# New models of pharmacy: what is emerging and what is possible.

## A review of the literature

The Royal Pharmaceutical Society England

Commission on
**Future Models of Care**
*Delivered through pharmacy*

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# INTRODUCTION

## The Commission

The English Pharmacy Board of the Royal Pharmaceutical Society has commissioned a report into future models of care that could be delivered through pharmacy. It has established a Commission to make the case for change in relation to the role that pharmacy can play in delivering care in new ways.

The Commission will look at emerging models of care involving pharmacy and examine what has helped or hindered the development of such models. It will suggest what needs to be done to enable and support the spread of practice and consider the implications for policy and practice in the English NHS and more widely.

## Literature review

To frame the work of the Commission, a literature review of national and international literature (a mix of research studies and grey literature) was undertaken covering the five years since the White Paper, *Pharmacy in England* (Department of Health, 2008). While the primary focus is England, the aim was also to draw on international learning and literature from, in particular, the United States, Australia, Canada, and the Netherlands.

This literature review supports the Commission by providing a snapshot of the current health policy context and pharmacy services. It also considers the opportunities presented by changes to the health and care system in England, and highlights some of the challenges that will need to be addressed if pharmacy services are to realise their potential.

Appendix A outlines the methodological approach taken to the literature review.

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## CONTEXT: ASPIRATIONS FOR PHARMACY

Pharmacy services are provided in a range of settings – hospitals, community, primary care, industry, academia.

Attention tends to focus on community pharmacy as holding greatest potential for advancement, being, with other primary care practitioners, *'on the frontline in the battle for better health and wellbeing'* (Johnson, 2008).

Primary care pharmacists, work with GPs and, until recently, Primary Care Trusts (PCTs) – now replaced by Clinical Commissioning Groups (CCGs) – and have played a central role in medicines management and optimisation. This role will continue to be important in the new health and social care system.

**Key facts**

Around 1.6 million people visit a community pharmacy daily.

84% of adults visit a pharmacy at least once a year, and for 78% the visit is for health related reasons (Central Office of Information, 2008).

Hospital pharmacy, often considered an exemplar in Europe, has been progressive in its adoption of new technologies, to the benefit of patient safety and hospital efficiency. Hospital pharmacists have made greater use of their clinical skills, embedding themselves in ward-based teams, and in new leadership roles. Hospital chief pharmacists have a recognised role as leading on the safe use of medicines across their organisations, and many hospital pharmacists have developed specialist expertise (for example, in the best use of medicines for particular groups of patients or in the preparation of complex medicines).

The 2008 White Paper *Pharmacy in England: Building on strengths – delivering the future* (Department of Health, 2008) set out a number of aspirations for providers of pharmacy services. These included:

- Becoming 'healthy living' centres – promoting health and helping more people to take care of themselves
- Offering NHS treatment for many minor ailments for people who do not need to go to their GP
- Providing specific support for people starting a new course of treatment for long term conditions such as high blood pressure or high cholesterol
- Offering screening for those at risk of vascular disease
- Using new technologies to expand choice and improve care in hospitals and the community, with a greater focus on research.

The White Paper sought to build on the strengths of community pharmacy in particular, in terms of access, convenience and extended hours. Reflecting changes that had already taken place in hospital pharmacy, it continued the drive to extend community pharmacy beyond the dispensing and supply of medicines to cover a range of clinical services.

This included pharmacists playing a more visible and active role in improving the public's health and supporting people with long term conditions, such as diabetes or asthma, and through the provision

of smoking cessation and sexual health services. It also set out aspirations for advancing patient care by developing higher-level competencies of consultant pharmacists and pharmacists with a special interest, for example, and involvement in developing clinical pathways to support integrated care.

## Contractual framework for community pharmacy

Since April 2005, most community pharmacies have provided services under a new community pharmacy contractual framework (CPCF) with three tiers of services – essential, advanced and local enhanced (Department of Health, 2008). A few have had direct contracts with their Primary Care Trusts (PCTs), known as local pharmaceutical services (LPS) contracts.

**Essential services:** under the framework, each community pharmacy must provide essential services (dispensing and repeat dispensing services, health promotion and healthy lifestyle advice, signposting to other services, support for self care and disposal of medicines). NHS England will commission and monitor the national CPCF.

**Advanced services:** The nationally agreed medicines use review (MUR) service (see page 15) was the first advanced service.

**Local enhanced services**: These are locally commissioned (until recently by PCTs). Examples of common services include stop smoking schemes, supervised administration of methadone, emergency contraception or nicotine replacement therapy, and minor ailment schemes. The commissioning of the majority of public health services currently provided by community pharmacies will transfer to local authorities.

