The Role Of A Preregistration Trainee Pharmacist In Primary Care

Sarah Crotty, Head of Medicines Interface (Pharmacist)*; Muhannad Daas, Preregistration Pharmacist: Aylesbury Vale and Chiltern Clinical Commissioning Groups (CCGs).

* at the time of writing. Correspondence to: s.crotty@nhs.net

Abstract

Title
The Role Of A Preregistration Trainee Pharmacist In Primary Care

Author list
Crotty S, Daas M.

Introduction
The role of the primary care pharmacist is evolving. We present a novel preregistration trainee pharmacist model which we have run with one trainee. This work could be of interest to other involved in such training.

Methods
The preregistration trainee pharmacist was recruited at a hospital recruitment session, supported by Health Education England. Only applicants who were interested in a Clinical Commissioning Group (CCG) rotation at interview were considered for this joint post. Our post involved half of the training in hospital and half in primary care roles. The primary care rotation included a two-month period in a community pharmacy and four months within a CCG. The CCG rotation included one day a week spent in a GP practice. The preregistration trainee pharmacist completed useful work including formulary reviews, bulletin development, running ePACT searches, adding entries to ScriptSwitch software, helping with medication safety and preparing for a Care Quality Commission (CQC) inspection in a GP practice.

Results
Our preregistration trainee pharmacist obtained a broad-based experience from various sectors, including hospital, community pharmacy, GP practice and CCG. He found the primary care/community based half required him to develop his clinical skills, and he gained an understanding of all sectors. Overall, this preregistration year has given him a good grounding for the future and prepared him for future roles, which could be in hospital, community or primary care.

Discussion
Following the national direction with primary care pharmacists helping GP practices to manage their increasing workload, many jobs have been created and it seems essential that part of the preregistration training gives experience in primary care roles. Our model could be adapted for either community-based placements or hospital-based placements and is in line with national recruitment drives of pharmacists in primary care roles.

Conclusion
We present a new model of preregistration training which included a successful rotation through a CCG.

Keywords: rotation, tutor, GP practice, CCG.

Introduction

The role of the primary care pharmacist has become more and more significant over the years. It is important that preregistration pharmacists have an understanding of the potential different roles for pharmacists within our health economy.

It is fairly uncommon to have a preregistration trainee pharmacist (prereg) rotation for more than a couple of weeks in a Clinical Commissioning Group (CCG), although these posts are developing in a few selected sites. We felt that our first rotation of a prereg for a four-month period in a two-CCG federation should be shared.

Health Education England (Thames Valley) agreed to fund a prereg post that involved a rotation though hospital and a rotation within the CCG, including a GP practice.

We were fortunate to have a GP practice that had a recent, positive experience of a pharmacy student rotating to them as a holiday job and which had a GP lead who is dual-qualified as both a doctor and a pharmacist. This practice was happy to take the student one day a week for their four-month rotation while attached to the CCG. The timing of the rotation to the GP practice was linked in with GP registrar training days to reduce the additional work required by the GP practice.

The CCG Head of Medicines Management nominated an experienced CCG lead pharmacist with prior experience of training preregs in hospital to provide tutoring. The CCG lead pharmacist acted as lead tutor for sign-off of the mandatory appraisals for the Royal Pharmaceutical Society.

A link was made with BMI Chiltern Hospital for hospital pharmacy skills and clinical rotations.

The lead-in time after recruitment is quite long and so we had time to discuss, within the CCG medicines management team, the tasks and responsibilities that might be feasible for a prereg to take on. There was significant disquiet within the team about the responsibility required of the prereg for
their own independent learning and working. It is the nature of CCG posts that, because teams are small, staff need to develop multiple skills to deal with complex and changing workloads, much of which are strategic. Against this background, staff felt that it might be difficult to delegate tasks to the new prereg. However, it turned out that we had under-estimated the number of currently undertaken tasks that could be given to a prereg. Given the academic ability and the information technology (IT) proficiency of the younger ‘pharmacist-in-the-making’ we have been surprised at how much could, with adequate supervision, be delegated successfully.

**Method**

The prereg was recruited at a hospital recruitment session supported by Health Education England, along with recruitment to NHS hospital preregistration posts. At interview, all applicants were asked for their preferences including whether or not they would be interested in undertaking a preregistration rotation to Chiltern and Aylesbury Vale CCGs. Only applicants who were interested in a CCG rotation at interview were considered for this joint post.

Our post involved half of the training in hospital and half in primary care roles.

The position was linked with a BMI Chiltern private hospital placement, which was provided in two three-month blocks in quarter one and quarter four.

The primary care rotation included a two-month period in a community pharmacy and four months within a CCG. The CCG rotation included one day a week spent in a GP practice under the supervision of the practice manager and a dual-qualified GP, who is also a qualified pharmacist.

