

Our Research Strategy

Introduction: Why we fund research

Pharmacy Research UK funds research into the practice of pharmacy – we are interested in how and why people access pharmacy services, what pharmacies do, how much care costs, and what happens to patients as a result of this care. We seek to understand the way professionals, patients and the public think about and access medicines and pharmacy services and utilise our research outputs to develop and support policy and practice relevant to pharmacy, health and social care.

Pharmacy Research UK's vision is "to improve the health of the public through excellence in pharmacy research". We view timely research, evaluation and evidence generation as fundamental for the advancement of pharmacy practice and related policy for public benefit; in providing new knowledge and helping to establish ways of working that reflect good practice, and consequently establish a platform for change.

Findings from research into the practice of pharmacy have underpinned or supported some of the recent policy changes affecting pharmacy and the patients and public from whom they care. In some instances they have been the driver for a new service to be delivered through pharmacy (e.g. smoking cessation¹ repeat dispensing², Minor Ailments³), in some instances they have provided evidence to underpin a policy change (e.g. pharmacist prescribing) and in some instances they have been used to evaluate a newly implemented initiative and make recommendations for continuation or change of the service (e.g. the new Community Pharmacy Contractual Framework⁴, Medicine Use Reviews⁵, New

¹ Sinclair, H.K., Bond, C.M, Stead. L.F. Community pharmacy personnel interventions for smoking cessation The Cochrane Library 2004 Issue 1

² Bond, C.M. , Matheson, C., Williams, S., Williams, P. Repeat Prescribing: An evaluation of the role of community pharmacists in controlling and monitoring repeat prescribing British Journal of General Practice; 2000:50;271-5

³ Bojke C, Gravelle H, Hassell K, Whittington Z. Increasing patient choice in primary care: the management of minor ailments. Health Econ. 2004 Jan;13(1):73-86.

⁴ Blenkinsopp A, Bond C.M Celino G, and Inch J. The implications of the new Community Pharmacy Contractual Framework (CPCF) for the community pharmacy workforce October 2008 RPSGB-PPRT

⁵ <http://www.networks.nhs.uk/nhs-networks/south-east-coast-respiratory-programme/news/formal-evaluation-of-the-inhaler-technique-improvement-project/?searchterm=evaluation%20of%20inhaler%20technique%20improvement> accessed 12-12-12

Medicines Service⁶). Research into the practice of pharmacy has also enabled the understanding of major safety issues associated with prescribing^{7,8}, highlighted the importance of understanding the patient perspective on medicines information⁹, and established a sound basis for workforce planning¹⁰.

Furthermore, pharmacy is both a knowledge-based and value-based profession. Thus, studies that have sought to understand pharmacy professionalism, values and ethical literacy have informed developments in education, practice, professional development and regulation^{11,12}.

Our goal is to fund research that supports the clinical and effective use of medicines, ensuring that associated risks are minimised and effect is maximised. In general, but not exclusively, we are concerned with the delivery of and access to pharmaceutical care, and other health related services delivered by pharmacists and their staff. The approaches taken can be summarised under the broad areas of understanding and describing the way care is accessed and delivered from pharmacists, pharmacies and other health care providers; identifying areas for improvement; and, evaluating new service models.

In addition, in order that our vision is best implemented, we need to see evidence generated by the profession in all sectors - and for the profession to be adequately signposted, supported and developed to play an active and valuable role in research. Therefore, we also invest in pharmacist, and more recently pharmacy technician, researchers through our capacity and capability funding.

⁶ <http://public.ukcrn.org.uk/search/StudyDetail.aspx?StudyID=12494> accessed 12-12-12

⁷ Lewis P.J, Dornan T, Taylor D., Tully M.P, Wass V, Ashcroft D.M. Prevalence, incidence and nature of prescribing errors in hospital inpatients: a systematic review. *Drug Saf.* 2009;32(5):379-89.

⁸ Avery A.J, Rodgers S, Cantrill J.A, Armstrong S, Cresswell K, Eden M, Elliott R.A, Howard R, Kendrick D, Morris C.J, Prescott R.J, Swanwick G, Franklin M, Putman K, Boyd M, Sheikh A. A pharmacist-led information technology intervention for medication errors (PINCER): a multicentre, cluster randomised, controlled trial and cost-effectiveness analysis. *Lancet.* 2012 Apr 7;379(9823):1310-9.

