

Community Pharmacy: at the heart of public health



December 2010

Introduction

Public health challenges in England are wide-ranging and a major cause for concern as they are having a profound effect on the nation's health and economy.

The Government has set out its long-term vision for the future of Public Health (1) with a much wider focus on health and wellbeing, protecting the public from health threats and improving the healthy life expectancy of the population. Local government will be responsible for improving public health, giving them the freedom and funding to develop their own ways of improving public health and reducing health inequalities in their area.

The Government recognises pharmacy's role in improving public health and the vital part it can play in preventing ill health, and that community pharmacy is a valued and trusted public health resource (1). The 2011/12 NHS Operating Framework also states that evidence continues to build for the provision of public health services through community pharmacies (2).

The new Public Health system is expected to make use of a wider range of professionals to increase capacity and build robust, integrated public health networks operating at the heart of communities. Community pharmacy is ideally placed to help to improve the capacity and effectiveness of services and thus reduce health inequalities and improve health and wellbeing.

Opportunities identified for community pharmacy in the new Public Health service include NHS Health Checks, tackling drug and alcohol misuse, promoting healthy lifestyles and prevention of long term illness and increasing the uptake of seasonal flu vaccination (1). When looking at the development and implementation of public health services using the wider public health workforce, community pharmacy should be seen as an integral part of the solution to effectively maximise patients' access to

services, and as a means of achieving improved outcomes.

Community pharmacy can deliver these services and this resource presents the evidence to support their involvement in the development and delivery of public health services.

Community pharmacies are a valuable and trusted public health resource. With millions of contacts with the public each day, there is real potential to use community pharmacy teams more effectively to improve health and wellbeing and reduce health inequalities.

Healthy Lives, Healthy People: Our strategy for public health in England, DH 2010

Why pharmacy?

Community pharmacists have always played a role in promoting, maintaining and improving the health of the communities they serve. Over 10,500 community pharmacies in England are already providing a wide range of public health services that are easily accessible and cost effective. Based in the heart of the community, in rural as well as deprived inner city areas, where people live, work and shop, community pharmacy teams gain a particular understanding of the needs of members of their communities through daily interactions with patients and customers. Because of their convenient access to the public without the need for an appointment, visitors to pharmacies come from all sectors of the population and it has been shown that local pharmacy services are particularly valued by those without easy access to a car (3).

Community pharmacies are often patients' first point of contact, and, for some, their only contact with a healthcare professional. Pharmacists already make a significant contribution to public health by engaging with

communities through day-to-day activities, which might include the provision of advice to parents of young children, visits to the homes of older and housebound people and advice on stop smoking.

Pharmacies are ideally placed in the heart of the community to access 'hard to reach' groups and thus reduce health inequalities and be instrumental in the radical changes envisaged. Often the only healthcare professional situated in areas of deprivation, community pharmacies are well-positioned to target the higher levels of obesity, smoking, and drug and alcohol misuse particularly associated with low income and deprivation (3).

Pharmacists are highly trained, skilled professionals who are part of the public health professional network and the potential to use pharmacy teams more effectively to improve health and wellbeing and reduce health inequalities has been identified (1). As a patient facing service, pharmacy has a number of key attributes that fit well with promoting public health and preventative healthcare messages and delivering public health services to a wide cross-section of society.

Many critical roles in public health are played by people who will not be employed by Public Health England, but who will be part of a wider professional network. A very wide range of clinicians and other professionals - from GPs to dentists, pharmacists to nurses, allied health professionals to environmental health officers - have essential roles to play in improving and protecting population health and reducing health inequalities.

Healthy Lives, Healthy People: Our strategy for public health in England, DH 2010

Enhanced pharmacy services, which include stop smoking services, sexual health and weight loss programmes, have been shown to be an under-utilised resource that can deliver innovative, cost-effective public health services to patients in a highly accessible manner. These services can also help the NHS achieve its Quality, Innovation, Productivity and Prevention (QIPP) objectives (5).

It is important that NHS organisations continue to maintain and develop pharmaceutical services, including local enhanced services to meet pharmaceutical needs... Evidence continues to build for the provision of public health services through community pharmacies.

2011/12 NHS Operating Framework DH 2010

Public health is included within the current NHS community pharmacy contractual framework in England. Pharmacies already give proactive advice on wellbeing issues to people presenting prescriptions with diabetes, those at risk of coronary heart disease (particularly those with high blood pressure) and those who smoke or are overweight. In addition, they also provide advice and support for carers to help them in their caring roles. Each year pharmacies participate in up to six health promotion campaigns at the request of the PCT, to promote public health messages to the public visiting the pharmacy during specific targeted campaign periods (6). Nationally, Public Health England will influence the future contractual framework and locally commissioned services of the future (2).

When discussing local development of services, commissioners should engage with Local Pharmaceutical Committees (the local representative body recognised in statute) to discuss how community pharmacy can help improve public health services in your area.

What contribution can community pharmacy make?

Healthy Lifestyles

Healthcare services have been estimated to contribute only a third of the improvements that could be made in life expectancy - changing people's lifestyles and removing health inequalities contribute the remaining two thirds. Many of the biggest future threats to health, such as diabetes and obesity, are related to public health. Four behavioural risk factors - tobacco use, physical inactivity, excess alcohol consumption and poor diet - are the biggest behavioural contributors to preventable disease. Tackling behavioural risk factors is an issue across all ages (7).

Stop Smoking

Smoking remains the leading cause of preventable morbidity and premature death in England today, and is estimated to be responsible for up to 86,500 deaths per year (5). Reducing smoking rates represents a huge opportunity for public health as 1 in 5 adults still smoke. The NHS spends over £2.7 billion a year on treating smoking-related illness, but less than £150 million on smoking cessation (1).

The number of hospital admissions for smoking related diseases is rising among adults. In 2008/09 around 5% of hospital admissions for all

diseases in England among adults aged 35 and over were attributable to smoking with a larger proportion of admissions among men (7%) than women (4%). In 2009, it was estimated that almost one in five deaths in England of people over 35 years of age were due to smoking. Over a third of all deaths from respiratory diseases and almost three in ten of all deaths from cancers in this population are estimated to be caused by smoking (8).

