



## The contribution of community pharmacy to improving the public's health.

**Report 3: An overview of evidence-base from 1990 – 2002 and recommendations for action.**

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There are four reports in this series:

- Report 1 Evidence from the peer-reviewed literature 1990-2001
- Report 2 Evidence from the non peer-reviewed literature 1990-2002
- Report 3 An overview of the evidence-base from 1990-2002 with recommendations for action
- Report 4 Title tbc

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## Foreword

Community pharmacists have always played a significant role in promoting, maintaining and improving the public's health. Based at the heart of communities, they gain a unique understanding of the health needs of the communities they serve through daily interactions with patients and customers.

Reports 1 and 2 of the Evidence Base Review clearly demonstrate the potential for community pharmacists to improve the public's health. There has been increasing recognition of the contribution that they can make to improving the public's health and the need to integrate them into the wider public health workforce.

The new pharmacy global contracts and pharmacy public health strategy for England sets the framework for the current and future public health role of pharmacy. We hope this role will develop further and that community pharmacists' skills and knowledge will be harnessed even more effectively in order to improve the public's health.

The following report summarises the evidence base linked to national targets and makes recommendations for action. PCTs may wish to use the findings to develop pharmacy services to improve the health of communities that they serve and to meet local health improvement targets.

Professor Jim McEwen  
Chair  
PharmacyHealthLink

## What is public health?

Public health is the study and practice of how best to improve the overall health, and health gains, of populations rather than individuals. The most widely used and over-arching definition of public health was coined by Sir Donald Acheson in 1988 as:

*“the science and art of preventing disease, prolonging life and promoting, protecting and improving health through the organised efforts of society”.*

<sup>1</sup>

This definition encompasses a very wide range of activities and emphasises the importance of a strategic approach to public health as well as collaboration between different groups and individuals to achieve their aims.

Within this definition pharmacists can apply their pharmaceutical skills, knowledge and resources to promote these objectives with the aim of defining, addressing and monitoring the real health needs of the population. This application is sometimes referred to as ‘pharmaceutical public health’.<sup>2</sup>

### Three domains of public health<sup>3</sup>

Health protection & prevention	Health & social care	Health improvement
<ul style="list-style-type: none"><li>• Disease and injury prevention</li><li>• Communicable disease control</li><li>• Environmental health</li><li>• Emergency planning</li></ul>	<ul style="list-style-type: none"><li>• Quality</li><li>• Clinical effectiveness</li><li>• Efficiency</li><li>• Service planning</li><li>• Audit and evaluation</li><li>• Clinical governance</li></ul>	<ul style="list-style-type: none"><li>• Employment</li><li>• Housing</li><li>• Family/community</li><li>• Education</li><li>• Inequalities/exclusion</li><li>• Lifestyles</li></ul>

### The public health approach:<sup>3</sup>

- emphasises the collective responsibility for improvement in health and on prevention of disease;
- recognises the key role of the state, linked to a concern for the underlying socio-economic and wider determinants of health, as well as disease;
- multidisciplinary, incorporating quantitative as well as qualitative methods; and
- emphasises partnerships with all those who contribute to the health of the population.

<sup>1</sup> Acheson D. (1988) Public Health in England. Report of the Committee of Inquiry into the Future Development of the Public Health Function. London: Department of Health, 1988.

<sup>2</sup> Walker, R. (2000) Pharmaceutical Public Health: The End of Pharmaceutical Care? *The Pharmaceutical Journal*. 264: 340.

<sup>3</sup> Faculty of Public Health. [www.fph.org.uk](http://www.fph.org.uk)

## The 10 key areas of public health practice<sup>4</sup>

The Faculty of Public Health identifies 10 core elements of public health practice, which form the basis of competency standards. These 10 core elements provide a useful starting point for illustrating various roles pharmacists could play at a population level.

1. Surveillance and assessment of the population's health and well-being.
2. Promoting and protecting the population's health and well-being.
3. Developing quality and risk management within an evaluative culture.
4. Collaborative working for health.
5. Developing health programmes and services and reducing inequalities.
6. Policy and strategy development and implementation.
7. Working with and for communities.
8. Strategic leadership for health.
9. Research and development.
10. Ethically managing self, people and resources.

Community pharmacists need to be competent in all ten areas of public health practice to deliver the future public health agenda. Aligning the core pharmacy public health competencies to the ten areas of public health practice fits within the ethos of generic health worker competencies and would facilitate joint registration for pharmacists wanting to specialise in public health between the Royal Pharmaceutical Society of Great Britain and the Faculty of Public Health.

*The Report of the Chief Medical Officer's Project to Strengthen the Public Health Function*<sup>5</sup> provides a framework for assessing the different contributions from different elements of the public health workforce. In particular the document refers to three broad categories:

- ◆ **Public health 'contributors'** – people who do not have specific responsibility for carrying out health interventions but who do have an influence on health improvement and reducing inequalities through the nature of their jobs. In the case of pharmacy this could include, for example, pharmacy technicians and support staff.
- ◆ **Public health 'practitioners'** – people who spend a large proportion of their job engaging with and providing health interventions to individuals, groups and communities. This could include community, primary care and hospital pharmacists.
- ◆ **Public health 'specialists'** – people who work at a strategic or senior management level and therefore may have a profound influence on the health and well-being of large numbers of people. For pharmacy this could include,

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<sup>4</sup> Department of Health (2001) The Report of the Chief Medical Officer's Project to Strengthen the Public Health Function. [www.doh.gov.uk/emmo/phfunction.htm](http://www.doh.gov.uk/emmo/phfunction.htm)



for example, pharmaceutical advisors working at a primary care or strategic level.

## Pharmacy public health policy context

Community pharmacists already make a significant contribution to public health through their day-to-day activities. These include the provision of information and advice, facilitating self-care, the care and support of drug users, visits to the homes of housebound people and advice on smoking cessation and emergency hormonal contraception. Community pharmacy is in a unique position to deliver the public health agenda. Comprising around 12,000 dedicated premises,<sup>6</sup> pharmacists provide a highly accessible, informal network of 'drop in' access points for medicines and advice on health and well-being, making them a significant component of the public health workforce.

Community pharmacy is unusual in that it straddles both public and private sectors. Community pharmacists are independent contractors to the health service, giving advice and dispensing medicines for the NHS. But they also have to survive as small businesses in local communities or as major retailers in the high street. The dual health and commercial role occupied by pharmacy offers a unique opportunity to target activities towards healthy people, as well as those with health problems. Pharmacy users' experiences are often more 'consumer' orientated than 'patient' orientated.

The Government's focus on public health is considerable and is primarily directed at developing the capacity within the public health workforce and reducing inequalities in health.<sup>7,8</sup> Often the potential contribution that pharmacists can make to achieve these stated aims is omitted. However, in recent years, a number of key policy documents have outlined the areas in which the public health role of pharmacists should be developed further. For example, the Health Committee Inquiry into Public Health recommended that *'the Government takes steps for community pharmacists to play a more active role in public health'*.<sup>9</sup> The Government strategy document for outlining the future direction of pharmacy, *Pharmacy in the Future*, recognised that the skills and expertise of the pharmacist could be further utilised.<sup>10</sup> According to the strategy this could be achieved through pharmacy becoming more integrated with the NHS, through working more flexibly as part of a multidisciplinary healthcare team and through playing a

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<sup>6</sup> Royal Pharmaceutical Society of Great Britain. Statistics of pharmacists and registered premises. [www.rpsgb.org.uk/pdfs/registerstats.pdf](http://www.rpsgb.org.uk/pdfs/registerstats.pdf)

<sup>7</sup> Department of Health (2002) Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>8</sup> Department of Health (2001) Report of the Chief Medical Officer's project to strengthen the public health function. Department of Health: London. [www.doh.gov.uk/phfunction.htm](http://www.doh.gov.uk/phfunction.htm). AND

Department of Health (2002) Tackling Health Inequalities: 2002 Cross-Cutting Review: Department of Health: London. [www.doh.gov.uk/healthinequalities/ccsrfinal.pdf](http://www.doh.gov.uk/healthinequalities/ccsrfinal.pdf)

<sup>9</sup> House of Commons Health Committee (2001). Second Report on Public Health. London: The Stationery Office. [www.doh.gov.uk/phreport2.htm](http://www.doh.gov.uk/phreport2.htm)

<sup>10</sup> Department of Health (2000) *Pharmacy in the Future – Implementing the NHS Plan*. Department of Health: London. [www.doh.gov.uk/pharmacyfuture](http://www.doh.gov.uk/pharmacyfuture)

greater role in supporting self-care. *Tackling Health Inequalities: A Programme for Action* highlights the importance of community settings and services in addressing health inequalities, including community pharmacies.<sup>11</sup> *A Programme for Action* goes on to state that community pharmacists have a vital role to play in improving the public's health by giving advice, specifically on how to quit smoking, offering exercise on prescription, identifying patients at risk of heart disease and providing services for substance users.<sup>12</sup> *A Vision for Pharmacy in the New NHS*, recognises the untapped contribution that pharmacists can make to the public health agenda.<sup>13</sup> The *Vision* made a commitment to develop a pharmaceutical public health strategy for England by 2005, integrating pharmacy with the wider public health agenda and workforce. The *Vision* also reflected the public health contribution that community pharmacy makes in the new pharmacy contract. The contract for community pharmacy in England is essential to delivering public health services in community pharmacy. Under the new contractual framework, essential services, provided by all community pharmacies will include the promotion of healthy lifestyles and the promotion of self-care. The inclusion of public health in the essential service element recognises the importance of public health and the contribution that can be made by pharmacy.

While the Department of Health for England provides overarching policies to tackle UK wide public health issues, Northern Ireland, Scotland and Wales have each developed their own set of priorities based on the particular needs of their regional communities.

The Scottish Executive's vision for improving the public's health, is to reduce inequalities, social exclusion and poverty. Reducing the differences in opportunity and experience is at the heart of work to improve Scotland's health, as is the belief that improving living and working conditions, and influencing lifestyle, will lead to better health. All parts of the Scottish NHS are expected to contribute to this agenda by working together in the community to improve health and reduce health inequalities.<sup>14</sup> *Pharmacy for Health: The Way Forward for Pharmaceutical Public Health in Scotland*, recognises the often untapped potential contribution which pharmacy can make to improving the public's health and the need to engage all pharmacists in the public health agenda, utilising their skills and experiences to the full.<sup>15</sup>

The National Assembly for Wales has as its set of guiding principles, 'act now for the future', 'reduce poverty and achieve equality'. The aim is to improve the health and well-being of people in Wales and to reduce inequalities in health.

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<sup>11</sup> Department of Health (2003) *Tackling Health Inequalities: A Programme for Action*. Department of Health: London. [www.doh.gov.uk/healthinequalities/programmeforaction](http://www.doh.gov.uk/healthinequalities/programmeforaction)

<sup>12</sup> Department of Health (2003) *Tackling inequalities: A Programme for Action*. Department of Health: London. [www.doh.gov.uk/healthinequalities/programmeforaction/index.htm](http://www.doh.gov.uk/healthinequalities/programmeforaction/index.htm)

<sup>13</sup> Department of Health (2003) *A Vision for Pharmacy in the New NHS*. Department of Health: London. [www.doh.gov.uk/pharmacyvision/visionforpharmacy.pdf](http://www.doh.gov.uk/pharmacyvision/visionforpharmacy.pdf)

<sup>14</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk/library/documents-w7/tahs-00.htm](http://www.scotland.gov.uk/library/documents-w7/tahs-00.htm)

<sup>15</sup> NHS Scotland (2002) *Pharmacy for Health: The Way Forward for Pharmaceutical Public Health in Scotland*. Public Health Institute of Scotland: Glasgow. [www.phis.org.uk](http://www.phis.org.uk)

Improving quality and effectiveness of healthcare and promoting interagency working, underpins this strategy.<sup>16</sup>

In Northern Ireland there is a multidisciplinary approach, that recognises that social, economic, physical, cultural and environmental factors largely determine health and well being. The strategy is to take action to tackle the factors that adversely affect health and increase health inequalities.<sup>17</sup> *Making it Better - A Strategy for Pharmacy in the Community* recognises that pharmacy plays an important role within the health services and community as a whole due to the accessibility of pharmacy, and therefore in a prime position to deliver services that improve the public's health. The strategy aims to build on traditional roles within pharmacy, to use pharmacists' skills to the fullest and make pharmacy an integral part of the health and social care team.<sup>18</sup>

Overall, the message is clear throughout Great Britain: pharmacy makes an important contribution to improving the public's health and reducing health inequalities, due to the skills and experience of the pharmacy workforce and location and accessibility of pharmacies. All four countries are now recognising this untapped resource and the need to engage all pharmacists in the public health agenda. In the future, pharmacists will become more recognised as public health practitioners, utilising their skills and experiences to the full and becoming more integrated with the NHS and wider public health workforce.

Our Reports 1 and 2 of the Evidence Base Review clearly demonstrated the potential of community pharmacists to improve the public's health. The diagram below represents pictorially the evidence summary of where community pharmacy contributes to improving the public's health.

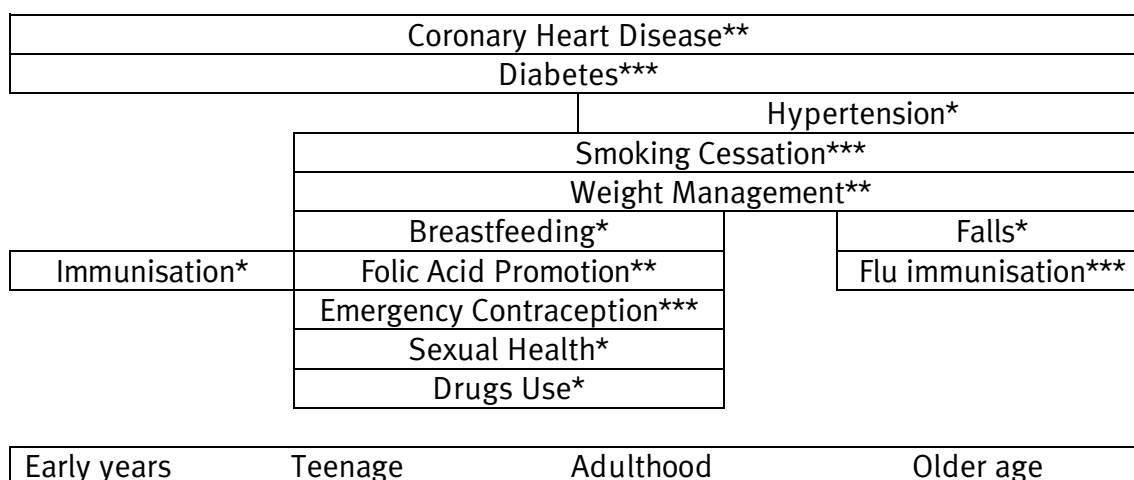
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<sup>16</sup> Government of the National Assembly for Wales (2001) *Plan for Wales 2001*. Government of the National Assembly for Wales. [www.planforwales.wales.gov.uk](http://www.planforwales.wales.gov.uk)

<sup>17</sup> Department of Health, Social Services and Public Policy (2002) *Investing for Health*. Department of Health, Social Services and Public Policy: Belfast. [www.investingforhealthni.gov.uk](http://www.investingforhealthni.gov.uk)

<sup>18</sup> Department of Health, Social Services and Public Policy (2003) *Making it Better: A Strategy for Pharmacy in the Community*. Department of Health, Social Services and Public Policy: Belfast. [www.dhsspsni.gov.uk/publications/2003/makingitbetter.pdf](http://www.dhsspsni.gov.uk/publications/2003/makingitbetter.pdf)

*Diagram 1* Evidence summary of where community pharmacy contributes to improving the public's health



- \*\*\* Strong Evidence
- \*\* Evidence
- \* Some evidence but further research is needed

This report draws together the key findings from Reports 1 and 2, summarising the evidence, linking it to the national targets of the four home countries and making recommendations for action. The evidence summaries are broken down into three sections. The evidence relating to health topics, factors affecting the effectiveness of interventions and developing relationships with stakeholders.