⁹ Raynor D.K, Blenkinsopp A, Knapp P, Grime J, Nicolson D.J, Pollock K, Dorer G, Gilbody S, Dickinson D, Maule AJ, Spoor P. A systematic review of quantitative and qualitative research on the role and effectiveness of written information available to patients about individual medicines. *Health Technol Assess.* 2007 Feb;11(5):iii, 1-160.

¹⁰ Hawthorne N, Anderson C. The global pharmacy workforce: a systematic review of the literature. *Hum Resour Health.* 2009 Jun 19;7:48.

¹¹ Rapport F, Doel M.A, Hutchings H.A, Wright S, Wainwright P, John D.N, Jerzembek GS. Eleven themes of patient-centred professionalism in community pharmacy: innovative approaches to consulting. *Int J Pharm Pract.* 2010 Oct;18(5):260-8.

¹² Benson A, Cribb A, Barber N. Understanding pharmacists' values: a qualitative study of ideals and dilemmas in UK pharmacy practice. *Soc Sci Med.* 2009 Jun;68(12):2223-30.

Our research strategy is to focus on the practice of pharmacy and so we do not currently fund research using animals. However, as a member of AMRC we support the principle of using animals in research when it is necessary to advance understanding of health and disease and to develop new treatments. This research only takes place where there is no alternative available.

All AMRC member charities support this principle, as outlined in this statement [AMRC statement on the use of animals in research](#).

Who and what we fund

Project Grants

We are looking to fund up to four studies a year that are aligned with our priorities. Studies should be relevant to policy and practice, and we encourage applications from multidisciplinary teams.

We fund research that is relevant to UK pharmacy practice and policy. Consideration will be given to international bids, but there should be demonstrable relevance to UK pharmacy practice.

Eligibility

The Principal Investigator should be an experienced researcher with a proven track record in the area of investigation. Pharmacists need not be the principal investigators on funding applications, but reviewers will expect to see pharmacy appropriately represented on the study team. Research teams should have a proven track record both in the methods proposed and the topic of focus.

Period of funding

Studies are usually a year in length and up to £60,000.

How to apply

There is a two-stage application process:

Stage 1: Outline applications

Outline applications will be reviewed by the Scientific Advisory Panel against shortlisting criteria. Applications shortlisted by the Scientific Advisory Panel will be invited to submit a full funding application.

Stage 2: Full submission

Full funding applications will be sent to external peer review; the Scientific Advisory Panel will oversee this process and make funding recommendations to the Pharmacy Research UK Trust Board, based on the peer review comments.

Partnership working

We are keen to work with our stakeholders – those who utilise the evidence generated to effect change – so that we might focus our charitable funds on important issues for pharmacy and their patients and public.

Therefore, funding research is not our only focus – as key to our success is effecting evidence-based change through working collaboratively. We recognise that areas of our work might be better delivered in partnership and are keen to exchange ideas and information, cooperate and collaborate with stakeholders to achieve greater impact.

We will pursue this goal in two key ways:

- 1. *Commissioning research in partnership with other pharmacy organisations*** – match-funded exploratory/scoping studies, hypothesis-led research and/or evidence gathering.
- 2. *Commissioning research in partnership with patient organisations and medical research charities*** – match-funded studies with a clear patient and public focus/audience.

Capacity and capability funding

We recognise that our vision and purpose can only be delivered through working with the brightest minds in research, policy and practice, and that the quality of the research produced relies heavily upon the availability of a properly equipped research workforce. Training the next generation of researchers is a vital investment to secure ongoing progress in pharmacy research. We aim to ensure that there are highly trained, innovative, world-class pharmacy researchers (both in academia and practice/clinical settings) who can continue to work towards our vision. Our research capacity and capability funding enables pharmacists with great potential to develop their research skills and experience and pursue their own research ideas for patient and public benefit. Funding opportunities currently include:

- ***Research Training Bursaries for community pharmacists and technicians***
- ***Personal Awards for pharmacists from all professional backgrounds:***
 - **Leverhulme Pharmacy Research Award** (previously the Sir Hugh Linstead Fellowship)

- **Galen Award**

This strategy will be reviewed in March 2014. However, we want to know how we can best support the pharmacy research community to fund the bold ideas that will impact upon policy and practice. If you have views on this, or other ideas you would like to explore, please contact us.

