Moorfields staff should be congratulated for their willingness and openness in reporting medication incidents.

This is the first Medicines Safety News Bulletin by the Medication Safety Group of Moorfields. It will be published on a quarterly basis to highlight the causes and frequencies of medication incidents and how we can learn from them to prevent future occurrence.

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ON BEHALF OF THE MEDICATION SAFETY GROUP

Medicine incidents intervened by Pharmacy

Graph 1 shows the contributions by Pharmacy in preventing errors reaching patients. Pharmacy staff intercept and act on errors as part of the routine clinical management checks and dispensing process.

- Most Pharmacy interventions were made when prescriptions were issued by clinicians bearing incorrect patient details and incorrect drug doses.
- This graph also shows the number of incorrect drugs dispensed which were intercepted within the Pharmacy department during the checking process.

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All other medicine incidents reported

Graph 2 shows the causes of all other medicine incidents reported across the Trust.

- Stock control accounted for the most medicine incidents that were reported. These included reports of drug syringes needing replacement due to accidental dropping of drug syringes on the floor before administration.
- The number of adverse reactions, incorrect drug administered and incorrect drug dispensed were similar.

Rate of dispensing errors across the Trust

Dispensing error rate was less than 0.08% for this period. It was based on the total number of prescriptions dispensed across all sites for this period. This was within the reporting rate of dispensing errors across all hospitals in UK which is between 0.02%-2.7%. (James KL et al. Incidence, type and causes of dispensing errors: review of the literature. In J Phar Pract.2009;17:9-30) Pharmacy staff and nurse dispensers are always working towards zero dispensing error rate.
Medicines Safety News

The 'systems model' of error

Contribution factors in incidents

Figure 1

The systems approach takes the view that most errors reflect predictable human failings within imperfect systems. The systems model avoids blame and focusing corrective efforts on the people involved, and instead seeks to identify factors within the system that led to human error and opportunities to improve these. For example, we can improve logging out between patients on our electronic prescribing system to reduce the number of patients receiving prescriptions with the wrong details.

In Pharmacy, we are installing an electronic patient calling system (Qmatic) with real time information to reduce the risk of dispensing errors. Staff can then concentrate on the dispensing process with limited interruptions from patients asking when their prescriptions are going to be ready. This will also help improve waiting times.

Figure 2. The Swiss Cheese model

The ‘Swiss Cheese’ model demonstrates the systems approach (Figure 2). Holes represent weakness in individual part of the system. Well trained staff and carefully planned barriers close the holes to prevent errors passing through the system.

MHRA updates and safety warnings

Domperidone risk of cardiac side effects, restricted indication, new contraindications, reduced dose and duration of use

The MHRA has restricted the use of domperidone for nausea and vomiting because it is associated with a small increased risk of serious cardiac side effects.

The dosage and duration of use have been reduced in adults and children and it is now contraindicated in those with underlying cardiac conditions and other risk factors.

• Full details of the alert can be found on this link: https://www.cas.dh.gov.uk/ViewAndAcknowledgment/viewAttachment.aspx?Attachment_id=101896

Impact of this alert at Moorfields

The impact of this alert at Moorfields is very low because domperidone is rarely used, according to records in pharmacy.

If used for nausea and vomiting, it should only be for a short period in patients without underlying cardiac conditions and other risk factors.

The recommended dose for adults and adolescents over 12 years and weighing 35kg or more is 10mg three times a day.

The recommended dose in children under 12 years and weighing less than 35kg is 0.25mg/kg body weight up to three times a day.

Actions for staff

• Report all medication incidents on the electronic reporting system.
• When you investigate an incident, think of the system that allowed it to happen.
• Medication incident investigations across Moorfields should identify contributing system factors which can be changed or introduced to ensure we all get things right every time.