a possibility emphasises the need for comprehensive, high quality, professional education that is kept updated throughout practitioners' careers. There is in fact strong evidence that NRT use is in all circumstances safer than cigarette smoking. The UK Committee on Safety of Medicines has, for example, recently recommended<sup>45</sup> that product information for all forms of NRT should *not* contra-indicate its use in:

- pregnancy and lactation;
- users with cardiovascular disease;
- adolescents aged twelve to eighteen; and
- circumstances which may lead to more than one form of NRT being used concurrently.

This and other authoritative sources also confirm that:

- using NRT approximately doubles the chances of users stopping smoking, even when it is supplied without pharmacist or any other form of professional support. One relevant illustration of the research evidence supporting this observation is that an extensive US meta-analysis of the effectiveness of over-the-counter NRT supply found that it produced a quit rate of about seven per cent, which is comparable to the efficacy of NRT in real world prescription practice;<sup>46</sup> and
- there is a relatively low risk of long term NRT use.<sup>47</sup> However, even when this does occur it is likely to be associated with individual and public health benefits, because substituting tobacco smoking with NRT reduces unwanted health outcomes. This understanding is in part reflected in the fact that a 'reduce to quit' indication has been introduced in a range of European countries since 1997. There is evidence that encouraging NRT use to cut down rather than stop smoking is likely in time to promote an increased number of quit attempts.

Although NRT products ought, like all other pharmaceuticals, to be used with appropriate caution (smokers with diabetes should, for instance, monitor their blood sugar more closely than usual when starting NRT use, and people with severely impaired liver or kidney function may be at an increased risk of side effects) they are relatively safe in use as compared with virtually any other form of medication or other legal (or illicit) drug taking. From a public health perspective all pharmacists should be aware of and willing to communicate such information, and offer similarly informed advice about other forms of pharmacologically active treatment for tobacco use.

It might also be argued that pharmacy as a profession should also be able and willing to comment publicly on the (cost) effectiveness of other, non-pharmaceutical, approaches to smoking control and elimination. For example, it may be valuable to point out that the available evidence indicates that temporary financial incentives for quitting, such as those offered by 'Quit and Win' schemes, are ineffective in the medium to long term.<sup>48,49</sup> They can encourage untruthful quit claims and when transient incentives end most quitters revert to their original behaviour. The most relevant implication of this research is that sustained behavioural changes need to be supported by genuine beliefs on the part of service users about what is in their best interests, rather than short term 'bribes' or other essentially coercive as opposed to professionally based approaches.

### Forming effective public and private partnerships for smoking cessation

Tobacco use, along with fatty food and sugar ingestion, has sometimes been perceived as fuelling industrial revolution, by helping workers to maintain concentration and energy levels. During the twentieth century the sale of tobacco products was often seen by governments as a public good. It provided employment, offered taxation opportunities and might have promoted satisfaction with – or at least increased public tolerance of – stressful social conditions. In poorer societies the fact that smoking can help control feelings of hunger may similarly appear to be beneficial.

Even in more affluent circumstances recognition of the fact that smoking kills has not always discouraged governments from condoning the use of cigarettes and allied products. For

example, the British Treasury until quite recently seemed to regard the fact that smoking related deaths in early retirement reduce public expenditures on pensions as desirable. Given such observations, it is not surprising that in the past it was often left to doctors and other health professionals to spearhead efforts to persuade the public of the undesirability of smoking.

However, as human societies develop their values tend to change in relation to not only factors such as the importance of exercising personal 'consumer' choice, but the importance of protecting health at a community wide level.<sup>50</sup> Awareness of such global trends may today encourage governments and other agencies to support relatively early measures to curb the tobacco pandemic. For example, in China action is already being taken to implement the WHO Framework Convention on Tobacco Control. The relevant authorities are planning to require health warnings on all tobacco products by 2008, the year of the Beijing Olympics. Tobacco advertising should be banned across China by 2010.<sup>51</sup>

The opportunity that modern pharmacy could and arguably should grasp centres on the proven capacity of community based pharmacists to enhance the rate of successful stop

#### Box 5. Safer nicotine?

Snus is a Swedish form of powdered tobacco. It is often referred to as an oral snuff, although it should not be confused with American and other fermented tobaccos sold for oral use. It is consumed by being placed behind the upper lip, rather than being 'snorted' or smoked, and is manufactured and stored in such a way as to minimise the formation of nitrosamines. The net result is that using snus may be up to 1,000 times less hazardous to health than cigarette smoking.<sup>52</sup>

Critics point to the fact that no form of smokeless tobacco can accurately said to be harmless, and that using snus habitually causes and/or sustains nicotine addiction. But proponents of a 'safe nicotine' approach argue that substituting snus use for smoking has helped to save lives in Sweden, and that the legitimate public health objective underlying tobacco control policies is the reduction of morbidity and premature mortality rates rather than the elimination of nicotine addiction *per se*.

Many alternative forms of tobacco use are highly hazardous, even when these do not involve combustion. In India, for instance, there are in addition to various local forms of smoked tobacco (such as beedis – sun dried tobacco rolled in a tendu leaf – and chuttas, a type of cheroot) a number of traditional smokeless tobacco products. Examples include paan with tobacco (plus ingredients like betel leaf, areca nut and slaked lime) and khaini (slaked lime and sun-dried tobacco). Traditional chewing and other smokeless tobaccos can be strongly carcinogenic.

Generalised statements about the safety or otherwise of such products should therefore be avoided. Regional and community patterns of nicotine addiction and its desired and undesired consequences need to be rationally understood, in sociological and psychological as well as bio-medical terms. Effective tobacco control and harm reduction policies must also be based on clearly defined and publicly agreed aims. Although eliminating all forms of nicotine use might be considered an ideal goal, this may not always be practically achievable.

smoking attempts. A key finding of this report is that although individual and small group oriented programmes to 'treat' tobacco use are not in isolation likely to be as cost effective as traditional public health measures such as increasing tobacco product prices and introducing smoking bans, cessation services will become increasingly important towards the 'end stage' of the tobacco pandemic. International pharmacy is well placed to communicate this message, and take a leading part in defining the ways in which societies should tackle tobacco use addiction in those individuals, groups and communities that, for whatever reason, are slow to quit.