Project Grant - Research Priorities

1. Medicines Optimisation/Pharmaceutical Care
2. Accessing Medicines in a Modern Era
3. The Roles and Competencies of Pharmacy Technicians
4. Patient & Professional Experience & Understanding of Pharmacy
5. The Contribution of Pharmacy to Public Health

1. Medicines Optimisation /Pharmaceutical Care

Background

Medicines play a vital role in maintaining health, preventing illness and treating disease and taking a medicine is the most frequent intervention that patients use. Despite developments in medicines management, clinical pharmacy and medicines information, considerable problems remain in how medicines are used in practice, with just 16% of patients prescribed a new medicine taking it as prescribed, experiencing no problems and receiving as much information as they need¹³.

Medicines optimisation/pharmaceutical care are both terms used across the UK to address the problems associated with sub-optimal medication use and to ensure patients are 'getting the most out of, and making the best use of, medicines'. This is a core role for pharmacists and their support teams and encompasses all aspects of medicines use from decisions about: which medicines are chosen to treat which conditions, in which patient groups and settings; how medicines are supplied; how they are prescribed and accessed and how patients actually use, understand and experience them in the context of their lives. It is an approach that emphasises patient engagement, collaboration and decision making; safety; governance; and integration between professional boundaries and health care settings.

"Medicines optimisation and pharmaceutical care will be what turns medicines management, which is primarily focused on the medicines, into roles that are focused on the nuances, individual therapeutic challenges and confounding factors that we come across in patients taking the medicines. Such roles

¹³ Barber N, Parsons J, Clifford S, Darracott R, Horne R. Patients' problems with new medication for chronic conditions. *Qual Saf Health Care* 2004; 13: 172-175.
<http://qualitysafety.bmj.com/search?author1=R+Horne&sortspec=date&submit=Submit> accessed 11-06-13

make pharmacists an essential part of the healthcare team”¹⁴ and offers the pharmacy profession an opportunity to lead in the optimisation of all aspects of medicines use.

Initial scoping and exploratory work has identified three areas under the theme of Medicines Optimisation/Pharmaceutical Care in which research could usefully be conducted. This list is not exhaustive and we welcome all funding applications which can inform and influence policy and practice under this priority.

I. Patient experience

- Ensuring decisions are made jointly and that patients and their carers are knowledgeable about their medicines
- Ongoing dialogue with the patient about their experience of using medicines to manage their condition. Recognising that the patient’s experience may change over time even if the medicines do not¹⁵
- Care is integrated and personalised around the patient, with appropriate pharmacy support at all points and across all interfaces of healthcare
- Pharmacists’ contribution to self management
- A holistic approach that considers opportunities for lifestyle and nonmedical therapies to reduce need for medicines.

II. Medicines Safety

- Avoiding harm from medicines
- Ensuring good medicines governance and the safe and secure use of medicines
- Learning from errors and incidents

III. Effective Outcomes

- Ensuring optimal outcomes from medicines by implementing national & local guidance, evidence based practice and the rapid adoption of appropriate innovatory treatments
- Delivering value for money from medicines

¹⁴ Airely R. It’s time research got a new image. PJ 2013;290-386,

¹⁵ Royal Pharmaceutical Society. Medicines Optimisation: Helping patients to make the most of medicines. May 2013 <http://www.rpharms.com/promoting-pharmacy-pdfs/helping-patients-make-the-most-of-their-medicines.pdf> accessed 11-06-13

- Local decisions about medicines are robust, transparent and in accordance with NHS Constitution
- Treatments of limited clinical value are not used and medicines no longer required are stopped¹⁶
- Helping all health professionals understand their own responsibilities in optimising medicines use

2. Accessing Medicines in a Modern Era

Background

The 'digital revolution' has seen rapid and far-reaching changes to the ways in which people can interact with one another, gather information, reach decisions, access services and purchase goods. Health care products and services, including those offered by pharmacy, have not been exempt from these developments. On the whole however, the NHS and pharmacy have been slow to respond to, or adopt, these new technological opportunities, or indeed to lead or foresee them.

The NHS Commissioning Board in England has an objective to achieve an increase in the use of technology to help people manage their health and care, with online repeat prescribing an explicit example. Likewise, the E Health strategy in Scotland currently underpins the community pharmacy contract and is an ongoing commitment to the use of new technology across primary and secondary care.

Present and future multi-channel (telephone, text, email, web, apps, social media) delivery of health services will affect all aspects of health care. There is an urgent need for pharmacy research within this massively expanding field.