# 1 Evidence summaries – Where community pharmacy can be effective in improving the public’s health

## 1.1 Health Improvement: Individuals

### *Cancer and Coronary Heart Disease (CHD)*

Cancer is a major cause of morbidity in the United Kingdom. There are more than 200 different types of cancer, but four of them: breast, lung, large bowel and prostate, account for over half of all new cancer cases.<sup>19</sup>

Coronary heart disease (CHD) is also a major cause of morbidity in the UK. More than 1.4 million people suffer from angina, 300,000 have heart attacks every year and more than 110,000 die of heart problems in England every year.<sup>20</sup>

There is considerable overlap between the risk factors for cancer and coronary heart disease such as, smoking, poor nutrition, obesity, and physical inactivity. The following section summarises these risk factors and the evidence on the contribution pharmacy can make to reduce these. There is a significant correlation between socio-economic status and vulnerability to both cancer and CHD. Among unskilled men the death rate from CHD is almost three times higher than it is among professionals and these differences have more than doubled in the past twenty years.<sup>21</sup> There are real inequalities in terms of who gets cancer. People from deprived or less affluent backgrounds are more likely to get some types of cancer, and overall more likely to die from it once they are diagnosed. In the early 1990s lung cancer among men was nearly five times higher among unskilled workers than among professional groups.<sup>22</sup>

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<sup>19</sup> Cancer Research UK (2003) *CancerStats: Incidence – UK*. Cancer Research UK: London. [www.cancerresearchuk.org](http://www.cancerresearchuk.org)

<sup>20</sup> Department of Health (2000) *National Service Framework for Coronary Heart Disease*. Department of Health: London. [www.doh.gov.uk/nsf/coronary.htm](http://www.doh.gov.uk/nsf/coronary.htm)

<sup>21</sup> Department of Health (2000) *National Service Framework for Coronary Heart Disease*. Department of Health: London. [www.doh.gov.uk/nsf/coronary.htm](http://www.doh.gov.uk/nsf/coronary.htm)

<sup>22</sup> Health Development Agency (2002) *Cancer prevention: A resource to support local action in delivering the NHS Cancer Plan*. Health Development Agency: London. [www.hda-online.org.uk/html/resources/cancer\\_prevention](http://www.hda-online.org.uk/html/resources/cancer_prevention)

### Coronary Heart Disease targets:

- Reduce substantially the mortality rates from heart disease by at least 40% in people under 75 by 2010. (England)<sup>23</sup>
- Contribute to a national reduction in death rates from CHD of at least 25% in people under 75 by 2005 compared to 1995-1997, targeting the 20% of areas with the highest rates of CHD. (England)<sup>24</sup>
- Update GP practice-based registers so patients with CHD and diabetes continue to receive appropriate advice and treatment in line with NSF standards. (England)<sup>25</sup>
- Improve the management of patients with heart failure in line with the NICE Clinical Guidelines. (England)<sup>26</sup>
- Reduce age standardised mortality rate from CHD in people under 75 years by 50% between 1995 and 2010 (Scotland)<sup>27</sup>
- Bring five year survival-rates for serious cardiac disease closer to the best in Europe by 2010. (Wales)<sup>28</sup>

### Cancer targets:

- Reduce substantially the mortality rates from cancer by at least 20% in people under 75 by 2010. (England)<sup>29</sup>
- Contribute to a national reduction in cancer death rates of at least 12% in people under 75 by 2005 compared to 1995-7, targeting the 20% of areas with the highest rates of cancer.(England)<sup>30</sup>
- Reduce age standardised mortality rate from all cancers in people under 75 years by 20% between 1995 and 2010.(Scotland)<sup>31</sup>
- Bring five year survival-rates for cancers far closer to the best in Europe by 2010.(Wales)<sup>32</sup>

<sup>23</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>24</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>25</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>26</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>27</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>28</sup> The Government of the National Assembly for Wales (2001) *Plan For Wales 2001*. [www.planforwales.wales.gov.uk](http://www.planforwales.wales.gov.uk)

<sup>29</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>30</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>31</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>32</sup> The Government of the National Assembly for Wales (2001) *Plan For Wales 2001*. [www.planforwales.wales.gov.uk](http://www.planforwales.wales.gov.uk)

## Primary prevention of Cancer and Coronary Heart Disease

### Smoking

Smoking causes one in seven deaths from heart disease and among those aged under 65 years, smoking causes two in five deaths from stroke.<sup>33</sup> Passive smoking is also a major cause of morbidity and mortality, contributing to death from heart disease and a range of other problems.<sup>34</sup>

Smoking causes one in three cancer deaths in the UK, 84% of these deaths are from lung cancer.<sup>35</sup> Smoking is also a major cause of cancer of the mouth, oesophagus, bladder, kidney and pancreas.<sup>36</sup>

Smoking is responsible for the major part of mortality differences in social class in middle age. Among men aged 35-69, it is estimated that if smoking rates among social class V were the same as those in social class I, health inequity would reduce by half.<sup>37, 38</sup>

### Smoking in pregnancy

Smoking in pregnancy is associated with many foetal and neo-natal problems such as low birth-weight, pre-term delivery, placental damage, miscarriage and sudden infant death syndrome. It can also be the cause of respiratory problems such as chest infections and can aggravate asthma in young children.<sup>39</sup> If smoking in pregnancy fell by just 10%, it is estimated that the average infant birth-weight would rise to just over 3.5grams and if no one smoked during pregnancy the average birth-weight would rise by an estimated 36 grams.<sup>40</sup> Low birth weight is associated with increased mortality and morbidity in the first year of life, and throughout childhood.<sup>41</sup> Smoking in pregnancy is linked to health inequalities; smoking in pregnancy is four times more prevalent among women in social class V than those in social class I. Teenage mothers are most likely of all age groups to smoke in pregnancy.<sup>42</sup>

<sup>33</sup> Callum, C. (1998) *The UK smoking epidemic: deaths in 1995*. Health Development Agency: London.

<sup>34</sup> Royal College of Physicians (1992) *Smoking and the young*. London: Royal Collage of Physicians.

<sup>35</sup> Callum, C. (1998) *The UK smoking epidemic: deaths in 1995*. Health Development Agency: London.

<sup>36</sup> US Department of Health and Human Services (2001) *Women and smoking: a report of the Surgeon General*. US Department of Health and Human Services: Rockville, USA.

<sup>37</sup> Jarvis, M., Wardle, J. (1999) *Social patterning of individual health behaviours: the case of cigarette smoking*. In Marmot, M., Wilkinson, R. (eds) *Social determinants of health*. Oxford University Press: Oxford.

<sup>38</sup> Department of Health (2002) *Tackling Health Inequalities: 2002 Cross Cutting Review*. Department of Health: London.

[www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm)

<sup>39</sup> Health Development Agency (1999) *Smoking and pregnancy: A survey of knowledge, attitudes and behaviour 1992-1999*. Health Development Agency: London.

<sup>40</sup> Department of Health (2002) *Tackling Health Inequalities: 2002 Cross Cutting Review*. Department of Health: London.

[www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm)

<sup>41</sup> Department of Health (2002) *Tackling health inequalities: 2002 cross-cutting review*. Department of Health: London.

[www.doh.gov.uk/healthinequalities/ccsrsummaryreport](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport)

<sup>42</sup> Department of Health (2002) *Tackling Health Inequalities: 2002 Cross Cutting Review*. Department of Health: London.

[www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm)



### Smoking targets:

- Reduce adult smoking in all social classes so that the overall rate falls from 28% to 24% or less by the year 2010; with a fall to 26% by the year 2005. (England and Wales)<sup>43</sup>
- Reduce smoking among children from 13% to 9% or less by the year 2010; with a fall to 11% by the year 2005. (England and Wales)<sup>44</sup>
- Reduce the percentage of women who smoke during pregnancy from 23% to 15% by the year 2010; with a fall to 18% by the year 2005. (England and Wales)<sup>45</sup>
- Reduce the rate of smoking, contributing to the national target of reducing the rate in manual groups from 32% in 1998 to 26% by 2010. (England)<sup>46</sup>
- Ensure 800,000 smokers from all groups successfully quit at the 4 week stage by 2006. (England)<sup>47</sup>
- Deliver a 1% reduction per year in the proportion of women continuing to smoke throughout pregnancy, focussing especially on smokers from disadvantaged groups as a contribution to the national target to reduce by at least 10% the gap in mortality between 'routine' and 'manual' groups and the population as a whole by 2010, starting with children under 1 year. (England)<sup>48</sup>
- Reduce rate of smoking among adults (16-64) from an average of 35% to 33% between 1995 and 2005 and to an average of 31% by 2010.(Scotland)<sup>49</sup>
- Reduce smoking among young people (12-15 year olds) from 14% to 12% between 1995 and 2005 and to 11% by 2010.(Scotland)<sup>50</sup>
- Reduce the proportion of women who smoke during pregnancy from 29% to 23% between 1995 and 2005 and to 20% by 2010.(Scotland)<sup>51</sup>
- Increase the proportion of 11-16 year old children who do not smoke from 86.5% in 2000 to 89% by 2006. (Northern Ireland)<sup>52</sup>
- Increase the proportion of pregnant women who do not smoke from 78% in 2000 to 82% in 2005. (Northern Ireland)<sup>53</sup>
- Increase the proportion of adults who do not smoke from 73% in 2000/01 to 75% in 2006/07. (Northern Ireland)<sup>54</sup>

<sup>43</sup> Department of Health (1998) *Smoking Kills*. White paper on tobacco. The Stationery Office: London. [www.archive.official-documents.co.uk/document/cm41/4177/4177.htm](http://www.archive.official-documents.co.uk/document/cm41/4177/4177.htm)

<sup>44</sup> Department of Health (1998) *Smoking Kills*. White paper on tobacco. The Stationery Office: London. [www.archive.official-documents.co.uk/document/cm41/4177/4177.htm](http://www.archive.official-documents.co.uk/document/cm41/4177/4177.htm)

<sup>45</sup> Department of Health (1998) *Smoking Kills*. White paper on tobacco. The Stationery Office: London. [www.archive.official-documents.co.uk/document/cm41/4177/4177.htm](http://www.archive.official-documents.co.uk/document/cm41/4177/4177.htm)

<sup>46</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>47</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>48</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>49</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>50</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>51</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>52</sup> Department of Health, Social Services and Public Safety (2002) *Investing for Health. A five year tobacco action plan: consultation document*. DHSSPS [www.dhsspsni.gov.uk/publications/2002/tobacco\\_plan.pdf](http://www.dhsspsni.gov.uk/publications/2002/tobacco_plan.pdf)

<sup>53</sup> Department of Health, Social Services and Public Safety (2002) *Investing for Health. A five year tobacco action plan: consultation document*. DHSSPS [www.dhsspsni.gov.uk/publications/2002/tobacco\\_plan.pdf](http://www.dhsspsni.gov.uk/publications/2002/tobacco_plan.pdf)

<sup>54</sup> Department of Health, Social Services and Public Safety (2002) *Investing for Health. A five year tobacco action plan: consultation document*. DHSSPS [www.dhsspsni.gov.uk/publications/2002/tobacco\\_plan.pdf](http://www.dhsspsni.gov.uk/publications/2002/tobacco_plan.pdf)



- Increase the proportion of non-smokers in manual groups from 65% in 2000/01 to 69% in 2006/07. (Northern Ireland)<sup>55</sup>

## Where community pharmacy can be effective

Community pharmacy can contribute to reducing the number of people who smoke by providing stop smoking services. The Evidence Base Review found that providing community based stop smoking services, run by trained pharmacy staff is effective and cost-effective. Training, especially in behaviour change methods, was found to be essential to the success of pharmacy stop smoking services. Without training pharmacists are more likely just to respond to smokers' requests for advice rather than to proactively initiate conversations about smoking.

### Recommendations:

- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.
- National and local health commissioners must include community pharmacies as providers of stop smoking services.
- Stop smoking training for pharmacists must be established, particularly for behaviour change methods.

## Healthy eating, obesity and weight reduction

Diet plays a fundamental role in the development of heart disease, cancer, obesity and type 2 diabetes. Both the type and amount of fat consumed and its relationship to blood cholesterol, along with salt intake linked to blood pressure, affect the development of CHD.<sup>56</sup> An increased intake of fruit and vegetables has been identified as an important factor in reducing the rate of both heart disease and some cancers.<sup>57</sup>

The number of people who are overweight and obese in the UK has increased in recent years. 45% of men and 33% of women are overweight and 17% of men and 20% of women are obese. The number of men who are obese has increased by 50% in 10 years, and the number of women who are obese has increased by 42% in 10 years.<sup>58</sup> The prevalence increases with age and is greatest among those of low socio-economic status, particularly in women, 25% of women from unskilled occupations are obese compared with 14% of women in professional jobs.<sup>59</sup> The

<sup>55</sup> Department of Health, Social Services and Public Safety (2002) *Investing for Health. A five year tobacco action plan: consultation document*. DHSSPS [www.dhsspsni.gov.uk/publications/2002/tobacco\\_plan.pdf](http://www.dhsspsni.gov.uk/publications/2002/tobacco_plan.pdf)

<sup>56</sup> The Health Development Agency (2001) *Coronary Heart Disease: Guidance for implementing the preventive aspects of the National Service Framework*. The Health Development Agency: London. [www.hdaonline.org.uk/downloads/pdfs/chdframework.pdf](http://www.hdaonline.org.uk/downloads/pdfs/chdframework.pdf)

<sup>57</sup> The Health Development Agency (2001) *Coronary Heart Disease: Guidance for implementing the preventive aspects of the National Service Framework*. The Health Development Agency: London. [www.hdaonline.org.uk/downloads/pdfs/chdframework.pdf](http://www.hdaonline.org.uk/downloads/pdfs/chdframework.pdf)

<sup>58</sup> Petersen, S. Mockford, C. and Rayner, M. (1999) *Coronary heart disease statistics*. British Heart Foundation: London.

