The Royal Pharmaceutical Society (RPS) believes that primary care patients should have the benefit of a pharmacist's clinical expertise similar to that currently experienced by patients in hospital.

Introduction

There are many good examples of innovative practice in primary care that integrate the skills of pharmacists as part of coordinated care to improve patient outcomes and safety whilst also reducing prescribing and downstream care costs. This is delivered in a number of ways: from an enhanced role for the pharmacist in a community pharmacy through arrangements for sessional working within surgeries or care homes and also partnership with GP surgeries. We believe there is a compelling case for it to become normal practice to have pharmacists working much more closely with GPs across England. With current and future shortfall in GP and nurse numbers, pharmacists are ideally placed to support their fellow professionals and improve the quality of care for patients.

Recommendations

The RPS is asking:

• General Practitioners to embrace the potential that pharmacists can bring to the care of their patients
• Local Commissioners to include pharmacist expertise in all care pathways that use medicines including the formal involvement of community pharmacists in local care pathways
• NHS England to support the spread of good practice and the dissemination of evidence which shows the benefits of pharmacist input in GP surgeries

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1 Pulse, 1st August 2014: http://www.pulsetoday.co.uk/your-practice/practice-topics/employment/practices-offered-400k-emergency-fund-to-ease-gp-shortage/

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Background

We know that patients are currently experiencing suboptimal care in relation to their medicines:

- Up to 50% of medicines are not taken as intended by the prescriber.
- Between 5% to 8% of all unplanned hospital admissions are due to issues related to medicines (this figure rises to 17% in the over 65s).
- Medicines waste is a significant issue; reported as £300 million in primary care alone, about half of which is avoidable. In addition an excess of £500 million per annum is the estimated opportunity cost of the health gains foregone because of incorrect or inadequate medicine taking.
- Medicine safety data indicate that we could do much better at reporting and preventing avoidable harm from medicines.
- Multi-morbidity and inappropriate polypharmacy in frail elderly people can be problematic. These patients need regular review of their medicines to ensure that all medicines prescribed, or bought over the counter, are safe and appropriate. As a patient’s physical health declines, he or she is at increased risk of adverse events such as falls or side-effects. Pharmacists have much to contribute to the care of these patients and are experts in assessing whether benefits of continuing medication outweighs risks.
- There is often a communication breakdown at the point of discharge from hospital resulting in prescribing errors. These errors can lead to damage to health, much time wasted for administrative and clinical teams in primary care and potential re-admission to hospital. Pharmacists are well placed to improve care across the interfaces between specialist providers and the wider primary and community care teams including GP surgeries and community pharmacists.
- From the patient perspective, with increased focus on patient-centred care, there is much more to be done to allay concerns about polypharmacy and address the lack of support with medicines taking. Pharmacists are specifically trained to be experts in the optimal use of medicines in multi-morbidity. These skills ideally complement the role of GPs and practice nurses and add to the range of knowledge available in GP surgeries to manage increasingly complex care.

There is increased demand on general practice caused by demographic changes, more complex health needs, and some care moving out of hospitals which is contributing to unsustainable pressures on the service. GPs are reporting a worrying impact on their delivery of care to patients. The BMA’s General Practitioners Committee campaign, Your GP Cares, highlights the issue of a lack of GPs available to meet the current workload.

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4 http://www.kingsfund.org.uk/publications/polypharmacy-and-medicines-optimisation
4 http://www.kingsfund.org.uk/publications/polypharmacy-and-medicines-optimisation
7 http://bma.org.uk/working-for-change/your-gp-cares
The 2010 PINCER study found that pharmacists play a critical role in reducing medicine errors in general practice. The study implemented a pharmacist-led information technology intervention (PINCER) composed of feedback and educational outreach to a randomised subset of 72 primary care practices in the United Kingdom. Six months after the intervention, patients in the PINCER group experienced substantially reduced frequency of clinically important prescription errors (e.g. beta blocker in a patient with asthma) and medicine monitoring errors (e.g. ACE inhibitor in an elderly patient without assessing electrolytes). The interventions made were acceptable to practices and pharmacists and were seen as cost effective by decision makers.

In 2012 a further study, the PRACtICe study, found that 1 in 20 prescription items contained either a prescribing or monitoring error, affecting 1 in 8 patients. Although the majority of errors were judged to be either of mild or moderate severity, 1 in 550 of all prescription items contained an error judged to be ‘severe’. The report recommended that pharmacists can play a greater role in mitigating the occurrence of error, through reviewing patients with complex medicines regimens at a practice level and in identifying and informing the GP of errors at the point of dispensing.

