A Pilot to Review Patients with Long Term Conditions in the Community Pharmacy Setting via Remote Access to GP Patient Records

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Abstract

Title
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Introduction
In December 2011, the then Chief Executive of the Health and Social Care Board (HSCB) published 'Transforming Your Care; A Review of Health and Social Care in Northern Ireland'. This set out the challenges and rationale for the need to restructure healthcare delivery in Northern Ireland. The review pointed the way to a more integrated future model of care.

In line with the ethos of 'Transforming Your Care', a pilot of community pharmacy based review clinics of patients with specific long-term conditions (LTCs) was established.

Methods
A number of community pharmacy based LTC (asthma, hypertension, at risk of developing cardiovascular disease) review clinics were organised in collaboration with three GP practices. The clinics were facilitated by remotely accessing the GP server, thereby providing the pharmacist with the ability to perform a full clinical review with the patient. This included recording relevant diagnostic results, conducting a medication review, noting advice given to patients and recording outcomes.

Results
Eleven clinics were held from January to March 2015. Eight were for hypertension patients or those at risk of developing CVD and three were for asthmatic patients. In total, 74 consultations were completed and 70 patients reviewed. Thirty-two medicine interventions were made, fifty-five patients received lifestyle advice and two patients presented with undiagnosed elevated blood pressure.

A confidential patient survey at the end of each consultation highlighted the patients' satisfaction with this service, with 97% indicating they were very satisfied with the care they received and 99% of patients stating they had received the same level of care as expected from a consultation within the GP practice.

Conclusion
The results demonstrated that remote access community pharmacy clinics improved patient access to LTC review clinics. Pharmacist independent prescribers can safely manage these patients and meet their expectations within this setting.

Keywords: community pharmacist, prescriber, long term conditions, remote access

Background

In the western world there are a growing number of people living longer with multiple long-term conditions (LTCs) who are receiving multiple medications; this is placing an increasing burden on the primary care networks with all the risks that this entails. Many reports have been written highlighting the problem at a strategic level.

The WHO Global Action Plan 2013-2020 for the Prevention and Control of Non-Communicable Diseases (NCDs) emphasises the need to strengthen and orient health systems to address the prevention and control of non-communicable diseases through a people-centred primary care approach and to incorporate strategies to prevent and manage non-communicable diseases into primary health care policies.[1] This was also the message from the 2008 World Health Report titled: Primary Health Care – now more than ever.[2]

The issue of the increasing burden of premature death due to NCDs was also raised at a high level meeting of the United Nations General Assembly in September 2011.[3] This was primarily a political declaration; however, it did state that there was a need

to 'Recognise the primary role and responsibility of Governments in responding to the challenge of non-communicable diseases and the essential need for the efforts and engagement of all sectors of society to generate effective responses for the prevention and control of non-communicable diseases'. In this UN resolution adopted by the General Assembly it also:

- acknowledged that the global burden and threat of NCDs constitutes one of the major challenges for development in the 21st century
- recognised that NCDs are a threat to the economies of many member states
- required engagement with all sectors of society to generate effective responses for prevention and control
- recognised the urgent need for greater measures at global, regional and national level to prevent and control NCDs
- noted with concern that, in 2008, 36 out of 57 million deaths were due to NCDs
- noted with profound concern that NCDs are among the leading causes of preventable morbidity and related disability
- recognised that most prominent NCDs are linked to common risk factors.

