St Paul's Medical Centre
Waste Campaign – Project Report

Background

There are three key elements that we need to consider when prescribing:

1. Safety
2. Effectiveness
3. Cost

Safety includes not only ensuring the correct medications are prescribed and that the patient understands how and when they should be used, but also limiting quantities to safe levels and avoiding stockpiling. Moreover it is essential that patients attend for monitoring and reviews as advised by the GP to ensure the medications are working effectively and not causing damaging side effects to other systems in the body.

Effectiveness relies on patients using their medications correctly, which in turn means that the preparation has to be in a form that the patient can tolerate and that their supply is available to them when they need it. We also need to check the effectiveness regularly to ensure that preparation, strength and dose are optimised.

The Blackpool health economy is under severe financial pressure and all practices are tasked with delivering cost-effective prescribing with minimal waste.

For 2016/17 St Paul's developed a Prescribing Plan to improve all of these areas, and the Waste Campaign is just one element of this.

Objectives

We were aware that nationally there is thought to be a high level of wasted medications, and we wanted to find out the extent of the problem at St Paul's.

We therefore asked patients to return any unused/unwanted prescribed items to us for a three-month period between 23rd July and 22nd October so that we could get an idea of the scale of the problem. Well Pharmacy within St Paul's agreed to work with us on this project and provided us with collection bins, as well as passing to us items returned directly to them.

We wanted to analyse the returned items for cost and to see if there was any discernible pattern or any insight we could glean into the reasons for the unused medicines.

We hoped the information we gathered would help us improve the systems we use within the practice when dealing with requests for repeat medications and to improve patient awareness so we can work together to reduce waste.

Results

We are very grateful to all the patients who brought in their unused/unwanted prescribed medicines, and to Well Pharmacy who also collected and allowed us to analyse what had been handed in.

The picture below shows most of what came in; at least 3 more bags were collected by the medication disposal service before we could include them in the analysis.

The total cost of the items shown above is £7,726. This can be broken down as follows:

Category	Value
Endocrine disorders	£4,286
Respiratory diseases	£1,221
Urological conditions	£418
Central Nervous System	£394
Nutrition	£259
Cardiovascular system	£180
Antibacterial/antifungal preparations	£133
Gastrointestinal system	£110
Skin conditions	£79
Wound care	£68
Eye problems	£36
Allergies	£31
Musculo-skeletal system	£25
Hormones	£21
End of life care	£13
Water for injection	£2

We know this represents only a fraction of actual waste, as some items were handed in to other pharmacies, and some items returned to Well were sent for disposal before we could analyse them. However, what we did receive has given us some really useful information and

would represent waste to the value of over £29,000 for a year. The cost to the NHS is higher, due to reimbursement of VAT and dispensing fees.

How does the problem arise?

Over-ordering/over-supply could arise due to problems:

- When medications are added to the list of repeat prescriptions
- When medications are ordered

A new medication/treatment may be added to the patient's repeat prescription because:

- It was added by a healthcare professional at St Paul's for a newly diagnosed condition
- It was added by a healthcare professional at St Paul's as an improved treatment for an existing condition
- It was added on the recommendation of a hospital doctor as either a new or improved treatment
- It was re-started having been used in the past by a patient, and requested again

Apart from the usual safeguards to ensure the treatment is not contra-indicated, for example by clashing with another medication or potentially hazardous in certain conditions, we need to minimise the risk of over-ordering.

- Some treatments are to be used only as and when needed (PRN) such as 'rescue medicines' for patients with COPD, some painkillers and 'blue' inhalers. If these are on repeat prescription there is a risk they will be ordered each time when not always needed. Moreover, if they are ordered each time because they *are* needed, the patient's condition may not be managed optimally.

- When medications are added as a new dose or as an alternative to an existing treatment, it is essential that the preparation it replaces is discontinued and a reason recorded in the records. If not, both preparations could be ordered inadvertently and either both used in error, or one used and the other wasted.

- When medications are recommended by a hospital doctor, we need to be sure for how long the patient needs them. In some cases the treatment may be intended only for a defined period, such as Clopidogrel required for a year after stent insertion. We need to take care not to inadvertently continue the treatment in the longer term.

- If a patient requests a treatment they have used in the past, it may be added back onto the list of repeat medications. However, this might not be appropriate, depending on why it was discontinued. In some cases the treatment may have been ordered from an old reorder slip and the patient does not really want it. We must always check why a medication has been discontinued before reactivating it.

When a prescription is ordered by or on behalf of a patient, such as by a pharmacy, we will assume the patient requires all the items requested, and they will therefore be issued if safe to do so. There are several ways in which this system could fall down:

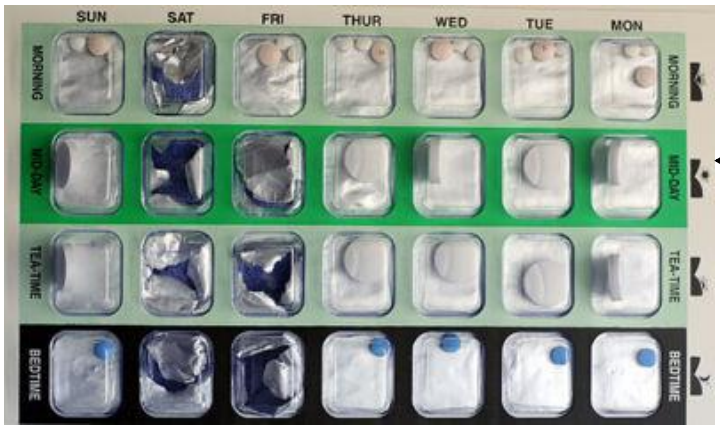
- Pharmacies are obliged to check directly with the patient or his/her carer within a week of requesting their prescription from the surgery. This does not always happen and consequently items might be ordered that are not needed because:
  a) The patient has stopped taking them completely
  b) The patient takes them only as and when required and has a current supply
  c) The patient is currently in hospital (the surgery is not informed when patients are admitted to hospital – only when they are discharged)

  Items that are not needed may therefore be dispensed and delivered, and consequently wasted.