<sup>59</sup> Petersen, S. Mockford, C. and Rayner, M. (1999) *Coronary heart disease statistics*. British Heart Foundation: London.

prevalence also increases within certain ethnic minorities, particularly people of Asian and Afro-Caribbean origin.<sup>60</sup> The prevalence of obesity is also increasing in children. People are at considerably increased risk of obesity in adulthood if they are either from a manual background, were overweight in childhood and/or their parents are overweight or obese.<sup>61</sup> Obesity is known to increase the risk of heart disease<sup>62</sup> and cancer of the endometrium, kidney and colon, and probably increases the risk of post-menopausal breast cancer.<sup>63</sup>

#### Healthy eating targets:

- Increase the daily consumption of fruit and vegetables, particularly among those on low incomes, to five portions. (England)<sup>64</sup>
- Double the average consumption of fruit and vegetables. Increase by half the intake of bread (mainly wholemeal and brown breads). Double the daily intake of breakfast cereals. Reduce the proportion of total fat and of saturated fat by over 5%. Reduce average salt intake by over a third. Halve child intake of non-milk sugar; increase the intake of non-sugar carbohydrates by a quarter. Double the consumption of oily fish. (Scotland)<sup>65</sup>

#### Obesity and weight reduction targets:

- Stop the increase in levels of obesity in men and women so that by 2010, the proportion of men who are obese is less than 17% and of women is less than 20%. (Northern Ireland)<sup>66</sup>

### Where community pharmacy can be effective

Community pharmacy can contribute to reducing the number of people who are obese and overweight by running pharmacy-based weight reduction programmes and promoting healthy eating and physical activity. Pharmacies, both in the UK and internationally, have initiated weight-loss programmes, and there are also examples of pharmacy weight monitoring programmes as part of heart disease risk factor identification programmes. Further research into the potential contribution of pharmacy to weight reduction is urgently needed with a view to extending and expanding successful programmes in the future.

<sup>60</sup> Health Development Agency (2002) *Cancer prevention: A resource to support local action in delivering the NHS Cancer Plan*. Health Development Agency: London. [www.hda-online.org.uk/html/resources/cancer\\_prevention](http://www.hda-online.org.uk/html/resources/cancer_prevention)

<sup>61</sup> Petersen, S. Mockford, C. and Rayner, M. (1999) *Coronary heart disease statistics*. British Heart Foundation: London.

<sup>62</sup> Department of Health (2000) *The NHS Cancer Plan: A plan for investment a plan for reform*. Department of Health: London. [www.doh.gov.uk/cancer/cancerplan.htm](http://www.doh.gov.uk/cancer/cancerplan.htm)

<sup>63</sup> World Cancer Research Fund (1997) *Food, nutrition and the prevention of cancer: a global perspective*. [www.wcrf.org.uk](http://www.wcrf.org.uk)

<sup>64</sup> Department of Health (2000) *The NHS Plan: A plan for investment a plan for reform*. The Stationery Office: London. [www.nhs.uk/nationalplan](http://www.nhs.uk/nationalplan)

<sup>65</sup> Scottish Executive (2001) *Cancer in Scotland: Action for Change*. [www.scotland.gov.uk/library3/health/csac-06.asp](http://www.scotland.gov.uk/library3/health/csac-06.asp)

<sup>66</sup> Department of Health, Social Services and Public Safety (2002) *Investing for Health*. DHSSPS: Belfast [www.dhsspsni.gov.uk/publications/2002/invest1.pdf](http://www.dhsspsni.gov.uk/publications/2002/invest1.pdf)

### Recommendations:

- Research and evaluate the potential contribution of pharmacy to promoting healthy eating and weight reduction.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

## Physical activity

There is an international consensus that having a physically active lifestyle is important for health and has great potential for health gain.<sup>67</sup> Physical inactivity can contribute to the development of cancer and heart disease, and also have an impact on diabetes, mental health and osteoporosis.<sup>68</sup> The Department of Health's recommendation for adults is at least 30 minutes of physical activity on five or more days of the week. However, six out of ten men and seven out of ten women in England are not active enough to benefit their health.<sup>69</sup>

### Physical activity targets:

- 50% of all adults aged over 16 and 80% of all children aged 16 and under to meet the minimum recommended levels of physical activity by 2022.(Scotland)<sup>70</sup>
- Increase proportion of 11-15 year olds taking vigorous exercise 4 times or more weekly from 32% in 1994 to 40% in 2005 and to 50% in 2010. (Scotland)<sup>71</sup>
- 50% of men and 40% of women (aged 16-64) to be taking 30 minutes of moderate activity on 5 or more occasions each week by 2005 and 60% and 50%, respectively, by 2010.(Scotland)<sup>72</sup>

## Where community pharmacy can be effective

The Evidence Base Review did not find any individual studies where pharmacy can contribute to physical activity. Further research is needed to determine where pharmacy can contribute to promoting physical activity.

<sup>67</sup> World Health Organisation (1995) Exercise for Health: WHO/FIMS committee on physical activity for health. *Bulletin of the World Health Organisation*. 73 (2): 135-6.

<sup>68</sup> Health Development Agency (2002) *Cancer prevention: A resource to support local action in delivering the NHS Cancer Plan*. Health Development Agency: London. See [www.nice.org.uk](http://www.nice.org.uk)

<sup>69</sup> See [www.nice.org.uk](http://www.nice.org.uk)

<sup>70</sup> Scottish Executive (2002) A strategy for physical activity - a consultation: Physical Activity Task Force [www.scotland.gov.uk/consultations/health/patf2-03.asp](http://www.scotland.gov.uk/consultations/health/patf2-03.asp)

<sup>71</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>72</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

### Recommendations:

- Research the potential contribution of pharmacy to promote physical activity.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

## Alcohol

In the UK 92% of men and 86% of women drink alcohol with drinking playing a mostly enjoyable part in UK culture. But for some people the misuse of alcohol brings serious consequences for the drinkers themselves, for their families and friends, and for the community as a whole.<sup>73</sup> Current estimates suggest 28,000 to 33,000 deaths a year are alcohol-related, due to accidents, injury and direct health effects on the body. Too much alcohol can affect the liver, digestive system, brain, nervous system, heart and circulatory system, bones, skin, muscles and sex organs. It also has an impact on nutrition, the development of some types of cancer and in pregnant women, the development of the foetus.<sup>74</sup>

### Alcohol targets:

- Reduce incidence of adults exceeding weekly limits of 21(men) and 14 units (women) of alcohol: from 33% to 31% for men between 1995 and 2005 and to 29% by 2010. From 13% to 12% for women between 1995 and 2005 and to 11% by 2010. (Scotland)<sup>75</sup>
- Reduce frequency and level of drinking from 20% of 12-15 year olds to 18% between 1995 and 2005 and to 16% by 2010. (Scotland)<sup>76</sup>

## Where community pharmacy can be effective

Although a highly sensitive topic, research found that pharmacy has the potential to offer support and advice on alcohol consumption. However, common barriers to receiving information on sensitive topics, especially privacy, confidentiality and training, need to be addressed.

<sup>73</sup> Department of Health (2002) *National Alcohol Harm Reduction Strategy: Consultation Document*. Department of Health: London [www.doh.gov.uk/alcohol/pdf/alcoholharm.doc](http://www.doh.gov.uk/alcohol/pdf/alcoholharm.doc)

<sup>74</sup> [www.alcoholconcern.org.uk](http://www.alcoholconcern.org.uk)

<sup>75</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>76</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

**Recommendations:**

- Barriers to receiving information on sensitive topics, especially privacy, confidentiality and training must be addressed.
- Research into where pharmacy can contribute to improving the public's health in regard to alcohol consumption.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

## Secondary prevention of Coronary Heart Disease - screening and management

People who have symptoms of heart disease, stroke, transient ischaemic attack (TIA), peripheral vascular disease (PVD), or multiple risk factors for heart disease, are typically three to five times more likely to die, suffer a heart attack or other major cardiovascular event, than people without such conditions or risk factors. There are simple treatments and important lifestyle changes that can reduce people's risks substantially and that slow and perhaps even reverse progression of coronary heart disease. When used appropriately, these interventions can be more cost-effective than many other treatments currently provided by the NHS.<sup>77</sup>

The interventions that patients at high risk of coronary heart disease should receive, unless contraindicated, are:

- advice about how to stop smoking including advice on the use of nicotine replacement therapy;
- information about other modifiable risk factors and personalised advice about how they can be reduced (including advice about physical activity, diet, alcohol consumption, weight and diabetes);
- advice and treatment to maintain blood pressure below 140/85 mm Hg;
- low dose aspirin (75 mg daily);
- statins and dietary advice to lower serum cholesterol;
- ACE inhibitors for people who also have left ventricular dysfunction;
- beta-blockers for people who also have had a myocardial infarction;
- warfarin or aspirin for people over 60 years old who also have atrial fibrillation; and
- meticulous control of blood pressure and glucose in people who also have diabetes.<sup>78</sup>

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<sup>77</sup> Department of Health (2000) *Coronary Heart Disease National Service Framework*. Department of Health: London. [www.doh.gov.uk/pdfs/chdnsf.pdf](http://www.doh.gov.uk/pdfs/chdnsf.pdf)

<sup>78</sup> Department of Health (2000) *Coronary Heart Disease National Service Framework*. Department of Health: London. [www.doh.gov.uk/pdfs/chdnsf.pdf](http://www.doh.gov.uk/pdfs/chdnsf.pdf)

### Coronary Heart Disease Targets:

- Improve the management of patients with heart failure in line with the NICE Clinical Guidelines. (England)<sup>79</sup>
- Reduce substantially the mortality rates from heart disease by at least 40% in people under 75 by 2010. (England)<sup>80</sup>
- Contribute to a national reduction in death rates from CHD of at least 25% in people under 75 by 2005 compared to 1995-1997, targeting the 20% of areas with the highest rates of CHD. (England)<sup>81</sup>
- Reduce age standardised mortality rate from CHD in people under 75 years by 50% between 1995 and 2010. (Scotland)<sup>82</sup>
- Bring five-year survival-rates for serious cardiac disease closer to the best in Europe by 2010. (Wales)<sup>83</sup>

### Where community pharmacy can be effective

The Evidence Base Review found that community pharmacists are effective in providing secondary prevention for heart disease. Using pharmacy medication records to identify patients 'at risk' of heart disease was found to be an effective method of identifying and targeting health promotion measures, such as advice about how to stop smoking, physical activity, diet, alcohol consumption, weight and diabetes. Pharmacists can also provide advice and information on maintaining a healthy blood pressure, and taking aspirin, statins, ACE inhibitors, beta-blockers and Warfarin. Pharmacy is a valuable source of advice on the appropriate use of prophylactic aspirin in the treatment of heart disease, and interventions to minimise potential harm from self-initiated aspirin treatment in people with contraindications to its use. Pharmacists can also use dispensing information to identify and successfully manage lipid levels. A set of programmes based on these findings should be piloted as soon as possible in the UK, with appropriate infrastructure support and in co-operation with other health professionals and related services.

<sup>79</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>80</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>81</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>82</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>83</sup> The Government of the National Assembly for Wales (2001) *Plan For Wales 2001*. [www.planforwales.wales.gov.uk](http://www.planforwales.wales.gov.uk)

**Recommendations:**

- Further research and piloting of community pharmacy-based lipid management programmes and pharmacy based prophylactic aspirin treatment and monitoring programmes should commence as soon as possible in the UK.
- The use of pharmacy medication records and dispensing data to target patients with risk factors for coronary heart disease in order to instigate health promotion measures, provide information, advice and referral.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.
- Primary care organisations should be aware of how community pharmacy-based services might be integrated into local service provision as a means of reducing rates of heart disease.

**Skin cancer**

Skin cancer is now the most common form of cancer in the UK. The number of cases in the UK has doubled in just 20 years. Skin cancer is mainly caused by excessive exposure to the sun. 57,700 people in the UK are diagnosed with it each year and in the last five years 8,000 people have died from it.<sup>84</sup>

**Where community pharmacy can be effective**

Pharmacists can be a valuable source of information about sun protection because many sell a range of related products. Pharmacy-based information on skin cancer prevention raises awareness, but more research is needed to see whether this heightened awareness has a positive effect on behaviour patterns.

**Recommendations:**

- Expand the health promotion role of pharmacists in regard to sun protection and establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.
- Research the effectiveness of skin cancer health promotion through pharmacy in changing behaviour.

**Oral health**

Dental disease (tooth decay and gum disease) has decreased in the last 20 years in the UK, but is still linked to economic deprivation and social exclusion.<sup>85</sup> Its peak occurs during childhood, affecting 38.3% of five-year olds in England, 51.6% in Wales and 54.9% in Scotland. It causes progressive destruction of the crowns and teeth, accompanied with pain and infection. 50% of older people will have

<sup>84</sup> [www.doh.gov.uk/sunsafer](http://www.doh.gov.uk/sunsafer)

<sup>85</sup> Department of Health (2000) Modernising NHS Dentistry – implementing the NHS Plan. Department of Health: London.



lost one or more teeth and 10% will have lost the majority of their teeth due to gum disease. While tooth and gum disease are the major causes of tooth loss, dental erosion by acidic drinks and other sources of acid now effects 50% of children. Oral cancer is not uncommon in the UK and many cases are tobacco related; all cases can benefit from early diagnosis. Dental disease can be reduced by behaviour change, which requires education and motivation, and is influenced by social and economic pressures. These factors may account for the persistence of high levels of dental disease in economically deprived communities in the UK compared to more affluent areas where low levels are often found.<sup>86</sup>

#### Oral health targets:

- Anyone will be able to find a NHS Dentist simply by calling NHS Direct by 2001.(England)<sup>87</sup>
- By 2005, children aged 12 to have (on average) no more than 1.5 teeth decayed, missing or filled. (Scotland)<sup>88</sup>
- By 2008, 90% of 18 year olds to have all their own teeth. (Scotland)<sup>89</sup>
- By 2008, at least 80% of dentate adults aged 35-44 to have at least 21 or more teeth. (Scotland)<sup>90</sup>
- Less than 5% of 45- 54 year olds to have no natural teeth by 2010. (Scotland)<sup>91</sup>
- 60% of 5 year olds to have no experience of dental disease by 2010. (Scotland)<sup>92</sup>
- By 2010 increase the levels of 5 year old children with no dental decay experience to 55% and to reduce the gap between the best and worst decayed/missing/filled scores by 20%. (Northern Ireland)<sup>93</sup>

#### Where community pharmacy can be effective

Research shows that pharmacists could carry out a valuable role in oral health and are often asked by users to give advice and information on oral health. Training in oral health promotion was found to increase the likelihood and effectiveness of pharmacists giving advice and information. However, opportunities for pharmacists to recommend sugar-free medicines for children are limited as most requests from customers are for a named medicine. This places the pharmacist in a position of conflict between the roles of health professional and retailer.

<sup>86</sup> Health Development Agency (2001) *The scientific basis of dental health education: A policy document (revised fourth edition)*. Health Development Agency: London.

