

Electronic referrals from hospital bedsides to community pharmacies

Between 30 and 50% of people do not take their medicines as intended (Royal Pharmaceutical Society, 2012), which can have consequences for their quality of life and may result in unnecessary illness or admission to hospital. On discharge from hospital patients can access services at their community pharmacy that will improve their medicines adherence; however, community pharmacists have no easy way of identifying these patients. This is why East Lancashire Hospitals NHS Trust pharmacy department conceived Refer-to-Pharmacy, a fully integrated electronic referral system that facilitates referral of eligible hospital patients to their community pharmacist when they are discharged to help them get the best from their medicines and to stay healthy at home.

The problem of medicines adherence

Medicines adherence is defined as the extent to which a patient's behaviour matches agreed recommendations from the prescriber (National Institute for Health and Clinical Excellence, 2009). Failure to adhere to a medication regimen is the cause of many medicines-related issues, e.g. someone not taking his/her antihypertensive medicines correctly can lead to stroke and a lower quality of life because of uncontrolled hypertension, along with episodes of unscheduled hospital care with the associated costs to health- and social-care organizations.

How community pharmacists can help

Research shows that medicines-related problems after discharge from hospital can be addressed by more systematic involvement of community pharmacists (Hugtenburg et al, 2009). Pharmaceutical services in community pharmacy have been nationally commissioned which are

specifically designed to improve medicines adherence, particularly to patients being discharged from hospital. These are the New Medicine Service and medicines use reviews.

The New Medicine Service, where patients participate in three separate consultations during the first month of starting medicines for certain long-term conditions, has been shown to improve adherence by 10% (Elliot et al, 2014). The conditions currently covered are: hypertension, type 2 diabetes, chronic obstructive pulmonary disease and asthma, and those requiring anticoagulant or antiplatelet medications.

Medicines use reviews, and in particular post-discharge medicines use reviews, conducted with patients whose medicines have been changed in hospital improves adherence with a three-fold return on investment through reduction in accident and emergency department attendances, hospital admissions and drug wastage (Hodson et al, 2014).

Unfortunately patients are often unaware of these services and do not seek them out, and community pharmacists find it extremely difficult to identify such patients during the window of opportunity when these services can make a difference, i.e. within a few days of leaving hospital.

How hospital pharmacy can help

Hospital pharmacists and pharmacy technicians are in a strong position to identify patients who are eligible for a New Medicine Service or post-discharge medicines use review. Several options exist to do this, but most are so time consuming that they are prohibitive to making referrals, or the drop out rate of the patient actually making it to his/her community pharmacy is very high.

Signposting is the easiest option, i.e. telling patients about the New Medicine Service and medicines use reviews, giving

them an information leaflet and encouraging to self-refer post-discharge. However, this has been demonstrated to be singularly unsuccessful (Barnett et al, 2013). Phoning or faxing information to a community pharmacy is time consuming and therefore prohibitive, there is no guarantee of the legibility of information and there can be information governance issues with faxing patient data.

A fully integrated electronic referral solution resolves these issues, facilitating the end-to-end referral process, capturing patient demographics instantly through interfaces with hospital systems, identifying the referrer's contact details, quickly capturing and overtly stating the reason for referral, attaching a copy of the patient's discharge letter to fully inform the community pharmacist of the patient's current clinical situation, and aiding identification of which community pharmacy to send the referral to. At the community pharmacy end a solution should allow seamless integration with working practices. The whole process should include engagement with the patient so that he/she understands the benefit of participating in these services.

The Refer-to-Pharmacy e-referral solution

Refer-to-Pharmacy, the first fully integrated hospital to community pharmacy referrals system, launched in December 2014. It was conceived by East Lancashire Hospitals NHS Trust pharmacy staff and developed in conjunction with software provider Webstar-Health, and is designed to offer a quick and easy referrals solution for hospital and community teams with the whole process wrapped around the needs and understanding of patients.

As a pharmacist or pharmacy technician goes about his/her daily work he/she naturally identifies patients eligible for the New Medicine Service or a medicines use review. The patient is asked to watch a short information film on his/her bed-

side television designed to explain in lay terms the problems of poor medicines adherence, how Refer-to-Pharmacy works, and the benefits of being referred to his/her community pharmacist. This film can be viewed at www.elht.nhs.uk/refer.