One possible option to be considered in this last context relates to extending access to 'safe' nicotine products designed for long term use. The example of snus (an unfermented oral snuff) use in Sweden indicates that benefits may stem from this type of approach (Box 5), despite disadvantages such as a raised oral cancer risk. However, it would not for the purposes of this report be appropriate to explore further such questions here. Rather, it is important to highlight the potential value of constructive partnerships between pharmacy and the medical profession, and between health professionals and health service user groups concerned with promoting smoking cessation.

Appropriate collaborations between pharmacists and pharmaceutical companies that produce smoking cessation support products may also serve the public's interest in enhancing access to effective smoking cessation, provided they are conducted in an ethical manner and are genuinely aimed at contributing to health improvement. The need for interest groups that are seeking to reduce, and ultimately eliminate, smoking to work together effectively is underlined by the enormous scale of both private and public investments in tobacco related industrial enterprises across the world. Counterbalancing resource asymmetries between the latter and agencies committed to reducing the harm caused by smoking will require intelligent co-operation and enterprise at all levels.

## Conclusions and recommendations

Pharmacy has an important global role to play in helping to end the smoking pandemic. Tobacco use caused hundreds of millions of premature deaths in the twentieth century. Unchecked, it could inflict an even greater volume of harm in the next hundred years. Further development of the profession's role in supporting smoking cessation at every level, from offering NRT and other medicines on an accessible over-the-counter basis to providing relatively intensive psychological support to potential quitters, could across the world promote high volumes of health gain at a cost which should become increasingly affordable.

In countries such as US, Denmark and Singapore there are already valuable examples of pharmacist supported smoking cessation services in place. In the case of the UK, this report has described relevant instances of successful pharmacy practice in Northern Ireland, Scotland and England. Wales too has made significant progress. Recommendations for further improvement in the context of British smoking cessation services range from increasing the scale and structural uniformity of smoking cessation programmes (in order to allow pharmacy groups of all sizes to use their staff in an optimally effective manner) to incorporating smoking behaviour assessments and follow up intervention planning in all pharmacist provided medication reviews.

The UK and wider EU and US experience also illustrates the importance of seeking to ensure that appropriate public and private systems are established to fund pharmacy based (and other) forms of smoking cessation support. However, it would be unfortunate if, in seeking to create appropriate financial environments for the delivery of enhanced pharmaceutical care, the impression were falsely given that the only thing that motivates the pharmaceutical profession's members is money. This is not the case.

This report's additional international recommendations are that:

- Governments and other stakeholders in better public health (including pharmacy) should work globally to ensure that due emphasis is placed on smoking cessation service provision, via strong and comprehensive interpretations of Article 14 of the WHO's Framework Convention for Tobacco Control;
- all health professionals should recognise the still growing importance of tobacco use as a threat to health world-wide, and work in partnership with other groups – including pharmaceutical industry and voluntary sector agencies – to promote smoking cessation along with other forms of tobacco control;
- pharmacy leaders and regulators ought to encourage appropriate investments in professional training, to allow pharmacists to play a full and confident role in ending the global pandemic of tobacco related harm; and
- members of the public seeking to take a responsible approach to their own health and that of their families and communities should support public health programmes aimed at preventing smoking and (especially as tobacco use declines towards the point that it becomes in social terms a sickness rather than a normal habit) the provision of universally available services to help tobacco users free themselves of their life threatening condition.

Governments, health care professionals and citizens living in the mature industrial economies with long-term experience of tobacco related harm have a responsibility to share their smoking cessation service experience with communities that have not yet suffered the full health costs of mass tobacco use. The prize that this could lead to is an accelerated end to the global tobacco related harm pandemic, that could save tens or even hundreds of millions of premature deaths in the coming century.

Each community's and nation's developmental priorities must be respected. Yet in the final analysis the evidence is overwhelming that, in virtually all but the poorest of the modern world's nations, tobacco smoking is normally the biggest single avoidable risk to health. Smoking cessation support is also one of the most cost effective of all possible health service investments. Hence helping individuals to stop smoking represents a vital opportunity, not only for pharmacy but for humanity world wide.

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## Appendices Appendix I: United Kingdom Smoking Cessation Services Summary

Area	Description
<b>Adur, Arun and Worthing</b>	Pharmacists involved to a limited extent in 2 local areas. In one, 4 pharmacists have been trained to provide level 3 (specialist group cessation) services on a scheduled basis. In the other, 2 pharmacies actively provide individual level 2 services in a 6 week scheme. Clinic and GP clinics are main providers and pilot being carried out involving dental clinics. Limited pharmacy involvement due to budget constraints but hope that in the near future it will be possible to have greater pharmacy input, especially from prescriber pharmacists.
<b>Camden</b>	Programme developed from joint Camden and Islington HAZ initiative, 'pharmacy quitters' now accounting for about one third of the total. Camden uses a fairly typical English NHS smoking cessation service specification, employing patient group directions (PGD) for NRT and allied product supply and CO testing at four weeks
<b>Charnwood and Northwest Leicestershire</b>	Programme requires pharmacies to invest £300-£400 into the training of staff and equipment (eg, CO monitoring) before providing services.
<b>Croydon</b>	'Charismatic' pharmacy leadership appears to helped senior PCT management to understand that community pharmacy has the potential to deliver performance targets. There are relatively high local levels of pharmacy payment.
<b>Glasgow and Clyde</b>	<p>'Starting Fresh' initiative: 12 week programme. 207 (94%) pharmacies involved. Quiet area is required to provide service. Pharmacist prescribes NRT according to Glasgow Formulary guidelines. After initial interview, either pharmacist or assistant can see the customer. Customer agrees to attend the pharmacy on a weekly basis for NRT and counselling. CO levels measured. Nicorette® 16 hour patch is formulation of choice. Support groups also set up – NRT supplied from week 3 of quit attempt.</p> <p>There has been an overall downturn in GP prescribing costs of NRT since introduction of programme (absolute decrease of 13% between 2005 – 2006).</p>
<b>Greenwich</b>	4 week NRT scheme. 35 pharmacies involved, all have private consultation space.
<b>Haringey</b>	4 week scheme. 48/55 pharmacies in the area provide services, but "only a handful of trained pharmacists have provided services to the expected level."
<b>Harrow</b>	5 week scheme. 52/54 pharmacies delivering the service. Programme offers counselling and motivational support, CO monitoring and prescriptions through a PGD for NRT.