Pharmacists can deliver safe, high quality, effective and efficient care to patients. As experts in medicines and their use, they play a crucial role in supporting patients to take those medicines as part of a shared decision making process, as well as ensuring patients get the right medicines.

Having a pharmacist as part of the clinical team within a practice can relieve work pressure on GPs to free up time for the GP to spend with patients with complex medical needs. Pharmacists can play a significant role in managing patients with long term conditions such as asthma, diabetes and hypertension but can also be a resource in managing patients with complex medicines requiring frequent monitoring, patients with problematic polypharmacy or those with special medicine needs, for example in patients with poor kidney function. There are many examples of this occurring across the country and feedback from the multidisciplinary team has welcomed the pharmacist’s expertise in managing risk in patients with complex care.

The role of the pharmacist as a clinician has been strengthened by the development of prescribing rights, allowing both supplementary and independent prescribing for pharmacists. Utilising the skills of an independent pharmacist prescriber within a GP practice was highlighted by Dr Keith Ridge, Chief Pharmaceutical Officer at NHS England who shared Rachel’s story. Rachel is an independent pharmacist prescriber in a GP practice. She runs her own clinics, undertakes research and supports her fellow clinicians in “all things medicines”. Initially employed on a sessional basis, her support to the team became invaluable and led to her becoming a partner in the practice.

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9 http://www.gmc-uk.org/about/research/12996.asp
10 http://www.england.nhs.uk/2014/06/10/keith-ridge/?app_data=%7B%22pi%22%3A%22555153%22%2C%22pt%22%3A%2210%22%7D
The role of pharmacists working with GP surgeries

The impact pharmacists can make on patient care in general practice are huge and varied, and just some examples are listed below;

Resolving problems with medicines:
- Working closely with the GPs to resolve day to day medicines issues (similar to pharmacists working on hospital wards)
- Liaising with relevant hospital, community and primary care colleagues to ensure correct medicines follow up on transfer of care
- Working with practice teams providing clinical medicine advice to care homes and domiciliary care support
- Ensuring that problems highlighted during medicine use reviews in community pharmacies, particularly for those patients experiencing polypharmacy, are followed up
- Working closely with local community pharmacists to resolve problems with prescriptions
- Running chronic disease clinics and liaising with practice nurses on changes of medicines

Prescribing:
- Managing a cohort of patients, if appropriate, within a particular area of expertise
- Advising on polypharmacy, suggesting alternatives and helping to reduce wastage within the practice
- Responding to discharge from hospital and liaising with local pharmacies
- Supporting a programme of medicine reviews within the practice
- Education and training for GPs on complex prescribing problems
- Leading on high risk prescribing to ensure safety e.g. methotrexate / warfarin
- Rationalising repeat prescription lists to avoid waste and duplication
-Assisting on transfer to electronic prescribing and maintenance of the system
- Leading the practice repeat prescription service and dealing with queries from reception staff and patients

Audits and processes:
- Prescribing audits
- Delivering ‘Prescribing Incentive Scheme’ targets
- Supporting Quality Outcome Frameworks.
The RPS considers that such roles will fundamentally improve the safety and integration of the medicines pathways, ensuring that excellent communication and collaboration between pharmacist colleagues working in both primary and secondary care helps to positively impact on the many medicines related problems that occur, particularly at the point of transfer between care settings.

Pharmacists in general practice can be a vital source of clinical care especially if they are independent pharmacist prescribers. They contribute hugely to patient care and support the medicines optimisation agenda. Patient empowerment is enabled via the medicines optimisation clinics and patients have a forum whereby complex medicines related queries are answered thus supporting adherence and improvement in health outcomes.

GP based pharmacists can also support the contractual elements of the contract such as the implementation of the enhanced services, preparation for CQC, training of staff in repeat prescription process, medicines information for other clinicians and access to an expert in complex, polypharmacy issues.

**Utilising community pharmacists**

The Community Pharmacy Future (CPF) project\(^1\), a collaboration between Boots UK, The Co-operative Pharmacy, Lloyds Pharmacy and Rowlands Pharmacy looked at a deeper role for community pharmacy in long term conditions. The evaluation concluded that community pharmacy can save the NHS over £470 million each year if services were rolled out across England.

The project included three schemes: a ‘four or more medicines’ support service in Wigan for patients over 65 taking four or more medicines; an award winning\(^2\) chronic obstructive pulmonary disease (COPD) support service in the Wirral and a COPD case finding service also in the Wirral designed to identify undiagnosed COPD patients. This service has changed the way of working between professional colleagues. One of the GPs involved in the service said “Together, we were able to devise a process from screening patients for COPD all the way through to diagnosis. It was invaluable to have the pharmacy involved as it meant that patients were no longer being lost between the screening and diagnostic stages. The service also benefited the surgery by helping existing patients to manage their condition.”

