ROYAL
PHARMACEUTICAL
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England

Case studies for pharmacists and GP surgeries

Case Study one

Having a pharmacist working as part of the team in a GP practice isn't a brand new idea – I've been doing it for the last ten years.

Pharmacists are fully qualified for the job. We train as clinicians for five years – one year less than a doctor, one year more than a nurse – and can step in and make a real difference to the care patients receive and the workload of our GP colleagues.

I manage patients with complex needs which removes a significant workload from our GPs in the practice. People with long term conditions, such as asthma or diabetes, particularly benefit from having a pharmacist to help them navigate the conflicting and confusing information they sometimes receive about their treatment as they move between hospital and community care.

I also liaise with hospitals, community pharmacists and community nursing teams to ensure seamless care for patients. Providing more integrated care gives me huge satisfaction and my patients are happy too. If a local pharmacy is conducting productive medicines use reviews or providing a high-quality smoking cessation service, I know that our practice does not need to repeat that work. I am also a point of contact for community pharmacists in the area should they have any prescription queries.

For the practice itself, I can advise colleagues how to resolve problems with medicines, especially the high risk ones, sort out prescriptions from hospital and train our clinical and non-clinical colleagues in the practice.

Our practice has one of the lowest A&E attendances in the area, further demonstrating that our patients with long term conditions are keeping well thanks to our help, their own efforts and care they receive from the whole team.

Morning

I run a clinic between 8.30am and 11am. My scope of practice covers elderly care, respiratory diseases and cardiovascular diseases. I can perform respiratory diagnostic assessments on patients with asthma and chronic obstructive pulmonary disease, write referrals to consultants and initiate treatment.

"I see any patient who requires some form of medicines management or medicines optimisation, such as agreeing concordance plans with patients who are struggling to take their medicines,"

Patients who are on complex medication regimens or who have had an adverse effect from a medicine will also be managed at one of the pharmacist's clinics.

After clinic, I tackle any medicines-related queries from patients, community pharmacists, receptionists or GPs. Lunch is usually preceded by a clinical or multidisciplinary meeting.

Afternoon

Afternoons are dedicated to dealing with correspondence from secondary care. I consider each medicine on a discharge summary or outpatient letter and review it against the patient's acute and repeat medicines list. I make any necessary amendments and organise any dose titrations or blood monitoring that has been advised.

I also liaises with consultants who request a non-formulary or unlicensed treatment to be prescribed.

For the remainder of the day I conduct audits, run patient engagement forums, share medicines management updates with the clinical team and provide training for practice staff.

Case study two:

I have made many interventions which have prevented an admission or readmission. One that springs to mind was an elderly gentlemen with CCF who was discharged with pioglitazone for his diabetes. As soon as I saw the discharge summary I liaised with our onsite community pharmacy to send out new monitored dosage systems urgently without the pioglitazone.

I review all discharge summaries and often make significant interventions, and change medicines to cost-effective formulary choices where necessary. I also prompt GP or District Nurse reviews if I think they are needed and not been specifically asked for or call patients in for medication reviews (or visit them at home) if needed.

Improved outcomes are demonstrated by our excellent QOF results. Diabetes and hypertension are my main areas of prescribing and we have improved the care of these patients without increasing our prescribing costs (in fact they are significantly below the national average). Patients seeing me have 20 minute appointments so a longer time to discuss their issues and sometimes multiple conditions.

I work closely with the local diabetes teams and refer on when necessary as some patients are highly complex and beyond my competence. I refer patients to various secondary care services including endocrinology, urology, dermatology, cardiology, rheumatology, weight management services etc.

I have also been involved in improving the systems for repeat prescriptions in the surgery by training the prescription clerks, writing protocols for them to follow, setting up Repeat Dispensing, reauthorisations of repeats when the review date is over/ number of issues expire, and liaising with community pharmacy about queries. So despite the increasing number of repeat prescriptions coming through the surgery the workload is managed as efficiently as possible.