Awareness of the adverse effects of smoking on health is now relatively widespread. 70% of smokers in Great Britain say they want to stop smoking and many have tried to give up in the past. For every two smokers who quit, one premature death will be prevented. Every year nearly three million smokers try to quit, although most find it very difficult and on average, will take five attempts to quit for good. In 2009/10 757,537 people in England set a quit date through NHS Stop Smoking Services and at the four week follow up 49% had successfully stopped smoking (8).

It has been shown that older smokers are more successful than younger ones at quitting, and men are more successful than women in stopping smoking; this has been a contributory factor to the narrowing of the life expectancy gender gap. The least successful groups for quitting have been identified as pregnant women, smokers in areas of deprivation, some ethnic groups and those with high dependency, usually shown when smoking is started at an early age (9). More than 8 out of 10 adults who have ever smoked regularly started smoking before 19 (1) and it has been shown that those who start smoking when they are young are three times more likely to die of a smoking-related disease (9).

Reducing smoking remains a key priority and smoking-related disease will remain a significant factor in population ill health and healthcare for the future. Although smoking prevalence has declined consistently, with a reduction of 7% since 1998 and 18% since 1980,

there is no room for complacency (8). The decline in smoking prevalence has been greater in higher-income groups than lower-income groups, which has contributed substantially to the widening of health inequalities (5). Moreover, certain groups have poorer health and some are uniquely disadvantaged because of a combination of their circumstances. For example, a UK study found that, of those living with schizophrenia in the community, a much lower life expectancy was experienced than the general population. The largest single cause of this inequality was identified as an increased rate of smoking, more than three times that of the general population (10).

Smoking remains one of the few modifiable risk factors in pregnancy. More than 1 in 6 mothers smoke during pregnancy and smoking rates during pregnancy are much higher among lower socioeconomic groups and teenage mothers. Smoking during pregnancy contributes to 6% of all infant deaths and accounts for about a third of the difference in infant deaths between the most and least deprived groups in the population. Smoking in pregnancy also increases infant mortality by about 40% and is a key risk factor associated with low birth-weight (10).

For over ten years, since the publication of the White Paper *Smoking Kills* (11), the UK government has demonstrated a strong commitment to reducing smoking prevalence through many actions, including the creation of a national network of smoking cessation services - the NHS stop smoking services. These services represent a unique national initiative to provide support for smokers motivated to quit and the available evidence suggests that they are effective in supporting smokers to quit in the short and longer term (9). Stop smoking services are one of the most cost effective of all NHS health interventions and studies have shown that investment of £0.3m on stop smoking services could realise a saving of £1.2m for the NHS (5).

Stop smoking support is one of the most frequently commissioned services through community pharmacy (12), with 77% of PCTs in England commissioning these services from pharmacy, and in 2009-10, an increase in successful quits through community pharmacy of 15% was achieved over the previous year (8).

In recent years, the majority of NHS Stop Smoking Services have modified their treatment protocols, dramatically increasing the proportion of treatment delivered in healthcare settings such as pharmacies (13). Community pharmacies serve local communities and have the potential to reach large numbers of people who use tobacco. They are able to meet the needs of minority ethnic and disadvantaged groups and those who may have difficulty accessing other community services (14). The use of nicotine replacement therapy (NRT) and stop smoking techniques are well known, with many patients visiting their pharmacy to commence such treatment. Community pharmacy is now an established and trusted provider of stop smoking services, and an integrated partner of the NHS Stop Smoking services in many areas, enabling a co-ordinated approach, quality assurance and use of consistent messages to people.

Many smokers per day pass through a pharmacy and pharmacists and their staff are ideally placed to opportunistically provide brief interventions on stopping smoking and increase access to stop smoking products through patient group directions (PGDs).

Helping people to stop smoking is a high priority for NHS Sheffield. It recognises that smokers who quit through using the NHS Stop Smoking services commissioned in their area will have improved health outcomes and lower levels of healthcare utilisation. The service supports 3000 people a year to successfully quit, has additional services to support pregnant women and works in partnership with community pharmacies. A flexible one-to-one service of up to seven interventions tailored to the client's individual needs has been commissioned through community pharmacy, building on the results of 2009-10 which showed that community pharmacy was the most effective local independent provider having achieved the highest outcome figures with a 54% success rate (15).

There is a strong evidence base for the effectiveness of pharmacy-led stop smoking programmes (16). Community pharmacy teams trained in behavioural change are effective at helping clients to stop smoking. Abstinence rates from one-to-one services provided by community pharmacists are similar to those of primary care nurses and community pharmacy-based stop smoking services are cost effective (16). The Department of Health has stated that it will strengthen its partnership working with community pharmacies to secure their support and investment in campaigns to promote effective routes to quit smoking (1).

Alcohol

Rising rates of alcohol abuse have been witnessed over the last decade, and this is projected to cost society anything up to £25.1 billion a year (5). Preventing alcohol-related harm is therefore a key public health imperative in England (1).

Hazardous and harmful drinking creates a huge burden on the health and wider public sector systems both in terms of the cost of treating alcohol related diseases and the impact on hospital and primary care demand. If hazardous and harmful drinking is identified and brief advice is offered, it could lead to a reduction in future alcohol related health problems, which could save on treatment costs and decrease pressure on the NHS. Alcohol abuse costs the NHS £2.7bn each year (1). For every £1 spent on alcohol services, it is estimated that £5 will be saved across health and the wider public services.

The majority of the population either do not drink alcohol at all or, if they do drink, they do so within the Government's lower-risk limits. However, about 26% of all adults in England, approximately 10.5 million people, are drinking at hazardous and harmful levels. A further 1.1 million people are showing signs of alcohol dependence. Heavy drinking can affect long term health and can lead to future health problems, including cirrhosis of the liver, many types of cancer and mental problems and is also involved in a wide range of other social issues such as domestic violence; suicide and deliberate self-harm; child abuse and child neglect (1).

The evidence base indicates that much of this harm is preventable. There is strong evidence to support the effectiveness of identification and brief advice (IBA) to reduce and prevent harm from alcohol use in primary health-care settings (17). Opportunistic IBAs delivered to hazardous and harmful drinkers in primary healthcare have been shown to be effective in reducing alcohol consumption to low risk levels. The public health impact of widespread implementation of brief interventions in primary care is potentially very large and the effects of brief interventions persist for periods of up to two years after intervention and perhaps as long as four years. The introduction and development of comprehensive integrated local alcohol intervention systems also considerably benefits

hazardous, harmful and dependent drinkers, their families and social networks, and the wider community.