\(^1\) [http://www.communitypharmacyfuture.org.uk/](http://www.communitypharmacyfuture.org.uk/)
\(^2\) BMJ respiratory team of the year 2014
Making it work in practice:

Scenario 1: A pharmacist could be employed by an individual GP practice. This was the case in Greenwich CCG where Rena Amin, a pharmacist prescriber specialising in respiratory medicines, was initially employed by a local GP practice. They found her contributions so useful that she is now a partner in the practice.

‘I think Rena personifies the notion of community integration: a pharmacist, a partner in a general practice, and a commissioner leading on medicines management. She has a wealth of knowledge relating to medicines optimisation, and can influence the care for patients at a local level (through her practice, and patient interaction), and at a population level through her work as a commissioner (supporting her membership of practices; and providing innovative QIPP initiatives which are both practical, patient centric, and whole system related).

Looking to the future of primary care I hope we have more people like Rena in the system to act as integration catalysts: to further support the collaboration (federation) between general practices and pharmacists, creating a community model of care delivery, with a focus on improving patient outcomes’. Dr Junaid Bajwa, GP, CCG Board Member NHS Greenwich, Member of the London Clinical Senate

In Rena’s practice the QOF performance for LTCs has always been optimal and bar a few exceptions (due to frailty, patient dissent) all patients are reviewed at least annually or more in some patients. Medicines optimisation is promoted and patient centred care is provided to individual patients. Their practice budget for prescribing and hospital spend is well within the accepted range for the CCG and under spent. The practice’s referral data shows that compared to the other specialties, referral to respiratory medicines is minimal thus showing that patients in primary care are fully optimised to the level it is appropriate for their care.

In Bristol, another pharmacist prescriber has also been made a partner in a GP practice. The pharmacist focuses on diabetes and hypertension and she has improved the care of these patients without increasing the prescribing costs. Having a pharmacist prescriber as a partner in the practice has enabled them to stay within their prescribing budget despite an increasing list size, and also maintain an average cost per prescription item (£5.92) which is significantly lower than the local (£7.49) and national (£8.20) averages. The patients have welcomed the pharmacists’ input as they realise the benefit of having a medicines expert within the practice who they can contact with queries. Patients seeing the pharmacist have 20 minute appointments so a longer time to discuss their issues and sometimes multiple conditions. The pharmacist works closely with the local diabetes teams and refers on when necessary. She refers patients to various secondary care services including endocrinology, urology, dermatology, cardiology, rheumatology, weight management services etc.
Scenario 2: Pharmacists could be employed by a Clinical Commissioning Group (CCG) to provide clinical input to their GP surgeries. These pharmacists would provide a purely clinical role over and above switches of medicines and monitoring of prescribing.

Anna Murphy, a Consultant Respiratory Pharmacist at University Hospitals of Leicester NHS Trust has been commissioned by one CCG in Leicester to support GP COPD services. Over the last 15 months, Anna has delivered a respiratory clinic within a GP practice, helping to support patient accurate diagnosis, medicine optimisation and patient self-management. Educational sessions to all GP staff on inhaler technique and medicine optimisation have been delivered throughout the year. Outcomes from this post are currently being evaluated.

Scenario 3: A social enterprise could be set up involving a number of healthcare professions across the primary care team.

In NHS Gateshead, NHS South Tyneside and NHS Sunderland CCGs they have set up a model akin to a social enterprise, although the parent company is a company limited by guarantee. They are a not for profit organisation that covers 116 GP surgeries. The pharmacy team are paid to deliver a set number of hours for a fixed annual price and are made up of a mix of employed and self-employed pharmacists and pharmacy technicians. The contract specifies a percentage of the time has to be covered by a pharmacist rather than a pharmacy technician. The not for profit setup helps them to achieve this even with long-term established (aka high band / salary / hourly rate) pharmacists. Some members of the pharmacy team have been part of this work for many years. This benefits practices and ultimately their patients due to continuity and long term relationships.

In Birmingham Cross City CCG a social enterprise was established to provide support to patients at home who nearing the end of life. The team included 3 pharmacists, 2 of whom were independent prescribers, and 1 pharmacy technician. The organisation support patients to die at home and are able to provide symptom control and pain relief via the pharmacist members. The pharmacy team can visit any patient in their preferred place of care with a GP from the area. They also offer an advice only service to healthcare professionals dealing with patients outside of the local area. Their records are held electronically so there is the potential to pull off data where needed on patient encounters, interventions, contact methods etc. All of their patients have an estimated prognosis of six months of life or less at the time of referral to the pharmacy team.
Scenario 4:
A pharmacist could be contracted with on a sessional basis to provide clinical input into one or more GP surgeries. This could include working with local community pharmacists.