The NHS Alliance has called for a new community pharmacy contract that supports the wider introduction of medicines optimisation and clinical services in community pharmacy (NHS Alliance, 2013).

# THE NEW HEALTH AND SOCIAL CARE SYSTEM

The White Paper, *Equity and Excellence: Liberating the NHS* (Department of Health 2010), set out the Government's vision for the future of the NHS and heralded fundamental restructuring of the health and care system.[1] It also reinforced the need for the NHS to release efficiency savings and applied greater urgency to the Quality, Innovation, Productivity and Prevention (QIPP) initiative. In relation to pharmacy it stated:

> *'Pharmacists, working with doctors and other health professionals, have an important and expanding role in optimising the safe use of medicines and in supporting better health.'* (Department of Health, 2010, p26).

The changes to the NHS architecture are likely to impact most noticeably on two areas of pharmacy: community pharmacy and pharmacists working in primary care.

## Community pharmacy

The changes will have a direct impact on the way the three tiers of services – essential, advanced and local enhanced – are commissioned. Responsibility for community pharmacy has transferred in the new system to local authorities and what was set up as the NHS Commissioning Board, now known as NHS England. Clinical commissioning groups (CCGs) can also commission local services from community pharmacy.

The new system will be more complex, involving more, often smaller players (including 211 CCGs). The literature perceives a lack of consistency over what is commissioned locally and the requirements for similar services (see, for example, Pruce 2010). However, a single operating model for primary care services commissioned by NHS England aims to support greater consistency in access and provision to essential services (NHS Commissioning Board, 2012).

Pharmacists will need to engage with all the new system players (see box, page 8) and demonstrate the value of pharmacy, if pathways are to be developed that integrate pharmacy into plans for community and hospital services. There is still uncertainty over the mechanisms by which this engagement can be achieved.

The ability of CCGs to commission services from any provider, whether NHS or private, may see community pharmacy competing in an increasingly diverse market to provide local enhanced services.

## Primary care pharmacy

It is evident from the literature that a great deal rests on the ability of CCGs to deliver effective medicines optimisation to improve patient outcomes, support pathway redesign and reduce system costs (National Prescribing Centre 2011).

[1] The Department of Health has produced an interactive diagram giving an overview of the new health and care system from April 2013, see http://healthandcare.dh.gov.uk/system/

Medicines management teams in the primary care setting have to date been at the forefront of medicines management and medicines optimisation, as local experts in the use of medicines. The literature highlights anxiety that this expertise will fragment or disappear during the transition to the new system (Drug and Therapeutics Bulletin, 2013).

Tighter budgets for CCGs in comparison to PCTs are likely to mean reductions in medicines management capability. Smaller medicines management teams may also have to respond to commissions from NHS England in addition to CCGs. This increases the need for smarter and more innovative ways to deliver prescribing, medicines optimisation and pharmacy functions. Emerging service models in medicines management include public-private partnerships, for example with federations of GP practices (Colquhoun, 2012c).

Whether expertise is in-house or bought in, CCGs need to properly understand the role, and potential, of medicines management expertise in optimising the use of medicines. The National Prescribing Centre (2011) has produced an organisational competency framework to help commissioners ensure they have, or have access to, the competencies necessary to deliver medicines management functions effectively.

Some CCGs are developing their own in-house arrangements in response to the National Prescribing Centre competency framework challenge, while others are buying in support from a third-party, such as the NHS Clinical Commissioning Support Service or from private providers, or sharing collaborative experience with other CCGs (Colquhoun 2012a).

Opportunities to make better use of medicines optimisation do not lie solely with commissioners. Primary care providers themselves – GPs, community staff, pharmacists and others – also need to coordinate their initiatives to provide better local health in liaison with local Health and Wellbeing Boards and Clinical Commissioning Groups (NHS Alliance, 2013).

Pharmacists in primary care have also been involved in informing service redesign projects, providing prescribing support to practices and in implementing local public health campaigns (Gray, 2010). Their ability to continue doing this depends on the value CCGs, area teams of NHS England, but also local GPs, give to drawing on this expertise.

## Key roles in the new health and social care system

**NHS England:** Will commission the national Community Pharmacy Contractual Framework (CPCF), and its 27 geographically based 'area teams' will take on direct commissioning responsibility for local primary care, including pharmacy services.

**Local authorities:** Will play a bigger role in commissioning public health services and conduct the Pharmaceutical Needs Assessment, which will inform the commissioning of community pharmacy by NHS England as well as local public health commissioning.

**Clinical commissioning groups (CCGs):** Will commission the majority of NHS services in their locality and this may include commissioning minor ailments, palliative care and other health services through community pharmacy.