I undertake work for the local CCG Prescribing Incentive Scheme which includes medication audits, drug switches, process reviews (e.g. repeat prescriptions) etc.

So in summary, I think the benefits of a clinical pharmacist in a GP surgery are:

- Improved patient care: prescribing for or management of Long Term Conditions
- Reduction in inappropriate prescribing
- Improved access to a clinician: longer appointments and pre-bookable up to 1 month in advance

- Better skill mix: GPs and practice staff have medicines info 'on tap'
- Improved QOF results
- Reduced prescribing costs: we have been under budget since 1 year after I started working here
- Job satisfaction: It's the most rewarding role I have had to date!

Recently being made a partner in the surgery was an endorsement of the value I have added over the past 8 years and recognition of my hard work. The patients have welcomed this as they realise the benefit of having a medications expert within the practice who they can contact with queries. My colleagues see me as an integral part of the primary health care team especially as the most common intervention for patients is to prescribe medicines. I help to ensure cost effective prescribing and adherence to local formularies. Over the years a culture has developed whereby doctors will discuss requests for unusual medications with me before they prescribe. This has enabled us to stay within our prescribing budget despite an increasing list size, and also maintain an average cost per prescription item which is significantly lower than the National average

Case study three:

What does our Practice Pharmacist do?

1. Reauthorises repeat prescriptions and conducts medication reviews from the patient's clinic record. This ensures medicines are prescribed appropriately and all have a clinical indication. All reviews and blood tests are checked to ensure up to date.
2. Provides medicine information to GPs and nurses. This includes formulary queries, clinical queries, specific drug queries and information provided to allow Clinician to make appropriate clinical decisions.
3. Carries out audit of prescribing to ensure in accordance with local and national guidance.
4. Reviews medication and repeat prescribing policies to ensure working to standard.
5. Liaises with local Community Pharmacists to sort out prescription queries.
6. Monitor requests from Appliance Contractors, Hospital at Home etc to ensure the requests are appropriate and within formulary guidance.
7. Monitor GP epact data monthly for budget spend and any areas of high cost prescribing.
8. Monitor use of Scriptswitch.
9. Attend regular Clinical meetings where issues around prescribing are discussed and dissemination of latest clinical information from CCG, MHRA, NICE etc.

How does this benefit our patients? Our aim is to ensure the right medication at the right time to the right patient. We believe that having a Pharmacist as a member of the team improves our knowledge and prescribing and hence the clinical care of our patients.

Case study four

The practice-based pharmacists undertakes a variety of roles and brings many benefits to the practice:

1. Pharmacist-led clinics:
- NSAID reduction clinics; persuading patients to move back to simple analgesia, i.e. paracetamol.
- Benzodiazepine withdrawal clinics; dose reduction schedules with GP prescribing support.
- Epilepsy review; looking at seizure history and current status and agreement with patients over possible anticonvulsant withdrawal.
- Review of all patients on 4 or more medicines; polypharmacy review. Any redundant medicines / no longer taken which could be withdrawn. Advice to patients on the functions and optimum usage of their continuing medicines.
- Review of diabetes patients and their medications with GP referral / prescriber support.
- Review of other patients with LTCs such as asthma, COPD, CHF etc

2. Medicines Information. Finding and providing information / answers to any Medicines Information queries from GPs and other healthcare professionals attached to the practice and acting as a conduit into Medicines Information services at the local Acute Trust to obtain answers to more complex queries.

3. Review of medicines of patients with long-term conditions; visits with District Nurses attached to practices to patients' homes to review patients' medicines and advise them on their use of medicines, e.g. inhaler technique.

4. Education and training. Provision of reviews of new medicines and presentations to members of surgery staff to help them make informed choices on the use of new medicines emerging on the market, or on existing medicines for which MHRA safety reports had been issued.

5. ePACT data analysis and advice to practices on savings to be made by appropriate choices of agents in therapeutic classes by, for example, choosing generic statins, PPIs, substitution of more cost effective corticosteroid inhalers in asthma / COPD

6. Projects: For example, step-down of acid suppression medicines in patients at appropriate points in care, from PPIs down to H2-antagonists down to alginate preparations and vice-versa if patients indicate inadequate cover

7. Legal advice; on, for example, changes in Controlled Drugs legislation which would affect prescribing by the practice.