Funding and infrastructure	Economic Incentives	Outcomes	
		Recruitment	Quit rate
NRT provided on GP's prescription. Training programme open to all pharmacists.	Flat remuneration rate regardless of success at 4 weeks (total fee approximately £55).	2355 set a quit date (SQD) in 05/06; Pop 210,000. Pharmacies contribute about 1% of results (note that there are 45 GP clinics actively providing service).	1517 (64%) quit at week 4 (QW4)
Supported by a co-ordinator plus pharmacy lead. Training programme available for pharmacists and assistants/dispensers. Total circa 50 pharmacies, of which c. 10% highly active	Payment to pharmacists totals £45 over 4 weeks for those administering PDG and providing support, starting with £15 for assessment. £10 for session 2 (quit date), £5 for 3&4 and £10 for session 5 (4 week follow up, CO test)	2857 SQD in 05/06; Pop 220,000.	1673 (59%) QW4.
PCT budgets for service provision and training/equipment costs have been pooled to provide greater economic incentive for service. Pharmacies rather than the PCT are required to invest in service set up and are responsible for ongoing training of pharmacists and equipment maintenance.	Pharmacies paid £25 per quit attempt and £50 per successful quitter (currently reduced to £40 due to budget restrictions). Pharmacies see economic need to provide service in order to recoup investment and hence greater buy in.	2247 SQD in 05/06; Pop 230,000.	1632 (73%) QW4.
Training and support provided. However, only about 10 out of 70 pharmacies judged fully active in the delivery of cessation support.	Payment to pharmacists totals £90, including £45 for the initial 'work up' and £10 final monitoring payment.	3324 SQD in 05/06; Pop 340,000.	1454 (44%) QW4.
NRT reimbursed by NHS, usual prescription charge to customer. One day training for brief negotiation interventions and distance learning pack on NRT (need to pass with 80%) given to pharmacists and assistants.	Pharmacies paid £30 per customer enrolled (or £15 if recruited from the group smoking cessation programme). Paid £5 even if customer fails to return after week 1.	More than 42,000 smokers recruited over 3 years. On average 1000 new customers register for service each month.	Quit rates: <u>5 -12 weeks</u> <ul style="list-style-type: none"> <li>• 29-39% for pharmacy recruited customers</li> <li>• 38-52% for group recruited customers.</li> </ul> <u>12 – 52 weeks</u> <ul style="list-style-type: none"> <li>• 12-18% (pharmacy)</li> <li>• 14-30% (group).</li> </ul> <u>After 52 weeks</u> <ul style="list-style-type: none"> <li>• 4-8% (pharmacy)</li> <li>• 5-14% (group).</li> </ul> There appears to be an association between deprivation status and quit rate.
Free NRT patches promotion scheme has been successful in encouraging people to access services in pharmacies.	Pharmacies paid £40 for a successful quit; and £10 - £25 (depending on length of follow up) for unsuccessful quit.	2770 SQD in 05/06; Pop 230,000. Pharmacy contributes around 50% of results.	1286 (46%) QW4.
60 pharmacists trained; only 5/55 pharmacies considered active.	Basic pharmacy payments total £45. Experiment with £70 payment per successful quitter but no payment for failed interventions did not motivate pharmacists, but positive response from practice nurses.	4006 SQD in 05/06; Pop 230,000	2815 (70%) QW4.
NRT supplied through PGD. Initial training plus regular top up training every 6 months offered (compulsory).	Pharmacies paid according to staggered payment structure – initial pre-assessment £15, first appointment £15, next 3 appointments £5 and final appointment £15 (£60 per quit).	2578 SQD in 05/06; Pop 200,000	1186 (46%) QW4 in 2005/06. 2007 quit rate 45%. Target for 2005/2007 – 1252 quitters.

## Appendix I: United Kingdom Smoking Cessation Services Summary (continued)

Area	Description
<b>Islington</b>	4 week scheme. 37/45 pharmacies involved. Scheme established in 1999. Model similar to that of Camden, derived from common HAZ experience. Strong local focus on the potential value of community pharmacy contributions to meeting cessation goals. Both boroughs have high deprivation rates and large ethnic minority groups, but also significant affluent populations.
<b>Middlesbrough</b>	3 month scheme. Pharmacists are an integral part of services in PCT. Two schemes operate, one described as a voucher scheme and the other is a 'one-stop-shop'. <ul style="list-style-type: none"> <li>• Voucher scheme: first assessment done at stop smoking clinic with follow up for 4 weeks, if remain smoke free they return to the clinic for an 8 week follow up voucher through pharmacy.</li> <li>• One-stop-shop: direct access of stop smoking service at pharmacy for 3 month period.</li> </ul>
<b>Newcastle and North Tyneside</b>	4 week scheme. Service running with pharmacies for 6 years. 50 pharmacies delivering service and more have taken up service with time (especially with the new pharmacy contract).
<b>Northern Ireland</b>	4 week scheme with check up at 52 weeks. Current model introduced December 2006. Pharmacy involvement supported by charismatic local leadership. Scheme now nationwide, replacing previous arrangements that were delivered independently via the four NI Health and Social Service Boards.
<b>North Tees, Hartlepool, Redcar and Cleveland</b>	Pharmacists not actively involved in services apart from 2 pharmacies which were involved in a trial. Limited involvement as there is not payment scheme for pharmacists to provide services in the PCT. Stop smoking services mainly provided through clinic and prescriber nurses. Potential for future development though steps for greater involvement not taken yet. Would prefer to target prescriber pharmacists and involve selected pharmacies through voucher scheme.
<b>Richmond and Twickenham</b>	6 week scheme. Pharmacists are actively involved in scheme. 85% of pharmacists trained in Richmond and Twickenham area, 75% of pharmacists trained in Kingston area.
<b>Yorkshire, Wolds and Coast; Hull and East Riding</b>	6 week scheme. Limited involvement of pharmacists. 1 scheme in Hull involving 6 pharmacies that agreed to take part in a pilot in 2005. There is an agreed maximum number of clients that are able to use the pharmacy service per year (approximately 20-50 per pharmacy). Capped involvement due to budget restraints. One community pharmacy actively provides service in Yorkshire Wolds and Coast. This is seen as a cost effective way of enabling access to cessation services in a small and in modern UK terms isolated community.