**Health and Wellbeing Boards (HWBs):** Responsible for encouraging integration between commissioners of services across health, social care, public health and children's services.

**Public Health England:** Will influence the development of the community pharmacy contractual framework through NHS England.

**Twelve clinical senates:** Will work with CCGs, HWBs and NHS England to make health care decisions for the populations they represent.

**Local professional networks:** Will secure clinical involvement in day to day operational and strategic commissioning processes undertaken by NHS England.

**Healthwatch England (HE):** Established in October 2012 as the independent consumer champion for health and social care. Local Healthwatch organisations began work in April 2013, covering every local authority area and with a remit to learn from patients' experiences of local care to shape local services.

## THE FINANCIAL CONTEXT

Pharmacy services are heavily dependent on NHS income. Hospital pharmacy services will be subject to the constraints of NHS hospital revenue (with the exception of those in the private and independent sector). Today's community pharmacy is considered to be an NHS business, entirely dependent for survival on NHS income, which accounts for more than 85% of turnover for the average pharmacy (Sharpe, 2013).

The NHS is in a period of austerity. A challenge has been set for the NHS to deliver up to £20 billion of efficiency savings by 2014/15 to invest in meeting demand and improving quality (Department of Health, 2011). There is an increased urgency on the NHS to deliver the 'QIPP challenge'.

The Nuffield Trust has estimated that unless health funding can increase beyond inflation, the NHS is set to face a funding gap by 2021/2 of between £44 and £54 billion (Roberts et al, 2012). Achieving productivity improvements through QIPP by around 4% a year to 2014/15 would reduce the potential shortfall by around 36%.

It is an intimidating, unprecedented challenge; but there are opportunities for pharmacy to play a key role in addressing the shortfall. The Nuffield Trust observes that managing demand, particularly among people with long-term chronic conditions, will be critical. Pay restraint is likely to contribute around 40% of the required QIPP savings by 2014/15. The scale of the productivity challenge facing the NHS after 2015 is increased by the very different outlook for pay across the NHS workforce.

### Key facts

NHS England has a budget of £95.6 billion for 2013/14. It has allocated £65.6 billion to local health economy commissioners: that is, CCGs and local authorities (NHS England, NHS allocations for 2013/14). This represents 2.6% growth compared to 2012/13 baselines – a real term increase of 0.6%.

The resources for local commissioners comprise three elements: an allocation to CCGs to cover the local services they will commission; the running costs allocated to CCGs; and an allocation to local authorities to fund services that benefit both health and social care.

## EMPHASIS ON QUALITY

A critical element of the current context is the emphasis placed on quality and safety. An overhaul of the health and care system is planned in response to the Francis Inquiry into failings at Mid Staffordshire NHS Foundation Trust. This includes a drive to instil a culture of compassion, and an end to 'the distorting impact' of targets and box ticking (Department of Health, 2013).

Ofsted-style ratings for hospitals and care homes will be introduced, together with a Chief Inspector of hospitals. A statutory duty of candour will be placed on organisations that are registered with the Care Quality Commission. The basic values of dignity and respect will be central to care training, and a pilot programme will see nurses working for up to a year as a healthcare assistant as a prerequisite for receiving funding for their degree.

Pharmacists already play a profoundly important role in enhancing safety by spotting prescribing errors and supporting the safe administration and use of medicines. There are opportunities within the current context to articulate how pharmacy can contribute on a wider quality platform.

The NHS is moving to a system where quality and outcomes drive everything. The NHS Outcomes Framework aims to act as a catalyst for driving quality improvements and outcome measurement throughout the NHS.

Indicators in the NHS Outcomes Framework for 2013/14 are grouped around five domains, each one focused on improving health and reducing health inequalities (Department of Health, 2012). The five domains derive from the three part definition of quality set by Lord Darzi (2008) as part of the NHS Next Stage Review (effectiveness, patient experience and safety).

A number of the five domains play to the strengths of pharmacy and services that are being provided already or are at the vanguard. This is particularly true for the emphasis on preventing people from dying prematurely (domain 1), and enhancing the quality of life for people with long term conditions (domain 2).

For example, dementia and care of older people was a priority for the NHS for 2012/13, and included initiatives to reduce inappropriate antipsychotic prescribing for people with dementia, with a view to achieving a two-thirds reduction in the use of these medicines (Department of Health 2011). The emphasis for 2013/14 has expanded to incorporate the diagnosis rate for people with dementia (Department of Health, 2012).