Initial scoping and exploratory work has identified three areas under the theme of Accessing Medicines in a Modern Era in which research could usefully be conducted. This list is not exhaustive and we welcome all funding applications which can inform and influence policy and practice under this priority.

¹⁶ Royal Pharmaceutical Society. Medicines Optimisation: Helping patients to make the most of medicines. May 2013 <http://www.rpharms.com/promoting-pharmacy-pdfs/helping-patients-make-the-most-of-their-medicines.pdf> accessed 11-06-13

I. Remote supply pharmacy

Research is needed into this rapidly increasing feature of pharmacy business. In the UK, online pharmacy is still in its infancy with some of the large multiples reporting sales of only 1% of total revenue through online channels. The UK is the largest online retail market in Europe and so it is likely that online pharmacy will grow in popularity. Regulation permitting, traditional high-street pharmacies will start experiencing the same shift in buying behaviours that the retail high street has been experiencing in recent years¹⁷. Conservative estimates suggest that these new channels should account for at least 20 per cent of all volumes.

With the emphasis on increasing patients' multi-channel engagement with health services, the pharmacy profession needs to develop ways of working with these new technologies whilst ensuring patient safety and adhering to current regulation. Rapid research which includes policy consequences and guidelines is needed, particularly with regard to understanding the business economics of remote supply pharmacy.

Exploratory research is required to scope the current 'state of play' of internet / remote supply pharmacy. This is likely to require a transnational focus and to address fundamental questions regarding the current state of play, including the current size and scope of the internet business and existing and future priorities, strategies & business practices of large businesses engaged in community pharmacy.

II. Regulation & Legislation

Multi-channel delivery of health services brings new challenges for healthcare regulators. Debate over how well current legislation 'fits' with new forms of social interaction has already been seen in relation to the (mis)use of social media such as Facebook and Twitter; with some professional bodies, such as the Royal College of Nursing, responding to concerns by issuing guidance to members on their personal use of such media.

¹⁷ *The Future of Community Pharmacy in England* Kearney A.T PP 9
<http://www.atkearney.co.uk/documents/10192/649132/The+Future+of+Community+Pharmacy.pdf/1838dede-b95a-4989-8600-6b435bd00171> accessed 11-06-13

Counterfeit pharmacy is a recognised concern and there is growing awareness of the misuse of POM and OTC drugs obtained via remote supply. In addition to understanding and managing these illegal or illicit uses of remote supply pharmacy, research is needed to examine the ways in which current regulation of pharmacy practice and legislation governing the supply and use of different classifications of medicines can or will 'fit' with this expanding landscape of multi-channel delivery of appropriate pharmacy services. This research needs to produce useful and timely evidence-based recommendations for policy and practice.

III. Health Care Delivery

The digital revolution provides a range of opportunities both to enhance current care and to develop new care delivery options. Research is needed into the ways in which pharmacy can use multiple channels to deliver the right services to patients whilst ensuring positive clinical outcomes, patient safety and appropriate use of NHS resources. This research needs to focus on both practical and ethical considerations and incorporate patient experience. Areas of interest include, but are not restricted to, the following:

- Internet prescribing / repeat prescribing
- Supply issues
- Shared electronic records
- Self management
- Patient access to records and test results
- Multi-channel patient interaction and advice giving
- Telecare
- Health inequalities

3. The Roles and Competencies of Pharmacy Technicians

Background

The nature of both pharmacy practice, and the pharmacy workforce, has changed over recent years and developments continue which reflect and respond to current and future health needs and care delivery models. One aspect of these changes is the mandatory registration (since July 2011) of pharmacy technicians and their regulation by the General Pharmaceutical Council (GPhC).

In order to practice in Britain, pharmacy technicians must be registered with the GPhC. Registration requires holding GPhC approved qualifications and meeting their work experience requirements. Until 30th June 2011, temporary arrangements, called 'grandparenting', made registration possible for trained and experienced technicians who did not hold a GPhC approved qualification.

Pharmacy technician registration can be understood as one aspect of modernising the pharmacy workforce and, in particular, was viewed as an enabler for responsible pharmacist and supervision legislation. As pharmacy practice and the pharmacy workforce develop it is important to explore the actual and potential role of pharmacy technicians in delivering high quality pharmacy services for the benefit of patients.