<sup>87</sup> Department of Health (2000) *The NHS Plan: a plan for investment, a plan for reform*. Department of Health: London. [www.nhs.uk/nationalplan](http://www.nhs.uk/nationalplan)

<sup>88</sup> The Scottish Office *Oral Health Strategy for Scotland*. [www.scotland.gov.uk/library/documents/oral00.htm](http://www.scotland.gov.uk/library/documents/oral00.htm)

<sup>89</sup> The Scottish Office *Oral Health Strategy for Scotland*. [www.scotland.gov.uk/library/documents/oral00.htm](http://www.scotland.gov.uk/library/documents/oral00.htm)

<sup>90</sup> The Scottish Office *Oral Health Strategy for Scotland*. [www.scotland.gov.uk/library/documents/oral00.htm](http://www.scotland.gov.uk/library/documents/oral00.htm)

<sup>91</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>92</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>93</sup> Department of Health, Social Services and Public Safety (2002) *Investing for Health*. DHSSPS: Belfast [www.dhsspsni.gov.uk/publications/2002/invest1.pdf](http://www.dhsspsni.gov.uk/publications/2002/invest1.pdf)

### **Recommendations:**

- Expand oral health promotion through pharmacy and establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

## **Diabetes**

Diabetes is becoming more common; around 1.3 million people are currently diagnosed with diabetes. There are two main types of diabetes: Type 1 and Type 2 diabetes. Type 1 diabetes develops most frequently in children and young adults, and is increasing in under fives. Type 2 diabetes is most commonly diagnosed in adults over the age of 40, although increasingly it is appearing in young people and young adults and many hundreds of thousands of people may have Type 2 diabetes without knowing it.

People with diabetes, particularly Type 2 diabetes, are at significantly increased risk of developing coronary heart disease (CHD). The death rate for CHD is five times higher for people with diabetes.<sup>94</sup> A number of other conditions also occur more commonly in people with diabetes, including, cataracts, infections of the urinary tract and skin, soft tissue conditions, skin conditions, depression, eating disorders and other mental health problems.

Type 2 diabetes is increasing among those who are overweight or obese, physically inactive or have a family history of diabetes. There are also significant inequalities in developing diabetes. Type 2 diabetes, is up to six times more common in people of South Asian descent and up to three times more common in those of African and Afro-Caribbean descent, compared with the white population. Type 2 diabetes is also more prevalent among less affluent populations; those in the most deprived fifth of the population are one-and-a-half times more likely to have diabetes at any given age. Both mortality and morbidity, in relation to diabetes, are increased by socio-economic deprivation. Morbidity resulting from diabetes complications, is three-and-a-half times higher in social class V than social class I.<sup>95 96</sup>

## **Where community pharmacy can be effective**

The Evidence Base Review found that within community pharmacy both monitoring and information giving around diabetes, and group education showed promise in improving diabetic control. Since the Evidence Base Review was completed, further peer-reviewed evidence on the contribution of community pharmacy to improving health in relation to diabetes has been published. In the US, a 5-year

<sup>94</sup> Department of Health (2002) Tackling Health Inequalities: 2002 Cross Cutting Review. Department of Health: London.

[www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm)

<sup>95</sup> Department of Health (Standards – 2001, Delivery Strategy 2003) The National Service Framework for diabetes. Department of Health: London. [www.doh.gov.uk/nsf/diabetes](http://www.doh.gov.uk/nsf/diabetes)

<sup>96</sup> Department of Health (2002) Tackling Health Inequalities: 2002 Cross Cutting Review. Department of Health: London.

[www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm)

study showed that interventions by community pharmacists for patients with Type 2 diabetes were both clinically and cost-effective.<sup>97</sup> In Australia, a trial of a disease management service, provided by community pharmacists for patients with Type 2 diabetes, showed a significant improvement in patients' adherence to medication.<sup>98</sup> In the UK, preliminary results from a study of people with Type 2 diabetes, showed that a fifth of study participants had poor understanding of the condition and that lifestyle modification was needed in a similar proportion of them. The study also investigated the contribution community pharmacists could make to identifying, understanding and meeting the needs of patients with diabetes in collaboration with other healthcare professionals.<sup>99</sup> These findings indicate that diabetes management services should be piloted in the UK as soon as possible.

#### **Recommendations:**

- Piloting of community pharmacy-based monitoring, management and public education of diabetes.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.
- Further research on the contribution community pharmacy can make to improving the public's health in relation to diabetes.

## **Asthma**

Over 5.1 million people in the UK have asthma, which equates to around 1 in 13 adults.<sup>100</sup> One in eight children in the UK are currently being treated for asthma.<sup>101</sup> On average, 1,500 people die from asthma each year in the UK and about a third of deaths (34%) caused by asthma occur in people under the age of 65. Overall there has been an increase of about 50% in the prevalence of childhood asthma over the last 30 years. There has been at least a ten-fold increase in hospital admissions for asthma among children, which may partly reflect changes in medical practice.<sup>102</sup>

### **Where community pharmacy can be effective**

Evidence shows that educational interventions by pharmacists are effective in enhancing asthma knowledge of primary school teachers. Further research is

<sup>97</sup> Cranor CW, Bunting BA, Christensen DB.(2003) The Asheville Project: long-term clinical and economic outcomes of a community pharmacy diabetes care program. *J Am Pharm Assoc*; 43 (2) 173-184

<sup>98</sup> Krass I, Stephenson S, Thuis I, Hourihan F, Taylor S, Armour C. (2002) Increasing adherence to medications through delivery of a disease management service for Type 2 diabetes in community pharmacies. *J Soc Admin Pharm*; 19 (6) 211

<sup>99</sup> Rajaei-Dehkordi Z, Hollingshead C, Herkes D, Holden M, Rao S. (2003) Investigating the contribution of community pharmacists in identifying, understanding and meeting the needs of patients with diabetes, in collaboration with other health care professionals. *Int J Pharm Pract*; 11: R18

<sup>100</sup> [www.asthma.org.uk](http://www.asthma.org.uk)

<sup>101</sup> [www.asthma.org.uk](http://www.asthma.org.uk)

<sup>102</sup> Department of Health (1995) *Great Britain Committee on the Medical Effects of Air Pollutants Great Britain: Asthma and outdoor air pollution*. The Stationery Office: London. [www.doh.gov.uk/comeap/statementsreports/airpol2.htm](http://www.doh.gov.uk/comeap/statementsreports/airpol2.htm)

required to determine whether pharmacist-led training programmes can lead to improved management of asthma in schoolchildren by teachers.

#### **Recommendations:**

- Pharmacist-led asthma training programmes in schools to be rolled out nationally.
- Further research to determine the extent to which pharmacist-led asthma training programmes lead to improved management of asthma in schoolchildren by teachers.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

### **Prevention of teenage pregnancy**

In 2001, the number of 15-19 year olds who became pregnant in England and Wales was 60.9 in every thousand and 70.6 per thousand in Scotland. The rate of conceptions amongst 13-15 year olds was 8 in every thousand in England and Wales and 7.6 per thousand in Scotland. Conception data is not collected in Northern Ireland; the only available statistics are for teenage births. In 2001, the number of teenage mothers was 1,524, a rate of 23.9 per thousand 15-19 year olds. Teenage pregnancy is linked to health inequalities, girls from the poorest backgrounds are ten times more likely to become teenage mothers compared to girls from professional backgrounds.<sup>103</sup> These children are at high risk of growing up in poverty and experiencing poor health and social outcomes. Infant mortality rates for babies born to mothers under the age of 18 are 60% higher than for older mothers.<sup>104</sup> The effect of halving the number of teenage births would by itself achieve an estimated 10% target reduction in infant mortality rates.<sup>105</sup>

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<sup>103</sup> Department of Health (2002) Tackling health inequalities: 2002 crosscutting review. Department of Health: London. [www.doh.gov.uk/healthinequalities/ccsrsummaryreport](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport)

<sup>104</sup> [www.brook.org.uk](http://www.brook.org.uk)

<sup>105</sup> Department of Health (2002) Tackling health inequalities: 2002 crosscutting review. Department of Health: London. [www.doh.gov.uk/healthinequalities/ccsrsummaryreport](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport)

### Teenage pregnancy targets:

- Reduce the under-18 conception rate by 50% by 2010. (England)<sup>106</sup>
- Achieve agreed local teenage conception reduction targets while reducing the gap in rates between the worst fifth of wards and the average by at least a quarter in line with national targets.(England)<sup>107</sup>
- Reduce inequalities in health outcomes by 10%, measured by infant mortality and life expectancy at birth by 2010. (England)<sup>108</sup>
- Reduce pregnancy rate among 13-15 year olds by 20% between 1995 and 2010. (Scotland)<sup>109</sup>
- Reduce the rate of births to teenage mothers by 20% by 2007 (19 years and under). (Northern Ireland)<sup>110</sup>
- Reduce the rate of births to teenage mothers under 17 by 40% by 2007. (Northern Ireland)<sup>111</sup>
- 75% of teenagers should not have experienced sexual intercourse by the age of 16 by 2007. (Northern Ireland)<sup>112</sup>

### Where community pharmacy can be effective

The Evidence Base Review found that there is a desire by the public for easy access to information on both contraception and safer sex and that they would be willing to receive this advice from pharmacists. Pharmacists appear to want an expanded advisory role in sexual health. Access to training that incorporates and encourages networking with other local service providers is likely to be crucial in increasing pharmacists' confidence in dealing with these issues appropriately and effectively.

Community pharmacy has already made a considerable and well-documented contribution to reducing teenage pregnancy through over-the-counter provision of emergency hormonal contraception (EHC). The Evidence Base Review found, that this service had high levels of user satisfaction and that pharmacists are positive about their experience of providing emergency hormonal contraception. The Review also found that the supply of EHC through pharmacy enables most women to receive EHC within 24 hours of unprotected intercourse and is highly rated by women as a source of EHC. Since the review was completed, further peer-reviewed evidence on the contribution of community pharmacy to the sexual health agenda,

<sup>106</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>107</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>108</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>109</sup> The Scottish Office (1999) *Towards a Healthier Scotland – A White Paper on Health*. The Stationery Office: Scotland. [www.scotland.gov.uk](http://www.scotland.gov.uk)

<sup>110</sup> Department of Health, Social Services and Public Safety (2002) *Teenage Pregnancy and Parenthood Strategy and Action*. DHSSPS: Belfast Plan [www.dhsspsni.gov.uk/publications/2003/teenage\\_pregnancy\\_action02\\_07.pdf](http://www.dhsspsni.gov.uk/publications/2003/teenage_pregnancy_action02_07.pdf)

<sup>111</sup> Department of Health, Social Services and Public Safety (2002) *Teenage Pregnancy and Parenthood Strategy and Action*. DHSSPS: Belfast Plan [www.dhsspsni.gov.uk/publications/2003/teenage\\_pregnancy\\_action02\\_07.pdf](http://www.dhsspsni.gov.uk/publications/2003/teenage_pregnancy_action02_07.pdf)

<sup>112</sup> Department of Health, Social Services and Public Safety (2002) *Teenage Pregnancy and Parenthood Strategy and Action*. DHSSPS: Belfast Plan [www.dhsspsni.gov.uk/publications/2003/teenage\\_pregnancy\\_action02\\_07.pdf](http://www.dhsspsni.gov.uk/publications/2003/teenage_pregnancy_action02_07.pdf)

in relation to providing EHC, has been published. In semi-covert research in Manchester, Salford and Trafford Health Action Zone, two female researchers posed as clients seeking EHC in a number of community pharmacies. The protocol for supply was largely adhered to and emergency hormonal contraception was supplied appropriately. The length of each consultation was between 10-15 minutes and the pharmacists were courteous, polite and non-judgemental. The consultations were carried out in a private area or in the dispensary and no concerns about confidentiality were found.<sup>113</sup> Another study found that users noted a welcome absence of judgmental attitudes when accessing the service.<sup>114</sup>

Pharmacists identified many benefits of pharmacy supply of EHC, in particular the improved access to EHC at no cost to clients, the confidential nature of the scheme and also the potential for sign-posting users to other service providers.<sup>115</sup>

Community pharmacies hope to develop this service further in order to meet women's needs at a local level, particularly through increased use of Patient Group Directions to supply EHC to under-16-year olds. PCTs need to consider how pharmacies might contribute to national and local strategies for reducing teenage pregnancy.

#### **Recommendations:**

- PCTs need to consider how pharmacies might play a greater part in national and local sexual health strategies and also in reducing teenage pregnancy rates.
- That pharmacy supply of EHC under Patient Group Direction leads to pharmacy-based services becoming more integrated with other local services increasing referrals between major service providers.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

## **Folic acid and pregnancy**

Research has shown that pregnant women who take more folic acid when their baby's spine is forming, greatly reduce the risk of their baby having a neural tube defect, such as spina bifida.<sup>116</sup> There are around 90 babies born each year affected by neural tube defects in England and Wales, and around 70 in Scotland and 15 in Northern Ireland. The total number of pregnancies affected by neural tube defects is not known, but is estimated to be 600-1,200 a year in the UK. A

<sup>113</sup> Anderson .C., Bissell .P. (2003 In Press) Using semi covert research to evaluate an emergency hormonal contraception service. *Pharmacy World Science*

<sup>114</sup> Bissell,P and Anderson, C (2003) Supplying emergency contraception via community pharmacies in the UK: reflections on the experience of users and providers. *Social Science and Medicine* 57,12, 2367-2378

<sup>115</sup> Bissell,P and Anderson, C (2003) Supplying emergency contraception via community pharmacies in the UK: reflections on the experience of users and providers. *Social Science and Medicine* 57,12, 2367-2378

Bissell .P., Savage .I., Anderson .C. A Qualitative (2004 In Press) study of pharmacists' perspectives on the supply of emergency hormonal contraception via Patient Group Direction in the UK.

<sup>116</sup> Seashore. M.R., Cho, S.C., Deposito. F. et al (1993) Folic acid and the prevention of neural tube defects'. *Paediatrics*, 92: 493-494.

number of these are aborted spontaneously and a further proportion are terminated around 20 weeks of gestation.<sup>117</sup>

### Where community pharmacy can be effective

Pharmacy staff are positive about promoting the role of folic acid in pregnancy and staff reported feeling comfortable discussing this issue with customers they knew, suggesting it is a sensitive topic. The attitudes of general practitioners had an influence on whether pharmacists placed a folic acid health promotion sticker on certain products, suggesting there is a need to integrate pharmacy health promotion into the wider public health workforce. Further research is needed to establish the effect of pharmacy-based folic acid health promotion interventions.

#### Recommendations:

- Integrate pharmacy health promotion into the wider public health workforce.
- Research the effectiveness of pharmacy folic acid health promotion interventions.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

### Mental health

Mental health problems can affect anyone, rich or poor, young or old, shattering the lives of those affected and the lives of the people close to them. One in four people experience a mental health problem at some point in their lives. Each year more than 250,000 people are admitted to psychiatric hospitals and over 4,000 people take their own lives.<sup>118</sup> Mental health problems range from more common conditions to deep depression to schizophrenia, which affects fewer than one person in a hundred. Mental illness is not well understood, it frightens people and all too often it carries stigma.<sup>119</sup> There are high levels of health inequality with mental health problems, the proportion of adults assessed as having a neurotic disorder was 80% higher in social class V than in social class I in 1993.<sup>120</sup> In terms of suicide, an unskilled working man is four times more likely to take his own life than a professional working man and rates in partly skilled and manual skilled workers, are twice as high as the professional group.<sup>121</sup>

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<sup>117</sup> Department of Health (2000) Consultation by the UK Health Departments and food Standards Agency on the report of the Medical Aspects of Food and Nutrition Policy (COMA) on Folic Acid and the Prevention of Disease. Department of Health: London. [www.doh.gov.uk/folicacid/folic.pdf](http://www.doh.gov.uk/folicacid/folic.pdf)

<sup>118</sup> [www.mind.org.uk](http://www.mind.org.uk)

<sup>119</sup> Department of Health (1999) Mental Health National Service Framework. Department of Health: London. [www.doh.gov.uk/nsf/mentalhealth.htm](http://www.doh.gov.uk/nsf/mentalhealth.htm)

<sup>120</sup> Department of Health (2002) Tackling Health Inequalities: 2002 Cross Cutting Review. Department of Health: London. [www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm)

<sup>121</sup> Department of Health (2002) Tackling Health Inequalities: 2002 Cross Cutting Review. Department of Health: London. [www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm)



### **Mental Health targets:**

- Reduce the suicide rate and deaths by undetermined causes by 20% by 2010. (England)<sup>122</sup>
- Reduce the proportion of people with a potential psychiatric disorder (as measured by the GHQ-12 score) by a tenth by 2010. (Northern Ireland)<sup>123</sup>

### **Where community pharmacy can be effective**

There is, as yet, little evidence about the contribution community pharmacy could make to improving the public's mental health. However, because pharmacy users purchase products to reduce stress and anxiety and take up related leaflets available in pharmacies, particularly on sleep problems and relaxation, there may be future scope for appropriately trained pharmacists to offer more support and advice. Pharmacists already successfully offer and provide help on other sensitive issues, such as head lice treatment, emergency hormonal contraception and needle exchange, illustrating the potential role community pharmacy could occupy in supporting and referring people with mental health problems. Establishment of appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services is needed. A first step would be to ensure that pharmacists have appropriate information about other relevant local services and to set up and evaluate pilot projects.