**NHS Outcomes Framework for 2013/14**

**Domain 1**: Preventing people from dying prematurely

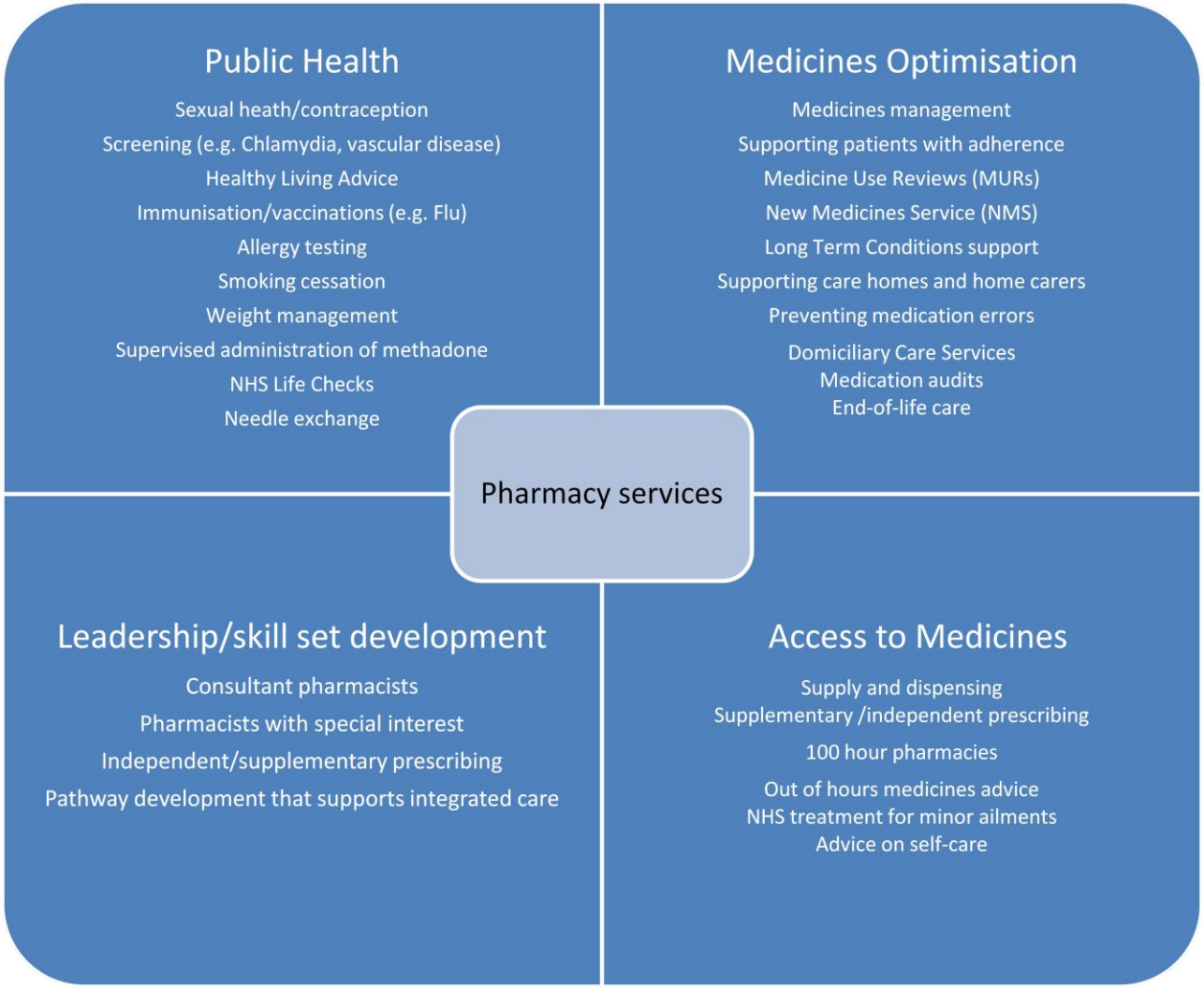
**Domain 2**: Enhancing quality of life for people with long term conditions

**Domain 3**: Helping people to recover form episodes of ill health or following injury

**Domain 4**: Ensuring that people have a positive experience of care

**Domain 5**: Treating/caring for people in a safe environment, and protecting them from avoidable harm

## PHARMACY SERVICES OVERVIEW



## ACCESS TO MEDICINES

Community pharmacists still spend the majority of their time in activities associated with dispensing prescriptions, and their dispensing workload has increased (Hassell et al, 2011). The introduction of e-prescription services is designed to speed up dispensing for patients and pharmacists, and the second release of the e-prescription services has the potential to improve the management of growing dispensing workloads (Harvey and Avery et al, 2011).