Initial scoping and exploratory work has identified two areas under the theme of The Roles and Competencies of Pharmacy Technicians in which research could usefully be conducted. This list is not exhaustive and we welcome all funding applications which can inform and influence policy and practice under this priority.

I. Optimising the skill mix of the pharmacy team

Pharmacies provide a range of services to patients beyond the safe and efficient supply of medicines. In order to deliver these services, pharmacies need to employ the collective skill mix of the pharmacy team. Research is needed which examines the impact of registered pharmacy technicians on actual and potential skill mix arrangements within pharmacy. In particular, greater clarity is needed on the competencies, roles, responsibilities and accountability of pharmacy technicians in order to understand their potential in delivering pharmacy services.

Within community pharmacy, there has been some feedback, so far without formal evidence, that some registered pharmacy technicians do not have the levels of competence needed to deliver high quality pharmacy services. It is not clear whether this shortfall is measured against current standards or against perceived standards that will emerge as a result of remote supervision.

Research is needed to identify specific competency issues, gain an understanding of why these issues arise and identify solutions that organisations could adopt in order to ensure pharmacy technicians are fully integrated into the pharmacy workforce and equipped with both the competencies and opportunities they need to fulfill their roles.

In order to delegate and use skill mix appropriately, pharmacists need to be confident in the competencies of their staff and to work within current legislation and guidelines which define responsibilities and accountabilities. Anecdotally, it has been suggested that pharmacists can be reluctant to delegate either because they are unsure as to what skills and competencies are within their team or there is a lack of clarity or understanding around lines of responsibility and accountability.

Clarity is needed on the roles and competencies of pharmacy technicians, on the readiness of pharmacy teams for extended roles and responsibilities, and on the barriers and enablers to effective delegation in order to develop effective skill mix arrangements and models. This research should be mindful of the potential consequences of developing skill mix models, including potential changes to salary structure and the impact changes may have on the wider pharmacy workforce.

II. Professionalisation And Pharmacy Technicians

Within pharmacy, pharmacists and pharmacy technicians are both registered healthcare professionals and, as such, they have a duty to achieve and maintain the skills and competencies required to undertake their roles. In addition, healthcare professionals need to have confidence in the decisions they make and be responsible for actions undertaken.

Anecdotal evidence suggests that many pharmacy technicians do not view themselves as professionals. In order to adopt a professional status, with the responsibility and accountability that entails, cultural change within organisations may be required. Research is needed to gain an understanding of the current situation regarding pharmacy technicians' adoption of a professional status. This research needs to investigate both barriers and enablers to adopting and demonstrating professionalism and to enable the development of focused solutions.

Previous research¹⁸ has been undertaken on this topic but was exclusively limited to hospital pharmacy. As the majority of pharmacy technicians work in community pharmacy where skill mix arrangements and working relationships often differ from those in hospital, wider research is required which can examine these contextual differences.

4. Patient and Professional Experience & Understanding of Pharmacy

Background

Pharmacists do not work in isolation; every day they are in contact with a large and varied number of patients, and they are often required to work in partnership with other healthcare professionals (HCPs). It is often stated that pharmacists work at the heart of the community making them ideally placed to promote and deliver services to improve the health of patients and the public. Likewise hospital pharmacists are involved in the care of almost every patient. However, we do not know the degree to which the public is aware of pharmacy services beyond the sale and supply of medicines. Similarly, many healthcare professionals may be unaware of the wide-ranging roles that pharmacists play. In order to further develop and optimise roles and services it is vital to know what both patients and non-pharmacy healthcare professionals understand about pharmacy and pharmacists, and their expectations and experiences of them. From here, we can identify any gaps in knowledge and understanding, and take steps to address them.

Initial scoping and exploratory work has identified two areas under the theme of Patient and Professional Experience & Understanding of Pharmacy on which research could usefully be conducted. This list is not exhaustive and we welcome all funding applications which can inform and influence policy and practice under this priority.

