Successful integration of a clinical pharmacist into a diabetes practice team: First-hand experience shared

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The first of an occasional series to help members of the multidisciplinary team better understand the responsibilities of colleagues, looks at the role of the clinical pharmacist.

Clinical pharmacists are becoming an integral part of diabetes general practice teams. This article follows the journey of clinical pharmacist Dina Kapoor, who joined Shakespeare Health Centre in Hayes, north-west London, in 2015. Reflections from Dina highlight the training and support required to develop skills that enabled her to become an integral member of the practice diabetes team. Her appointment was part of a new integrated team approach within the practice, which prioritised training and the use of audit to recall appropriate patients and improve the diabetes services. The outcomes presented are a testament to the teamwork provided at practice level, including the emerging role of the clinical pharmacist.

The increased prevalence of type 2 diabetes, the drive to identify people at risk of the condition and the growing requirement for general practice to accommodate work previously undertaken by specialist teams and to provide data on target-driven outcomes have resulted in unprecedented pressure on practice teams. The need to employ a wider skill mix to release capacity, enabling longer consultations for people with complex or multiple long-term conditions, has become increasingly recognised in recent years at a national level (NHS England, 2014; 2016a; Primary Care Workforce Commission, 2015).

The *Five Year Forward View* (NHS England, 2014) encouraged recruitment of clinical pharmacists into general practice (470 in over 700 practices). Recruitment has since been extended, aiming for a further 1500 pharmacists in general practice by 2020 (NHS England, 2016a). It is important to consider how clinical pharmacists can assist practice teams to deliver diabetes care, and to reflect on the training and support they require. This article describes and reflects on the journey of a clinical pharmacist who joined a practice team committed to achieving diabetes service and outcome improvements.

Background

Despite their earlier unsuccessful bid for a clinical pharmacist in NHS England's initial pilot, the new GP partners at Shakespeare Health Centre (SHC), in Hayes, north-west London, continued to pursue this path, as they felt strongly that there was an integral role for a clinical pharmacist in their team. They employed a local pharmacist, Dina Kapoor, in October 2015. An important condition of Dina's employment was her independent prescribing qualification, which she had recently completed, with a focus on hypertension. Her initial role involved prescription queries and completing elements of the over-65s Integrated Care Plans, including blood pressure.

Upskilling an integrated practice team

SHC was previously ranked one of the worst-performing practices in north-west London in all clinical domains, and the new partners initially decided to focus on improving diabetes services and patient outcomes. They attended an advanced diabetes course and returned to practice with the aim to upskill 75% of their clinical workforce, including Dina. From this point,

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Article points

1. A clinical pharmacist was recruited and became an integral member of a general practice diabetes team.
2. Upskilling the primary care workforce had a substantial impact on patient experience and clinical outcomes.
3. A team approach, including GPs, nurses, clinical pharmacists and administration staff, was a vital part of this project.

Key words

- Clinical pharmacist
- General practice team approach
- Proactive audit
- Training and mentorship

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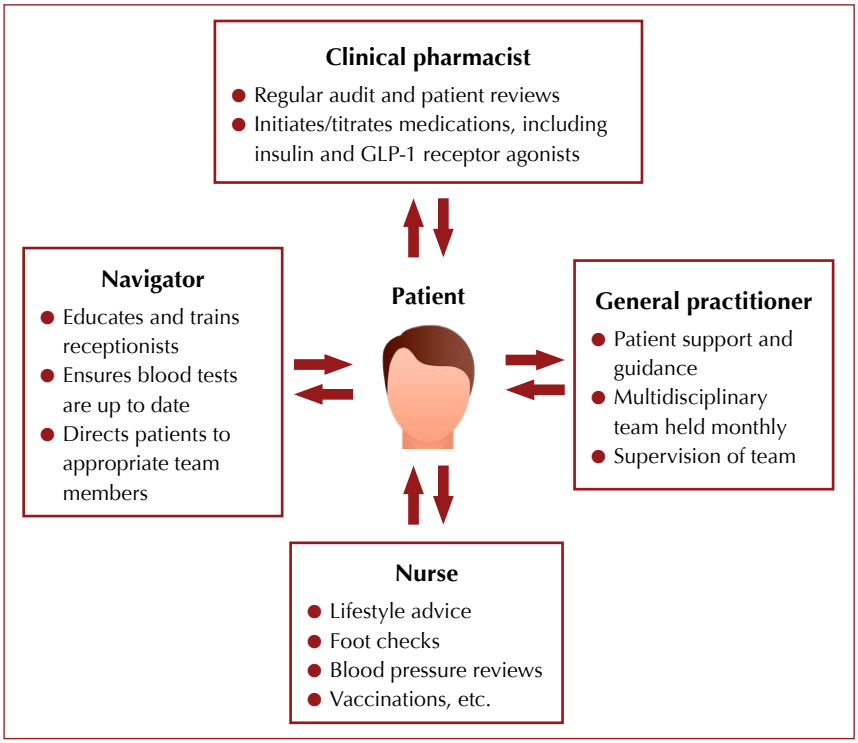

Figure 1. The integrated diabetes team members at Shakespeare Health Centre. GLP-1=glucagon-like peptide-1.