Good communication across sites, which is essential, is an area we could improve upon. For example, the mandatory prereg audit and poster was completed during the hospital rotation but written up during the CCG rotation. This aspect felt ‘rushed’ and the timing of rotations will be reviewed for the next preregs who we employ to ensure that the prereg is in the same base as the audit when writing up.

The CCG medicines management team kept a list of projects that we felt were of a suitable size for a prereg to complete and all members of the medicines management team were asked to contribute to this list. If a pharmacist within the medicines management team contributed a task that required completion then they supervised the day-to-day completion of this task, although overall supervision of the prereg was managed by one pharmacist.

Tasks were allocated, taking into account the prereg’s preferences and abilities. As this was a new rotation the setting of tasks was more fluid than hospital rotations, which tend to have a more set task completion list. It was felt appropriate to have a maximum of three projects ‘on the go’ at any one time. This provided the right balance between having a realistic work schedule while having something to move on to if a task reached a stage where tutor input was required.

It is important to support growth and skill development throughout the rotation and to reinforce knowledge gained. So, for example, at the time when undertaking a medication review for a care home pharmacist on a patient with renal problems worsened by metformin, the student was attending study days about acute kidney injury (AKI), read local policies on AKI and discussed the implementation of the recently introduced AKI card with their GP tutor. He also ran a short session within a clinical team meeting where AKI was further discussed. This presentation was used as evidence of presenting skills for his prereg study days. Linking tasks to study days is not always possible, but where it can be done it reinforces an ethos of learning for life and not just for the exams.

The CCG tutor met with the prereg on an informal basis at least twice a week, more often if required, and on a more formal basis monthly. Written evidence was provided by the prereg against Royal Pharmaceutical Society competencies on Mondays each week. This was communicated to the tutor by email. Initially the student wrote up things of which he was proud, where he had learnt something or if he had changed an aspect of his approach. Towards the end of the rotation evidences became more targeted towards items where the student had gaps. Our current evidence collation uses a standard form that relies on longhand form completion and email, but for the next prereg intake we will be using an electronic system.

**Main achievements and successes**

The key accomplishments are summarised in Table 1. The main achievements and successes for the CCG and the GP practice respectively are outlined below.

**CCG**

**Becoming familiar with useful tools in the CCG**

ePACT.net is software available for CCG

“The primary care rotation included a two-month period in a community pharmacy and four months within a CCG.”
prescribing advisors that allows online analysis of the previous 60 months prescribing data generated by NHS Prescription Services from FP10 prescriptions submitted by community pharmacists within the CCG for payment. This resource is very useful and fairly easy to use. It was used by the prereg to obtain prescribing data for medicines relating to projects such as interventions, formulary applications and reviews. At their request, the prereg was able to provide a specific GP practice with their current prescribing of ‘red-listed’ (hospital only) and ‘black-listed’ (non-formulary) drugs and to devise variance reports for individual practices, which are then used to assess where a practice varies significantly with the usual prescribing rates. Reducing variation within prescribing is a current ‘hot topic’ within pharmacy.

ScriptSwitch is a computer program that interacts with GP clinical systems and operates at the point of prescribing. It offers messages and potential ‘switches’ to the prescriber. These messages/switches are set locally and approved after discussion at a Medicines Management Joint Executive Team Meeting. It was used to standardise messages for drugs that were red and black-listed on the Buckinghamshire formulary. The prereg added messages to all low protein foods for phenylketonuria (PKU) and reviewed messages for all sip feeds.

**Bulletin Preparation**

The task was to develop a local bulletin for GPs in Buckinghamshire, after review of the PrescQIPP ‘drop list’ bulletin on omega-3 fatty acids. The bulletin had to be concise and simple to implement. The project was managed from start to finish by the prereg, who took it through the CCG approval process.

The prereg critically appraised the evidence and concluded that we should recommend stopping therapy and not switching to alternative agents.

Buckinghamshire CCGs’ local bulletins have a standard format, including practice benchmarking data. This required searches to be done using ePACT data so that a benchmarking graph could be produced. The data on omega-3 fatty acids was displayed showing spend from highest to lowest across all 53 general practice surgeries in Buckinghamshire. Using benchmarking data is an effective way of motivating practices to make a change - they can see how they compare to other practices and want to perform better.

PrescQIPP provide a patient letter template for practices but this required some local re-drafting. The prereg learnt that it is important to be very particular with the choice of words when writing patient-facing material.

The local ‘intervention’ bulletin was approved and was circulated to all the Buckinghamshire practice managers and each GP practice prescribing lead. Implementing our local recommendations at this time was included as part of the Aylesbury Vale CCG quality...
improvement scheme. The impact of the intervention will be possible to see using ePACT data.