Funding and infrastructure	Economic Incentives	Outcomes	
		Recruitment	Quit rate
PGD for NRT. Stop smoking training recognised as part of CPD for pharmacists in new agreement.	Pharmacies paid £45 for a successful quit and £35 for an unsuccessful quit.	3569 SQD in 05/06; Pop < 180,000.	1939 (54%) QW4. Approximately 35% of these were through pharmacies.
Most pharmacies in PCT involved in providing service. NRT given with usual prescription charge. Specialist and call services also provided by other health professionals. Good communication between clinic and pharmacies felt to contribute to success of scheme.	Payment for service of 4 weeks or 3 months. £10 bonus given for successful quit at 4 weeks.	3953 SQD in 05/06; Pop < 200,000.	1779 (45%) QW4 in 2005/06. 61% of these were through pharmacies.
Agreements signed with chains and individual pharmacies. NRT supplied on PGD; NRT charged at prescription costs and reimbursed by PCT. Service providers have good support from PCT and receive promotional materials and regular updates. Free training provided to pharmacists and pharmacy technicians/ assistants.	Pharmacies paid £10 for drop out customers and £20 for quitters or those who remain in programme at 4 weeks.	Newcastle reported 4854 SQD in 05/06; Pop 270,000. N Tyneside 3882 SQD in 05/06; Pop 200,000. Pharmacy data represents around 19-20% of total data received on smoking cessation services in the PCTs.	Newcastle: 2342 (48%) QW4. North Tyneside 1907 (49%) QW4.
Additional funding provided for nationally to enable pharmacy to provide NRT directly – might be seen as a step towards a pharmacy prescribing budget.	Pharmacies paid a flat rate 4 week course payment of £28 per patient/user regardless of whether or not a successful quit is recorded, coupled with an additional £7 for a 52 week cessation monitoring check.	Figures for 2002/03 indicate a national total of circa 9,000 setting a quit date. Total NI population 1.7 million. 60 per cent of professionals delivering smoking cessation services were pharmacists in 2003	Self report success rate 58 per cent at four weeks in 2003, dropping to 47 per cent where non-smoking status was confirmed by CO validation.
Training is open to all pharmacists to participate		North Tees 3229 SQD in 05/06; Pop 180,000. Hartlepool 2564 SQD in 05/06; Pop 90,000. Around 10% of results come through the 2 pharmacies that do provide the service.	North Tees 1551 (48%) QW4. Hartlepool 1328 (52%) QW4.
2 week prescriptions given for NRT by GPs upon advice of pharmacist and charged at usual prescription cost.	Pharmacies paid as a staggered rate with £20 for first visit and £10 for each visit thereafter. £5 bonus for successful quit.	1204 SQD in 05/06; Pop 180,000. Pharmacy data represents around 50% of total results.	568 QW4. • 47% through PCT. • 55% through pharmacies.
Voucher scheme also exists for NRT to be dispensed at pharmacies (pharmacy paid a £3 dispensing fee) with payment of usual prescription cost. This supports the specialist (level 3) smoking cessation support model relatively widely employed in these localities.	Flat remuneration regardless of quit success. Total £39, comprising three payments of £10 and three of £3 in the 2005/06 model described here.	Eastern Hull reported 1421 SQD in 05/06; Pop 120,000. West Hull reported 1736 SQD in 05/06; Pop 150,000. Yorkshire, Wolds and Coast reported 1127 SQD in 05/06; Pop 150,000.	Quit rate through pharmacy is lower than main stop smoking services. An evaluation of reason for lower success rate is needed before considering expansion of scheme. Eastern Hull 982 Q4W. West Hull 1190 Q4W. Yorkshire, Wolds and Coast 779 Q4W. 69% quit at 4 weeks in all PCTs.



## Appendix II: International Smoking Cessation Services Summary

Country	Tobacco cessation activity	Economic incentives	Other incentives	Infrastructure and support	Awareness and promotion
<p><b>Australia</b></p> <p>Adult smoking: 21% male 18% female</p> <p>1,907 cigarette consumption annual pp</p>	<p>Pharmacy guild commissioned two projects – 2004, 2006.</p> <p>2004: SUPPORTU project aimed to examine effectiveness of smoking cessation services delivered by community pharmacy. 18 months, 80 pharmacies recruited. 5A Smoking cessation framework adopted. Pharmacies were to recruit customers and refer them to Quitline program or provide formal smoking cessation support.</p> <p>2006: Pharmacy smoking cessation project. Built on pilot from 2002 with \$1million AUD funding. Aimed to implement an effective quit smoking management program. 6 months, 400 pharmacies.</p>	None		Materials provided by pharmacy guild – stands, brochures, passports, Dr's referral pad.	Wide publicity campaign using all media.
<p><b>Canada</b></p> <p>Adult smoking: 27% male 23% female</p> <p>1,976 cigarette consumption annual pp</p>	No national program but largest provincial program is Clinical Tobacco Intervention (CTI), co-sponsored by Dental, Medical and Pharmacy Societies in Ontario and the Canadian Medical Association.	<p>No national reimbursement system but one-off reports of pharmacists charging patients.</p> <p>Recent (unpublished) pilot by Green Shield Canada to pay for products + pharmacy services.</p>		<p>CTI provides training &amp; support materials. Website is <a href="http://www.ctica.org">www.ctica.org</a></p> <p>CTI trains dentists, physicians, pharmacists, nurses and support staff together.</p>	
<p><b>Denmark</b></p> <p>Adult smoking: 32% male 29% female</p> <p>1,919 cigarette consumption annual pp</p>	<p>National pharmacy program commenced in 1986.</p> <p>Pharmacy programs provided in 10 of the 14 counties in Denmark until 2007. Negotiations currently underway to re-establish services amongst the newly formed 150 municipalities.</p> <p>Services provided free of charge or in range of 50-100% subsidy for customers.</p> <p>New brief consultation service.</p>	<p>Danish pharmacies allocated 3 million kroner per year for 2005-2008. Funding spent on increasing access, information campaigns, new services.</p> <p>Pharmacy remunerated around 170 Euros for every customer that completes the programme and is followed up on at 52 weeks.</p>		Smoking cessation brochure translated into 7 languages for ethnic minorities.	Campaigns to inform general practitioners of programs. 53% of respondents stated they would go to a pharmacist if recommended by doctor. Many doctors don't recommend service as little is known about it.