Dina shadowed the lead GP in his new diabetes clinic, focusing on individuals with HbA_{1c} levels >75 mmol/mol (9.0%). She became interested in the holistic approach, using her hypertension and lipid knowledge, and was keen to become further involved.

In line with their plan, Dina, two salaried GPs and a practice nurse attended a foundation-level 3-day course commissioned by Hillingdon Clinical Commissioning Group (CCG) in February 2016. Two months later, Dina and one of the salaried GPs went on to complete the advanced course.

The foundation-level course focused on correct diagnosis; lifestyle advice; the oral medication treatment pathway; individual target-setting; screening requirements; team management of essential diabetes care; and recognition, prevention and management of diabetes-related complications. The advanced course focused on supporting people with type 2 diabetes on more complex medication regimens, including insulin and glucagon-like peptide-1 (GLP-1) receptor agonists.

Hillingdon CCG also commissioned a mentor service to support the students to embed their learnt skills in clinical practice. This took place over a 12-month period after the course. This is a similar model to the Stepping Up model of care in Australia, described by Furler et al (2017).

Service changes, proactive patient reviews and outcome improvements

SHC undertook a wide-ranging audit looking at every patient with an HbA_{1c} >48 mmol/mol (6.5%), with Dina taking an integral role, initially in reviewing patients on none or one oral medication and only seeing more complex patients if she understood the oral medication regimens and mentor support was available. The audit ensured that most of the practice's diabetes population was reviewed in a short period, with proactive lifestyle advice and/or treatment changes, including de-escalation. The practice designed an integrated team approach (*Figure 1*), including the role of "navigator" (administration staff directing patients to the correct team member according to their needs).

The improvements in outcomes from 2015 to 2017 are shown in *Table 1*. The results show significant improvements in all patient outcomes related to glycaemic control, blood pressure and cholesterol, highlighting the success of the practice's actions and holistic approach to training. They also demonstrate proactive type 2 diabetes screening, with the prevalence increasing from 7% to 9% in 2 years.

Challenges for the clinical pharmacist

Dina was a newly qualified independent prescriber with no prior experience in prescribing diabetes medications. She was confident in seeing patients in the pharmacy setting and completing diabetes medication reviews, but was a novice in optimising and tailoring medication to suit the individual. After joining SHC, she attended foundational and advanced diabetes courses in quick succession.

Normally clinicians are expected to embed the skills learnt on their foundation course before applying for advanced training; however, the newly formed team was keen to include Dina in the training opportunities and willing to provide practice-based support. She also had access to the practical resources from the diabetes courses and the mentorship service.

Dina's reflection:
"If I had to do it alone it would have been far more difficult, but I had great support. Any patient I considered to be more complicated would be booked into my mentor-supervised clinics. If I had any questions I was easily able talk to one of the GPs or contact my mentor for advice."

From a training and mentorship perspective, the steep learning curve facing Dina was a concern. The initial focus was to support people requiring simple treatment changes, allowing Dina to build up her confidence and competence with the oral medication pathway before embarking on injectables. This prevented her from becoming overwhelmed with complex cases and allowed her to build skills from the bottom up, within a safe environment. Initial mentor sessions focused on lifestyle changes and finding appropriate oral medication regimens for each individual. This was assisted by the extensive audit and recall letters the navigators had set in motion, leading to good engagement from patients.

Dina's reflection:
"Previously I could explain the diabetes medications but now I understand the NICE treatment pathway and which patients may benefit from different combinations of medications. I really enjoy the holistic nature of a diabetes review, the importance of finding out how the patient is feeling and getting information about how they manage their day, along with weight, kidney function, glycaemic control, cholesterol and blood pressure. I am amazed how much a simple timeline can uncover, and I spend time discussing diet and possible lifestyle changes, whereas before I would have focused more on their medication."

In total, there were nine mentor contacts, including an initial session to discuss the mentorship process, seven clinical sessions and a final session to complete the competency assessment. Dina completed the required GLP-1 mimetic and insulin starts within 12 months of starting her advanced course. She submitted the required academic work and competency assessment, and gained university accreditation.

Table 1. QOF data at Shakespeare Health Centre in 2015 and 2017.