Convenient access is the most commonly cited strength of community pharmacy. The growth in 100 hour pharmacies has extended access further still.

The UK is thought to have the most extended non-medical prescribing rights in the world, the benefits of which include increasing the speed and convenience of access to medicines and allowing prescribers, such as pharmacist, to make more effective use of their knowledge and skills (Carey and Stenner, 2011).

Automated drug dispensing systems in hospitals have delivered cost savings, reduced dispensing times and released pharmacists to integrate into ward-based teams (Taheri, 2012). Examples include robotic dispensing and automated drug cabinets, with webcams enabling pharmacists to check prescriptions remotely. Other advances include using webcams and electronic medical charts to provide remote medicines dispensing, patient counselling, refill authorisations and medication assistance referral services (Lam and Rose, 2009). Such technologies could also benefit community pharmacists, by enabling them to delegate more dispensing activities to support staff.

### Key facts

99% of the population can get to a pharmacy within 20 minutes by car and 96% by walking/public transport (Department of Health, 2008).

Community pharmacists in England dispensed 885 million prescriptions in 2011-12, compared to 81.9 million items dispensed in general practices (Health and Social Care Information Centre, 2012).

One out of hours organisation found that medicines requests were the second largest reason for seeking primary care outside of normal hours (Hilkins, 2008).

Almost 2,000 pharmacists in the UK are reported to have qualified as independent and/or supplementary prescribers (Carey and Stenner, 2011).

The literature shows that pharmacists are also making a significant contribution to end-of-life care, for example, through developing guidelines on pain management and supporting other professionals in the safe use of, for example syringe drivers (Department of Health, 2008).

The repeat dispensing scheme is enabling community pharmacists to dispense regular medicines to suitable patients, according to an agreed protocol, without the direct involvement of the GP surgery on each occasion a repeat medicine is required (National Prescribing Centre, 2008). There have been calls to give pharmacists access to patient care records to enable them to manage repeat dispensing fully (Pharmacy Voice, 2012a).

There are examples of community pharmacy providing a shared central pharmacy resource for clusters of GP research practices, including managing drug accountability for the practices and being

responsible for the receipt, storage and dispensing of unlicensed investigational medicines (Roe et al, 2011). Community pharmacies in the North West have been collaborating with primary and secondary care, industry and academia, to participate in a phase III clinical trial (NHS North West, 2012).

# MEDICINES OPTIMISATION

There is a growing body of evidence in the UK and internationally that medicines use is suboptimal at different points of patients' pathways. The emphasis has shifted from medicines management to medicines optimisation – maximising the value of medicines for the patient, and for the wider NHS. Its marks a shift in focus from processes and systems, to patients and their outcomes (Royal Pharmaceutical Society, 2013).

Studies in the UK and internationally demonstrate a number of benefits to medicines optimisation, including improving patient care and medicines safety (Vinks et al, 2009; Black and Glaves, 2011), and avoiding the use of other healthcare resources, such as hospital visits (Ross and Bloodworth, 2012)

Medicines optimisation has been found to be best when health and social care work together (Black and Glaves, 2011). The urgency to the QIPP challenge reinforces the importance of medicines optimisation.

## Reducing waste

Medicines optimisation can help to reduce the amount of medicine that is wasted and then destroyed. University Hospitals of Leicester NHS Trust, for example, has been using pharmacy medicines management assistants to visit wards regularly and empty medicines placed in a 'return to pharmacy' bin. They sort out waste medicines against agreed criteria and eligible medicines are reused, with forecast savings of £450,000. This example has been evaluated by NICE as meeting the QIPP criteria of savings, quality, evidence and implementation (NHS Evidence, 2011).

### Key facts

The prescription of medicines is one of the most common health interventions, yet studies suggest that between 30% and 50% of prescribed medicines are not taken as recommended (Pharmaceutical Services Negotiating Committee and NHS Employers, 2011).

Pharmacists help to resolve 43,800 incidents that could potentially result in patient harm (Pharmacy Voice, 2012a).

Over 2.2 million Medicines Use Reviews (MURs) were conducted in England during 2011-2012 (Pharmaceutical Services Negotiating Committee, 2013).

Other advances include the New Medicine Services (NMS) for patients starting medicines for long term conditions.

## Preventing errors

Pharmacists regularly intercept prescribing errors as part of their routine practice in hospitals (Avery and Barber et al, 2012), community settings (Pharmacy Voice, 2012a), and primary care (Avery and Rodgers et al, 2012).

Techniques used by pharmacists to correct medication errors include reviewing patients' records, discussing actions with doctors and inviting patients for reviews (Avery and Rodgers et al, 2012).