Education and training	Outcomes	Policies	Comments and future plans
<p>Training provided to pharmacists.</p> <p>2004: as part of SUPPORTU - introductory workshop, academic detailing visits, mystery shopper visits and feedback and staff meetings.</p> <p>2006: Online training provided through the Centre for Innovation in Health Professional Health Education, University of Sydney – developed an online course. More comprehensive course for assistants and a refresher course for pharmacists.</p>	<p>2004: SUPPORTU project - 107 smokers referred/ 88 smokers enrolled into support programme in 6 months. 70% of intervention pharmacists discussed importance of support from Quitline vs. 29% in control. 19% intervention pharmacists enrolled mystery shopper into pharmacy team support vs 3% control. NRT sales increased in both groups.</p> <p>2006: 792 customer survey forms returned over 6 months. 55% of control and intervention respondents remained quit at 12 weeks. Outcome evaluation showed no statistically significant effect of intervention over control group. NRT sales actually marginally decreased over intervention period compared to baseline. 52% customers of intervention group quit after 6 months, while 48% quit from control group.</p>	<p>NRT available as general sale since March 2006. No government/state funding for services in Community Pharmacy Agreement.</p>	<p>Following SUPPORTU: recommendations included incorporating smoking cessation advice as an integral part of the role of accredited pharmacists when undertaking Home Medicines Review, smoking cessation training should be a required and accredited role, funding should be sought in negotiations for pharmacy/ government agreement for support of pharmacies, and that payment for services should be a yearly practice incentive allowance.</p> <p>2006 project: Customers attending intervention pharmacies were more inclined to speak to pharmacy assistants in addition to pharmacists and receive more useful advice and support than in control pharmacies. Concluded that the process indicators of intervention impact are positive and result in significant impact on outcomes relating to pharmacy (as opposed to impact on smokers) – increased positive regard for pharmacy and likelihood of repeat purchase from the same pharmacy. However stated that intervention NRT buyers were more likely to receive useful advice, be informed of support services and complete the NRT program.</p>
	<p>&gt; 3500 clinicians trained by CTI (requests for training increased recently because required for reimbursement in Green Shield pilot).</p>	<p>NRT recently moved from pharmacy-only sales to general sale.</p> <p>Ontario Drug Benefit (ODB) Program does not pay for NRT products.</p>	<p>New legislation in Ontario for 2007 will pay for some cognitive services through ODB; possibly smoking cessation.</p> <p>1-2 provinces in Canada still sell tobacco products in pharmacies.</p> <p>SW Ontario still produces some tobacco.</p> <p>Stop Smoking for Ontario Patients (STOP) study is currently looking at outcomes of providing free NRT (via mass mail &amp; via clinicians) to 14,000 smokers.</p>
<p>Training provided-based on materials and models produced in partnership with the Cancer Society.</p> <p>11 pharmacists from ethnic minorities are also trained to provide services to this population group.</p>	<p>Quit rate is 30% at 52 weeks.</p> <p>Brief consultation service tested in 25 pharmacies. 145 pharmacies offer individual smoking cessation services, 151 pharmacies offer group services.</p>	<p>NRT not covered in funded/subsidised schemes.</p>	<p>Cooperation with national state will end in 2007 and be replaced with municipal based cooperation.</p> <p>Future programs will target pregnant smokers and those with diabetes and heart disease.</p>

## Appendix II: International Smoking Cessation Services Summary (continued)

Country	Tobacco cessation activity	Economic incentives	Other incentives	Infrastructure and support	Awareness and promotion
<p><b>Finland</b></p> <p>Adult smoking: 27% male 20% female</p> <p>1,351 cigarette consumption annual pp</p>	<p>Personalised smoking cessation service developed in 2005.</p> <p>27 private pharmacies and 17 university pharmacies (chain owned by University) offer PAS model service. PAS model: 4-5 visits to pharmacist and telephone follow up over 4-6 months.</p> <p>University pharmacies require 11 visits over 6 months. Blood pressure and CO monitored. 50 pharmacists take part.</p> <p>Kuopio area: 10 year cooperation with two pharmacies, local health centre and university hospital.</p>	<p>Fee charged to patient (60-80 Euros). Felt that there are few economic incentives.</p> <p>University pharmacy chain are the main providers with 150 customers.</p> <p>Challenge in determining the required fee that patients are willing to pay. If patients access programmes through other providers such as GPs or nurses, they still need to pay for appointments and for NRT.</p>	<p>Quit and win competition</p>	<p>Association of Finnish pharmacies (AFP) coordinates the anti-smoking group (SALSA). SALSA provide study materials, tools, information articles and bulletins, local educational events.</p> <p>Private pharmacies provide their own infrastructure and support for service provision.</p>	<p>Quit and win competition promotion. Promotion through SALSA – leaflets, posters, newspaper articles.</p> <p>University Pharmacy advertises the programme in the public media, their own customer magazines and brochures and in the pharmacies.</p>
<p><b>France</b></p> <p>Adult smoking: 38% male 30% female</p> <p>2,058 cigarette consumption annual pp</p>	<p>There are about 500 specialist tobacco use cessation centres in France. Smoking cessation services are also provided by community pharmacies. No national programme.</p> <p>National survey of young people suggests pharmacists are recognized as leaders in this area.</p>	<p>None known. However, two mutuels (private insurers) have recently agreed to pay pharmacists a fee of E21 for conducting patient health checks aimed at enhancing preventive care and national. Limited public funding support for access to NRT and allied therapies is being introduced</p>	<p>None known.</p>	<p>Part of World Health Organization European Partnership Project to Reduce Tobacco Dependence.</p>	
<p><b>Germany</b></p> <p>Adult smoking: 39% male 31% female</p> <p>1,702 cigarette consumption annual pp</p>	<p>“Although highly developed in other areas, the medical system in German-speaking countries has yet to be convinced that smoking cessation is not only necessary but feasible.”</p>	<p>None known.</p>	<p>40% of pharmacists surveyed did not see tobacco cessation services as a normal part of their work</p>	<p>Part of World Health Organization European Partnership Project to Reduce Tobacco Dependence.</p>	<p>Federal Union of German Association of Pharmacists</p> <p>German Coalition against Smoking, German Medical Association, and German Scientific Society for Smoking Cessation.</p>