- Prescription items do not always run out at the same time and patients may find it easier to order everything when the item that is running out first becomes due, rather than order different items at different times. We can try to reduce this problem by bringing as many items into alignment as possible. The practice pharmacists can assist with this.

- Some patients have told us that they order some of their medications because the doctor has prescribed them, but they do not want to take them and feel uncomfortable admitting this to the doctor. We would always prefer patients to talk to us about any concerns they have about prescribed medicines and we will respect their views. A more acceptable alternative might be available or the patient might prefer to manage his/her condition without treatment. The practice pharmacists are happy to help with this.

- Some patients prefer to have their medications dispensed in blister pack trays where possible, i.e. tablets and capsules only. This system is intended for patients at risk of forgetting to take their medications at the correct times due to age or frailty and have nobody to help them with this. The problem arises when there is a change to medications in-between prescriptions. It is not possible to change what is in a tray once it has been made up. If an item is no longer needed, the whole tray has to be destroyed and a new tray dispensed without the discontinued item. Patients can help with this by only using blister pack trays if they really need to. Pharmacies should assess requests for tray and ensure the criteria for providing them are met. The practice can also help by issuing medications for trays by using repeat dispensing. This means the full month's prescriptions can be issued at once, but only dispensed weekly so that less will be wasted if changes are made.



Example of blister pack tray from pharmacy

Some patients may choose to puchase a dosette box, into which their medications can be sorted to help them remember which to take at different times or on different days. Care must be taken to ensure that the patient knows which medication is which, in case changes are made during the month.

Example of dosette box refilled by patient/carer

Recommendations

The initial recommendations put forward are in black below. These were discussed at the practice Prescribing Meeting on 22nd November, and the outcome is given in brown.

1) PRN Medicines – consider authorising some as 'acute' instead of 'repeat' or reduce number of issues on repeat. Have the prescriptions clerks alert practice pharmacist when item requires reauthorisation so usage can be monitored and review with appropriate health care professional arranged if required.
   It is sensible in many cases to keep PRN medicines on repeat; however GPs will try to reduce the number of treatments prescribed for PRN use.

2) Medication changes – use this as an opportunity to review patient's full medication list. Issue medications as 28-day supply where possible in line with BCCG instructions. This can be via repeat dispensing where appropriate to limit additional workload.
   Newly prescribed treatments will be prescribed on a 28-day supply basis apart from known exceptions such as weekly supply for certain controlled medicines, etc.

3) Time-limited medications – ensure instructions are added to these so they will not be inadvertently reauthorised, e.g. take 1 per day until 10/11/2017 then stop.
   The date at which the medication is to be stopped will be put on the prescription instructions, so it is clear to patients, prescribers and pharmacies.

4) Reactivations – have the prescriptions clerk ascertain why the medication was discontinued and why the patient now requires it. Do not reactivate if ordered in error, replaced by an alternative preparation, now on drop list (prohibited by BCCG) or inappropriate for some other reason.
   Recommendation agreed.

5) Prescription orders – encourage patients to order personally rather than via a pharmacy wherever possible. Online using Patient Access is the preferred method, as the patient can clearly see all the items they currently available on repeat. Other methods to order are by using the repeat order slip and sending/bringing this to the surgery, or calling into the surgery to speak to a prescriptions clerk.
Recommendation agreed. The practice will not prohibit orders via pharmacies, but will encourage patients to order personally wherever possible.

6) Mis-aligned medications – encourage patients to book in with the practice pharmacist for a full medication review including realignment of medications where appropriate. We should proactively invite patients who take multiple medications for this service.
Recommendation agreed.

7) Blister pack trays – limit use of trays to those who really need them. Issue prescriptions for trays as monthly with weekly repeat dispensing instead of monthly full supply.
Recommendation agreed.

Action Plan

Action	Due Date	Lead
Agree wording of BCCG press release	07/11/16	APB
Discuss report findings with prescribers at prescribing meeting and agree actions	22/11/16	APB
Obtain feedback from patients via website/Facebook & PRG	31/12/16	APB
Review repeat prescribing system and workload	31/01/17	JH
Review/revise repeat prescribing protocol	28/02/17	JH/JD
Improve marketing re: Patient Access	31/01/17	APB
Improve marketing re: prescription ordering & waste	31/12/16	APB
Identify suitable patients for repeat dispensing	Ongoing	JD/SA
Provide training on repeat dispensing for prescriptions clerks	30/11/16	SA
Issue repeat prescriptions for dispensing in trays as repeat dispensing where 1 month's prescription = 4 x weekly issues	Ongoing	JD/SA
Devise system for recalling patients for pharmacist medication review	30/11/16	APB/JD/SA
Liaise with Well pharmacy to see if volume of waste reduces as a result of this project.	30/09/17	APB

APB
24/11/2016