In Bath and North East Somerset a team of practice pharmacists (approx. 1 session per week per practice) has been established across the 27 practices. They are mostly sessional pharmacists and their agenda is a blend of the CCGs priorities: Effectiveness, Safety and Cost Effectives in use of Medicines, plus the practices agenda plus the agenda they develop in their various situations. This model has been embedded over the last 6 years and the pharmacists are very much appreciated and respected within their practices. The pharmacists come from a variety of backgrounds: Community, Hospital and ones who are making practice work their primary career.

Scenario 5:
Residents living in Care Homes are often more vulnerable than those living in their own homes. Studies have shown that 7 in 10 residents in Care Homes have a problem with their medicines at any one time. This report, ‘Care Homes Use of Medicines Study’, spoke about lack of ownership of the whole medicines system and leadership in reducing medication errors. We believe that having a pharmacist who is responsible and accountable for the management of medicines within that setting would reduce medication errors as they would provide the oversight across the whole system. Pharmacists could be contracted with to provide particular services such as provision of a clinical service to Care Home patients which would include reviews of patients medicines.

A recent Health Foundation project undertaken in Northumbria demonstrated the benefit of pharmacist interventions in Care Homes. Using pharmacist prescribers employed by the local NHS Trust to carry out medication reviews with residents and their families they demonstrated a cost effective model which could be undertaken in other areas. The key results from the study were:

- 422 resident reviews carried out
- 1,346 interventions made, the majority of which were to stop medicines
- 1.7 medicines stopped for every resident reviewed
- The main reasons for stopping medicines were there being no current indication or residents’ request to stop
- The net annualised savings were £77,703, or £184 per person reviewed
- For every £1 invested in the intervention, £2.38 could be released from the medicines budget.

Pharmacists could also be contracted with to provide domiciliary visits to those patients who are housebound and often taking a number of medicines. In Croydon, community pharmacists, trained and supported by primary care pharmacists, delivered domiciliary medicine use reviews (MURs) to patients in the local area. The interventions demonstrated better patient care and avoidance of hospital admissions. A summary of activity for 13/14 shows that 322 reviews were conducted, estimated to have avoided 83 emergency admissions giving a cost avoidance of £234,000. Data for the first six months of 13/14 has been analysed to see the actual impact of the service on emergency admissions. The number of emergency admissions for six months before and after each review has been compared for 124 people who received the service from April to September 2013. 24 patients showed a reduction in emergency admissions following the review and 75 patients had no emergency admissions during this period implying no deterioration. Overall there was a net reduction of 84 bed days.

Brighton and Hove CCG have contracted an independent medicines optimisation organisation to undertake medication reviews for 2000 care home residents on behalf (and working closely with) all GP surgeries. The scheme has been very successful - well received by GPs, Care Homes and residents - and is now in its third year. Quality of care and risk reduction is the main drivers for this scheme but value is also important. Savings last year due to medicines stopped were over £300K and about the same again estimated as savings from avoided admissions.

**Scenario 6:**
As GP surgeries federate to provide a more efficient and effective service to patients across a wide area, local pharmacists and pharmacies could become part of those federations.

The Prime Ministers Challenge Fund model being developed in Brighton and Hove is a network of GP surgeries working closely with community pharmacies. The pharmacists working in the community pharmacies will have read and write access to patient records, with patient consent, and can treat a range of conditions that would commonly have resulted in a GP appointment or A&E attendance.

**Scenario 7:**
Local community pharmacists could come together in a number of ways to provide services to GP surgeries. For example they could use the model of two pharmacists per pharmacy in order to enable flexibility so they could be more involved with the local GP surgeries.

A pharmacy in Bromley by Bow has a Local Pharmaceutical Service (LPS) contract and has led the formation of a pharmacist federation which covers 40-50,000 population. They are in early stages of developing pharmacists within the federation to become prescribers, particularly looking at delivery of common ailments services throughout the locality. The federation consists of seven community pharmacies who are working collaboratively to support local commissioners to deliver high quality clinical care to patients. The pharmacists are also closely involved in local care pathways.
The Medicine Use Review (MUR) and New Medicine Service (NMS) provided by community pharmacists in England need to be integrated into care/patient pathways so that they become part of normal practice. A recently published national evaluation of the NMS service\textsuperscript{15} demonstrates the added benefit this brings to patients and the overall cost saving this provides to the NHS. Local community pharmacists and GPs should work closely together to ensure that the patients targeted for these services are a priority for commissioners. These services are already funded via the national pharmacy contract.

\textsuperscript{15}http://www.nottingham.ac.uk/~pazmjb/nms/