### **Recommendations:**

- Set up pilot projects to determine whether there is a role for pharmacies regarding support, advice and referral for mental health issues.
- Integrate pharmacy-based services into other relevant local services.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

### **Drug Use**

The social and economic costs of drug use in the UK amounted to £4 billion in 2001, with most of this incurred by drug related crime. Drug use can be linked to poverty, homelessness, unemployment and crime.<sup>124</sup> Therefore the problems of drug use require integrated solutions and co-ordinated delivery of services involving education, enforcement, social, economic and health policies. Tackling drug use requires effective joint working between Government Departments at national level and similar partnership working between agencies at local level.<sup>125</sup>

<sup>122</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>123</sup> Department of Health, Social Services and Public Safety (2002) *Investing for Health*. DHSSPS: Belfast [www.dhsspsni.gov.uk/publications/2002/invest1.pdf](http://www.dhsspsni.gov.uk/publications/2002/invest1.pdf)

<sup>124</sup> The National Assembly for Wales (2000) *Tackling Substance Misuse in Wales: A Partnership Approach*. The National Assembly for Wales: Wales.

<sup>125</sup> Government (1998) *Tackling drugs to build a better Britain*. The Stationery Office: London.



### **Drug misuse targets:**

- Increase the participation of problem drug users in drug treatment programmes by 55% by 2004 and by 100% by 2008 and increase year on year the proportion of users successfully sustaining or completing treatment programmes. (England)<sup>126</sup>
- Reduce the proportion of people under the age of 25 reporting the use of Class A drugs and reduce frequent use of any illicit drug amongst young people, especially by the most vulnerable young people. (England)<sup>127</sup>
- Reduce drug-related deaths by 20% by 2004 (against 1999 baseline). (England)<sup>128</sup>

### **Where community pharmacy can be effective**

The Evidence Based Review found that community plays an important role in tackling some of the problems of drug use and that community pharmacy-based drug use services are highly valued by drug users. Pharmacy-based needle-exchange schemes are cost-effective and supervised methadone administration services achieve high attendance rates and are acceptable to clients. Positive pharmacist attitudes are correlated with higher service provision for drug users, however, practising pharmacists appear to have more negative opinions about drug users than undergraduate pharmacy students. Training is needed to address translating technical terms into an appropriate language for drug users.

### **Recommendations:**

- Establish community pharmacy-based services for drug users in all areas.
- Train pharmacists and their staff in providing services to ensure safe and appropriate services for both users and staff. This should include awareness of the needs of the target group and of cultural barriers.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

## **1.2 Health Improvement: Communities**

### **Health inequalities**

During the twentieth century there have been considerable improvements in the nation's overall health. For example, life expectancy at birth for women is now 80

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[www.archive.official-documents.co.uk/document/cm39/3945/3945.htm](http://www.archive.official-documents.co.uk/document/cm39/3945/3945.htm)

The Home Office (2002) Updated Drug Strategy 2002. The Home Office: London.

[www.drugs.gov.uk/ReportsandPublications/NationalStrategy/1038840683/Updated\\_Drug\\_Strategy\\_2002.pdf](http://www.drugs.gov.uk/ReportsandPublications/NationalStrategy/1038840683/Updated_Drug_Strategy_2002.pdf)

<sup>126</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>127</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>128</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

years compared with 48 in 1900; for men it is 75, compared with 44. Over the same period, infant mortality fell from over one in ten to six per 1,000. Unfortunately these improvements have not always been achieved at a similar rate among all social groups, or in all parts of the country. In particular, people in lower socio-economic groups tend to be ill more often, to die sooner<sup>129</sup> and suffer more long-standing and limiting illnesses. The death rate in men under 65 years is 1.6 times higher in the North West than in the South East. In Manchester, the death rate for people under 65 years is over three times higher than in Kingston and Richmond.<sup>130</sup>

People are born into situations of inequality, which continue throughout life. Health inequalities cross generations, affecting the life chances and quality of life of adults, their children and their grandchildren.<sup>131</sup> Babies born to poorer families are more likely to be premature, are at greater risk of infant mortality. They have a greater likelihood of suffering poverty, impaired development and chronic diseases later in life. Babies with fathers in social classes IV and V have a birth-weight that is on average 130 grams lower than that of babies in social classes I and II. Low birth-weight is closely associated with death in infancy, as well as heart disease, diabetes and hypertension in later life.

#### **Health inequalities targets:**

- Reduce inequalities in health outcomes by 10% as measured by infant mortality and life expectancy by 2010. (England).<sup>132</sup>
- Reduce the gap in life expectancy between those living in the fifth most deprived electoral wards and the average life expectancy by 50% for both men and women by 2010. (Northern Ireland).<sup>133</sup>
- Health Headline Targets for the period 1995 to 2010: Reduce premature mortality from Coronary Heart Disease by 50%. Reduce premature mortality from Cancer by 20%. Reduce smoking among 12-15 year olds from 14% to 11%. Reduce the proportion of women smoking during pregnancy from 29% to 20%. Reduce incidence of men and women exceeding weekly alcohol limits from 33% to 29% and 13% to 11% respectively. Reduce teenage pregnancy rate among 13-15 year olds by 20%. 60% of 5 year old children with no experience of dental disease. For each of these targets, there is an inequalities gap, which will be regularly measured to assess progress in reducing the disparity in health status between different socio-economic groups. (Scotland).<sup>134</sup>
- The Welsh Assembly proposes to develop, in consultation with key agencies, a number of priority targets for the reduction of inequalities in health in Wales.<sup>135</sup>

<sup>129</sup> Department of Health (2002) *Our Healthier Nation: Reducing Health Inequalities: an Action Report*. Department of Health: London

<sup>130</sup> Department of Health (2002) *Tackling Health Inequalities: 2002 Cross Cutting Review*. Department of Health: London. [www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm)

<sup>131</sup> Department of Health (2002) *Tackling Health Inequalities: 2002 Cross Cutting Review*. Department of Health: London. [www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm](http://www.doh.gov.uk/healthinequalities/ccsrsummaryreport.htm)

<sup>132</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006) or [www.doh.gov.uk/healthinequalities](http://www.doh.gov.uk/healthinequalities)

<sup>133</sup> Economic Policy Unit (2003) *Building on Progress: Priorities and Plans 2003-2006*. [www.pfgni.gov.uk/Economic](http://www.pfgni.gov.uk/Economic) Policy Unit: Northern Ireland.

<sup>134</sup> The Scottish Office (1999) *Towards a Healthier Scotland - A White Paper on Health*. The Scottish Office: The Stationery Office. [www.scotland.gov.uk/library/documents-w7/tahs-00.htm](http://www.scotland.gov.uk/library/documents-w7/tahs-00.htm)

<sup>135</sup> Secretary of State for Wales (1998) *Better Health Better Wales*. The Stationery Office

## Where community pharmacy can be effective

Community pharmacy, based in the heart of communities, could be used to improve access and quality of primary care services in deprived areas. Pharmacists are very positive about the need for health improvement activities in the pharmacy and their role in delivering this. The Evidence Based Review found a number of interesting, but anecdotal case studies of how community pharmacy might contribute to reducing health inequalities. Whilst this Evidence remains anecdotal and was largely excluded from the Evidence Base by the selection criteria, there is significant value to be gained from examining it with a view to identifying and conducting further research into the potential role that community pharmacy might take in reducing inequalities. An appropriate infrastructure support to enable pharmacy to contribute effectively to reducing health inequalities in co-operation with other health professionals and related services, must be established.

### Recommendations:

- Further research to determine where pharmacist can effectively contribute to reducing health inequalities.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

## Health education

The main source of pharmacy public health information is in the form of leaflets, which cover health issues such as folic acid, stopping smoking, oral health, and depression. The Evidence Based Review found community pharmacists consider health information leaflets to be an important component of their health improvement toolkit and that pharmacy users who have received health advice are positive about the service and gained useful health information. However, a high number of pharmacists report that they have never received training or guidance on using leaflets. Also, the public don't immediately recognise pharmacists as a source of general health advice and passive displays of leaflets in the pharmacy may be missed by half of pharmacy customers. The Evidence Based Review found that frequent users of pharmacies, particularly those taking prescribed medicines, are more likely to take and read pharmacy health information leaflets and view the pharmacist as a source of general health advice, probably because they have had more contact with the pharmacist. This suggests that leaflet-based strategies to raise public awareness and knowledge of health issues may be more effective if they are considered as supporting medicines or health advice, or offering an opportunity for discussion, rather than as an end in themselves. Community pharmacy has been identified as a promising setting for behaviour change interventions due to the frequency of contacts between the public and the health professional. A 'brief intervention' is a time-limited (5-10 minutes) interaction between the health professional and client with a focus on changing client

behaviour. The method has been used in modifying a range of health behaviours including smoking, physical activity, adherence to diet in diabetes, weight control, alcohol moderation, domestic violence and safe sex. There is evidence of the efficacy of brief interventions and the use of this method in primary care by pharmacists has considerable potential to improve the public's health. The Evidence Base Review suggested that pharmacists could develop their advice-giving role further by proactively offering advice and leaflets. More evidence is required on the relationship between increased interaction with pharmacy staff and changes in clients' behaviour or health outcomes.

Although there is no doubt that leaflets are still the core communication device in many situations, there is mounting evidence to suggest that how patients receive health information should relate to their individual preferences. In order to appeal to a much wider audience, other methods of communication need to be utilised. Currently there is insufficient evidence to suggest that one particular form of information presentation is more effective than any other. When a pharmacist or other staff member actively engages with patients, it may be possible to determine what method of information provision would suit them best. For example touch-screen kiosks in pharmacies seem more likely to appeal to younger people (under 40 years old).

#### **Recommendations:**

- Pharmacists need to consider the most appropriate ways of ensuring their users have access to the information they need.
- Leaflet-based strategies to raise public awareness and knowledge of health issues should be used as an opportunity for discussion, rather than as an end in themselves.
- When neither pharmacy users nor the pharmacist may be able, or willing, to engage in further consultation, easily accessible written or electronic health information should be available to those who require it.
- Further research is needed to explore the potential to develop the information and advice-giving role of community pharmacists further, for example through pharmacists proactively offering advice and leaflets.
- As service developments occur it may be necessary to run local campaigns to raise public awareness of services on offer and to target those who would benefit most from increased access such as those living in areas of deprivation or inner cities.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

## 1.3 Health Protection

### Prevention and transmission of infection

Infectious diseases are a major global threat to health, prosperity, social stability and security. Infectious diseases account for 41% of the global disease burden with infections such as HIV/AIDS, tuberculosis and malaria accounting for millions of deaths in the world each year. A number of important factors increase the risk to human health from infectious diseases, these include global travel, adaptation of micro-organisms and changes in environment and land use.<sup>136</sup>

In England, although the major infectious diseases kill only a small number of people compared to the past, infection is still important. For example 40% of people consult a health professional each year because of infection and infections account for 70,000 deaths each year. A number of major national crises over the last few years have been a direct consequence of infectious diseases such as BSE and CJD, foot and mouth disease, deaths of children and students from meningitis, NHS winter pressures from influenza and bronchitis and the Lanarkshire E. coli O157 outbreak. The number of people living with diagnosed Human Immunodeficiency Virus (HIV) in England is estimated to rise to 29,000 by the end of 2003, an increase of 40% from 1999. The potential threats to health from infectious diseases in England today are diverse and include: the threat of new or previously unrecognised diseases, animal diseases that can transmit to humans, poor hygiene, slack disease control measures and poor standards of medical care.<sup>137</sup>

### Immunisation

Immunisation protects individuals and the community from serious diseases. There are some diseases that can kill children or cause lasting damage to their health, and sometimes a child's immune system needs help to fight those diseases. Childhood immunisation provides that help. For example, in the years before the measles vaccine was introduced, an average of 250,000 cases were recorded annually in England and Wales, and 85 children died. In 1999, 2,438 cases were recorded and two people died both from the later effects of the disease caught in the 1980s or before. Immunisation also plays an important part in protecting people throughout their lives, whether through the meningitis C vaccine for students, or influenza (flu) vaccination for those aged 65 years and over. Immunisation also helps protect people when travelling abroad.<sup>138</sup>

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<sup>136</sup> Department of Health (2002) Getting Ahead Of The Curve: A strategy for combating infectious diseases (including other aspects of health protection). A report by the Chief Medical Officer. Department of Health: London.

<sup>137</sup> Department of Health (2002) Getting Ahead Of The Curve: A strategy for combating infectious diseases (including other aspects of health protection). A report by the Chief Medical Officer. Department of Health: London.

<sup>138</sup> [www.doh.gov.uk/immunisation/index.htm](http://www.doh.gov.uk/immunisation/index.htm)

**Immunisation targets:**

- 70% uptake in influenza immunisation in people aged 65 years and over, targeting populations in the 20% of areas with the lowest life expectancy. (England)<sup>139</sup>

**Where community pharmacy can be effective**

The Evidence Based Review found that immunisation services can be provided safely through community pharmacies, and that pharmacy patient medication records are effective in identifying ‘at risk’ clients who can then be invited for immunisation. User satisfaction with this service is high and support for non-physician immunisation was found to be greater for adult than for child immunisation. Pharmacy could make a significant contribution to the flu immunisation target by supplying influenza immunisation for the elderly through pharmacy. Older people are often in regular contact with their pharmacists, this provides an opportunity for pharmacists to proactively approach and advise immunisation.