Annually, alcohol-related diseases account for around 800,000 hospital admissions, 6% of all admissions with up to 35% of all A&E attendance and ambulance costs (around £0.5 billion) being alcohol related (5). IBA can play an important role in reducing hospital admissions and meeting the overall goals of the Government strategy (1). The key challenge is how to encourage the uptake and use of brief interventions by relevant practitioners in routine public health practice (18).

There is now a national target to reduce the trend in the increase of alcohol related hospital admissions and community pharmacy can play its part within an integrated system by providing an accessible and convenient service. By identifying hazardous and harmful drinkers and delivering brief advice, pharmacy can intervene early to bring down the identified level of risk. Pharmacists and their teams regularly provide a range of public health services to their patients and the Department of Health has recommended that community pharmacists and their staff should be trained to identify alcohol problems and provide brief interventions to those who access their pharmacy services.

The Department of Health views IBA as one of the most effective and cost-effective interventions that can be implemented among the range of available alcohol interventions for preventing harm. It can reduce risk and harm at an individual level and, if used widely, it can reduce harm to the population as a whole (19).

NICE recommends that commissioners should ensure their plans include screening and brief interventions for people, including those from disadvantaged groups, at risk of an alcohol-related problem (hazardous drinkers) and those whose health is being damaged by alcohol (harmful drinkers). Behavioural change is most likely to occur if tackled early and an early

Tackling alcohol consumption is a major challenge for the North West of England and pharmacy is playing a key role in the provision of alcohol intervention and brief advice across six PCT areas.

Initial reports from NHS Blackpool show that from 138 interventions 39% of people screened were found to be drinking at increasing or high risk. This is significantly higher than the DH estimation of 1 in 4. The Bow Group report on community pharmacy estimates that for an investment of £0.8m the potential saving is £3.3m, although if the numbers are indeed higher the potential cost savings for the NHS could be considerably greater (5).

The service can be targeted to those who may be at high risk such as those who come in for hangover remedies, with gastric problems or falls. Pharmacy sees a different demographic of people from those who may visit a GP practice, especially in areas of health inequality and people may be more open to disclosing their true behaviour to pharmacy staff who they consider to be a peer.

NHS Portsmouth recently held an alcohol awareness month - *Rethink your drink* - in which over 3600 people were assessed through community pharmacies using scratch cards. 44.5% of those taking part were male and 55.5% female. Results were similar to those of the North West with over 40% found to be at increasing risk and 8% at high risk (22). Following these results, an alcohol intervention and brief advice service was commissioned and 850 people have already benefitted from the new service, with 38% identified as increasing or high risk and 11% with possible dependency.

intervention could prevent extensive damage. Pharmacies are among the identified healthcare providers who could be commissioned to provide these services (20).

A key question is whether such a service would be taken up by pharmacy customers. A recent study in Westminster PCT's area, which has one of the highest proportion of risky drinkers and mortality rates from alcohol-related causes, has shown that the majority of respondents surveyed were supportive of an IBA service delivered by pharmacists and would be willing to utilise the service. They were positive about pharmacists' involvement and commented favourably on aspects of the pharmacy environment as they viewed pharmacies as friendly and informal spaces where no appointment was necessary (21).

Alcohol and teenagers

Alcohol has a major impact on the health and well-being of young people. The UK has amongst the highest rates of young people's binge drinking in Europe and 13,000 hospital admissions linked to young people's drinking each year (23).

Alcohol consumption by under-18s remains a significant problem for the UK and whilst government policy has often focused on how to tackle alcohol as a public nuisance issue, insufficient attention has been paid to the health problems that young people face, as youthful 'immature' organs are more easily affected by alcohol. The number of under-18s admitted to hospital because of drinking has increased by a third and alcohol related accidents, including drink driving, are the leading cause of deaths in the 16-24 year-olds (1).

Young people who consume alcohol are damaging their health at greater levels than ever and the cost to health and ambulance services due to underage alcohol consumption is in the region of £19 million per annum. The

increased lifetime effects and costs to the society in terms of health and working ability should also be considered. The costs of intervention are however far less than the costs of treating the health consequences of alcohol misuse by children and young people. As well as making economic sense, tackling youth drinking must surely be one of the ways to reduce levels of risky, binge and dependent drinking in the future (24). Community pharmacy could provide a service which could be easily accessed by teenagers. Consideration should also be made to link interventions on sexual health risks to alcohol misuse in order to manage broader risk-taking behaviour (1).

Alcohol and pregnancy

The NHS recommends that pregnant women or women trying to conceive should avoid drinking alcohol. If they choose to drink, to minimise risk to the baby, they should not drink more than one to two units of alcohol once or twice a week and should not get drunk (25). Pharmacists and their teams are in good position to raise awareness of drinking and pregnancy and identify and assess pregnant women among customers, as part of a 'healthy pregnancy' approach.

Weight Management

Obesity has reached epidemic proportions globally, making it the fastest developing public health problem and is a major contributor to the global burden of chronic disease and disability. The Government is concerned about the levels of obesity in this country, which are the highest in Europe (5).

In England the prevalence of obesity has increased steadily during the last 50 years and has tripled since 1980. The Health Survey for England 2008 data (26) shows that nearly 1 in 4 adults, and over 1 in 10 children aged 2-10, are obese. Currently over 60% of adults are

overweight with prevalence of serious obesity increasing with age. Of particular concern is the increasing incidence of child obesity and there has been a 38% increase in childhood obesity since 1995. Though progress has been made in tackling childhood obesity (27), more than 1 in 5 children are still overweight or obese by age 3. Childhood obesity rates are higher among some black and minority ethnic communities and in lower socioeconomic groups (10).

In 2007, the Government-commissioned Foresight report predicted that if no action was taken, 60% of men, 50% of women and 25% of children would be obese by 2050 (28).

There is a significant burden on the NHS - direct costs caused by obesity are estimated to be £4.2 billion per year and forecast to more than double by 2050 if things continue as they are, with costs to society and business at today's prices estimated to reach £49.9bn per annum. Obesity is also a key risk factor for other long term conditions, together with smoking, high blood pressure and high blood cholesterol. Infant mortality could further be reduced by tackling maternal obesity, as around 1 in 5 mothers could be overweight or obese (1).