By reviewing all patients taking omega-3 fatty acids and stopping 100% of omega-3 fatty acids therapy, general practices across the region could make savings that amount to more than the prereg’s salary for the year.

**New medicines application (NMA) – tolvaptan for treating autosomal dominant polycystic kidney disease (ADPKD)**

Following the release of the National Institute for Health and Care Excellence (NICE) technology appraisal (TA358), tolvaptan had to be available on our local joint formulary within three months.2

The prereg had to understand and apply the local processes for the addition of new medicines to the Buckinghamshire joint formulary.3

The task was to complete the local NMA form for tolvaptan that would go to the next Formulary Management Group (FMG) for review. These reviews require someone with clinical expertise and understanding to complete. An abbreviated version of the local application form is used for NICE TAs because the NICE TA document reviews the evidence and safety well. The purpose of the application is to decide the local place in therapy, the traffic light position and whether additional resources (such as a local protocol) are needed.

The reviewer needs to be able to perform literature searches, critically appraise and give an opinion on the medicines. The prereg was asked to propose a traffic light classification and so looked at bordering formularies to see their classification and discussed this with their tutor.

To effectively understand this drug’s place in therapy, it was suggested that the prereg should have a good understanding of renal physiology and chronic kidney disease. This led on to developing an acute and chronic kidney injury (AKI) case presentation, which was presented at an internal clinical meeting and at a preregistration study day. AKI is topical at the moment and pharmacists are crucial in advising on medication dose adjustment to prevent AKI.

The costing section of the form was a challenge and required a pharmacoeconomic analysis. Using the NICE costing template and the prevalence of ADPKD, the prereg was able to estimate that the estimated annual usage for the Buckinghamshire population would be 22 patients. Using the confidential PAS price, he was then able to calculate the hospital cost including VAT per patient per year. He calculated the total cost for the Buckinghamshire population. Although the expenditure would be high, there could be savings from avoiding hospital admissions, delayed need for dialysis and delayed need for kidney transplants. With guidance from the tutor, the application form was completed, including obtaining budgetary approval, in time to be discussed at the next FMG.

Tolvaptan was presented by the lead tutor and the renal consultant who attended the FMG. The prereg attended to offer support if any questions arose from the application. He found it interesting to see the process for how medications are approved for addition to the formulary within the Buckinghamshire health economy. The Buckinghamshire formulary applies to both primary and secondary care.

To calculate the hospital cost including VAT per patient per year. He calculated the total cost for the Buckinghamshire population. Although the expenditure would be high, there could be savings from avoiding hospital admissions, delayed need for dialysis and delayed need for kidney transplants. With guidance from the tutor, the application form was completed, including obtaining budgetary approval, in time to be discussed at the next FMG.

The prereg undertook an audit to establish whether methotrexate drug monitoring requirements were being met.

The audit showed that 14 patients (87.5%) were being monitored correctly but there were two who did not meet the standard . . . .

**General Practice**

**Service improvement project: methotrexate audit and developing an individualised care plan**

The prereg undertook an audit to establish whether methotrexate drug monitoring requirements were meeting guidelines.

Local drug monitoring guidance suggests that monitoring should be done every three months once on a stable dose. Therefore, the audit standard was that ‘100% of patients on methotrexate are monitored - with four blood tests in the last 12 months’.

Using the in-house disease-modifying antirheumatic drugs (DMARD) register that the practice maintains, the prereg identified 16 patients who were prescribed methotrexate. ‘EMIS Web’ was used to search each patient and check their blood tests to confirm if the recommended drug monitoring requirements were being met.

The audit showed that 14 patients (87.5%) were being monitored correctly but there were two who did not meet the standard i.e. less than four blood tests in the last 12 months. This is not sufficient because of the potential harm that can result from a missed test. After seeking advice, the prereg ensured that these two patients were currently being monitored safely.

The prereg drafted, from the outset, an individual methotrexate care plan. This was designed to be held by the patient to remind them when they need to get methotrexate and other blood tests carried out. They also drafted a template letter to explain the care plan document and tailored the template letter to each

“The audit showed that 14 patients (87.5%) were being monitored correctly but there were two who did not meet the standard . . . .”
patient, taking into account other conditions and adjusting the drug monitoring accordingly. These can now be uploaded onto the clinical system by the practice manager.

The project took longer than expected to complete and so the prereg produced a guide for the practice staff on how to input data into the template and care plan.

The principle of developing an individual care plan could be used for all DMARDs. This should empower patients to seek tests at the correct time and fits in with local work encouraging patients to take more responsibility for their own healthcare. Feedback from the prereg is that it is great to feel that something that they developed will benefit patient care and prevent harm.