Outcome	31 Mar 2015	31 Mar 2017	QOF 2017 target (upper threshold)
Number of patients on diabetes register	371 (7%)	383 (9%)	n/a
HbA_{1c} ≤59 mmol/mol	47%	79%	75%
HbA_{1c} ≤64 mmol/mol	55%	84%	83%
HbA_{1c} ≤75 mmol/mol	63%	91%	92%
BP ≤150/90 mmHg	79%	94%	93%
BP ≤140/80 mmHg	69%	84%	78%
Cholesterol ≤5 mmol/L	58%	82%	75%
Foot assessment performed	63%	92%	90%
Patients with proteinuria or albuminuria receiving ACEi	100% (*n*=12)	100% (*n*=34)	97%
Influenza vaccine given	59%	93%	95%
Referred to structured education	55%	89%	90%

ACEi=angiotensin-converting enzyme inhibitor; BP=blood pressure; QOF=Quality and Outcomes Framework.

Dina's reflection:
"I am surprised how far I've come in such a short time. I keep a list of all the patients I've started on GLP-1 mimetics and insulin so that no-one gets lost in the system, and patients appreciate the effort and time I take to find out more about them and explain everything fully."

A personal challenge for Dina involved time constraints, and she often had to write in patients' notes at the end of her clinic. She reflected that the consultation skills required in general practice differ from those used in community pharmacy, where consultations tend to be shorter. To help overcome this challenge, the lead GP is supporting Dina, observing her clinics and providing feedback.

Enablers of this approach

- The support from the CCG to provide training and mentorship was forthcoming.
- The dynamic practice team approach enabled Dina to feel supported.
- The proactive use of audit enabled patients to be recalled and triaged to the clinician most

"This model is replicable if there is an agreed decision to focus on diabetes service improvement, encouraging a team approach (with new roles emerging) supported by appropriate, practical training and mentorship from specialists."

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appropriate to support their needs.

- The mentorship enabled Dina to learn and develop skills at a pace to suit her, focusing on foundation-level skills first and feeling confident in discussing the oral diabetes medications regimens, before moving on to injectables.

Benefits of a clinical pharmacist's involvement

Khunti et al (2013) completed an international literature review, including 18 studies, examining the effectiveness of pharmacist interventions on reducing HbA_{1c}. All studies reported that interventions by a pharmacist were successful at significantly reducing HbA_{1c}. The interventions included pharmacy-managed diabetes clinics, primary care-based clinics, patient education programmes and pharmacy-based support. The interventions included different aspects of support, including counselling on medications and strategies to improve adherence and self-monitoring.

The SHC project also demonstrated a significant reduction in HbA_{1c}, as well as blood pressure and cholesterol, with additional screening uptake. This cannot be attributed purely to the role of the clinical pharmacist, as there was a commitment to improve diabetes services across the entire practice team. However, Dina played an integral role during 2016/17 and is now running weekly diabetes clinics and seeing more complex patients, releasing GP capacity and enabling longer consultations with those who require more complex support.

Feedback from patients has been positive:

"No one has ever explained it so fully before."

"I am very happy getting quick appointments at the practice for my diabetes follow-up. The pharmacist is always helpful."

"I am very happy that I get appointments regularly and quickly. The pharmacist has helped me control my sugars better. I am very pleased with the service here."

Dina continues to work part-time in a local pharmacy, and has highlighted the impact her improved knowledge and competencies have had on supporting people collecting prescriptions and on educating the counter staff and dispensers.

Dina's reflection:

"I can identify and discuss with people if I notice they are not collecting specific prescriptions. A good example is blood glucose monitoring on sulfonylureas and insulin. I can discuss the DVLA requirements and find out why patients are not requesting the strips on their repeat. This also educates the pharmacy team. I'm definitely more forthright."

Outlook

SHC is considering employing a second clinical pharmacist and is hoping to partner up with another practice within its Federation to roll out a similar service model, eventually involving all practices.

Dina's personal challenges around time constraints and adapting consultation skills to suit general practice need to be explored to see if this is a wider problem for other clinical pharmacists. If so, future training will need to incorporate practice-based consultation skills.

Conclusion

This project complements NHS England's Sustainability and Transformation Plans (STPs) that stem from the *Five Year Forward View*. The STP aide-mémoire (NHS England, 2016b) states:

> *"If all GP practices were to achieve at least the national median position for all 3 NICE-recommended treatment targets (for HbA_{1c}, blood pressure, and cholesterol), significant savings and patient benefits would be realised."*

The SHC team, with Dina playing an integral role, have surpassed themselves in improving patient outcomes within a short period. This model is replicable if there is an agreed decision to focus on diabetes service improvement, encouraging a team approach (with new roles emerging) supported by appropriate, practical training and mentorship from specialists. ■

Disclosure: Anne Goodchild is author and lead trainer of the PITstop (Programme for Injectable Therapy) and PrePITstop diabetes courses, which were commissioned for the training and mentorship in this project. For more information, visit: www.pitstopdiabetes.co.uk