eahsn Eastern Academic Health Science Network

EMOP

Case Studies - Suffolk

Key facts:

- Supports STP objectives i.e. reducing emergency bed days, hospital re-admissions, length of stay and drugs waste
- Improving safe transfer of patient medicines information has been shown to reduce the incidence of avoidable harm
- Improves patient information and compliance to prescribed medication
- Increasing the role of community pharmacists can alleviate pressure on GP services
- PharmOutcomes can reduce the time taken following up suspected prescription changes with GP surgeries

Inaccurate prescriptions have become a dangerously common occurrence when people move between care providers, particularly those in a vulnerable position who place their trust in official instructions, and therefore may not question the details. 30-70% of patients experience unintentional changes to their treatment or an error is made.[1] Recent research estimates that up to one in five prescriptions end in the wrong drug being given to a patient, equivalent to 237 million errors a year.[2]

This situation is largely owing to a delay in communications between care providers. In some cases, following a review and upon discharge from hospital, the patient is prescribed typically between one or two weeks' dosage of a new prescription, but this may run out before the system catches up to change what is automatically generated by their GP surgery. 20% of patients have reported experiencing adverse events within three weeks of hospital discharge, 60% of which could have been ameliorated or avoided.[3]

Eastern AHSN has initiated and supported the Electronic Medicines Optimisation Pathway (EMOP) programme for pharmacy providers in the east of England. Innovative software called 'PharmOutcomes' is being rolled out to make electronic prescribing around care discharges to the community faster, more accurate and more efficient for health professionals and patients.

EMOP in practice

Pharmacist Manager in Bury St Edmonds, Masih Kunduzi serves approximately 1000 customers and despatches 3500 items of medication monthly. He is acutely aware of the problems, and has opted to employ the new technology to solve it:

"For the past two months we have been using PharmOutcomes. This new system allows the hospital to send referrals on PharmOutcomes to the pharmacy with an up-to-date list of the patient's medicines post-discharge. When a repeat prescription is generated by the GP, I can now cross reference between the two and communicate any discrepancies via PharmOutcomes to the GP.

1. Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes. NICE guideline [NG5] Published date: March 2015
2. https://www.manchester.ac.uk/discover/news/more-than-200-million-medication-errors-occur-in-nhs-per-year-say-researchers/
3. Wessex AHSN/ CPSC.org.uk – Transfer of care around medicines

A female patient of ours who was prescribed morphine as a pain killer was admitted to hospital. Following the hospital discharge her dosage was lowered but the repeat prescription from her GP came through with the higher dose. In this case, I was able to notify the GP of the change and the patient's dosage was altered immediately and a new prescription issued by the GP thus reducing the risk of the patient taking the higher dose of morphine."

By introducing a second layer of expert checks, it is possible to ensure that these issues can be picked up. It is also a logical place for the checks to take place, community pharmacists are best placed to know their customers' medication requirements and spot any discrepancies. This process can also save the GP time so that they can concentrate on other matters when the patient next visits.

Masih explains how he set up the system:

"It's quite straight forward. We attended a talk at West Suffolk hospital, organised by the Suffolk local pharmacy committee (LPC) and supported by the Trust and Eastern AHSN. There was a demonstration on PharmOutcomes to show us how to operate the system – the Trust pharmacy team explained how they generate the summary, what information we as community pharmacists will get, and what notes we can make to send on to GPs. All of my team went along so that we all know how it works and what it can do."

"The system opens up a lot of opportunities in my opinion, we have only been using it for two months but I have already seen positive results. Another case that I dealt with involved an 89-year-old female patient on blood-thinners who was recently discharged from hospital and had been experiencing internal bowel bleeding. This issue was identified while I was conducting a review of her medication needs as part of the new system, after which, the findings were communicated to the doctor via PharmOutcomes who ended up stopping the blood thinner prescription."

"It's a valuable service benefitting those who are vulnerable, ensures medication errors during the clinical transition from secondary to primary care are minimised and enables a continuous care for patients. I think it's the way forward. It's much safer for patients to have another layer of medication checks, it also helps out GPs by alerting them to potential issues and making medication changes a more efficient process with pharmacists at the heart of it. It's as it should be – we are better placed to be aware of our regular patients' needs, can help them with medicines optimisation and address any clinical issues."

"The new system involves hospital and community pharmacists working collaboratively with local GPs, so it's extremely important to communicate with the GPs effectively as it's a very new service. This is a great opportunity to further our relationships with our local surgeries."

Masih has also provided details of how to implement PharmOutcomes to the Day Lewis Pharmacy Head Office so that a Standard Operating Procedure can be developed. There are approximately 300 other Day Lewis pharmacies in the UK, employing over 2500 people, so Masih hopes that this will help to spread best practice.

Superintendent Pharmacist and Director of the Lord Pharmacy in Newmarket, Zuzer Musaji has also recently begun using PharmOutcomes:

“The first case that was recorded by West Suffolk Hospital using PharmOutcomes helped us to spot a significant change in an elderly patient’s medication. This patient is one of the people that we prepare a weekly ‘dosette’ box (a compartmental dosage box), in this case containing medication for his heart condition, a diuretic, pain relief, iron, folic acid, bone strengthener and blood thinners. The angina and blood pressure meds had been stopped following a hospital visit and pain relief meds reduced. The usual prescription came through from his GP surgery, but we could see that the system hadn’t caught up, so we were able to intervene and raise this with the surgery.”

“The greatest thing about the new system is that we now have easily accessible, digital evidence that changes have been made at the hospital, so in the case of a discrepancy, it makes the process of following up with the surgery much quicker and more efficient. Beforehand we were relying on patients telling us, or showing us their discharge medication from the hospital, then we would spend time contacting the surgery to discuss and verify.”

Inefficiencies in communication between care providers has been found to leave pharmacists out of the loop in some cases:

“Prior to using this software, hospitals were good at letting us know when a patient had been admitted, but not so efficient in letting us know that they had been discharged. Now we are getting information as quickly as the surgery. It’s putting us right at the centre of patients’ medication management.”

Zuzer believes that this new way of operating is the way forward:

“Increasing pharmacists’ involvement in the discharge process can only be positive. To have more than one qualified network looking at the patient’s medication may help reduce errors. I would definitely recommend pharmacists using this, the digitised system also saves time when following up concerns with the surgery.”

David Holland is the owner of a pharmacy in Haverhill, next to the Clements GP surgery. He signed up to using PharmOutcomes six months ago:

“Prior to this, sometimes we weren’t always immediately aware that a patient had been in hospital. We relied on faxes for information to reach us, the system certainly wasn’t as efficient as it could be. This new digital system holds the information securely and keeps us in the loop quickly so that we can provide extra checks which in turn increases patient safety.”

“One case that it has helped with was relating to an elderly gentleman who was admitted to hospital with cardiac problems. The hospital discharge medication listed on PharmOutcomes highlighted some significant changes that if missed could have cause some serious problems for the patient. One was relating to Sando K, a potassium supplement that he had been prescribed. There were special instructions for the next three days and we were able to flag this up with the GP to eliminate the risk of the patient accidentally carry on taking the supplement, which could have been very dangerous. Also, his Furosemide dosage had increased to twice a day, we raised that with the GP as well to help double check that the change had been noted.”

David is finding that the upgrade in communications is a welcome improvement:

"PharmOutcomes improves the communication between all parties. The pharmacy is now in the communication loop, whereas previously it may have been missed. I feel like we have more reliable information which is helpful, we can deal with issues more quickly and effectively with more confidence. I would definitely recommend it to other pharmacists, it makes it much easier to provide continuity of care for patients."