Obesity is the second most common preventable cause of death in Britain after smoking and is responsible for increasing the prevalence of diseases such as diabetes, cancer and heart disease and for more than 9,000 premature deaths per year in England. In addition, obese people are more likely to suffer from a number of psychological problems such as low self image and confidence, social stigma, reduced mobility and a poorer quality of life. Obesity is largely preventable through changes in diet and lifestyle and weight reduction is one of the most effective lifestyle changes to improve health.

Health policies and increased public health concerns mean that community pharmacists and their teams have a growing role to play in obesity and weight management through the dispensing of medication, provision of

supporting advice to patients to address their diet and lifestyles and of weight management services. Community pharmacies, through their accessibility to patients, are in a position to provide advice to patients on nutrition and encourage obese patients to attend a monitored weight loss programme.

By integrating community pharmacy obesity management services within the care pathway for the management of obesity, community pharmacy can help reduce the costs of treating the consequences of obesity such as expensive coronary heart disease, cancer or diabetes care. The service will have a significant impact on local commissioning resources mainly by preventing an increase in disease prevalence and by offering sustainable approaches to managing people who are overweight or obese. For those people who do not routinely access primary care services, pharmacists might be the only healthcare professional seeing them on a regular basis. People also like the informal pharmacy environment, their accessibility and their flexibility to fit into their lifestyles (29).

Reducing a patient's weight by as little as 5% will have a significant effect on risk factors and lead to the prevention of some of these obesity-related diseases. Following the results of the locally commissioned NHS community pharmacy weight management scheme in Coventry (30), which demonstrated that community pharmacy is well placed to provide a weight management service effectively, and achieve statistically significant results, the Bow Group report (5) on community pharmacy recommended that Directors of Public Health should consider pharmacy-based weight management services as part of the new Public Health Service. If Public Health England can help to reduce obesity, lower levels of diabetes and liver disease, among other benefits, would result.

Diet and Exercise

Trends in obesity and lifestyle choices are inextricably linked and many premature deaths and illnesses could be avoided by adopting healthier lifestyles, including improving diet and increasing physical activity (1).

Sir Michael Marmot identified unhealthy nutrition and lack of physical activity as two of the key health behaviours significant to the development of long term conditions which follow the social gradient (4).

There is potential to do more on behavioural risk factors including diet and physical activity. Health promotion and prevention is to be the main focus for public health, and promotion of healthy lifestyles through community pharmacies could be instrumental in tackling diet and exercise problems.

Action to ensure that children have the healthiest possible start in life is a major priority as habits that are established in childhood often carry through to later life. This makes poor diet and low levels of physical activity in children of particular concern. There is evidence that lifestyle behaviours and habits established during school-age years can influence a person's health throughout their life. Families need to be supported to make informed choices about their diet and their levels of physical activity. Sure Start and National Healthy Schools Programmes will both help children with healthy living (10) and are both areas in which community pharmacists can get involved.

Mothers play a crucial role in determining the levels of physical activity for their whole family, so if mothers get active, children get active too. Community pharmacies are widely accessed by families, especially mothers, and can inform and encourage family members. For example, Green Light Pharmacy in Camden holds regular

The NHS Coventry service provided an individualised service over twelve months for patients with a body mass index of 30 to 35, with at least one diagnosed or established risk factor, such as hypertension, Type 2 diabetes, raised total cholesterol or waist circumference greater than 102cm for men and 88cm for women. 86% of recruits lost weight with 26.5% losing 5% or more. The average mean changes in BMI, waist circumference, blood pressure reduction were significant and 139 monitoring parameters outside the set range were referred to GPs, with the highest number related to blood pressure (39%). The service was based on changing the behaviour of the patient (30).

Community pharmacy is well placed to provide a weight management service effectively, and achieve statistically significant results which have also been achieved in other areas. NHS Portsmouth have commissioned a weight management programme through community pharmacy which has achieved similar results, with 23% losing at least 5% weight (22). In Lancashire, the pharmacy weight management service, based on behavioural change, incorporates NICE guidelines and is integrated with the Central Lancashire weight management care pathway. It showed statistically significant results for agreed weight loss (5% of body mass or more) maintained for 12 months with a reduction in BMI of 2.4%. It also demonstrated that the service is more cost effective than prescribing orlistat over 12 months (£160 per patient against £419.51) (15). This fact gains greater significance when looking at statistics for obesity which show that in 2008, the number of prescription items dispensed for the treatment of obesity was 1.28 million; this is ten times the number in 1999 (31).

healthy walks for men and women starting at the pharmacy and pharmacies can signpost people to local physical activity opportunities such as walking or cycling programmes.

The Government have stated they will provide clear, consistent messages on why people should change their lifestyle, how to do so, and put in place ways to make this easier. Community pharmacy can help in communicating these messages, giving consistent advice to families.

Many interventions are cost-effective and increase disability-free life expectancy, yet are not routinely implemented, such as those for diet and exercise (32). Some long term conditions can also be avoided or their effects minimised through improving diet and increasing physical activity, especially when included in an overall public health model which may also include assessment of smoking and alcohol intake, for example.

Some areas which pharmacy could be involved in include (1):

- about 12-24% of girls aged 11-18 years show evidence of low iron status, which increases their risk of iron deficiency anaemia;
- increasing physical activity improves mental health and there is an opportunity to reduce the impact of dementia, or prevent it altogether, for some people through changes in their diet and lifestyle earlier in life;
- diet and exercise reduce the rates of heart disease and cancer, and have been found to reduce the relative risk of developing diabetes by 37%;
- musculoskeletal conditions account for over 60% of the reported burden of longstanding illnesses in the over-65s. Hip fracture is the most common serious injury related to falls in older people -

around 76,000 hip fractures occur in the UK each year costing the NHS £1.4 billion, and numbers may double by 2050. 8-38% of people over 65 have a low vitamin D intake and a higher intake could prevent the condition or reduce the impact; and

- many pregnancies are unplanned and the number of women entering pregnancy in poor health is increasing; often women have not had time to change their diet accordingly.

People need to know that they can change their lifestyle and make a difference to their health. Pharmacy teams are ideally placed to offer healthy lifestyle advice and appropriate interventions to their patients and the public. Many of the pharmacy team can also support people in changing behaviour, with some trained as Health Trainer Champions and Health Trainers to support services based on behaviour change and also to further support people in making positive lifestyle choices.

In East Lancashire the PCT commissioned contractors to train pharmacy staff as Health Trainers and deliver motivation and advice to a set number of clients in the pharmacy with an expected 75% lifestyle behaviour change rate outcome.