Education and training	Outcomes	Policies	Comments and future plans
<p>Nationwide education campaign on national guidelines in 2003. Regular training days and courses. 700 pharmacists work in the professional Asthma programme and provide smoking cessation services.</p> <p>Kuopio University pharmacy chain: provide multidisciplinary training to streamline messages conveyed by different health professional groups. Training given to undergraduate students.</p>	<p>Not routine. Poor uptake of PAS model services.</p> <p>Kuopio: pharmacists ask patients who are prescribed pulmonary medicines on their smoking status.</p> <p>Variation in type of service provided ranging from comprehensive to basic advice on NRT.</p> <p>54% of pharmacies ran activities outside of the pharmacy in workplace etc. Activities increased 2-4 fold between 2002-2003. Some multidisciplinary group cessation practices but these are rare.</p>	<p>NRT available as general sale since January 2006. Perhaps may reduce motivation of pharmacists to provide service. Despite fee for service it is not seen as profitable.</p> <p>National guidelines state that pharmacies are responsible for good NRT therapy though little is felt to have changed following the introduction of guidelines.</p>	<p>Expansion of activities since mid 1990s. Pharmacists and pharmacy owners lack economic incentives and motivation likely to come from a desire improve own competence and help people. Only 1.4% of respondents to a 2005 survey stated that they had been advised to quit by a pharmacy staff member.</p> <p>Observe that pharmacists are more likely to help those who request assistance rather than all smoking customers.</p> <p>Multidisciplinary models appear to be successful – examples in Lapua and Hameenlinna (group and individual services).</p> <p>University Pharmacy chain seems to be the most successful with 150 customers taking part in the programme. Patient visits take 15-30 minutes but tend to run overtime. Challenges in making the programme more time efficient.</p>
<p>Among 82 pharmacists polled (2000), 37% had undergone training for smoking cessation and 85% claimed to provide services.</p> <p>Le Louarn A, 2002</p>		<p>Pharmacist role recognised by Drug Regulatory Agency. No government contract with pharmacies to provide services.</p>	
			<p>Nicotine nasal spray is available OTC in pharmacies.</p> <p>70% of Germans are opposed to legislation banning smoking in public spaces.</p>

## Appendix II: International Smoking Cessation Services Summary (continued)

Country	Tobacco cessation activity	Economic incentives	Other incentives	Infrastructure and support	Awareness and promotion
<p><b>India</b></p> <p>Adult smoking: 29% male 2.5% female</p> <p>129 cigarette consumption annual pp</p>	<p>No regular activities. No known models of pharmacist led tobacco cessation services</p> <p>Indian Pharmaceutical Association: pharmacists active in campaigns for World No Tobacco Day and National Pharmacy Week.</p> <p>Survey conducted to examine attitudes of pharmacists.</p>	<p>India is 2<sup>nd</sup> largest tobacco producer. 86% of tobacco sales in India are bidi (pipe), chewing tobacco, gutka. Smuggled cigarette market is 4.4 billion USD.</p> <p>Survey results: Survey conducted in 3 regions, 429 respondents (107 community, 88 other, 234 students).</p> <p>11% pharmacists in study are users of tobacco.</p> <p>80% pharmacists felt their current knowledge of smoking was sufficient.</p> <p>75% said that they advise customers to stop smoking. However only 50% of pharmacists volunteer information about smoking cessation programs to customers that want to quit.</p>			
<p><b>Italy</b></p> <p>Adult smoking: 32% male 17% female</p> <p>1,901 cigarette consumption annual pp</p>	<p>No regular activities. No known models of pharmacist led tobacco cessation services</p> <p>Italian tobacco cessation programmes are primarily GP-mediated</p>	<p>An anti-smoking program for the prevention of cancer and cardiovascular diseases has been ongoing in Italy since 1981, coordinated by the National Cancer Institute of Genoa and the Italian League Against Cancer of Genoa. The program includes several initiatives addressed to different target groups; schoolchildren and teachers, military personnel, doctors and nurses, and women. No pharmacist activities are discussed in a review of these programs published in 1995.</p> <p>Pizzo, et al (Tumori, 2003) report the results from a phone interview of 729 family doctors, 409 in Northern and 320 in Southern Italy, regarding their personal smoking habits and their approach with patients on the topic. The percentage of current smokers among GPs included in the survey was 28.3%.</p>			
<p><b>Malaysia</b></p> <p>Adult smoking: 49% male 3.5% female</p> <p>910 cigarette consumption annual pp</p>	<p>Certified smoking cessation service provider (CSCSP) programme run by Malaysian Pharmaceutical Society from 2004.</p> <p>Two known examples where pharmacists actively provide services – clinics are attached to teaching universities (USM, UKM).</p>	None	<p>Certification to provide smoking cessation services. Quit and win contest.</p>	<p>Organised by Malaysian pharmaceutical society. Main funder is Pfizer. Trained facilitators run the workshops and trained pharmacists are monitored.</p>	<p>MPS promotion to pharmacists. Collaboration with Clearing House for Tobacco Control, Malaysian Academy for Pharmacy, Ministry of Health (Public health dept), and Pfizer.</p>
<p><b>Norway</b></p> <p>Adult smoking: 31% male 32% female</p> <p>725 cigarette consumption annual pp</p>	<p>Pilot project involving 19 community pharmacies. January-April 2006.</p> <p>Organised by professional body: Apotekforeningen</p> <p>Customers given 5 free consultations at the pharmacy.</p>	None.	<p>Publicity – articles about services in newspaper.</p>	<p>Financial report for project given by Directorate of Health and Social Affairs, Pfizer, Novartis, Stiftelsen til fremme av norsk apotekfarmasi.</p>	<p>Marketing campaign to inform local companies, health services, physicians. Advertised in newspapers, radio, newspaper website, leaflets.</p> <p>Most effective: newspaper adverts and articles, recruiting activities in the pharmacy.</p>
<p><b>Portugal</b></p> <p>Adult smoking: 30% male 7% female</p> <p>2,079 cigarette consumption annual pp</p>	<p>National Association of Pharmacies (ANF) launched structured smoking cessation service through national campaign in May 2006.</p>	<p>None. Discount on purchasing OTC medications for pharmacies.</p>		<p>ANF support. Support from pharmaceutical companies with OTC products – some provided special promotions to pharmacies.</p>	<p>Pharmaceutical Society also has campaigns on smoking cessation and role of pharmacist. National campaign publicity.</p>