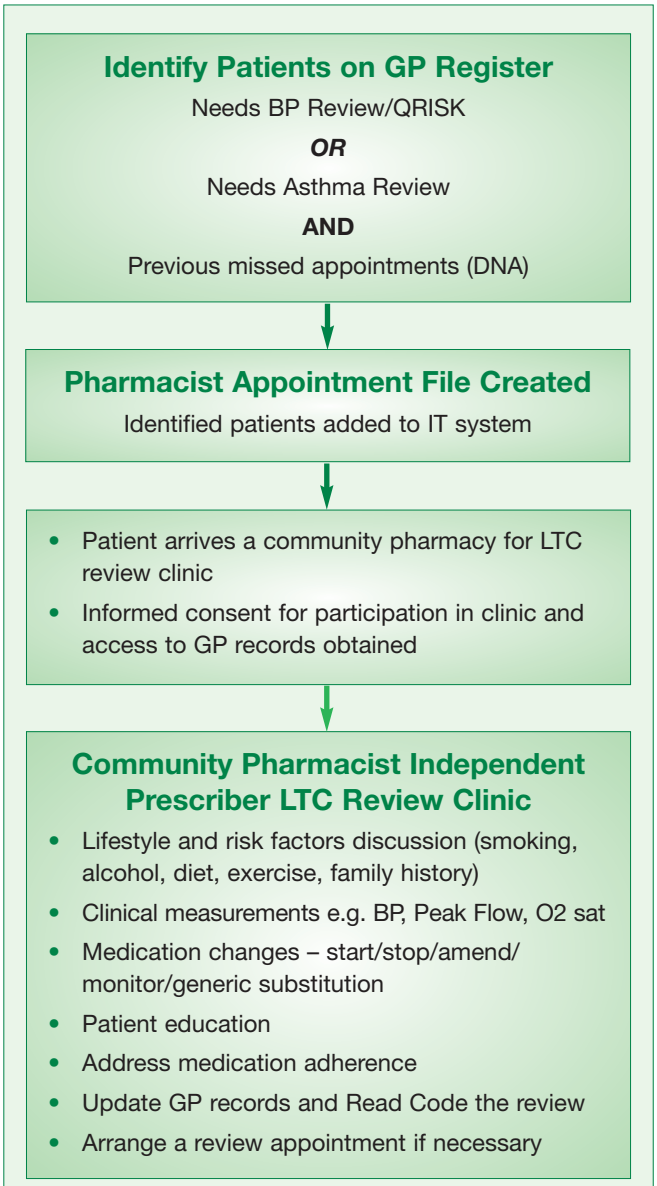

Figure 1: Format of the Community Pharmacist Long Term Condition (LTC) Review Clinic

Both the UN and WHO reports are reflected in our own Northern Ireland strategy for the restructuring of health and social care, known as 'Transforming Your Care' (TYC),[4] and in the need to manage a growing elderly population with multiple LTCs.

The review of patients with LTCs is a prerequisite for obtaining the outcomes desired in TYC; that is better management, a reduction in hospital admissions, best use of clinical skills and better use of medicines. It is also a prerequisite in reducing the number of preventable deaths from common risk factors such as smoking, poor diet, lack of exercise and excess alcohol consumption. In addition, by making access to a review closer to a person's home and/or at a time more convenient to them, patients are more likely to engage in adherence and self-management of their own condition.

Two further recent reports; the Department of Health Social Services and Public Safety Northern Ireland (DHSSPSNI) 'Living with Long Term Conditions policy framework, April 2012'[5] and Sir Liam Donaldson's report 'The Right Time, The Right Place December 2014',[6] both highlighted the need for individuals and professionals to work differently and use their skills to support the changes required in our health service.

The DHSSPSNI policy framework on LTCs states that 'pharmacists are an integral part of the primary and community care family of services. They work in partnership with GPs and other professionals in the primary and community care team to play an important role in helping people manage their condition and medicines effectively.' It goes on to say, 'In this way community pharmacists can help minimise adverse drug reaction; address and prevent potential exacerbations; maximise patient safety; provide structured follow-up intervention; reduce wastage and improve patient outcomes. Medicines management services involving community pharmacies should be reviewed to ensure that they successfully meet the needs of people with long-term conditions.'

Sir Liam Donaldson's report, focusing on the need to ensure quality of care in our health service, states that we 'need to create a greatly expanded role for pharmacists.' He also went on to say 'there was substantial untapped potential' in the service.

It is clear therefore, not only from the international perspective but from a local perspective, that community pharmacists need to change the way they work and utilise their clinical skills to manage patients with LTCs effectively. How this is to be achieved is something for the profession to decide. This project aimed to demonstrate one way for pharmacists to provide a more integrated, collaborative and clinical approach to the care of patients.

Method

A proposal was put to the Craigavon & Banbridge (C&B) Integrated Care Partnership (ICP) to extend the independent pharmacist prescriber led remote access prescribing clinics to

include two further practices and two other pharmacists. Originally, these were held once a month from April 2013 in partnership with the Orchard Family Practice. Remote access from the pharmacy into the GP patient medical records was established at this time. A laptop from the GP practice was linked from the community pharmacy via the HSC net into the GP practice server; this enabled the pharmacist to have full remote access to patient clinical records, read patient notes and annotate decisions/outcomes, thereby enabling a comprehensive medication review. Pilot clinics were held on Saturday mornings from January to March 2015. The format of these review clinics is illustrated in Figure 1.

Patients were told at the start of each clinic that, should a prescription be issued at the clinic, they were under no obligation to have that pharmacy dispense the script; they were free to take it to another community pharmacy.

NICE guidelines (Hypertension QS28[7]; Cardiovascular Risk Assessment and Lipid Modification QS100[8]; Chronic Obstructive Pulmonary Disease QS10[9]; and Asthma QS25[10]) were followed during the LTC review clinics held to establish the need for medication and for on-going management.