8. Provision of advice and education to Residential and Nursing homes served by the practices, as required by the Lead GP. Medication reviews with residents within these homes who are often on a large number of medicines due to multi-morbidities

Case study five

One of the key things I've been doing is giving inhaler technique and telling people how to clean their spacers etc.

I think that pharmacists do look for different things to other professionals and we are very good problem solvers. I had a trainee doctor shadowing me for a couple of visits last week and she was so impressed with what I was doing and the time spent discussing the medication and inhalers etc – she is doing a rotation on geriatrics in the hospital and was going to share the work with her consultants especially the community geriatricians.

Patient one:

This is a 79 year old gentleman who lives alone in his own house. The diabetes nurse in the GP surgery had done a home visit for his annual diabetes check and then asked me to visit as she was concerned that he wasn't taking all of his medication from his compliance aid. I visited and it was clear that he was taking most of his medication from his compliance aid but was not taking his calcium/vitamin D supplements. I discussed the need to take these tablets and advised him to continue taking them which he agreed to do. He just kept forgetting to take them as they were in a different slot to the other tablets. He wasn't testing his blood as he couldn't use the machine due to his rheumatoid arthritis. The diabetes nurse had shown his family friend how to use it when she was there as she was cleaning for him but she had stopped visiting now so he wasn't testing his blood. He also wasn't sure of what dose of insulin he was taking.

I took back a lot of compliance aids to his pharmacy which still had the calcium/vitamin D supplements. They mentioned that he had been stock piling insulin previously and that they had some concerns with his medication-taking. Back at the surgery I spoke to the clinical care co-ordinator about the social concerns with this patient and that I wasn't sure how he was managing with his insulin with his rheumatism. He was not known to her and was not on the risk scoring register. We agreed to do a joint visit the following week. In this joint visit the clinical care co-ordinator took his blood glucose, temperature and blood pressure. She also discussed his social situation and how he manages at home. I looked in the fridge to find 15 insulin pens that were all used with broken needles. I asked again about how much insulin he administers and he said it depended on how he was feeling. His blood glucose was 21.9 when tested. He had no insulin in the house and this was the Thursday before Easter weekend.

Back at the surgery I referred Mr HL to Access to Care so that the community nurses could visit twice a day to administer his insulin as it was clear he was not administering it correctly. I also had to prescribe some more insulin. It was also not clear what dose of insulin Mr HL should have been taking – the last documented dose was a number of years ago. After the weekend, Mr HL was referred by the diabetes nurse to the diabetes specialist community nurse for ongoing management. The clinical care co-ordinator is going to look at his social care needs now that his medication is being sorted.

Patient two:

I did a joint visit with the community matron to this 66 year old man with COPD. He is very high on the risk tool scoring system as he frequently attends hospital with exacerbations of COPD. He didn't know what his medication was for so I went through everything with him. He had recently been discharged from hospital and his Ramipril had been reduced. I updated the repeat template with this information. The discharge letter stated that furosemide had been stopped due to low blood pressure, however, furosemide was given to him on discharge and it was within his pharmacy drug sheet. He did say that they had put him back on it. The community matron checked his blood pressure and this was fine – I noted that this needed to be continuously monitored. I checked his inhaler technique which was very poor. I explained how to use the inhalers and that by taking them correctly he was more likely to reduce his exacerbations. His spacer device was very cloudy so hadn't been cleaned for a long time and would not have been working properly to get the correct amount of drug into his lungs. I explained how to clean and dry the inhalers. He is still smoking a few cigarettes a day. He uses NRT patches but this isn't enough to stop him smoking – advised him to see the smoking advisor at the surgery.

He had some Quickmist still in the packet which I explained he should be using as well to help with his smoking cessation.