Education and training	Outcomes	Policies	Comments and future plans
<p>Almost all felt that they have a role to play towards a tobacco free future.</p> <p>Campaign:</p> <p>National pharmacy week committee sent a smoking cessation promotion kit to 10,000 members of the IPA, 65 state and local branches and 500 degree and diploma pharmacy institutions. Sessions on NRT were conducted. Media and awareness generated.</p>		<p>Government passed the Cigarettes and other Tobacco Products Act 2001.</p> <p>Variable state level enforcement.</p> <p>Government of Karnataka have banned smoking in public places.</p>	<p>IPA to prepare and implement Guidelines for Pharmacists for a Tobacco Free Future.</p> <p>Karnataka state: draft concept paper prepared to develop tobacco cessation program. Not yet initiated due to lack of resources and time. Request a manual from FIP to assist in training pharmacists to provide services.</p>
	<p>with a higher prevalence in the south (33.3%). Most of the GPs believe that it is their duty to give information about smoking cessation (96.8%) and consider giving information about smoking cessation to their patients an important intervention (98.5%), but only about 49% think their patients will accept their advice. Most GPs (87.3%) declared having discussed about tobacco use with their patients during the month preceding the interview, and 83.5% would like to be trained on smoking cessation strategies.</p>	<p>An official ban on smoking in all enclosed public places has been in place since January 2005, resulting in an 8% reduction in cigarette consumption. (Gallus, 2006)</p> <p>Resistance, associated with restaurant/bar owners being fined if they don't enforce the laws, has been high.</p>	<p>The Pharmaceutical Society (SISF) have no text related to tobacco cessation on their website and officials there did not responded to requests for information re: tobacco cessation activities by pharmacists.</p>
<p>Home study manual, workshop, participation in government run quit smoking clinic. 5 workshops run in 2004, 10 in 2005, 3 in 2006.</p>	<p>Total of 540 pharmacists trained (32% of community pharmacists).</p> <p>USM clinic data from 129 male smokers over period of 34.5 months. Average duration of consultation: 15 minutes. Quit rate for gum= 24%. Quit rate for gum+patch=30%</p>	<p>Draft Tobacco Control Act. Control of Tobacco Products Regulations. Tobacco tax increases.</p>	<p>Programme is being evaluated for effectiveness. No financial incentive to provide services. Appears that pharmacists do not actively provide services. Possibly due to no sole dispensing rights for pharmacists. Hope to achieve dispensing rights in 2008. Nurses and dental association are becoming involved.</p>
<p>Two day training course for 9 pharmacists and 10 pharmacy technicians.</p>	<p>118 customers enrolled. Most customers used NRT.</p> <p>35% (41) customers stopped smoking.</p> <p>48% (57) customers dropped out of project.</p>	<p>Directorate of Health and Social Affairs have national campaigns. No central role for pharmacies in policies yet.</p>	<p>Continue to train pharmacists and technicians. Arrange a new course for January 2007. Most of the pharmacies in the 2006 project do not provide regular smoking cessation services.</p> <p>Current focus: demonstrate that pharmacists succeed in helping customers to quit smoking.</p> <p>Next step: Aim to develop ongoing services. Hope to engage Directorate in discussions in 2007 on how smoking cessation services could be funded.</p>
<p>Training materials provided.</p>	<p>1430 (from 2700) pharmacies participated. Data received from 180 pharmacies – awaiting results of analysis.</p>	<p>New law proposed on Tobacco and smoking prevention – states that pharmacies should play a role.</p>	<p>Pharmacists were to assess addiction level, provide counselling, develop an action plan with customer, provide regular follow up for &lt;3 months, refer if necessary.</p>