## Transfer of information

The transfer of information about medicines is another area where progress has been made to support the effective use of medicines. Achievements here include improving the quality of discharge communications when patients move between care providers, improved communications about medicines with patients, as well as between care homes and hospitals and primary care, and a renewed focus on medicines reconciliation on admission to hospital (Picton 2012; Royal Pharmaceutical Society, 2012a&b).

## Medicines use reviews

The Medicines Use Review (MUR) service was introduced in April 2005 as the first advanced service for community pharmacy. MURs aim to improve patient knowledge, adherence and use of their medicines. National target patient groups (respiratory, high risk medicine and post-discharge) were introduced to ensure that at least 50% of MURs are provided to those who will benefit most (Pharmaceutical Services Negotiating Committee and NHS Employers, 2012).

Pharmacists believe MURs enhance their relationship with patients, although there is some concern that they can impact negatively on those waiting for a prescription (Urban et al, 2008). The first national audit found that most patients (93%) are likely to follow advice about medicines given as part of a MUR (The Pharmaceutical Journal, 2010).

A pilot using community pharmacists to provide enhanced pain-related MURs showed the value of pharmacists serving in an extended role, in identifying and supporting people with both acute and chronic pain. Over the course of eight weeks, ten pharmacies successfully identified and referred 42 people to their GPs to address side effects or inadequate pain control (Gill et al, 2013).

## Support to community and primary care

Pharmacists, here and internationally, are also playing an important role in supporting intermediate care patients with complex medicine regimes (Mitchell et al, 2011), as well as in assisting in domiciliary or homecare services (Green et al, 2008; Martin and Street, 2010; Wang, 2008; Scrimshaw, 2008).

There are calls to embed medicines optimisation within general practice through the employment or attachment of medicines optimisation pharmacists (NHS Alliance, 2013). Hertfordshire introduced a model a few years' ago whereby a team of practice-based clinical pharmacists were recruited to work with GPs to manage the drugs bill. Each practice has its own pharmaceutical adviser (PA) who advises and supports around ten practices. This model is credited with engaging clinicians to review their prescribing practice and make changes where needed, with each pharmacist regarded as a trusted and respected member of the practice team (Gray, 2010).

A range of developments have been called for in support of the further expansion of medicines optimisation activity. This includes referring patients to a community pharmacy for medication planning before starting any treatment (Soni, 2011), and strengthening the transfer of medicines information, for example, by providing all community pharmacists with NHS.net website addresses

to enable secure communications between secondary and primary care (Royal Pharmaceutical Society, 2012b).

## PUBLIC HEALTH

The literature highlights that the potential of community pharmacy in contributing to public health has been undervalued. This is despite the White Paper, *Healthy Lives, Healthy People* (HM Government, 2010) recognises to the potential to use pharmacy teams more effectively to improve health and wellbeing and reduce inequalities. Public Health England will influence the development of the community pharmacy contractual framework through NHS England.

One service development that has demonstrated an impact is the Healthy Living Pharmacy (HLP). HLPs are attributed with having a real impact on health promotion, offering a range of services that can include smoking cessation, weight management, emergency hormonal contraception and advice on alcohol (HM Government, 2010). As of April 2013, there were 478 HLPs across 28 part of England. The pathfinder programme evaluation found improvements in the majority of services evaluated, including improved quality outcomes, and positive feedback from the public – 98% said they would recommend the service to others (Evans et al, 2013).

Sainsbury's plans to roll out its Healthy Living Plan – a three-month service focused on heart disease, diabetes and weight management – to all of its 277 UK pharmacies during 2013, having evaluated a year long experiment into the impact that pharmacists can have in this area (2020health, 2013).

Pharmacists are also undertaking NHS Health Checks, for example, for vascular disease, men's health, blood pressure, blood glucose monitoring, body mass index assessment (Department of Health, 2008).

### Key facts

The average pharmacy consultation costs £17.75 compared to an average of £32 for a GP consultation (The Bow Group, 2010).

Pharmacists are providing a wide range of public health services, including smoking cessation, NHS health checks, sexual health (e.g. contraception and Chlamydia screening), and weight management.

The most commonly commissioned local enhanced services by PCTs in 2011-12 were Stop Smoking (19%), Supervised Administration (19%), Minor Ailment Scheme (12%) and Patient Group Direction (12%), (Health and Social Care Information Centre, 2012).

There is a growing international trend towards the delivery of cognitive pharmaceutical services in community pharmacy to improve patient health (Roberts et al, 2006 and 2008).