Care Quality Commission (CQC) preparation for inspection

In October 2014, CQC began inspecting and regulating GP services. The prereg’s GP practice was due for its first ever inspection. This was a very busy and stressful time for the staff.

The prereg was asked to review all the drug safety alerts from the last two years to show which of these had been actioned. Older alerts can be found on the National Patient Safety Agency (NPSA) website until June 2012, after this date they were stored on the Central Alerting System (CAS).4 Medicines and Healthcare Products Regulatory Agency (MHRA) drug safety updates were also included.

The prereg familiarised himself with the three websites and then downloaded the patient safety alerts and put them into a folder on the practice intranet, made a table and added a short summary of what they related to. He inserted the files as objects into the document to allow for easy navigation of all the alerts. The GP tutor reviewed the document and colour coded the alerts to identify which had been implemented and which needed to be actioned.

The prereg discussed this project at a CCG Medicines Management team meeting and discovered that colleagues at the CCG sometimes have difficulty locating alerts. He therefore created a simple two-page walkthrough explaining where to look. This document was circulated within the practice and to the medicines management team of the CCG.

Both the methotrexate audit and alerts document were shown to the CQC inspectors and used as evidence of good practice for this inspection.

Discussion

Initially, the prereg had some concerns which included:

- Any new post is a bit of a gamble because the training is developing and there is some uncertainty as to what you will get from the post.
- Cost of living. Living in Buckinghamshire is expensive.
- Travelling to numerous training sites. A car was needed and the prereg had to pass his driving test after he accepted the post in a tight timeframe.
- Moving sites. Moving between training sites means building new...
professional relationships. This adds stress, but provides unique and valuable experience.

- Communication between training sites and tutors. Work is still required to ensure ‘glitches’ identified this year do not happen in the future.
- Isolation. Being the only prereg in the CCGs, there is not the camaraderie of having a number of peers in the same workplace.
- Preparation for the dreaded prereg exam! Concerns that the CCG time would not prepare the prereg adequately for the new format exam. This concern appears less valid now (for the whole training) because, through his hard work, the prereg achieved a very good pass.

Interestingly, the advantages of the CCG/GP practice rotation perceived by the post-holder were that they:

- gained a better understanding of the NHS and the wider aspect of who is involved and what goes on
- were able to work independently a lot of the time and were expected to be professional. So, in essence, the CCG staff’s concerns about the need for responsible working were perceived as a benefit by the prereg
- considered the varied nature of the work, feeling part of a team and having their own projects to work on were key to their personal development.

Conclusion

Overall, the new four-month CCG/GP practice rotation was a positive experience. Subject to suitable posts becoming available, our initial prereg believes that, at some time in the future, he may like to return to a clinical role within primary care.

It is exciting that one of the advantages of a varied experience obtained from a mixed placement - from a prereg pharmacist’s perspective - is that you can see all the different roles and responsibilities in a GP practice, a CCG, a community pharmacy and a hospital. Our prereg felt that he developed a unique perspective that few pharmacists gain even in many years of practice.

There is a need to train more pharmacists. Currently the number of graduate pharmacists exceeds the number of preregistration training places; increasing the supply of preregistration places is not easy. In addition, the number of available roles for pharmacists is expanding. Including a three or six-month period within a CCG/GP practice into existing or new hospital or community preregistration training posts could be attractive as well as providing a way to expand the number of preregistration training posts available. However, to release the necessary time within the current prereg training year, there needs to be local discussion on how to reduce the existing hospital/community portion of training, which is currently 12 months, into six or nine months to allow for more variety of experience including a CCG/GP practice rotation.

We believe there have been benefits on both sides. The prereg does need to fit in well and be highly motivated to be able to cope with changing rotations regularly. Experienced CCG medicines management staff are training a pharmacist for the future. The prereg has benefitted from undertaking a wide variety of different work, under supervision. It takes time to act as a tutor, but the benefits of seeing a young pharmacist progressing and developing have been very rewarding. With NHS England’s ‘pharmacists in practices’ pilot starting to demonstrate that pharmacists can reduce the workload of GPs, there is huge potential for more pharmacists to work within primary care in the future. Where should this training start if not right at the beginning?

Acknowledgements

This preregistration training post was funded by Health Education England - we are grateful for their support.

Declaration of interests

The authors declare no conflicts of interest with respect to the authorship and/or publication of this article.

"Our prereg felt that he developed a unique perspective that few pharmacists gain even in many years of practice."

REFERENCES

1. Prescqipp: Omega-3 fatty acids, Bulletin 47. October 2013 v2.0. Available at: https://www.prescqipp.info/-omega-3-fatty-acids/finish/208-omega-3-fatty-acids?Accessed 03/05/16.