Patient safety quarterly report: Quarter 4 (October – December) 2017

Introduction

This is the NPA Medication Safety Officer's (MSO) patient safety report for Quarter 4 of 2017. During 2017, we have seen an increase of over 45 per cent in Patient Safety Incident reports submitted to the NPA, compared to 2016. In Quarter 4 alone, there has been a significant increase in the number of reports submitted compared to previous quarters of 2017. Moving into 2018, pharmacy teams are reminded to encouraged to complete and submit Patient Safety Incident reports on the NPA website and strive to continue to improve patient safety.

NOTICEBOARD

NPA Patient Safety Awards 2018 – Best Patient Safety Improvement Team

2018 welcomes the first NPA Patient Safety Awards. We are looking for pharmacy teams to demonstrate the patient safety work undertaken so far and the impact it has had. The winner will be crowned "Best Patient Safety Improvement Team 2018". The winner's achievements and patient safety agenda will be shared with other NPA members and pharmacy teams. Applications will open in early February 2018.

MHRA alert - drug-name confusion

The Medicines and Healthcare products Regulatory Agency (MHRA) recently released a reminder to healthcare professionals, including pharmacy teams, of the potential risks when prescribing and dispensing medicines which are easily confused with others. Such medicines increase the risk of dispensing errors because they look-alike and/or sound-alike, therefore, the MHRA issued the following tips to minimise the errors:

- Be vigilant when dispensing commonly confused drug names
- Contact the prescriber if there is any ambiguity over which medicine was intended
    - Follow the pharmacy's standard operating procedure (SOPs) and guidance for dispensing
    - Use "*The Five Rights*" when undertaking clinical and accuracy checks – right medicine, right patient, right dose, right route and right time
- Report adverse drugs reactions that have occurred as a result of a patient safety incident via the Yellow Card Scheme or a platform which submits information to the National Reporting and Learning System (NRLS), such as the NPA Patient Safety Incident report form

The NPA portfolio of SOPs and "*Dispensing process: best practice*" are designed to provide information and guidance in regards to dispensing and other pharmacy processes, with a focus on patient safety. The NPA MSO patient safety Quarterly report regularly highlights the most common look-alike/sound-alike errors reported to the NPA and the most common errors of Quarter 4 2017 are discussed below.

Direct Dial: 01727 891 800 **Email:** pharmacyservices@npa.co.uk **Online:** www.npa.co.uk

Patient safety quarterly report: Quarter 4 (October – December) 2017

Frequent errors – common themes

Errors involving look-alike, sound-alike medicines

Dispensing errors involving medicines that look-alike and/or sound-alike are commonly reported. However, during Quarter 4 of 2017, there has been an increase in serious cases involving:

- Esomeprazole and escitalopram
- Rabeprazole and rivaroxaban
- Rosuvastatin and rivaroxaban

In one report, the dispensing of escitalopram instead of esomeprazole led the hospitalisation of a patient with hyponatraemia. Additionally, a patient dispensed rivaroxaban instead of rabeprazole, whilst taking regular warfarin, was left in a serious condition.

Errors involving medicine dosage systems (MDS)

Dispensing errors involving MDS trays made up 11 per cent of incidents reported during Quarter 4 of 2017 and are consistently a large proportion of submitted patient safety incident reports. The most common errors involving MDS include:

- Items missing from MDS trays
- Medication administration record (MAR) charts not correlating with prescriptions and MDS trays (such as items missing from MAR charts)
- Incorrect strengths of medications dispensed in MDS trays
- Accidental mixing of medicines from one patient's dispensing basket with another patient's basket
- MDS trays not securely sealed, allowing medicines to move slots
- Tablets/capsules "*jumping*" to different slots during dispensing/checking
- Staff using MAR charts or old prescriptions to dispense against and not the original prescriptions

The NPA has developed a suite of MDS resources including a new MDS SOP, with a focus on patient safety.

Errors involving Controlled Drugs (CDs)

Errors occurring during the dispensing of CDs are also very common. An occurring theme involves the incorrect quantities of CDs being dispensed and incorrect formulations of morphine and tramadol; in particular:

- Modified release instead of standard release, or vice versa
- Capsules instead of tablets , or vice versa

During Quarter 4 of 2017, another emerging theme of patient safety incidents involving supervised consumption of buprenorphine and methadone. Examples of a number of cases reported are:

- Patients had received standard methadone oral solution instead of sugar-free
- The wrong dose was dispensed (especially where there had been recent dose changes)
- A patient was given another patient's supervised dose

Direct Dial: 01727 891 800 **Email:** pharmacyservices@npa.co.uk **Online:** www.npa.co.uk

- In more than one example, more than double the prescribed methadone dose was provided to the wrong patient

The NPA has a suite of CD resources available and a collection of CD SOPs to support members with dispensing CDs safely and effectively.