The commissioning of enhanced pharmacy services to improve public health is reported to be variable. For example, less than one in five community pharmacies are commissioned to provide smoking cessation services (Robinson, 2013). Sustained efforts to improve relationships between GPs and pharmacists are recommended and for pharmacists to be represented within local CCGs and Health and Wellbeing Boards (The Bow Group, 2010). There is a theme in the literature around taking steps to exploit the potential of community pharmacy as a supplier of public health services.

## LEADERSHIP AND SKILLSET

The emphasis on providing services and not just dispensing paves the way for an expansion in pharmacy roles. Using clinical skills in pharmacy practice is becoming increasingly important. For example, community pharmacies have been found to play an important role in the early detection of cancer (NHS North West, 2013).

Already there are pharmacist prescribers, consultant pharmacists and pharmacists with a special interest (for example, in cardiac medicines). These have been supported by developments in pharmacy support roles (notably accredited technicians who can undertake the final check of prescriptions, thereby freeing up pharmacists to deliver clinical services). Compulsory registration of pharmacy technicians (since July 2011) may create opportunities for pharmacists to delegate more tasks to technicians, who will need to have met consistent standards of training (Turner, 2011).

In hospitals, there are consultant pharmacist posts in antimicrobials, older people, HIV, patient safety and intensive care. The bias of posts to the hospital sector reflects more structured career pathways, enabling pharmacists to develop expertise within a particular clinical domain (Mason et al, 2010).

The new NHS landscape demands closer and more consistent collaboration between community pharmacists and GPs than ever before. A recurring theme from the literature is a sense from pharmacists that GPs do not fully understand or value what pharmacy services can offer. This creates challenges in securing the input of pharmacists in commissioning discussions.

### Key facts

There are over 70,000 regulated pharmacists, pharmacy technicians and pharmacy premises in England, Scotland and Wales (General Pharmaceutical Council, 2013).

7,882 pharmacists are currently in post as providers of NHS services in England – in NHS hospitals, mental health trusts, community health trusts and former PCT provider arm activity etc. (NHS Pharmacy Education and Development Committee, 2012).

There are 1,159 pharmacists working in primary care (NHS Pharmacy Education and Development Committee, 2012).

Studies have identified benefits for patients where pharmacists are integrated into core healthcare teams, as well as gains in raising awareness amongst other health professionals of the role of pharmacists (Makowsky et al, 2009).

New models by which pharmacists advise GPs are reported (Colquhoun, 2012a). The single prescribing competency framework published by The National Prescribing Centre (2012) will support collaboration by recognising that a common set of competencies underpin prescribing regardless of professional silo.

The 2008 White Paper set out a vision for health community clinical pharmacy teams – virtual teams that build clinical networks to provide an infrastructure for hospital and community pharmacists, primary care pharmacists, pharmacy technicians and potentially other healthcare professions to oversee medicines usage and effectiveness (Department of Health, 2008). Further expansion around leadership and skillset might involve taking a more strategic approach to the development of

consultant pharmacist and pharmacist with a special interest roles to the benefit of the NHS – for example, by planning for consultants pharmacists in long term conditions, such as diabetes, that create greatest burden on the NHS (Mason et al, 2010). Others make the case for developing primary care consultant posts to support GPs and other practitioners in areas such as older people or diabetes, where optimal medicines management is crucial to supporting patient in the community (Mason et al, 2010).

Pharmacists can also exploit the potential to broaden their skillset in the new NHS landscape, drawing on knowledge of medicines and how to maximise their cost-effectiveness, general management skills, knowledge of the health service and local understanding, as well as skills in counselling, influencing and securing behaviour change (Colquhoun, 2012).

# CONSIDERATIONS FOR THE FUTURE

## New ways of working

Despite the innovations in service provision and expanding roles, the model of community pharmacy has remained largely unchanged. It is considered by some to be at tipping point, particularly for independent pharmacists (A.T.Kearney, 2012).

A variety of different models has been suggested, and there is a theme around adopting cooperative or networking arrangements to bring efficiencies from economies of scale. A move away from single-handed practice and towards 'superpharmacies' or 'hub and spoke' models has also been suggested (Pruce, 2010).

Opportunities exist for greater cross-fertilisation between hospital pharmacy, community pharmacy and pharmacy in primary care.

## Innovation dissemination

A renewed urgency has been given to the QIPP programme (Department of Health 2010). Consecutive operating frameworks for the NHS have envisaged the recycling of some efficiency savings back into the NHS, which should allow for investment in new innovations. Pharmacy innovations in hospitals have been shown to deliver efficiency savings. The potential of innovation in community pharmacy has not yet been exploited.