In accordance with the Clinical and Social Care Governance Agenda, the assurance of standards, quality and efficacy, was met by implementing agreed SOPs, which could be replicated for future work. These included:

- agreeing, with the GP practice, the process for contacting those patients who would attend the clinic. This ensured patients had the choice as to whether they would attend the clinic held in the GP Practice or the clinic in the pharmacy, thereby avoiding any conflict of interest which may have been perceived
- agreeing laptop, prescription pad and IT security
- discussing patient inclusion criteria with the senior GP and Practice Manager
- ensuring ownership for carrying out the searches of the hypertension/cholesterol and asthma/COPD practice registers was established
- implementing guidelines for a BP check, cholesterol, asthma check or medication review
- engaging with the HSCB IT department to ensure the IT system worked efficiently
- ensuring contracts were drawn up on the use of the laptop and appropriate access to patient information.

Medicines Optimisation Interventions	
Intervention	**Number of Interventions**
Medicines initiated	5 (+2 restarted)
Dose increased	7
Dose decreased	0
Medicines discontinued	5
Adherence issues addressed	13
Patients offered lifestyle advice	55
QRISK assessment	5
No of pts with potential new dx hypertension (BP>140/80)	2
Near Patient Testing (Asthma)	
Intervention	**Number of Interventions**
Peak flow checked	16
Inhaler technique checked	7
O2 sat checked	12
Patient Outcomes	
BP: No of patients to QOF BP target (150/90) at first appointment	33
BP: Of those patients not to target, how many reached target?	7/17
BP: Average drop in pressure for those initiated new medicine or dose adjusted	14/8mmHg
Asthma: Patient education	16

Table 1: Medicines optimisation interventions and patient outcomes

Results

Eleven clinics were held in the community pharmacy setting from January to March 2015. Eight were for the review of hypertension patients or those patients who were at risk of developing cardiovascular disease (CVD) and three were for patients with asthma.

In total, 74 consultations were completed and 70 patients reviewed (average age = 45 years). Four patients were recalled back to the pharmacy for follow-up during the three-month project time period. Any patients requiring follow-up and unable to attend a review clinic in the pharmacy were referred back to their GP practice where the normal review process was followed.

The medicines optimisation interventions made and patient outcomes are shown in Table 1. This includes two patients presenting with undiagnosed elevated BP; they were referred to their GP for further investigation. This was recorded on the clinical system during the review and the patient asked to make an appointment with the GP/Pharmacist or practice nurse for follow-up.

For patients with hypertension, 18 were found to be out of the target range, one of whom had a raised BP and was Read Coded as having high blood pressure; however, their pressure was not at a level requiring treatment.

The clinics were designed primarily to facilitate those who may have difficulty accessing services during normal GP opening hours; it was found that 32 (46%) had not been seen for a review in the previous nine months.

Another outcome of the clinics was the professional enablement of an independent prescriber pharmacist to:

- conduct regular medication reviews
- optimise medicines leading to improved health outcomes
- improve patient adherence
- highlight potential adverse drug reactions
- reduce adverse prescribing incidents
- prescribe cost-effectively and appropriately
- offer lifestyle advice and encourage behavioural change
- manage necessary annual clinical tests.

"Very helpful and friendly staff."

"It would be great to have this continued, as it is a more relaxed atmosphere."

"The consultations are very personalised, which is nice."

"The appointment went very well – quick and convenient."

"Better, was listened to with concerns. Excellent."

"Very good and convenient."

"Perhaps conduct the review in a room away/off shop floor, otherwise excellent service."

"Very helpful and pleasant."

"Very pleased, test was done in a very professional manner."

"I find this service invaluable and very helpful – it suits me well."

"Great service."

Figure 2: Comments made by patients using a confidential survey

Patient satisfaction

A confidential survey seeking patient views and their level of satisfaction regarding the service was given to the patient at the end of each consultation. Further comments were invited at the end of the questionnaire. Sixty-six surveys were completed. The results were as follows:

- 97% of patients were very satisfied with the care they received at the review clinic and 3% satisfied. No-one was dissatisfied.
- 100% of patients stated they had confidence in the clinician they saw.
- 99% of patients felt the consultation was conducted with an acceptable amount of confidentiality. No-one said it was unacceptable but 1% reported being unsure.
- 99% of patients stated they had received the same level of care as they would have expected from a consultation within the GP practice.
- 94% of patients indicated that the appointment outside normal GP practice opening times suited them better, due to the difficulty of attending the practice during their normal opening hours.
- 97% of patients said they would be happy to continue to attend the community pharmacy for future appointments whilst only 1% said they would not, due to being away at week-ends.
- On a scale of 1-10, patients were asked to rate their overall experience of attending the clinic in the community pharmacy. 91% rated the service 10/10, 6% rated it 9/10 and 3% rated it 8/10.

Some of the individual comments made by patients are shown in Figure 2.

Stakeholder satisfaction

Two of the three GP practices responded to requests for comments on the pharmacy service.