If the patient consents the pharmacist logs in to the Refer-to-Pharmacy web application (the referrer's contact details are then included in the referral) and enters the patient's hospital number into the system. That then auto-populates the referral with the patient's demographic details. Using a series of drop-down menus and 'radio buttons' the reason for the referral is captured in seconds. A 'Find-a-Pharmacy' function allows rapid identification of the patient's chosen community pharmacy, either through a list or an interactive map. Patients can be referred at any point in their hospital journey from admission onwards, not just at the point of discharge.

The whole process takes a few seconds; it is not time prohibitive and the team can make many referrals each day (the week-day target is 70). Large-scale referrals are crucial to realizing benefits across the health economy. The referral only leaves the hospital when (electronically speaking) the patient is discharged and his/her discharge letter is completed. A patient may have an optional text or e-mail reminder sent at discharge to reinforce the referral message.

The community pharmacy receives a message by any combination of fax, e-mail or text, stating that a referral has been received and to securely log in to the system to access patient details. The pharmacy contacts the patient to arrange a mutually

convenient time for the consultation. A referral is closed when all actions are complete by capturing an outcome measure, and this archives the referral.

Audit and research

Refer-to-Pharmacy has in-built audit tools to identify the numbers and types of referral and outcomes in the community pharmacy. In early 2015 a research feasibility study will commence, led by the School of Pharmacy at Manchester University, into the outcomes of Refer-to-Pharmacy with particular interest focused on reductions in accident and emergency department attendances and hospital readmission rates.

Spread to other health economies

The Royal Pharmaceutical Society, through their Innovators' Forum, has produced a toolkit to allow other health economies to spread the concept of hospital to community pharmacy referrals (Royal Pharmaceutical Society, 2014). The toolkit comprises two sections: Making a Case for Change provides evidence to support the arguments and business case to implement a referral system; and Making it happen gives practical advice, and examples of how to implement an effective electronic referral system. A webpage features additional practical resources to help health economies to spread the concept.

Upon its launch in December 2014 a copy of the toolkit was sent to every chief pharmacist, clinical commissioning group medicines management lead, and local pharmaceutical committee chairperson in NHS England with the intent they meet, evaluate options and discuss

a strategy to make hospital referrals to community pharmacies a reality in their locality. **BJHM**

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- Barnett N, Parmar P, Ward C (2013) Supporting continuity of care: referral to the NMS after discharge from hospital. *Pharm J* **290**: 178
- Elliott RA, Boyd MJ, Waring J et al (2014) Department of Health Policy Research Programme Project 'Understanding and Appraising the New Medicines Service in the NHS in England (029/0124). www.nottingham.ac.uk/~pazmjbnms/downloads/report/files/assets/basic-html/index.html#1 (accessed 9 December 2014)
- Hodson K, Blenkinsopp A, Cohen D et al (2014) Evaluation of the discharge medicines review service. March 2014. www.cpwales.org.uk/Contractors-Area/Pharmacy-Contact---Services/DMR/DMR-Evaluation_Final-Report_13082014.aspx (accessed 9 December 2014)
- Hugtenburg JG, Borgsteede SD, Beckeringh JJ (2009) Medication review and patient counselling at discharge from the hospital by community pharmacists. *Pharm World Sci* **31**: 630–7 (doi: 10.1007/s11096-009-9314-z)
- National Institute for Health and Clinical Excellence (2009) Medicines adherence: Involving patients in decisions about prescribed medicines and supporting adherence. www.nice.org.uk/guidance/CG76 (accessed 9 December 2014)
- Royal Pharmaceutical Society (2012) Keeping patients safe when they transfer between care providers: Getting the medicines right. www.rpharms.com/getting-the-medicines-right/keeping-patients-safe-report.asp (accessed 9 December 2014)
- Royal Pharmaceutical Society (2014) Hospital referral to community pharmacy: An innovators' toolkit to support the NHS in England. www.rpharms.com/unsecure-support-resources/referral-toolkit.asp (accessed 10 December 2014)

KEY POINTS

- The New Medicine Service and medicines use reviews are nationally commissioned community pharmacy services that significantly improve medicines adherence.
- Patients being discharged from hospital with changes to their medicines will be eligible for one of these services.
- Patients are usually unaware of these services and community pharmacists cannot easily identify patients being discharged from hospital.
- Refer-to-Pharmacy is the first fully-integrated hospital to community pharmacy electronic referrals system designed to address this need.