Healthy Living Pharmacies

The Healthy Living Pharmacy (HLP) is a new concept to meet public health needs through a tiered commissioning framework to deliver NHS services through community pharmacy tailored to local requirements. HLPs offer a range of high quality services, contributing towards reducing health inequalities by improving health and wellbeing outcomes in their communities. As well as committing to and promoting a healthy living ethos, one of the key distinctions

In Portsmouth, the PCT has commissioned eleven accredited Healthy Living Pharmacies to deliver a range of public health services, using support staff trained as Health Trainer Champions.

HLPs have achieved impressive results in behavioural change and are making a real difference to the health of people in Portsmouth (1).

Early indications show HLPs engage fully in PCT programmes and deliver high productivity and excellent quality services. Early results (22) include:

- 140% increase in smoking quits from pharmacies compared to the previous year.
- Of the 3629 people who took part in an alcohol audit through HLPs in June 2010, 1784 people received brief advice on drinking levels during one month, with 830 receiving more in-depth guidance and 29 being referred onto a specialised service. These results have led to a commissioned service.
- Almost 200 people with asthma or COPD who have had a Medicines Use Review with their pharmacist are smokers; 76% of these accepted help to stop smoking. Early data shows improvement of symptom control on return to the pharmacy six months later.
- 23% of those people undertaking the weight management programme lost more than 5% of their body weight.

of a HLP is having health trainer champions on site.

Trained in behavioural change, their role is to interact with people proactively, offer practical help and advice about a range of health and wellbeing issues and be responsible for leading health promotion.

Prevention

Community pharmacies see the well in addition to the unwell and are therefore ideally placed to play a central role in the prevention of ill health. Examples of services currently offered that could be developed further include testing /screening and immunisation.

Testing / Screening

NHS Health Checks

The NHS Health Check programme is a national initiative to target adults between the ages of 40-74 years and enable them to get a clearer picture of their health and understand and manage their risk of vascular disease. Collectively, vascular diseases - heart disease, stroke, diabetes and kidney disease - affect the lives of more than four million people and kill 170,000 every year. They also account for more than half the mortality gap between rich and poor (33).

The check includes measuring BMI and physical activity levels and will help identify if adults are an unhealthy weight and, where appropriate, provide support or referral to a weight management service or physical activity opportunities to reduce their cardiovascular risk (27). The assessment can be carried out in a variety of settings, including pharmacy to help ensure that the service is accessible to all those eligible, including those in groups at highest risk of these diseases (1).

NHS Health Checks present a major opportunity for community pharmacy to become more involved in supporting wellness and making

NHS Health Check service carried out in Islington PCT was found to be a successful, cost effective provision with potential to contribute usefully to public health improvement in Islington (34). The service showed that community pharmacies offering vascular risk assessments can attract groups of people that do not routinely approach GP services. Patient interviewees said that they *'did not want to bother GPs with screening test requests'* and a proportion appeared to prefer going to pharmacies for risk assessment services because they provide a less challenging environment than GPs' surgeries and cause less anxiety. The use of the service by ethnic groups was broadly in line with the makeup of the local population and service users positively valued the service.

In Birmingham, across three PCTs and over six months, 9,500 males over the age of 40 were tested in community pharmacies and during this period, 65% of patients attending the service received onward GP referral:

- 36% were identified as having a high CVD risk;
- 30% were referred due to high blood pressure levels;
- 35% were referred due to high cholesterol levels;
- 18% were referred due to high blood glucose results.

The service had high user satisfaction and the programme aims, over time, to improve male life expectancy through encouraging behavioural change or early treatment of those with a raised cardiovascular risk (35).

public health interventions. The location of community pharmacies makes them an ideal venue from which to provide the service and there is an emerging evidence base that suggests that pharmacies can effectively target hard to access groups that use GPs' services very infrequently.

Raising Awareness

Cancer

Cancer is one of the leading causes of death across all ages (1) and earlier diagnosis can save lives. Late diagnosis has a huge impact on England's poor cancer outcomes. Changing adults' behaviour could avoid a substantial proportion of cancers (1).

It is estimated that a substantial proportion of cancers could be avoided, mainly through a combination of stopping smoking, improving diet and increasing physical activity (1). Skin cancer is among the top five cancers in 15-24 year olds and is linked to the use of sunbeds (10).

Community pharmacy can provide an additional point of access for promotion of cancer awareness and increase public choice over where they can access information and undertake interventions.

In Westminster, early detection of breast cancer was enabled by the promotion of the NHS Breast Screening Programme through pharmacies to increase uptake and coverage. Not only was awareness raised, but appointments were booked through pharmacies for eligible women and confirmed by email, text or phone call (15).

The four PCTs in Essex covered by the Essex Cancer Network looked at both raising awareness of and the early detection of skin and bowel cancer. Pharmacists and pharmacy counter staff were trained to discuss the red flag symptoms of these cancers, particularly for those patients that may be hiding symptoms through the purchase of over the counter medicines, and to initiate discussions and so raise cancer awareness. Over 8,800 leaflets were distributed initiating over 4,600 conversations in relation to skin and bowel cancer, so raising the awareness of both conditions. Six percent of these interactions resulted in the pharmacist advising the person to see their GP because one or more symptoms had been identified that may be indicative of cancer. When asked, over 93% of the members of the public said they had a greater awareness of the symptoms of cancer following the conversation. The service was very well received by patients with 92% comfortable in discussing issues relating to cancer with

Immunisation

Immunisation is one of the most effective preventative measures to protect individuals and the community from serious diseases and has been a very successful public health intervention to reduce and eradicate disease. However the success with many vaccine-preventable diseases has, to some extent, lulled the public into complacency.

Protection via a vaccination programme depends on a high level of uptake. Community pharmacy can be involved in vaccination programmes through NHS commissioned services and has shown that, where services are in place, it can contribute to increased vaccination

uptake by the public through involvement in seasonal and emergency programmes, for example:

- influenza;
- catch up programmes, e.g. HPV; and
- harm prevention strategies, e.g. Hepatitis B.

Pharmacists interact with the general public in relation to immunisation, for example by promoting the seasonal flu campaign or giving advice related to foreign travel or childhood vaccinations and take the opportunity to emphasise the importance of immunisation and the risks associated with non-vaccination compared with those of the possible side effects of the vaccines used.