Orchard Family Practice:

'The Orchard Family Practice and Andersons Pharmacy have a close working relationship developed over many years, and this continues to develop, which shows considerable benefits to our patients. It is our desire to continue this link and seek new ways of managing our patients' medication; reducing risk, improving adherence, optimising medicines use and ensuring cost effective prescribing.

The development of the remote access clinics has made a huge difference to our patients, as this offered another more assessable option for them to attend for their review appointment. (We organised our remote access clinics for a

Saturday morning). This is especially helpful to those patients who work during the week and are unable to attend the surgery during normal opening hours.'

Meadows Family Practice:

'As the hypertension patients usually see the Advanced Nurse Practitioner it was more difficult to identify those who would come to the pharmacy clinic instead. It was felt that most patients prefer to attend the person they have built up a relationship with. In addition, the PIP (Pharmacist Independent Prescriber) was not able to take bloods at the Saturday clinics.

Despite these difficulties, the positive feedback from patients indicates that there is a role for clinics on a Saturday morning. Eight out of fourteen patients had not been in the practice for more than nine months and some had not had been in the surgery for a number of years. Two of these patients had raised blood pressure and were given appointments for further assessment.'

Discussion

The project highlighted the potential value there is when GPs and community pharmacists work together for the benefit of patients. This is in line with the principles of TYC and something highlighted in the GMC PRACTtICE study.[11] The remote access clinics more specifically contribute to the following TYC recommendations:

- Renewed focus on health promotion and prevention to materially reduce demand for acute health services.
- Home as a hub of care for older people, with more services provided at home and in the community.
- A focus on promoting healthy ageing, individual resilience and independence.
- Partnership working with patients to enable greater self-care and prevention.
- A stronger role for community pharmacy in medicines management for LTCs.

One of the key outcomes from the project was to establish whether the public would accept pharmacists carrying out clinical reviews in the pharmacy with access to their personal medical records. From the surveys conducted with the patients, 97% of patients were very satisfied with the care they received and 97% rated the service either 9/10 or 10/10. Even though the numbers are relatively small this should give the profession confidence that the public recognise and accept the role pharmacists have in their clinical care.

Another key outcome related to the relationship of community pharmacists with their GP colleagues. This project would never have happened without the support of the participating practices and demonstrates how a more integrated approach to service development can facilitate the management of LTCs. Practices were able to keep control of the process as they were fully engaged in the management of the clinics.

The initial project was initially designed to last for six months but time taken to get approval delayed the pilot by three months. There was also a need to use the limited support available before the end of the financial year. This meant that the time frame was shortened and, hence, the number of clinics held was a limiting factor.

There was no control group within the pilot and therefore it was not possible to compare the expectations of those attending the clinic in the pharmacy with those who normally attended the GP practice for review. This may be something to consider in any follow-up study, which could take the format of a retrospective patient review or randomised controlled trial.

One other limitation with the service was the inability to take bloods or carry out blood testing in the pharmacy. A previous project (January 2013 to December 2014) had shown that the near patient tests, such as full lipid profiles and creatinine clearance tests were very expensive relative to the costs the practises paid. It may be worth considering whether pharmacists carrying out such clinics should be trained in phlebotomy. This may further help facilitate the integrated and collaborative approach to such a service.

In relation to next steps, there is a need to increase the number of practices and prescribing pharmacists to a level of five to ten people, potentially covering other disease areas and in different Integrated Care Partnership (ICP) regions. This would help gain an understanding of how the service could potentially be scaled up and replicated. A limiting factor in this, however, could be the small number of prescribing pharmacists working in the community pharmacy sector. Scotland is seeking to address this in their 'Prescription for Excellence' strategy.[12] Ultimately, community pharmacists will need to establish if this is the direction of travel and the type of service they wish to provide.

Non-medical outcomes

The funding provided by C&B ICP for the remote access clinics has ended at this time; however, it should be noted that interest has been shown from further afield. Pharmacists from Europe have visited Northern Ireland to see how the clinics operated, with individuals from Brussels and Denmark attending. There have also been visits from two pharmacists from Nigeria.

The project was nominated and won the Chemist & Druggist (C&D) 'GP Partnership of the Year' award 2015. It also won the NI Healthcare award 'Working in Partnership, GP Surgery and Pharmacy Practice of the Year 2014'.

Interest has also been shown by the University of Limerick, who are researching electronic access to patient information by pharmacists and how this can impact on patient health outcomes.

Conclusion

The results of this pilot service evaluation indicate that the public value the opportunity to have their clinical reviews performed in a community pharmacy by a pharmacist independent prescriber. It has also helped raise the issue of community pharmacists managing stable LTCs, potentially easing the pressure on GPs, particularly at a time when more clinical care is being transferred from secondary care to primary care. More work needs to be done however to increase the numbers and scale up to a deliverable service model.

Declaration of interests

Raymond Anderson has nothing to disclose.

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