**Recommendations:**

- The potential to use pharmacy based patient medication records to target people for flu immunisation is considerable and should be piloted in the UK.
- Community pharmacy provision of flu immunisation should be piloted in the UK.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

**Head lice**

Head lice are small, six-legged wingless insects, pin-head size when they hatch, less than match-head size when fully grown and grey/brown in colour. They very often cause itching, but this is not always the case, particularly when recently arrived on the head. Head lice cannot fly, jump or swim, but spread from head to head. Anyone with hair can catch them, but children who have head-to-head contact, either at school or during play, are most commonly affected.<sup>140</sup>

**Head lice targets:**

- None found

<sup>139</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>140</sup> [www.doh.gov.uk/headlice/index.htm](http://www.doh.gov.uk/headlice/index.htm)

## Where community pharmacy can be effective

The Evidence Base Review found evidence to support the involvement of community pharmacy in head lice monitoring and treatment. Members of the public see pharmacists as an approachable source of advice and treatment for head lice and pharmacists and health professionals are positive about the service and would like to see it continue. Pharmacists followed the protocol requirement for examination and proof of infection efficiently and where treatment was supplied, community pharmacists' adherence to the local formulary appears to have been extremely high, approaching 100%. Further research to assess the effectiveness and cost-effectiveness of these pharmacy-based interventions, is required, together with the need for local planning and co-ordination of treatment services and messages. Due to the sensitivity of this issue, a private consultation area in the pharmacy should be established.

### Recommendations:

- Community pharmacy head lice advice and treatment services rolled-out across the UK.
- Research to assess the effectiveness and cost-effectiveness of pharmacy-based head lice interventions.
- Local planning and co-ordination of head-lice treatment services and messages.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

## Sexually transmitted infections

Since 1995 there has been a rise in the diagnosis of acute sexually transmitted infections (STIs) such as genital chlamydia, gonorrhoea, syphilis and genital warts. Chlamydia cases increased by 165% between 1995 and 2002, gonorrhoea increased by 145% and syphilis, though affecting only a small number of people, increased by 777%. In particular, there have been large and increasing numbers of diagnoses among teenage women and men who have sex with men. This may be because more people are aware of STIs and are visiting clinics to be tested, but risky behaviour continues to be a factor in the increase. Genito-Urinary Medicine (GUM) clinics in England, Wales and Northern Ireland diagnosed 81,680 cases of chlamydia, 69,417 cases of genital warts, 24,953 cases of gonorrhoea, 18,392 cases of genital herpes and 1,193 cases of syphilis in 2002. Figures for Scotland are not currently available. 2002 saw the largest annual number of newly diagnosed HIV infections with 5,338 cases reported. It is estimated that 41,200 people are living with HIV in the United Kingdom, around a third of whom are undiagnosed. There is a strong link between social deprivation and STIs. For example the rates of gonorrhoea in some inner city black and minority ethnic groups are ten or eleven times higher than in whites. There is also evidence of considerable lack of



information amongst young people about sexually transmitted infections and how to protect against them.<sup>141</sup>

#### **Sexually Transmitted Infection targets:**

- None found

#### **Where community pharmacy can be effective**

The Evidence Based Review found that there is the potential to increase the role of pharmacy in preventing the transmission of infection and pharmacists are positive about undertaking this role. In order to expand this role pharmacists need a supporting infrastructure in place including: training, appropriate reimbursement and an area in the pharmacy for private consultations. Further exploration and research into their potential role is required.

#### **Recommendations:**

- A supporting infrastructure be put in place including; training, appropriate reimbursement and an area in the pharmacy for private consultations.
- Research further where pharmacists can contribute effectively in prevention of sexually transmitted infections.

#### **Travel Health**

Every year, residents of the United Kingdom go on more than 56 million overseas journeys. The following are driving factors associated with increased infection from travel:

- Air travel makes it possible to spread infectious diseases to different parts of the world;
- People are travelling to areas where they can become infected and bring new diseases home with them; and
- The speed of travel enables a person carrying a disease such as Ebola to travel 12,000 miles and pass unnoticed through customs and immigration before developing symptoms several days later; infecting many other people before becoming ill.<sup>142</sup>

#### **Travel Health targets:**

- None found

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<sup>141</sup> [www.brook.org.uk](http://www.brook.org.uk)

<sup>142</sup> Health Protection Agency [www.hpa.org.uk](http://www.hpa.org.uk)



## Where community pharmacy can be effective

The Evidence Based Review found that at present, pharmacy involvement in preventing the transmission of infection, currently centres on opportunistic travel health advice. However, there is the potential to increase this role. In order to expand this role, pharmacists need to have a supporting infrastructure in place including: training, appropriate reimbursement and an area in the pharmacy for private consultations. Further exploration and research into their potential role is urgently required. Due to the sensitivity of this issue a private consultation area in the pharmacy should be established.

### Recommendations:

- A supporting infrastructure is put in place including training, appropriate reimbursement and an area in the pharmacy for private consultations.
- Research further where pharmacists can contribute in giving travel health advice.

## Injury Prevention

### Accidental injury

Accidental injury is a significant public health issue, particularly for children and older people. Every year 10,000 people die from accidental injury; it is the leading cause of death among children aged 0-14 years. In addition, there are many millions of non-fatal accidents each year, around 2.8 million of them occur in the home, many caused by falls.<sup>143</sup>

Falls are a major cause of disability and the leading cause of mortality due to injury in older people aged over 75 in the UK. Up to 14,000 people a year, die in the UK, as a result of an osteoporotic hip fracture.<sup>144</sup> Most falls do not result in serious injury, but there are serious consequences for an individual from falling or from not being able to get up after a fall. These can include: loss of confidence, loss of mobility leading to social isolation and depression, increased dependency and disability, hypothermia, pressure-related injury and infection.<sup>145</sup>

Accidental injury is also related to socio-economic factors. For example, residential fire deaths for children are 15 times greater for children in social class V compared with those in social class I and child pedestrian deaths are 5 times greater between these social classes.<sup>146</sup>

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<sup>143</sup> Department of Health (2002) *Preventing Accidental Injury - Priorities for action: Report to the Chief Medical Officer from The Accidental Injury Task Force*. The Stationery Office: London.

<sup>144</sup> Department of Health (2001) *National Service Framework for Older People*. Department of Health: London.  
[www.doh.gov.uk/nsf/pdfs/nsfolderpeople.pdf](http://www.doh.gov.uk/nsf/pdfs/nsfolderpeople.pdf)

<sup>145</sup> Department of Health (2001) *National Service Framework for Older People*. Department of Health: London.  
[www.doh.gov.uk/nsf/pdfs/nsfolderpeople.pdf](http://www.doh.gov.uk/nsf/pdfs/nsfolderpeople.pdf)

<sup>146</sup> Department of Health (2002) *Preventing Accidental Injury - Priorities for action: Report to the Chief Medical Officer from The Accidental Injury Task Force*. The Stationery Office: London.

### Accidental injury targets:

- Reduce the mortality rate from suicide and undetermined injury by at least 20% by 2010. (England)<sup>147</sup>
- Improve the quality of life of older people so that they can live at home where ever possible, by increasing the number of those supported intensively to live at home, to 30% of the total being supported by social services at home or in residential care by 2006. (England)<sup>148</sup>
- Each year less than 1% growth in emergency hospital admissions and no growth in re-admissions. (England)<sup>149</sup>
- To reduce the death rate from accidents in people of all ages by at least one fifth between 2000 and 2010. (Northern Ireland)<sup>150</sup>
- To reduce the rate of serious injuries from accidents in people of all ages by at least one tenth between 2000 and 2010. (Northern Ireland)<sup>151</sup>

### Where community pharmacy can be effective

The Evidence Based Review, found pharmacy can contribute to reducing accidental injury through pharmacy-based osteoporosis-screening services, involving pharmacist and nurse input. This service was found to be accessible and valued by users and effective in identifying women at risk of osteoporosis in order to initiate health promotion interventions.

### Recommendations:

- Establishment of pharmacy osteoporosis screening services across the UK.
- Further research where pharmacy can contribute to injury prevention.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

### Medicines related injuries

#### *Children and methadone related injuries*

Methadone use has been steadily increasing to tackle rising addiction problems in society. In the UK, deaths attributable to methadone poisoning fell from 37% in 1997 to 18% in 1999 according to a study based in Yorkshire.<sup>152</sup> This report also described that the proportion of deaths involving methadone fell despite

<sup>147</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>148</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>149</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>150</sup> Department of Health, Social Services and Public Safety (2002) *Investing for Health*. DHSSPS: Belfast [www.dhsspsni.gov.uk/publications/2002/invest1.pdf](http://www.dhsspsni.gov.uk/publications/2002/invest1.pdf)

<sup>151</sup> Department of Health, Social Services and Public Safety (2002) *Investing for Health*. DHSSPS: Belfast [www.dhsspsni.gov.uk/publications/2002/invest1.pdf](http://www.dhsspsni.gov.uk/publications/2002/invest1.pdf)

<sup>152</sup> Oliver P, Keen J, Mathers N (2002) Deaths from drugs of abuse in Sheffield 1997-1999: what are the implications for GPs prescribing to heroin addicts? *Family Practice* 19(1):93-4

increased prescribing. On the other hand, methadone has been implicated in child accidents and this indicates a need for thorough examination of methadone related child accidents.<sup>153</sup>

### **Where community pharmacy can be effective**

There is a need for the health professionals to join up with parents and community in an effort to curb these avoidable accidents. A simple strategy to prevent these kinds of accidents will be to promote the use of child resistant containers<sup>154</sup> and to educate parents and carers to keep the medications safe. Another preventative measure would be to conduct supervised administration of methadone. With support from both health professionals and the local community, pharmacists could play a crucial role in these strategies.

#### **Recommendations:**

- Research to assess the effectiveness and cost-effectiveness of pharmacy-based supervised administration methadone
- Community pharmacists should advice on keeping medicines safe
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively to the local drugs strategy in co-operation with other health professionals and related services.

### ***Older people and medicine related injuries***

As people get older, their use of medicines increases. Four out of five people over 75 take at least one prescribed medicine and around 36% take four or more medicines.<sup>155</sup> Alongside this, comes an increasing challenge to ensure that medicines are prescribed and used effectively. The ageing process affects the body's capacity to handle medicines. Multiple diseases and complicated medication regimes, may also affect a patients capacity and ability to manage their own medication.<sup>156</sup> This can have serious consequences and cause medicines related injuries such as falls and other accidents.<sup>157</sup> It is generally accepted that any effective medicine will also have side effects. Many side effects are related to the way in which the medicine works to cause beneficial effects. Some side effects however, are not related to the way in which the medicine causes beneficial effects, and are unpredictable. Patients are all individuals and may respond in slightly different ways to the same medicine; it is therefore often impossible to

<sup>153</sup> Towner E Dowswell T. (2002) 2001 Community-based childhood injury prevention interventions: what works? *Health Promotion International* 17(3):273-84.

<sup>154</sup> Lawson GR, Craft AW, Jackson RH. Changing pattern of poisoning in children in Newcastle, 1974-81 *Br Med J (Clin Res Ed)*. 1983 Jul 2;287(6384):15-7

Krug A, Ellis J, Hay IT et al. The impact of child-resistant containers on the incidence of paraffin (kerosene) ingestion in children. *S Afr Med J* 1994 Nov;84(11):730-4

<sup>155</sup> Health Survey for England (1998) Volume 1: Findings.

<sup>156</sup> Department of Health (2001) Medicines and older people National Service Framework: Implementing medicines related aspects of the NSF for Older People. Department of Health: London. [www.doh.gov.uk/nsf/pdfs/medicinesbooklet.pdf](http://www.doh.gov.uk/nsf/pdfs/medicinesbooklet.pdf).

<sup>157</sup> Cited in Health Education Authority (1999) Older people and accidents: Fact Sheet 2. HEA: London.

predict how effective a medicine will be in treating a patient's medical condition, and whether the patient will have any side effects.<sup>158</sup>

#### **Medicines related injuries targets:**

- Improve the quality of life of older people so that they can live at home wherever possible, by increasing the number of those supported intensively to live at home, to 30% of the total being supported by social services at home or in residential care by 2006. (England)<sup>159</sup>
- Each year less than 1% growth in emergency hospital admissions and no growth in re-admissions. (England)<sup>160</sup>

#### **Where community pharmacy can be effective**

During the normal course of their work, pharmacists and their staff have a substantial amount of contact with older people and people who require repeat dispensing. This places them in an ideal position to be able to identify patients at risk of medicines related injuries.

#### **Recommendations:**

- Establish communication between local health professionals to set up a system of adapting prescribing patterns to changing patient needs.
- Research further into the pharmacists' role in preventing accidents in other target groups, for example children and young people.
- Establish appropriate infrastructure support to enable pharmacy to contribute effectively in co-operation with other health professionals and related services.

<sup>158</sup> [Committee on Safety of Medicines \(CSM\)/MHRA www.mca.gov.uk](http://www.mca.gov.uk)

<sup>159</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

<sup>160</sup> Department of Health (2002) *Improvement, expansion and reform: the next 3 years. Priorities and planning framework 2003 – 2006*. Department of Health: London. [www.doh.gov.uk/planning2003-2006](http://www.doh.gov.uk/planning2003-2006)

## **2 Factors affecting the effectiveness of interventions**

In order for community pharmacists to carry out an extended public health role and deliver public health services through their pharmacies, a comprehensive underpinning support infrastructure must be developed. Key components of this are outlined below.

### **Training and facilitators**

The Evidence Base Review found that the provision of training and facilitators, positively increases the level of involvement of pharmacists in health promotion interventions. It also results in a greater uptake of services by clients, with increased satisfaction. This suggests that training and facilitation are key to increasing the acceptability and usefulness of interactions between pharmacists and clients over health promotion. Training and education can also link pharmacists more closely with primary care staff and local services, thus reducing the concerns of pharmacists over how pharmacy-based public health initiatives might be received by pharmacy users and other healthcare professionals.

The Evidence Base Review, identified a number of specific health promotion areas where training was effective. For example, pharmacists delivering smoking cessation services, who had undergone training in smoking cessation techniques and behaviour change methods, were found to increase the effectiveness of the service by achieving higher quit rates. Overall, training was found to increase knowledge, self-confidence and positive attitudes among pharmacists and their staff in relation to smoking cessation. Training in oral health and skin cancer prevention, was found to enhance knowledge and increase the opportunistic offering of advice to clients by pharmacists. The Evidence Base Review also identified a specific training need for pharmacists participating in pharmacy-based needle-exchange schemes. It was found that this training needs to include skills in translating technical terms into a suitable language for drug users.

### **In summary, training and facilitation was found to:**

- Successfully produce behavioural change in pharmacists to a more holistic approach and understanding of health.
- Increase the length of consultation with the clients.
- Increase the effectiveness of interventions.
- Increase local multi-agency working.
- Increase the likelihood of pharmacists becoming more proactive in giving health information and advice.
- Increase the likelihood of pharmacists becoming more likely to discuss general health issues and prevention, rather than focusing on medicine.
- Increase clients' satisfaction with the consultation.
- Increase the likelihood of clients feeling able to ask questions.

Studies from the early 1990s, showed that most pharmacists felt that their education at undergraduate and pre-registration level, had not prepared them adequately for involvement in health development activities. Pharmacists have reported their undergraduate and pre-registration training, carried out in the late 1980s as being 'non-existent' or 'poor' in preparing them for an advice-giving role. However, the investigation identified no recent data to allow comparisons with the current situation. Given the importance of training and education in delivering public health initiatives, research is urgently needed to determine current perceptions of recently qualified pharmacists on the training and education they received. Also core pharmacy practitioner and specialist public health competencies need to be developed based around the Faculty of Public Health's 10 key areas for public health practice (as outlined).<sup>161</sup> Underpinning these competencies must be a comprehensive training and education programme.