Many pharmacists in England have now been trained to administer vaccinations and pharmacy patient medication records (PMRs) can be used to find 'at risk' individuals to be invited for immunisation, which can increase the percentage of the target group immunised. Community pharmacies provide an easily accessible alternative site which is available for longer hours than most other healthcare professionals, and this is appreciated by the public.

Vaccines are particularly susceptible to changes in temperature and maintenance of the cold chain is important. Community pharmacy already has procedures in place to ensure that the stock supply chain requiring cold storage is properly maintained and complies with the NPSA rapid response report issued in January 2010 (37).

Influenza programmes

Seasonal Flu

Flu vaccines are highly effective in preventing illness and reducing complications and hospital admissions among the elderly and the defined 'at-risk' groups. Increasing the uptake of flu vaccine among these groups also contributes to easing winter pressure on primary care services (38).

Pandemic Flu

The part community pharmacy played in the 2009/10 pandemic flu vaccination programme was recognised in the Hine report (39) where it was noted that a variety of mechanisms to deliver the vaccine would be appropriate, including GPs, community pharmacies and occupational health services. It was also recommended that putting a sleeping contract in place with GPs or other willing providers such as community pharmacists would be helpful.

In many areas, community pharmacy, through the Local Pharmaceutical Committees, participated in the strategic planning of the managed introduction of the Swine flu immunisation programme.

The Isle of Wight PCT also pioneered the use of community pharmacists to vaccinate the under 5 years at risk group.

Catch up programmes

Human Papilloma Virus (HPV)(2009-10)

It is estimated that at least half of all sexually active women will be infected by genital HPV in

their lifetimes. Infection is most likely to occur in the teenage years and early twenties.

The national vaccination programme to protect against cervical cancer began in 2008 with all 12-13 year-old girls being offered the vaccine. A catch-up programme to offer the vaccine to all remaining girls aged 12-18 was undertaken in 2009-10 and all females eligible for the national

Westminster PCT commissioned community pharmacists who had already provided other NHS commissioned vaccination services and who provide NHS sexual health services to provide an Enhanced service for HPV immunisation for girls aged 16 to 18 years as part of the specific catch up programme. A target of 92% vaccination rate in the population group by August 2010 was set. By commissioning pharmacies the PCT was able to increase capacity and client choice and it was estimated that approximately 2500 clients were eligible for this service within NHS Westminster. Each pharmacy was expected to vaccinate a minimum of 50 clients by August 2010.

The programme identified and vaccinated young women aged 16-18 years of age with the complete course (3 doses) of the HPV vaccination, and community pharmacy data was included for evaluation purposes. Reporting to GPs as patients were vaccinated was undertaken by NHSmail and clients were contacted about follow up vaccinations by text messaging. Pharmacists involved actively promoted the service, and the service was also promoted through the main schools based vaccination programme. GP practices also participated in the programme (15).

programme were encouraged to participate and complete the course of three injections over six months (40).

Harm Reduction programmes

Drugs and Hepatitis

About a third of the population admits to taking illicit drugs at some stage in their lives (10).

Patterns of drug misuse are changing. In England there has been a small reduction in the number of heroin users and the heroin using population is ageing, with fewer young people becoming dependent upon the drug. Those aged 40 and above now make up the largest proportion of those newly presenting for treatment. Illicit drug use is associated with a cost to society in terms of crime and, although the number of people using heroin or crack is in decline, there remains an estimated societal cost of drug-fuelled crime of £13.9 billion a year (23).

Drug treatment can be very effective in preventing wider damage to the community such as high volume acquisitive crime, and together with initiatives like needle exchange schemes, can reduce the harm caused by dependence, such as the spread of blood-borne viruses like HIV and Hepatitis C (23).

Generally Hepatitis B and C infection rates are rising and prevalence is strongly linked to liver disease (10). Often asymptomatic, the disease may not be noticed until complications develop. Hepatitis B can be prevented by vaccination, and simple precautions reduce infection from both viruses. With more than half a million people in the UK estimated to be living with undiagnosed hepatitis B and C, the introduction of testing services in pharmacies could potentially save thousands of lives whilst providing value and cost-effectiveness for commissioners (5).

Infections are common among injecting drug users with around one-half of injecting drug

users have been infected with hepatitis C and one-sixth with hepatitis B (41). Traditionally there is poor engagement between providers of fragmented services and communities at risk of hepatitis B or C and as a result, opportunities for education, prevention, detection, and treatment are missed (42). In England, Hepatitis B vaccine is offered to selected high risk population groups only. Vaccination uptake in some of these groups is poor and transmission of hepatitis B remains a problem, and this has remained the case for over a decade (43).

Of the estimated 142,000 people aged 15-59 years who are chronically infected with hepatitis C in England, only about half are aware of their condition. Hepatitis C is almost always spread via blood-to-blood transmission and more than 90% of known cases in which there is information on risk factors are associated with injecting drug use. (10) A viral hepatitis testing pilot carried out in 19 pharmacies found a hepatitis B or C positive patient in every six tests conducted. Of the tests conducted, 15% were diagnosed with Hepatitis C and 2% with Hepatitis B. The proportion of hepatitis C-positive diagnoses was higher than those found in GP surgeries, where 4% of tests found positive hepatitis C patients and the hepatitis B diagnoses were the same at 2% (5).

Polysubstance abuse is increasingly the norm amongst substance misusers and this dependence commonly involves alcohol as well as drugs (23). The Government is now aligning funding streams on drug and alcohol treatment services across the community and in criminal justice settings and funding will incentivise recovery outcomes while maintaining key public health measures such as needle exchange schemes (1).

Public health professionals will need to work together locally to prevent people from taking harmful drugs, to reduce the drug use of those already taking drugs, and to help people to be drug free, recover fully and contribute to

society (23). Pharmacies already provide drug misuse services, including supervised supervision of daily doses of substitute medication to prevent illegal sale of

The Isle of Wight PCT extended their supervised consumption services to drug misusers by trialling a hepatitis screening and vaccination service, in conjunction with the Hepatitis C Trust targeting potentially high risk individuals such as injecting drug users and their partners or domestic contacts aged over 18. Registered patients currently on methadone or undergoing alcohol detoxification therapy, who felt they may have been at risk of contracting Hepatitis B or C were also included.