## Appendix II: International Smoking Cessation Services Summary (continued)

Country	Tobacco cessation activity	Economic incentives	Other incentives	Infrastructure and support	Awareness and promotion
<p><b>Singapore</b></p> <p>Adult smoking: 27% male 3% female</p> <p>1,230 cigarette consumption annual pp</p>	<p>Pharmaceutical Society of Singapore (PSS) partnered with Pfizer to provide patient education campaign 'the goodness of life starts here'. Pharmacists in community and hospital provide 4 week quit services and brief advice. Government polyclinics which are government subsidized primary health centres also offer cessation services in their pharmacies.</p>	<p>Community pharmacy services are free although charges apply at polyclinics for a consultation with a cessation consultant. Hospital pharmacy programmes also offered at a small charge. Workplace cessation services provided at a charge.</p>	<p>Health Promotion Board (HPB) certifies trained pharmacists. Certification is not compulsory but allows pharmacists to become trainers. Some pharmacists are also youth counsellors for smoking cessation.</p>	<p>PSS provide counselling materials and certifies pharmacists to provide services – funded by Pfizer. HPB provides training and certification.</p>	<p>Campaign: pharmacists interviewed on radio, TV. Press conference held in a pharmacy. Pharmacists also run quit booths at community fairs and advertise their pharmacy.</p>
<p><b>Sweden</b></p> <p>Adult smoking: 19% male 19% female</p> <p>1,202 cigarette consumption annual pp</p>	<p>National pharmacist-led tobacco cessation service provided through state owned pharmacies, Apoteket.</p> <p>Telephone support service provided by trained tobacco cessation counsellors as well as individual counselling programme.</p> <p>Individual and group tobacco cessation services provided. Group services typically provided to workplaces (10 sessions in one year).</p>	<p>No economic incentives given to providers. Individual tobacco cessation programme not funded by government despite pharmacies being owned by the state. Customer to pay fees of around 60 Euros to complete programme.</p>	<p>Certification for trained pharmacists (not compulsory). Some pharmacists also certified youth counsellors for smoking cessation.</p>	<p>Apoteket provide training, support and materials for the services across the national chain.</p>	<p>Services advertised in the pharmacies. Group cessation services advertised to businesses.</p>
<p><b>United States</b></p> <p>Adult smoking: 25% male 21% female</p> <p>2,255 cigarette consumption annual pp</p>	<p>There are numerous published descriptions of pharmacist-led tobacco cessation programmes in the US. In general, these programmes report moderate effectiveness for smokers who enroll, but with typically low recruitment rates even when well-supported by trained staff and resources.</p> <p>Tommasello, 1997 Kennedy, 2002 Tran, 2002 Zillich, 2002 Aquilino, 2003 Kennedy, 2004 Zillich, 2004 Roth, 2005 Purcell, 2006</p>	<p>Varying, as part of other disease state management programme efforts (eg, state Medicaid programmes, Medicare MTM services).</p> <p>Although it is logical that reimbursement for tobacco cessation counselling would enhance pharmacist activity in this area, there are no US data to describe the breadth of reimbursement across the variety of programmes available.</p>	<p>Quitters report that 46% would be either very likely or extremely likely to meet with a pharmacist one-on-one about tobacco cessation if a nominal (\$10 USD) co-payment were required. This increases to 68% if the service was provided at no cost. (Hudmon, JAPhA, 2003)</p>	<p>The primary professional organisation promoting US pharmacist-led tobacco programmes is ASHP, where the National Pharmacy Partnership for Tobacco Cessation is housed. NPPTC is a comprehensive effort to provide pharmacists with the resources to empower smokers to quit. It's funded by the Smoking Cessation Leadership Center and the Robert Wood Johnson Foundation.</p> <p>APhA has passed professional legislation to support having a designated field in all patient records including pharmacy electronic dispensing systems for collection of tobacco use data.</p>	<p><a href="http://www.ashp.org/s_ashp/bin.asp?CID=2039&amp;DID=6460&amp;DOC=FILE.PDF">http://www.ashp.org/s_ashp/bin.asp?CID=2039&amp;DID=6460&amp;DOC=FILE.PDF</a></p>

Education and training	Outcomes	Policies	Comments and future plans
<p>Training and counselling materials provided by PSS.</p>	<p>Some pharmacies are approved to provide workplace education and counselling services. Quit Centre Pharmacies have been set up by pharmacy chains which provide free services.</p> <p>Hospital inpatient and outpatient pharmacist cessation services offered.</p>	<p>HPB runs smoking cessation campaign each year and provides support materials. Government scheme requires all inpatient smokers in participating hospitals be counseled on cessation. Government policy also requires all under 18 year old smokers to go through a cessation programme.</p>	<p>PSS smoking cessation workgroup publish practice and counselling guidelines together with HPB. All trained pharmacists to provide smoking cessation support in a 4 week programme. Certified pharmacists are also able to train other pharmacists. Most community pharmacists offer brief advice services and some Quit Centre pharmacies provide a 4 week programme.</p>
<p>Pharmacists are trained to be tobacco cessation counsellors, health coaches and in goal setting and Motivational Interviewing. 150 health coaches have been trained thus far to provide services.</p> <p>60 trained tobacco cessation counsellors provide free telephone service.</p>	<p>30% smoke free at the end of 52 weeks via the individual and group cessation programmes.</p>	<p>Tobacco is one of the 11 public health areas of focus since 2003. Tobacco control interventions is said to comprise 0.001% (=11 million Euros) of the total costs for the Swedish healthcare system. Out of these, 1 million Euros were dedicated for tobacco prevention.</p>	<p>Apoteket state that limited uptake of services is due to limited support by the government in funding/subsidising programmes. Experience difficulty in expanding services for this reason. Future of tobacco services from pharmacies is uncertain as government monopoly of pharmacies is likely to be removed in the near future.</p>
<p>Rx for Change: Clinician-Assisted Tobacco Cessation is a comprehensive, tobacco cessation training program that equips health professional students and licensed clinicians with state-of-the-art knowledge and skills for assisting patients with quitting. The program is based on principles set forth in the US Public Health Service Clinical Practice Guideline for Treating Tobacco Use and Dependence. Dissemination of the Rx for Change materials to all US schools of pharmacy is made possible by a grant from the National Cancer Institute.</p>	<p>Discussions with the leaders of successful community pharmacy-based programmes suggest that the “Ask – Advise – Refer” model is most appropriate for widespread use in US community pharmacies. In addition, they found that training the technician to perform the “Ask” step will increase the number of patients successfully recruited into cessation programmes.</p>	<p>The following NRT products are available without prescription in the US – gum, lozenge, patches. These items can be sold in any retail establishment (not only in pharmacies).</p> <p>Reports of pharmacists storing NRT products behind the counter are linked more to risk of pilferage than to the opportunity to counsel.</p>	<p>Despite numerous resolutions set forth by pharmacy organisations over the past 3 decades, many community pharmacies in the US continue to sell tobacco products.</p> <p>Health insurance coverage of medication &amp; counselling increases use among the population. Although 66% of Americans under the age of 65 are insured, only 24% of programmes offer any coverage of tobacco cessation treatment. The Clinical Practice Guidelines and the Community Preventive Services Task Force recommend that all insurers pay for both medications and counselling for tobacco cessation. Some private and state-funded programmes are beginning pilot projects to pay for tobacco cessation.</p>







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