*Many pharmacists are embracing the change and seeing it as a great opportunity to use their skills, grow their business, and become more meaningful contributors to the nation's health. The professions should now build on the momentum created by these early adopters.'*

(A.T.Kearney, 2012)

*'With future funding of the NHS likely to be at a standstill, proving that a service is clinically effective and cost-effective could be crucial to its survival.'*

(Connelly, 2010)

The literature highlights multiple examples of innovative and progressive practice in pharmacy services. There would appear to be a challenge in mainstreaming good practice. Partly this reflects variations in local commissioning arrangements, but it also highlights issues around change management and dissemination of innovative approaches. Hurst and Williams (2012) found that the rate of diffusion of new, cost-effective technologies can be slow even when they appear affordable.

## Measuring outcomes

A recurring theme from the literature is around better understanding the impact of enhanced services and innovations in pharmacy, particularly community pharmacy, in terms of safety, patient experience and clinical outcomes.

There have been calls for community pharmacy to develop quality indicators and assurance framework, which enable the outputs of pharmacy services to be incorporated into the national datasets of the three outcomes frameworks: NHS, public health, and adult social care (Pharmacy Voice, 2012b).

Demonstrating outcomes from interventions will also be necessary to persuade commissioners to invest in pharmaceutical services and in demonstrating opportunities around QIPP (Connelly, 2010).

## Strengthening commissioning

A number of changes have been highlighted to strengthen the commissioning of pharmacy in the new system. These include a more coherent, strategic approach to commissioning community pharmacy, based on a solid understanding of the contribution of community pharmacies, and incentivising new models of delivery (Task Group Four, 2012).

Some of the literature makes the case for the Quality and Outcomes Framework (QOF), the incentive scheme for GP practices that rewards doctors based on the quality of care delivered to patients, to be extended to pharmacy (Carroll and Jones, 2010; The Bow Group, 2010). Others have called for a transition to rewarding pharmacy based on the quality of services delivered, rather than simply throughput (Pharmacy Voice, 2011).

Pharmacists will need to work with local commissioners to demonstrate how they can support patients in such areas as medicines optimisation and health promotion. CCGs will be represented on local quality surveillance groups, which will review thematic evidence from all healthcare providers, including pharmacy. Pharmacists may also cross paths with CCGs at Health and Wellbeing Boards, but the mechanisms by which pharmacists can systematically engage with CCGs are not yet clear.

## Connecting with consumers

Whilst the public has a high regard for pharmacy, there is some way to go to raise awareness of the range and benefits of pharmacy services (Department of Health, 2008). General exposure by the public to community pharmacy-based healthcare has been limited, and raising public expectations here has been identified as a priority (Gill et al, 2013).

Public expectations of pharmacy have not always kept pace with the pursuit of an expanded role for pharmacy. For example, some public support for pharmacists as prescribers has been found, however work is needed to address concerns from patients about clinical governance, the privacy of community pharmacies and physical space to provide the service (Hobson, Scott and Sutton, 2010). While the public show support for pharmacists helping them with medicines, they are less likely to use a service involving an appointment with the pharmacist. More people would be likely to use the pharmacy for treatment of minor illness than for advice on healthy lifestyle, diet or exercise (Blenkinsopp et al, 2007).

> *'Community pharmacy is a customer-driven profession. If patients, and the public, do not like the service they receive they can take their custom elsewhere. However, the public can drive change only if they are aware of the services they can expect to receive.'*
>
> (Pruce, 2010)

Consumer research suggests that take up of some pharmacy services is not anywhere near achieving its potential. For example, while only 6% of members of the public surveyed had consulted a pharmacist for tests for long-term conditions, 43% would consider doing this (Which? 2008). Another study found that only 1% of people surveyed had visited a pharmacy for out-of-hours care in the preceding year (Which? 2007).

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# APPENDIX A: LITERATURE SEARCH

A review of national and international literature was undertaken covering the period post-2008 using a pre-specified procedure. The objective was to focus strategically instead of evaluating different models, by looking at where pharmacy is, what is starting to emerge, the opportunities and possibilities for the future. The aim was to identify, summarise and appraise literature relating to future models of NHS pharmacy care both in the UK and internationally.

An electronic search strategy was compiled using Medical Subject Headings and text words or phrases.

- The literature search spanned the five years since the publication of the White Paper, *Pharmacy in England,* in 2008, to the present day.
- A mix of research studies published in peer reviewed journals and grey literature was included.
- The search also incorporated international literature – specifically the United States, Australia, Canada and the Netherlands – because these countries are amongst those at the forefront of pharmacy development. Only a limited amount of international literature satisfied the search strategies, mainly due to the exclusion of any literature not written in the English language.