#### **Recommendations:**

- Development of core pharmacy public health competencies based around the Faculty of Public Health's 10 key areas for public health practice.
- Comprehensive training and education programme, to meet the needs of both pharmacy public health practitioners and specialists.
- At a specialist level, joint training and registration between the Royal Pharmaceutical Society of Great Britain and the Faculty of Public Health.
- The use of facilitators in public health interventions where appropriate.
- Training for pharmacy-based needle-exchange schemes, including skills in translating technical terms into a suitable language for drug users.
- Research current perceptions of newly and recently qualified pharmacists on the training and education they received. This research should particularly evaluate the pharmacists' confidence in raising health issues with pharmacy users in an appropriate manner and readiness for greater communication with primary care staff.

#### **Remuneration**

The Evidence Base Review highlighted how infrastructure issues, particularly remuneration, can create a barrier to maximal use of community pharmacies to deliver services aimed at improving the public's health. The new contract for community pharmacy will be an important framework for delivering public health services in community pharmacy. Under the new contractual framework, essential services, which would normally be provided by all community pharmacies, will include the promotion of healthy lifestyles and the promotion of self-care. The inclusion of public health in the essential services element of the new pharmacy contract recognises the importance of public health and the contribution that can be made by pharmacy contractors.

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<sup>161</sup> Faculty of Public Health – [www.fph.org.uk](http://www.fph.org.uk)

**Recommendations:**

- That the new pharmacy contract rewards high-quality, patient-centred, effective interventions and encourage the maximum number of pharmacies to engage in public health activities.

**Information technology**

Community pharmacy must have the information technology expertise and capacity to provide services that are integrated into the wider health community. For example, pharmacy must be linked and able to access and annotate NHS electronic patient records to ensure effective and appropriate care.

The current pharmacy IT infrastructure should be developed as there is substantial evidence indicating that using pharmacy records for screening and client identification purposes is effective and can be used for instigating health promotion measures. This applies to a number of health topics including coronary heart disease, lipid management and immunisation. It is also relevant to a number of health topics marked down for further research, such as diabetes and obesity. Given the fact that both the ill and the healthy visit pharmacies, the use of pharmacy records, to identify and target public health interventions for individuals and communities, offers huge potential to improve the public's health and reduce health inequalities.

**Recommendations:**

- Use community pharmacy patient medication records to identify and target public health interventions for individuals and communities.
- Expand the IT capacity and expertise of pharmacy.
- Link pharmacy electronically to the NHS.

**Design and use of pharmacy premises**

The Evidence Base Review, found that the vast majority of pharmacy users (approximately 80%) reported satisfaction with privacy and confidentiality levels within community pharmacies. In addition, some clients choose to use a pharmacy to maintain their anonymity. For example, research on emergency hormonal contraception supply, found that some women positively select a pharmacy where they are not known in order to preserve anonymity. However, a number of the areas in which pharmacists could potentially contribute to improving the public's health, involve sensitive issues and users often emphasise the importance of confidentiality and privacy. For example: sexual health, head lice management and mental health. Clients may also self-select pharmacies on the basis of privacy level, where they have a choice. Some clients reported intending to ask the pharmacist's advice on a sensitive issue, but ultimately found themselves unable to do so because of concerns about privacy. Pharmacists must respond to these needs, if

they are to expand their involvement in public health and provide a high level of user satisfaction. Facilities must be available to enable confidential consultations, especially when giving advice on sensitive topics. There is no commonly-accepted definition of what a consultation area is. A working definition might be “*a separate area of the pharmacy that allows for confidential dialogue with patients and customers in appropriate surroundings*”. There are no national data on the numbers of community pharmacies that have a consultation area. Current estimates for England are 25-30%.

Since the Evidence Review was completed, further evidence on consultation areas has been published. The large multiple groups are proposing to increase the spread of installation of consultation areas. We estimate that by the end of 2004 at least 40-45% community pharmacies will have such an area – and the installation rate is likely to be accelerated by the new requirements under the community pharmacy contract.

From the limited evidence available, consultation areas appear to make a useful contribution to community pharmacy facilities. They are well regarded by the customers who use them as well as by pharmacists and their staff. The available evidence suggests, that consultation areas are likely to be welcomed by the public. The extent to which the presence of a consultation area will change the behaviour of those pharmacy users who do not currently access health advice and services from pharmacies is unknown. Simply installing consultation areas without implementation support is, in itself, unlikely to be sufficient. The use of consultation areas is influenced by the attitudes and behaviour of pharmacists and their staff, as well as by customer attitudes. At least initially, pharmacists and their staff will have to take a lead in using their consultation areas, until pharmacy users themselves become familiar with their purpose and benefits. Publicity and signage for consultation areas are also likely to influence their use. Pharmacy organisations can continue to promote the use of consultation areas and to disseminate examples of innovative practice.<sup>162</sup>

#### **Recommendations:**

- Facilities must be available to enable confidential consultations, especially when giving advice on sensitive topics.
- To encourage the addressing of concerns about privacy, and to ensure that all users have access to the full range of pharmacy services, information about privacy, confidentiality and anonymity should be clearly available in the pharmacy.
- Efforts must be made to reassure users that the issues of privacy, confidentiality and anonymity are taken seriously and can be appropriately addressed by all pharmacy staff.

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<sup>162</sup> **Blenkinsopp, A. Anderson. C. (2003)** Consultation areas in community pharmacies: a rapid review of evidence and models



### 3. Developing relationships with stakeholders

#### Pharmacists' views

Pharmacists are very positive and attach a high degree of importance to health improvement activities in the pharmacy and their role in delivering them. However, in practice, their approach tends to be reactive rather than proactive and centres around the use of medicines rather than a more holistic view of health. The Evidence Base Review, found a number of barriers to developing the pharmacist's role in health improvement, including: lack of remuneration, time pressures, lack of training and perceptions of a negative response to these activities by General Practitioners and the public.

#### Recommendations:

- Address barriers to developing the pharmacist's role in health improvement including: lack of remuneration, time pressures, and perceptions of a negative response to these activities by GPs and the public.
- Develop the pharmacist's role in health improvement to be proactive and centred around a more holistic view of health.

#### Stakeholders' views

Pharmacy is a valuable component of the multidisciplinary primary healthcare team and needs to be recognised and incorporated into it. Likewise, the skill mix in the pharmacy needs to be developed. The Evidence Base Review, found that there are inter-professional and logistical barriers to closer working between pharmacists and staff working in primary care. In logistical terms, insufficient resources for development, support and facilitation locally, have been suggested as possible barriers to collaborative working. In terms of inter-professional barriers, research in the 1990s found that, often, the work of community pharmacists is viewed as peripheral rather than central to public health and health improvement activities. It is up to the profession, through alliances and joint working, to develop a vision that relates to local health priorities and needs. The Evidence Base Review, found that pharmacists generally expressed a willingness to work more closely with primary care staff but felt uncertain whether their input would be welcomed. Primary care staff were predominantly positive about community pharmacists' potential involvement and often expressed confidence in individual pharmacists. However, they reported wider anxieties about pharmacists' lack of access to medical records and the commercial aspect of their business. Since this research was conducted, there have been an increasing number of community pharmacists who have been working on a sessional basis to provide prescribing advice to local practices. Further research is needed to assess whether wider integration has occurred as a result of this development.

The Evidence Base Review, found that collaborative working is reported to be greater where the pharmacy dispenses high numbers of prescriptions, or, is the only pharmacy near a GP surgery. This suggests that collaboration is currently associated with the existing mode of remuneration for pharmacy services.

Joint training events between pharmacists and Primary Healthcare Team members appear to be useful in promoting collaborative working. However, pharmacists report finding it difficult to make time to leave the pharmacy and attend 'team meetings'.

**Recommendations:**

- Pharmacy needs to be incorporated into the multidisciplinary primary healthcare team.
- Overcome barriers to pharmacy becoming integrated into the wider health community such as training and remuneration.
- Further research is needed to assess whether wider integration has occurred.
- Joint training events between pharmacists and other health professionals at a local level.

**Pharmacy users' views - Public perception and expectation**

The Evidence Base Review, found that pharmacy users are positive about pharmacy-based health improvement activities and value advice and services from community pharmacies. For example, community pharmacies are highly rated by users as a source of supply and advice for emergency hormonal contraception and head lice management. However, public perception of services available through pharmacy needs development, since both the public and community pharmacists believe, that the advice-giving role of community pharmacists on general health issues is not widely recognised or utilised. The public view pharmacists primarily as drugs experts rather than experts on health and illness.

The Evidence Base Review, also found that the use of community pharmacies for general health advice is greater among women, respondents with young children and those in lower socio-economic groups. Therefore, pharmacy could play a vital role in tackling health inequalities. Further research is required to investigate the use of community pharmacies by members of lower socio-economic groups and other disadvantaged groups.

**Recommendations:**

- Develop public perception of the services available through pharmacy.
- Investigate how community pharmacies could be used to tackle health inequalities.

## 4 Conclusions

Community pharmacists already make a significant contribution to public health through their day-to-day activities. However, the public health role of pharmacists and their staff could be developed further.

Reports 1 and 2 of the Evidence Base Review, clearly demonstrate the potential of community pharmacists to improving the public's health. The Review found that public health initiatives delivered through pharmacies could significantly contribute to both local and national strategies and targets. To this end, it is recommended that pharmacy be integrated into the wider primary care and public health workforce. It is also recommended that, where pharmacy-based public health initiatives have been found to be effective, they should be incorporated into national and local commissioning plans. Further research and pilots need to be carried out on other areas where community pharmacy could be effective.

Public awareness of the services available through pharmacy need to be developed, particularly among of those who would benefit most from increased access to health advice - such as those living in areas of deprivation.

The barriers to expanding the role of the pharmacist to public health practitioner, need to be addressed urgently. As well as an appropriate infrastructure support established, to enable pharmacy to contribute effectively to the public health agenda, in co-operation with other health professionals and related services. This infrastructure support, must include training and education, appropriate reimbursement, information technology and redesign of pharmacy premises. Comprehensive training and education programmes designed to meet the needs of both pharmacy practitioners and public health specialists must be established as a matter of priority. These need to be based around the 10 key areas for public health practice. In terms of remuneration, the new pharmacy contract must reward high-quality, patient-centred, effective public health interventions and encourage the maximum number of pharmacies to engage in public health activities. Pharmacy premises must also have facilities available to enable confidential consultations, especially when giving advice on sensitive topics. Once the support infrastructure is in place, pharmacists will be able to engage positively and effectively with the public health agenda.

Community Pharmacists are a valuable part of the public health workforce and must become more integrated with the NHS and wider public health workforce.

## Reports 1 and 2 – Key findings

### Evidence summaries – Where community pharmacy can be effective

#### Smoking and smoking in pregnancy

##### Key Findings:

- Community pharmacists trained in behaviour change methods are effective in helping clients stop smoking (B1).
- Training increases knowledge, self-confidence and positive attitude of pharmacists and their staff in relation to smoking cessation (B1).
- Community pharmacy-based stop smoking services are cost-effective (B1).
- There is potential benefit to be gained from a whole staff approach in community pharmacy, although there is no comparative data for when pharmacists alone have provided the service (2).

##### Stakeholder responses:

- Pharmacists are more likely to respond to smokers' requests for advice than to initiate conversations about smoking. (1)

##### Further research:

- Further research is needed into the effects of community pharmacy team approaches on, service provision capacity, quit rates and numbers of people setting a quit date. (2)

#### Healthy eating, obesity and weight reduction

##### Key findings:

- Community pharmacy-based weight reduction programmes appear to show promise but further evidence is needed (B3).

##### Further research:

- Further research is required to determine the potential for effective weight reduction programmes, based in community pharmacies.

## Coronary Heart Disease Screening and Management

### Lipid management

#### Key findings:

- Lipid management services provided by community pharmacists are effective in
  - Helping clients to achieve target lipid levels (B1).
  - Enhancing the prescribing and use of lipid-regulating medications (B1).
  - Reducing clients' coronary heart disease risk scores (B1).
- There is insufficient evidence to determine whether 'screening' activities (e.g. blood pressure measurement), carried out in community pharmacies, are an effective use of resources without further research and training (B3).
- Using pharmacy medication records to identify clients at 'high risk' of coronary heart disease is effective and can be used for instigating health promotion measures (B1).
- Information routinely kept by community pharmacies on dispensed medication, can also be used for case finding of patients for interventions in lipid management (C1).

#### Further research:

- Further investigation into the effectiveness and cost-effectiveness of 'screening' activities in community pharmacies should be carried out.

### Aspirin, anticoagulant monitoring and screening

#### Key Findings:

- Community pharmacy audits can identify self-initiated aspirin treatment and encourage referral for medical advice (B3).
- Patients taking aspirin prophylactically have unmet information needs that could be provided for by community pharmacists (C1).
- Community pharmacy-based monitoring of the following shows promise but more evidence is needed on:
  - The use of prophylactic aspirin treatment (B3).
  - Anticoagulant therapy (B3).

#### Stakeholder responses:

- The pharmacist is perceived by pharmacy users as an appropriate potential source of advice on aspirin and heart disease. However, pharmacists are not perceived to be currently providing the advice they need by patients taking aspirin, partly because patients are often reluctant to ask (C1).
- There was some concern about the level of privacy achievable in a community pharmacy; with just over half believing that the pharmacy was a suitable venue for receiving information on aspirin.

**Further research:**

- Further research, in collaboration with local prescribers is needed, to test feasibility and outcomes of a community pharmacy programme to improve benefit and reduce harm from prophylactic aspirin use (AB).
- Further research into community pharmacy-based monitoring of anticoagulant therapy is urgently required, to identify the potential for minimising negative health outcomes for this 'high risk' patient group.

**Skin cancer prevention****Key findings:**

- Training in skin cancer prevention enhanced knowledge and increased the opportunistic offering of advice to clients by pharmacists (B1).

**Further research:**

- Pharmacy-based information on skin cancer prevention appears to be effective in raising awareness of 'sun risks' and trained pharmacists are more likely to be proactive in counselling clients. However, the effects of this advice on behaviour are unknown and further research should address this information shortfall.

**Oral health****Key Findings:**

- Pharmacists are asked by their customers to give advice on oral health, but training received on this topic is variable and evidence of the effectiveness of their interventions is lacking (B3).
- Training and participation in oral health promotion activities appear to increase pharmacists' intent to try to change users' behaviour (C1).
- A more proactive approach by pharmacists is required, to maximise opportunities for oral health development (C1).

**Stakeholder responses:**

- Most pharmacy customers say they believe sugar-free medicines are important for children, but opportunities for pharmacists to recommend sugar-free medicines for children are limited, as most requests from customers are for named medicines (C1).

## Diabetes

### Key Findings:

- Pharmacy-based group education for people with diabetes shows promise but more evidence is needed (B3).
- Community pharmacy-based monitoring and information giving, in diabetes, shows promise in improving diabetic control, but further research is needed (B2).

### Further research:

- Further research into the effectiveness of pharmacy-based programmes to improve the management of diabetes should be initiated.

## Asthma

### Key Findings:

- An educational intervention by pharmacists enhances asthma knowledge among primary school teachers (B2).