I. Patient Experience and Understanding of Pharmacy

In order to maximise the potential of community pharmacies and all that they offer at a convenient location, the public need to be aware of the knowledge, expertise and services on offer. In addition patients need to be fully involved in their own care with decisions made in partnership with healthcare professionals rather than by HCPs alone. This is the basis of shared decision-making and the 'nothing

¹⁸ http://www.leeds.ac.uk/medicine/meu/lifelong07/Helen_Middleton.pdf accessed 11-06-13

about me without me' principle described in the 'Equity and Excellence: Liberating the NHS' white paper¹⁹. Patient experience and feedback are vital parts of service design, delivery and improvement, and it has been shown that involving patients in their care and treatment improves their health outcomes, boosts their satisfaction with services received, and increases not just their knowledge and understanding of their health status but also their adherence to a chosen treatment. Fundamental to this patient involvement is an understanding of what patients know about the care they are receiving and how they experience the provision of this care. Within the scope of pharmacy there is very little evidence about patient's expectations, experiences and understanding of the services they are receiving and this must therefore be a starting point for research in this area.

Possible areas for investigation include:

- What do patients know and understand about pharmacy and pharmacists; what do they think pharmacists know and don't know, what role do they think pharmacists perform (in community and in hospital), what services do they think that pharmacies provide, what commonalities and differences do patients think pharmacists have with other HCPs?
- What are patients' expectations and experiences of pharmacy and pharmacists?
- How can we measure and improve the patient experience?
- What are pharmacists' perceptions of patient knowledge, understanding and expectation of pharmacy; what do pharmacists think patients are thinking / wanting, and is this accurate?

II. Other HCP Experience and Understanding of Pharmacy

Pharmacists today are regularly required to work with other healthcare professionals, for example during transfer of care, or as part of multi-professional teams in settings other than pharmacies. The GPhC Standards for the initial education and training of pharmacists state that pharmacists must 'know how to engage in multidisciplinary team working and collaborate with other healthcare professionals' and that the curriculum should include 'learning based on experience that provides education in inter-professional practices and procedures with other healthcare professionals'.²⁰ The inclusion of these outcomes illustrates the importance of effective multi-professional working within pharmacy, as a means to improve patient care. Segregation of students based on their chosen professional pathway

¹⁹ Equity and Excellence: Liberating the NHS. Department of Health (2010)
<https://www.gov.uk/government/publications/liberating-the-nhs-white-paper> accessed 11-06-13

²⁰ http://www.pharmacyregulation.org/sites/default/files/GPhC_Future_Pharmacists.pdf accessed 11-06-13

continues to be the norm even though much research literature challenges this practice, and segregation means that there is limited opportunity to learn about the different remits, targets, processes and even ethics, values and philosophies of working which vary between professions and can ultimately cause problems when trying to work together. In order to achieve effective interprofessional collaboration with pharmacy, we need to first understand what other healthcare professions know about pharmacy and pharmacists.

Possible areas for investigation include:

- What do HCPs know and understand about pharmacy and pharmacists?
- HCP experience of working with pharmacy and pharmacists
- Effectiveness of pharmacists working within multi-professional teams
- Methods and effectiveness of communication between HCPs during transfer of care
- Barriers and enablers to multi-professional working, understanding and awareness of differences between ways of working in different professions
- Professionalism, relationships with other HCPs and within own profession

5. The Contribution of Pharmacy to Public Health

Background

Public Health can be defined as ‘the science and art of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention.’²¹ Public health works to prevent health problems before they occur, and inherent in this is a cost-saving element; not only in direct healthcare related costs in the future, but additionally in retained economic activity within the population. Whilst it is clear that public health offers opportunities for substantial long term savings for the Treasury in the future, in the current economic climate a strong evidence base is required to justify a continued, and ideally increased, investment in public health.

Health inequalities are preventable, unjust differences in health status that exist between groups, populations or individuals. They exist because of unequal distributions of social, environmental and

²¹ <http://www.whatispublichealth.org/> accessed 11-06-13

economic conditions within societies, which determine the risk of people getting ill, their ability to prevent sickness, or opportunities to have access to the right treatments. Factors such as income, level of education, access to employment, geographic region, gender and ethnicity all influence health status, and whilst some health inequalities are attributable to biological variations or free choice, the majority are generally attributable to the external environment and conditions mainly outside the control of the individuals concerned. Reducing health inequalities therefore requires a holistic approach, one part of which lies with the health sector.