The screening service requires a simple blood spot test which can be carried out by trained staff at pharmacies participating in the scheme. A separate vaccination service for Hepatitis B (including a 12 month booster) is also offered where the pharmacy is actively engaged with a needle exchange programme and supervised consumption of methadone service. This service led to further developments including HIV and syphilis testing. As a result of the programme's success, community pharmacists have become part of a collaborative effort in two further vaccination programmes - seasonal flu and the H1N1 vaccination for the under 5 age group during the winter of 2009/10. There is also potential for this model to be extended to integrate pharmacists into the childhood vaccination programme.

The service was part of the 'Pharmacy Fix' application which won the silver medal at the CMO's Public Health Awards 2010 (44).

prescription medicines on the streets, needle exchange schemes, alcohol interventions and vaccination and screening services and are therefore ideally placed to continue to provide these services and to be integral in the development of new drug treatment and alcohol services in line with the key target of recovery. These services may be cross cutting and commissioned with other relevant services, as the following examples show.

In Manchester, pharmacies provide access to sterile needles and syringes, and sharps containers for return of used equipment through a user-friendly, non-judgemental, client-centred and confidential service.

Used equipment is normally returned by the service user for safe disposal and this is promoted by the pharmacy. However failure to return used equipment does not stop pharmacies issuing new supplies.

The pharmacy provides support and advice to the user, including referral to other health and social care professionals and specialist drug and alcohol treatment services where appropriate.

The pharmacy provides the service user with appropriate health promotion materials and promotes safe practice including advice on sexual health and STIs, HIV and Hepatitis C transmission and Hepatitis B immunisation (15).

Young people and sex

England has the worst rates of sexually transmitted infections recorded, and they are still rising. Poor sexual health is a problem especially for young people; the prevalence of STIs continues to increase and 15-24 year olds - particularly young women - continue to be the group most affected in the UK. Of all 15-24 year olds diagnosed with an STI in 2009, around 1 in 10 will become reinfected within a year (1).

Chlamydia is the most commonly diagnosed sexually transmitted infection (STI) in the UK,

Pharmacies in Lambeth and Southwark have been providing an Emergency Hormonal Contraception service since 2000, in a bid to tackle the (then) 10,500 unintended pregnancies in the area. In the first year of the service, it was found that 50% of women accessed the service at the weekend or on Mondays, when it can be difficult to obtain appointments at family planning clinics or GP, a critical finding given that emergency contraception is most effective if taken within the first 24 hours after unprotected sex. Many young women access emergency contraception through pharmacies and in Lambeth and Southwark there are over 8,000 consultations in pharmacies every year (5).

affecting both men and women. Untreated chlamydia can have serious long term health implications and may lead to infertility. The National Chlamydia Screening Programme, targeting 15-24 year olds, includes services commissioned through community pharmacy to extend choice and access. Young women visit pharmacies for a number of reasons, including buying makeup or to seek emergency contraception or buy pregnancy tests. A pilot

In City and Hackney tPCT, a sexual health service is commissioned through community pharmacy, as part of their teenage pregnancy partnership, to increase access to emergency hormonal contraception especially to those under 26, and therefore reduce unwanted pregnancies. The service also refers hard to reach groups, especially young people, into mainstream contraceptive services, and signposts the availability of other services, thereby increasing numbers of young women accessing regular sexual health and family planning services.

The service also aims to decrease the incidence of sexually transmitted infections (STIs) among young women by raising awareness of the connection between unprotected sex and STIs and increasing the use of condoms by young people. An increase in both the screening rates for Chlamydia and gonorrhoea in sexually active young women between the ages of 16 and 25 and the screening for and access to treatment for STIs for young women and their partners is also included.

Over 10 years the teenage pregnancy rate dropped by 28% and the PCT is one of the most consistent performers in the country as teenage pregnancies have not risen.

Community pharmacies have contributed to these results and between 2005 and 2008, the number of EHC consultations doubled whereas the number of those for under 18s trebled. Pharmacies currently provide EHC consultations in Hackney, distributes test kits for chlamydia, and provides treatment for positive screens via a patient group direction (PGD) (15).

study in NHS Southwark revealed that 16% of patients tested in pharmacy would not have been screened in any other setting (5).

Teenage conceptions are at a 20-year low (40 cases per 1,000 under-18s), but the rate is still high when compared with Western Europe (10). Around 40,000 young women become pregnant each year; three quarters of these pregnancies are unplanned and half end in an abortion. In a survey about sexual health services for young people, one of the key improvements that were recommended was the greater access to services at weekends and evenings (45).

Community pharmacies are conveniently situated and open longer hours than most community healthcare services and have become an increasingly important venue for community sexual health services.

Access to emergency contraception is a common enhanced pharmacy service as pharmacies are open in the evenings and at weekends, with no need to book an appointment.

Improving access to and uptake of contraception amongst young people is one of the main priorities in the strategy to reduce rates of unintended conceptions amongst teenagers in North of Tyne. To accelerate reductions in teenage pregnancy, North Tyne has prioritised improving young people's access and uptake of effective contraception, with a particular focus on Long Acting Reversible Contraception (LARC), by building on the successful locally commissioned EHC scheme offered through community pharmacies. Access to a comprehensive range of sexual health services for clients aged 19 is now available through six community pharmacies and chlamydia screening, treatment, partner notification and onward referral into contraception services is also included. Pharmacies participating in the scheme are those located in an area of high teenage conception rates with limited availability of other contraceptive services and with a good uptake of free emergency contraception in under 18s (45).

In Manchester, all women who access a community pharmacy to request EHC are offered oral contraception to an approved protocol. In addition, if women are 24 years and below a Chlamydia screen and treatment is also offered (15).

Conclusion

The Government's vision is to transform the public health service to create a service which focuses on prevention and wellness and uses the wider public health workforce to provide effective services and deliver outcomes.

The public health challenges are immense; health inequalities between rich and poor are getting progressively worse and obesity, sexually transmitted infections, smoking, problem drug users and rising levels of harm from alcohol need to be tackled swiftly and effectively.

Situated at the heart of the community, pharmacies can provide easily accessible public health services, including targeted interventions, which reach a wide range of the public, young and old, ill and well, through the network of over 10,500 pharmacies in England.

Whether providing an innovative healthy living pharmacy service, a sexual health service targeting teenage pregnancies and STIs, the local implementation of an integrated programme such as stop smoking, established services for drug misusers, or being part of a national vaccination or screening programme, the evidence shows that community pharmacy can play a vital part in tackling present and future public health challenges.