### Further research:

- Further research is required into whether pharmacist-led training programmes, can lead to improved management of asthma in schoolchildren by teachers.

## **Prevention of teenage pregnancy**

### **Key Findings:**

- Emergency contraception can be effectively and appropriately supplied by pharmacists (B3).
- Pharmacy supply of EHC enables most women to receive EHC within 24 hours of unprotected intercourse (B3).
- Window displays in pharmacies are effective in raising client awareness, about supply and increasing the presentation of prescriptions for emergency contraception and pregnancy tests (B3).
- A small minority (10%) of women, choose pharmacy supply of EHC in order to maintain anonymity (B3).
- The role of other pharmacy staff in provision of EHC services is reported by pharmacists to be important, but there is no data to enable assessment of their contribution (B3).

### **Stakeholder responses:**

- Users were generally satisfied with the service pharmacists provided (C1).
- Community pharmacies are highly rated by women as a source of supply and associated advice for EHC on prescription, by Patient Group Directions or over-the-counter sales (B3).
- Pharmacists were positive about their experience of providing emergency hormonal contraception through Patient Group Directions and, over the counter sales (B3).
- Pharmacists wish their services for supply of EHC to develop in order to meet women's needs at a local level, particularly through increased use of Patient Group Directions to supply under 16 year olds (B3).

### **Further research:**

- Further monitoring is needed into the use of, and outcomes of, pharmacy supply of EHC under Patient Group Directions.
- The contribution of other pharmacy staff should be evaluated.



## **Folic acid and pregnancy**

### **Stakeholder responses:**

- The attitudes of GPs had an influence on whether pharmacists placed a folic acid label on certain products and staff reported feeling more comfortable discussing this issue with customers they knew, suggesting it is a sensitive topic.
- Pharmacy staff are positive about promoting the role of folic acid in pregnancy, but there is no published evidence of the effects of interventions on behaviour (B3).

### **Further research:**

- Further investigation should be carried out to assess the impact of pharmacy-based interventions on folic acid use by women.

## **Mental health**

### **Key findings:**

- Community pharmacies are used for the purchase of products to reduce stress and anxiety (C1).
- Pharmacy users take up leaflets on topics relating to stress and anxiety with leaflets on sleep problems and relaxation being most commonly selected (C1).
- Around half of pharmacy staff were aware of relevant local self-help groups (C1).
- At present most pharmacy-based support appears to be linked to medicine sales.

### **Stakeholder responses:**

- Most (87%) pharmacy users did not regard pharmacists as their preferred source of advice on stress and anxiety (C1).

### **Further research:**

- Further research is required to determine whether there is a role for pharmacies in the management of stress and anxiety.

## **Drugs misuse**

### **Key findings:**

- Community pharmacy-based supervised methadone administration services can achieve high attendance rates and be acceptable to clients (B3).
- Positive attitudes among pharmacists are correlated with higher service provision for drug users (B3).

- Specific training needs have been identified, for pharmacists participating in pharmacy-based needle-exchange schemes. Such training needs to include skills in translating technical terms into a suitable language for drug users (C1).
- Pharmacy-based needle-exchange schemes are cost-effective (B3).
- Cultural barriers (e.g. use of 'drug culture' language) are important to address through training.

**Stakeholder responses:**

- Most drug users value community pharmacy-based services highly (B3).
- Practising pharmacists appear to have more negative opinions about drug users than undergraduate pharmacy students (B3).

**Pharmacy Public Health Information**

**Key findings:**

- Public use of community pharmacies is almost universal but is low for general health advice (B3).
- Passive displays of leaflets may be missed by half of pharmacy customers (C1).
- Awareness of pharmacy-based leaflets on health topics is higher for those clients taking prescribed medicines (B3).
- Pharmacy window displays are effective in raising client awareness, enquiries about supply and the presentation of prescriptions for emergency contraception and pregnancy tests (B3).

**Stakeholder responses:**

- Community pharmacists consider leaflets to be an important component of their health improvement toolkit (B3).

**Multimedia technology**

**Key findings:**

- Multimedia technology (e.g. portable touch-screen kiosks and access to electronic information through the Internet) may be a means of engaging young and healthy pharmacy customers in health improvement activity (C1).

## Prevention of infection

### Key findings:

- Pharmacists' knowledge about transmission of HIV, hepatitis B and hepatitis C is variable (B3).

### Stakeholder responses:

- Pharmacists generally have positive attitudes towards involvement in prevention of transmission of infection (B3).

### Further research:

- Pharmacists' current involvement is mainly limited to opportunistic travel health advice. The main barriers to increasing their involvement are time, remuneration and private consultation areas. Further exploration and research into their potential role is urgently required.

## Immunisation

### Key findings:

- Immunisation services can be provided safely through community pharmacy (B3).
- Support for non-physician delivered immunisation is greater for adult than for child immunisation (C1).
- Pharmacy patient medication records are effective in identifying and flagging 'at risk' clients to be invited for immunisation and can increase the percentage of the target group immunised (B3).

### Stakeholder responses:

- User satisfaction with pharmacy-based immunisation services is high (C1).

## Head lice

### Key findings:

- The majority of head lice management programmes require proof of infestation before treatment is supplied and between one-quarter and one-third of consultations result in no treatment being recommended (B3).
- Where treatment is supplied, community pharmacists' adherence to the local formulary appears to be extremely high (approaching 100%) (B3).
- The finding that, no treatment was provided in one-third of cases, indicates that pharmacists followed the protocol requirement for examination and proof of infection.
- Work is needed locally to ensure messages about treatment of head lice infestation are consistent between pharmacists, GPs, practice staff and schools (B3).
- There is some evidence that the cost of over-the-counter head lice treatments, is a barrier to appropriate use. Community pharmacy supply of treatment on the NHS should be explored in areas where this applies (C1).

### Stakeholder responses:

- Pharmacists and health professionals appear positive about the service and express a wish for it to continue (B3).
- User feedback shows that head lice management services are generally well received, but between 18% and 34% of scheme users, report having some concerns about privacy in the pharmacy during the consultation (B3).
- Members of the public see pharmacists as an approachable source of advice and treatment for head lice. The provision of this service, however, appears unstructured and requires further assessment of its effectiveness.

### Further research:

- No evidence of effectiveness of treatment, or prevention of infestation or re-infestation was reported in the studies reviewed. Further research to assess the effectiveness and cost-effectiveness of these pharmacy-based interventions is required, together with the need for local planning and co-ordination of treatment services and messages.

## **Sexually Transmitted Infections**

### **Key findings:**

- Public interest in the availability of advice on contraception and safe sex through pharmacies is high (B3).
- Pharmacists' access to up-to-date postgraduate training that incorporates and encourages networking with other local service providers, is likely to be crucial in increasing pharmacists' confidence in dealing with these issues appropriately and effectively.
- Pharmacists' knowledge about transmission of HIV, hepatitis B and hepatitis C is variable (B3).

### **Stakeholder responses:**

- Quality and confidentiality were identified by pharmacy users as important considerations in selecting a pharmacy for advice on women's health (B3).
- Pharmacists express support for involvement in promoting safer sex and contraception but are rarely asked for such advice and are reluctant to offer it (B3).
- Male pharmacists perceive themselves to be less knowledgeable and more embarrassed than female pharmacists, in discussing women's health issues (B3)

## **Accidental injury**

### **Key findings:**

- A pharmacy-based osteoporosis screening service, involving pharmacist and nurse input, was found to be feasible and identified women at risk of osteoporosis (B3).

### **Stakeholder responses:**

Women using the scheme valued the accessibility offered by community pharmacy (B3).

## **Medicines related injury**

### **Key findings:**

- Requests to patients to return unused medicines to the pharmacy, resulted in large quantities of excess medicines being identified (C1).
- Important reasons for excess quantities of medicines in people's homes include changes in therapy, patient deaths and adverse effects.
- Discussions between local health professionals appear to be useful in making changes to prescribing frequency to prevent the accumulation of excess medicines (C1).
- During the normal course of their work pharmacists and their staff have a substantial amount of contact with older people (who often have a high medicine intake) and people who require repeat dispensing. This places them in a good position to be able to identify where the use of medicines may be predisposing the user, or carer, to accidents in the home or elsewhere.

### **Further research:**

- Further research into the pharmacist's role in preventing accidents in other target groups, like children and young people, is also warranted.

## Factors affecting the effectiveness of interventions

### Infrastructure support

#### Training

##### Key findings:

##### Training:

- Training increases pharmacists' participation in health improvement programmes (B3).
- Training has positive effects on the consultation and information-giving behaviour of community pharmacy staff (B1).
- Training changes pharmacists' behaviour during specific health promotion programmes (B2).
- Training in health improvement increases the length of consultation between pharmacist and client on health issues and increases user satisfaction and opportunistic health promotion advice (B2, B3).
- Postgraduate training produces positive changes in both attitudes and behaviour of community pharmacists in relation to health improvement activities (B3).

##### Training and stop smoking services:

- Training in stop smoking techniques and in behaviour change methods increases pharmacists' effectiveness in achieving higher quit rates (B1).
- Community pharmacists trained in behaviour change methods are effective in helping clients stop smoking (B1).
- Training increases knowledge, self-confidence and positive attitudes among pharmacists and their staff in relation to smoking cessation (B1).

##### Training and drug use programmes:

- Specific training needs have been identified for pharmacists participating in pharmacy-based needle-exchange schemes (C1).
- Training for pharmacists needs to include skills in translating technical terms into a suitable language for drug users (C1).

##### Training and oral health initiatives:

- Pharmacists are asked by their customers to give advice on oral health, but training received on this topic is variable and evidence of the effectiveness of their interventions is lacking (B3).
- Training and participation in oral health promotion activities appears to increase pharmacists' intent to change users' behaviour (C1).

##### Training and skin cancer prevention:

- Training in skin cancer prevention enhanced knowledge and increased the opportunistic offering of advice to clients by pharmacists (B1).

## Facilitators

### Key findings:

- Support from facilitators increases the number of health improvement consultations made by community pharmacists (B3).
- Support from facilitators was associated with pharmacy-based health improvement activities with high public uptake (C1).

## Information Technology

### Key findings:

- Using pharmacy medication records to identify clients at 'high risk' of coronary heart disease is effective and can be used for instigating health promotion measures (B1).
- Information routinely kept by community pharmacies on dispensed medication, can also be used for case finding of patients for interventions in lipid management (C1).
- Pharmacy patient medication records are effective in identifying and flagging 'at risk' clients to be invited for immunisation and can increase the percentage of the target group immunised (B3).

## Design and use of pharmacy premises

### Key findings:

- Community pharmacists and users, appear to have different perceptions of what constitutes acceptable facilities to maintain privacy (B3).
- Pharmacy users' perceived concerns about privacy are generally not borne out in their reports of actual experience (B3).
- Most users of potentially sensitive pharmacy services (e.g. emergency hormonal contraception, head lice management) report adequate facilities for privacy in community pharmacy, with a consistently sizeable minority (up to 20%) expressing concern (B3).
- A sizeable minority (around 20%) of women obtaining emergency hormonal contraception from community pharmacies, reported having concerns about confidentiality and this was higher among those under 19 years of age (B3).



## Developing relationships with stakeholders

### Pharmacists' views

#### Key findings:

- Pharmacists are generally very positive about the need for health improvement activities in the pharmacy and their role in delivering them. In practice, however, their approach tends to be reactive rather than proactive and centred around the use of medicines rather than a more holistic view of health. A reported combination of barriers have been identified including: lack of remuneration, time pressures, and perceptions of a negative response to these activities by GPs and the public.
- Dispensing duties and a lack of training, time and space within the pharmacy are widely reported to be key barriers to pharmacists' greater involvement in health improvement (B3).
- Pharmacists attach a high degree of importance to health improvement (B3).
- Pharmacists are more comfortable with health improvement activities that are related to medicines and need support to extend their portfolio of health related work (B3).
- Pharmacists' concerns about being 'intrusive' in offering potentially unwelcome health advice predisposes to a reactive stance (B3).
- Future roles in health improvement are largely perceived as medicines-related by community pharmacists (B3).

#### Further research:

- Further evaluation of the recently developed services (including means of remuneration and time spent in these activities) is necessary, to accurately determine the extent to which these reported barriers to community pharmacy involvement exist today.

## **Stakeholder views**

### **Key findings:**

- Recent community pharmacy service developments (e.g. emergency hormonal contraception supply, head lice management) were well-received by GPs and primary care nurses (B3)
- The extent of sustained joint working between community pharmacists and other members of the primary health care team is generally low but may be improved by joint training (B3).
- Referrals from pharmacists to other health professionals are higher where pharmacy staff have knowledge of relevant local services.
- Collaborative working is reported to be higher where the pharmacy dispenses high numbers of prescriptions or is the only pharmacy near a GP surgery.
- Joint training events between pharmacists and Primary Healthcare Team (PHCT) members appear to be useful in promoting collaborative working but pharmacists report finding it difficult to find time to leave the pharmacy and attend 'team meetings'.

### **Stakeholder views:**

- Primary healthcare team members expressed some general anxieties about the wider role of community pharmacy in promoting health but reported having confidence in individual pharmacists known to them (B3).
- New community pharmacy service developments, such as EHC and head lice management, were well received by primary care health professionals (B3).
- Pharmacists report isolation from other health professionals as one of the barriers to developing sexual health services.
- Community pharmacists have concerns about the receptiveness of GPs and patients to a greater role in health improvement, so their advice is more likely to be reactive than proactive. (B3).
- PHCT members are generally positive about pharmacists' involvement in service development. However, reservations exist around community pharmacists' lack of access to patients' full medical histories and about potential conflicts of interest arising from commercial activities.

### **Further research:**

- Further investigation is needed into how local health service planners and commissioners perceive pharmacy's role in health improvement and its contribution to local service plans.

## Pharmacy user views – public perception and expectation

### Key findings:

- Client feedback from pharmacy-based health improvement projects is invariably positive (B3)
- Both the public and community pharmacists believe that the advice-giving role of community pharmacists on general health issues is not widely recognised or utilised. Clients' awareness that community pharmacies are a source of general health advice is low (B3)
- Pharmacy users report having followed the health advice given by pharmacists with positive views on the pharmacist's input (B3).
- Community pharmacists are perceived as drugs experts rather than experts on health and illness (B3).
- Community pharmacies are highly rated by users as a source of supply and advice for emergency hormonal contraception and head lice management (B3).
- Awareness of pharmacy-based leaflets on health topics is higher for those clients taking prescribed medicines (B3).
- Most pharmacy users perceive there is sufficient privacy in the pharmacy to discuss even sensitive subjects (B3).
- Most clients (80%) report having experienced an acceptable level of privacy for their consultation in the pharmacy (C1).
- Quality and confidentiality were identified by pharmacy users as important considerations in selecting a pharmacy for advice on women's health (B3).
- A small minority (10%) of women choose pharmacy supply of EHC in order to maintain anonymity (B3).
- User feedback shows that head lice management services are generally well received, but between 18% and 34% of scheme users report having some concerns about privacy in the pharmacy during the consultation (B3).

### Further research:

- Use of community pharmacies for general health advice is higher among women, respondents with young children and those in lower socio-economic groups. Further research is required to investigate the use of community pharmacies by lower socio-economic and other disadvantaged groups, particularly in relation to advice-giving, as well as the supply of medicines.