With their expert knowledge and skills, as well as being accessible to the public at a time convenient to them, community pharmacists are ideally placed to be professional advocates for public health on the front line of healthcare. Opportunities identified (by DH in 2010) for community pharmacy include NHS health checks, tackling drug and alcohol misuse, promoting healthy lifestyles, preventing long term illness, and increasing the uptake of seasonal flu vaccinations.²² People often visit pharmacy to self-manage and self-medicate conditions and minor symptoms such as minor respiratory conditions (e.g. coughs and colds), minor GI conditions (e.g. heartburn), minor analgesic needs (e.g. back pain). With millions of contacts with the public each day, community pharmacy teams can provide services and signpost to other healthcare providers to improve health and wellbeing and reduce health inequalities.

Community pharmacies are increasingly offering a suite of ‘advanced and enhanced’ services within the remit of public health such as:

- Smoking cessation services
- Emergency hormonal contraception provision
- Prevention and management of drug abuse, misuse and addiction: supervised methadone consumption, needle exchange schemes, services for alcohol misuse
- Healthy eating and lifestyle advice: weight management services
- Chronic disease management: e.g. clinics for blood pressure, cholesterol, diabetes, asthma
- Infection control and prevention: e.g. vaccinations for seasonal flu, HPV, hepatitis B; screening for chlamydia, hepatitis

²² Healthy Lives, Healthy People – our strategy for public health in England. Department of Health (2010) <https://www.gov.uk/government/publications/healthy-lives-healthy-people-our-strategy-for-public-health-in-england> accessed 11-06-13

– Minor ailments schemes

Healthy Living Pharmacy is a concept developed in Portsmouth in 2009 and subsequently trialed in 20 sites across England in 2012.²³ It seeks to provide a range of enhanced and advanced public health services relevant to the needs of the local community, and ‘package’ them within the Healthy Living Pharmacy brand which serves to demonstrate quality and increase public awareness of what pharmacy can offer. As of March 2013 there were 425 Healthy Living Pharmacies and 1,200 health champions, and pharmacy footfall is reported to be increasing as a result of the initiative.

However, there are still some more fundamental barriers to pharmacy’s contribution to the public health agenda, one of which is structural issues, which include IT and information sharing. An example of this is the need for clinical data to invite people to an NHS health check. Secondly, it is often not feasible to plan large scale RCTs in community pharmacy; however data held by pharmacy companies could be very useful as an alternative. Finally, despite the considerable interest recently shown by UK Governments in further developing the public health role of pharmacy^{24,25}, there has been a lack of growth of UK studies in many key areas of public health and this is a matter for concern.

Broadly speaking there is evidence that community pharmacy ‘can do’ public health and that it is effective. Evidence is strongest in services including smoking cessation, cardiovascular disease prevention, blood pressure management, and aspects of the management of diabetes, asthma and heart failure.

Initial scoping and exploratory work has identified several areas under the theme The Contribution of Pharmacy to Public Health on which research could usefully be conducted. This list is not exhaustive and we welcome all funding applications which can inform and influence policy and practice under this priority.

²³ Evans D, Kennington E.J, Shepherd E, Duggan C, Leach R, Root G, Holden M. Evaluation of the Healthy Living Pharmacy Pathfinder Work Programme 2011-2012. (2013)

<http://www.npa.co.uk/Documents/Docstore/Representing-you/Evaluation.pdf> accessed 11-06-13

²⁴ Healthy Lives, Healthy People – our strategy for public health in England. Department of Health (2010)
<https://www.gov.uk/government/publications/healthy-lives-healthy-people-our-strategy-for-public-health-in-england> accessed 11-06-13

²⁵ Pharmacy in England – Building on strengths, delivering the future. Department of Health (2008)
<http://www.official-documents.gov.uk/document/cm73/7341/7341.pdf> accessed 11-06-13

Potential areas for research:

- Whilst there is evidence that community pharmacy 'can do' public health effectively, there is little evidence to suggest that it is cost effective, or more effective than other providers.
- Evidence of effectiveness is less strong in areas of COPD, infection control, substance abuse, weight management, minor ailments and EHC supply outcomes. Successes have been reported with these schemes however the evidence is not strong enough to justify investment.
- The effectiveness of pharmacy in delivering NHS health checks
- The public's awareness of / acceptance of receiving public health interventions in community pharmacy
- The role of pharmacists in the early detection and awareness raising (e.g. cancer)
- The role of pharmacists in addressing health inequalities e.g. does pharmacy address the needs of "vulnerable" sub-populations?
- How does provision of public health services fit within the corporate plans & business models of pharmacies, and what drives service provision in this area?
- Does the education & professional training of pharmacists prepare them (properly/fully) for public health roles & responsibilities?