The Public Health White paper (1) and the 2011/12 NHS Operating Framework (2) recognise the growing evidence to support community pharmacy involvement in public health and the skills and expertise of the pharmacy team and their potential to play an increasing role. With an estimated 1.6 million visits taking place to community pharmacies daily, of which 1.2 million are for health-related reasons (46), community pharmacies are easily accessible and have the potential to be an integral part in the provision of public health services and the development of the new public health service to improve public health and reduce ill health.

References

1. Healthy Lives, Healthy People - our strategy for public health in England. Department of Health (2010)
2. 2011/12 NHS Operating Framework. Department of Health (2010)
3. Public Health - a practical guide for community pharmacy. PSNC (2004)
4. Marmot, M. (2010) Fair Society, Healthy Lives: Strategic Review of Health Inequalities in England post 2010.
5. Delivering Enhanced Pharmacy Services in a Modern NHS: Improving Outcomes in Public Health and Long-Term Conditions. The Bow Group (2010)
6. The new NHS Community Pharmacy service - a summary of the structure. PSNC (2004)
7. Enabling Effective Delivery of Health and Wellbeing - An independent report. Department of Health (2010)
8. Statistics on Smoking: England 2010. The Health and Social Care Information Centre (2010)
9. Bauld L, Bell K, McCullough L, Richardson L, Greaves L. *The effectiveness of NHS smoking cessation - services: a systematic review*. Journal of Public Health Vol. 32, No. 1, pp. 71-82 (2009)
10. Our Health and wellbeing today. Department of Health (2010)
11. Smoking Kills: a White Paper on tobacco. Department of Health (1998)
12. General Pharmaceutical Services in England 2000-01 to 2009-10. The Health and Social Care Information Centre (2010)
13. NHS Stop Smoking Services - Service and monitoring guidance 2009/10. Department of Health (2009)
14. Smoking Cessation Services in Primary Care. National Institute for Health and Clinical Excellence (2008)
15. Information from the PSNC Community Pharmacy Services database www.psn.org.uk
16. Pharmacy-based stop smoking services: optimising commissioning. NHS Employers (2009)
17. Kaner EF, Dickinson HO, Beyer FR, Campbell F, Schlesinger C, Heather N, Saunders JB, Burnand B, Piener ED. *Effectiveness of brief alcohol interventions in primary care populations (Review)*. The Cochrane Library (2009)
18. Kaner E. *NICE work if you can get it: Development of national guidance incorporating screening and brief intervention to prevent hazardous and harmful drinking in England*. Drug and Alcohol Review Vol 29, 589-595 (2010)
19. Lavoie D. *Alcohol identification and brief advice in England: A major plank in alcohol harm reduction policy*. Drug and Alcohol Review Vol 29, 608-611 (2010)
20. Alcohol-use disorders: preventing harmful drinking. NICE quick reference guide (2010)
21. Dhital R, Whittlesea CM, Norman IJ, Milligan P. *Community pharmacy service users' views and perceptions of alcohol screening and brief intervention*. Drug and Alcohol Review Vol 29, 596-602 (2010)
22. Bowhill J, Bowhill S, Evans D, Holden M, Nazar Z, Portlock J. *An interim report on the outcomes from the Portsmouth Health Living Pharmacy initiative*. NHS Portsmouth (2010)
23. Drug Strategy 2010 Reducing Demand, Restricting Supply, Building Recovery: Supporting People to Live a Drug Free Life. HM Government (2010)
24. Right time, right place: Alcohol harm reduction strategies with children and young people. Alcohol Concern (2010)
25. Advice from www.direct.gov.uk
26. Health Survey for England 2008 - Trend Tables. The Health and Social Care Information Centre (2009)

27. Healthy Weight, Healthy Lives: 2 years on. Department of Health (2010)
28. Tackling Obesities: Future Choices. The Foresight Report (2007)
29. Primary Care Service Framework: Management of Obesity in Primary Care. NHS Primary Care Contracting (2007)
30. Development and assessment of a pharmacy-based obesity management service - Final report. Coventry tPCT (2008)
31. Statistics on obesity, physical activity and diet: England, 2010. The Health and Social Care Information Centre (2010)
32. Bernstein H, Cosford P, Williams A. *Enabling Effective Delivery of Health and Wellbeing - An independent report* (2010)
33. Putting prevention first. Vascular Checks: risk assessment and management. Department of Health (2008)
34. Davies J, Taylor D, Bates I. *A Qualitative Evaluation of Islington Primary Care Trust's Pharmacy Based Cardiovascular Risk Assessment Pilot*. The School of Pharmacy, University of London (2009)
35. Doogan D. *Improving Male Life Expectancy in Birmingham - working in partnership*. NHS Improvement Programme (2009)
36. Newman J, Pandya A, Wood N. *Promoting Cancer Awareness and Early Detection within Community Pharmacies* (2010)
37. Rapid Response Alert - Vaccine cold storage. NPSA/2010/RRR008 (2010)
38. The influenza immunisation programme 2010/11. Letter from the Department of Health, Gateway Ref No: 14171 (2010)
39. An independent review of the UK response to swine flu by Dame Deirdre Hine. The Cabinet Office (2010)
40. Acceleration of the HPV vaccination catch-up campaign. Letter from the Department of Health, Gateway Ref No: 11185 (2009)
41. Shooting Up - Infections among injecting drug users in the United Kingdom 2009. An update. Health Protection Agency (2010)
42. Rethinking strategies to control hepatitis B and hepatitis C. The Lancet Vol 375, Issue 9710 172 (2010)
43. Goldberg D, McMenamin J. *The United Kingdom's hepatitis B immunisation strategy - where now?* Communicable Disease and Public Health Vol 1: 79-83 (1998)
44. Winners of the Chief Medical Officer's Public Health Awards. Department of Health (2010)
45. Teenage Pregnancy Strategy: Beyond 2010. Department of Health (2010)
46. Pharmacy in England - *Building on strengths - delivering the future*. Department of Health 2008



Published by the
Pharmaceutical Services Negotiating Committee

59 Buckingham Street
Aylesbury
Buckinghamshire
HP20 2PJ

01296 423823

www.psn.org.uk

Community Pharmacy Services Database

The PSNC Community Pharmacy Services Database has been developed to provide accurate, relevant and up-to-date information to support the development of local pharmacy strategies and Enhanced services. The database contains over 600 examples of locally commissioned pharmacy services.

www.psn.org.uk/database