Patient three:

I was asked to visit this 81 year old lady because she was having regular home visits by the GP and also many telephone consultations about her medication. The GP had asked me specifically to look at her pain medication and to see if I could recommend anything. Her son and daughter-in-law were present at the review. The main problem that I identified was that some medication that had been stopped by the GP, was still in her compliance aid. She was taking regular paracetamol (1g four times a day) and currently 1 amitriptyline but was still in pain. She had tried tramadol, buprenorphine and morphine previously. She was awaiting an x-ray. I suggested that she now stops the sertraline and she takes 2 amitriptyline at night until after the x-ray. The pharmacy have sent out compliance aids still with iron supplements in which have been stopped so I advised which ones these are to take out. I fed all this back to the GP and since this visit the GP has not had to review the patient as often as he was doing and he hasn't visited the patient again. After the visit I looked through her notes and identified that she was on bone protection medication but that this had been stopped – I asked the GP whether she should be on something and he prescribed it for her.his smoking cessation.

Case study six

How do my clinics benefit patients?

- Assessment and tests performed in patients own surgery
- Timely diagnosis and treatment- In most cases diagnosis can be made in the first consultation. Whereas waiting times for secondary care can be weeks if not months and further delay before they can be followed up by patient's own GP and treatment started or optimised.
- Holistic approach- screened for co-morbidities such as hayfever, eczema and these conditions managed, smoking cessation advice & treatment.
- Continuity of care
- Full medication review and optimisation- not just for asthma & COPD but a comprehensive medication review of all treatments the patient is on. And any necessary interventions i.e. drug optimisation of patients with heart failure, hypertension, CKD, primary & secondary prevention of CVD
- Expert pharmacological management

Integrated patient pathway

1. Shortness of breath, Respiratory cause, chronic stable asthma or COPD
2. Referral from GP, Practice Nurse, District Nurse, Case Manager, Smoking Cessation Team
3. Assessment; Diagnosis, Management, Medication Review
4. Referral to Respiratory Consultant following discussion with GP if appropriate i.e. complex issues, further investigations
5. Referral back to GP if complex case, treatment failure, non- respiratory cause of shortness of breath identified

Likewise the hypertension clinic I run involves a similar sort of pathway. Mainly patients are referred to me by their GP or practice nurse if they are not achieving blood pressure target for appropriate pharmaceutical management and medication review or for assessment & diagnosis.

My main objective when I started off was to review and optimise the treatment of respiratory patients but this expanded to diagnostic screening, treating acute exacerbations, smoking cessation advice as my knowledge and skills developed ultimately ending up with a respiratory care diploma and PhwSI accreditation in respiratory. My training involved shadowing respiratory consultants & other secondary care colleagues, completing a diploma in spirometry, allergy, COPD, asthma and a Degree level module on cardiorespiratory symptoms assessment and diagnosis.

The GPs are more than happy for me to provide this service as they were familiar with the benefits of pharmacist led medication review clinics. Over the last 8 years thousands of patients have visited my clinics and almost all have benefited in some way; better management of asthma in terms of symptom control, reduction in the use of relievers, improved compliance with preventer therapy & management of hayfever symptoms that can worsen respiratory symptoms. A written self management plan is always provided to patients on how to deal with acute exacerbations of their asthma. Similarly COPD patients visiting my clinic will also be given a similar plan on how to deal with COPD exacerbations and if appropriate issued with oral steroids and antibiotics in a rescue pack as part of the local COPD LES. All suitable patients are also referred for pulmonary rehab & dietetic advice if needed. The training I have undertaken also allows me to assess and treat COPD patients presenting with acute exacerbations of their COPD with antibiotics & steroids. Likewise most patients visiting my hypertension clinic will achieve their BP & cholesterol targets. This will inevitably have a positive impact on reducing risk of cardiovascular events such as stroke and MI.

The work I do in my practices is very rewarding and does involve advanced interventions but this certainly makes a significant difference to the patients I see and this has been acknowledged in patient participation groups. This has all been possible because I have been fortunate enough to work with great forward thinking practices that have had faith in my abilities and given me this opportunity.