Other interesting errors – examples

Reconstitution of oral liquids

The incorrect reconstitution of oral liquids, in particular antibiotic solutions and suspensions, has led to serious patient safety incidents. In some examples, it is suspected that the incorrect volume of water was used to reconstitute oral antibiotics, which may have led to incorrect dosing and even potential overdose. This highlights the need to ensure that only a competent member of staff carries out reconstitution and to consider having another trained member of staff to check the volume of water against the manufacturer's instructions, before it is added to the powder.

Hospital discharge

A key area in which communication between community pharmacies, GPs and hospitals can improve, is patient safety incidents following discharge from hospital. A number of cases reported in Quarter 4 of 2017 highlighted the issues and concerns with transfer of care from secondary to primary care.

For example, in more than one case, community pharmacies were not informed of a patient being discharged, or discharge summaries had not been transferred to the patient's community pharmacy /GP. This led to patients being left without medication for a week and GPs prescribing incorrect medication, respectively.

Threat to staff

During Quarter 4 of 2017, a rare patient safety incident occurred in which an individual entered a community pharmacy armed with a small weapon and proceeded to threaten the staff and demand diazepam and pregabalin. Events like this do not happen often; however, the National Reporting and Learning System/NHS Improvement encourage such incidents to be reported – which can be completed via the NPA Patient Safety Incident report form. Additionally, pharmacy teams should be trained in how to respond to such an event, for example, by co-operating with the individual and informing the police as soon as possible.

Direct Dial: 01727 891 800 **Email:** pharmacyservices@npa.co.uk **Online:** www.npa.co.uk

Patient safety quarterly report: Quarter 4 (October – December) 2017

Key statistics and frequently appearing drugs

Medication error categories

Figure 1 illustrates the main medication error categories and incidence reported during Quarter 4.

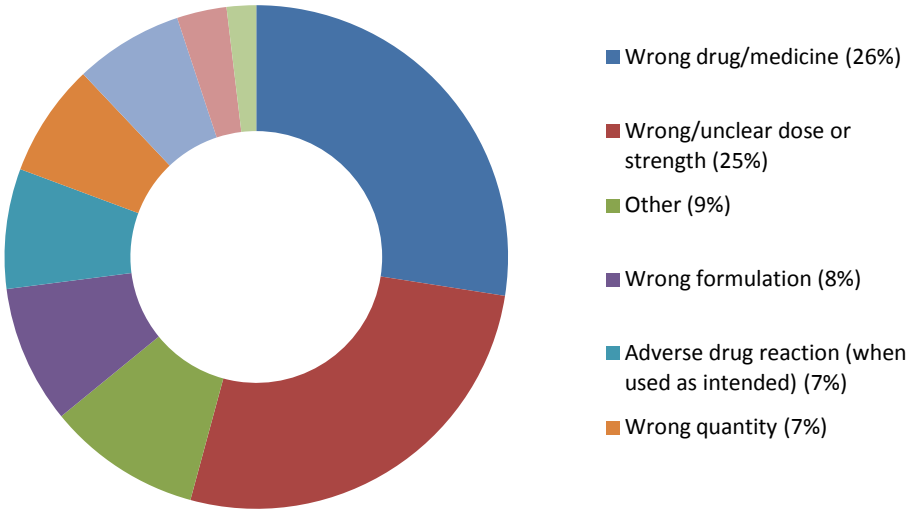


Figure 1: Medication errors reported during Quarter 4 by category

Key findings

- The two most common error categories reported were dispensing a **wrong drug/medicine** (26 per cent), and dispensing the **wrong/unclear dose or strength** (25 per cent) – this corresponds to trends identified in Quarter 3 of 2017
- Common look-alike, sound-alike medicines reported in the **'=wrong drug/medicine** category are indicated in the table below:

Commonly mistaken medicines	
Amitriptyline	Amlodipine
Allopurinol	Atenolol
Escitalopram	Esomeprazole
Gabapentin	Pregabalin
Latanoprost/timolol	Latanoprost
Pantoprazole	Pravastatin

- Other trends which were found in the **wrong drug/medicine** category are as follows:

Type of medication	Commonly mistaken medicines	
Fridge	Humulin I	Humulin M3
	Humulin	Humalog
	Lixisenatide	Liraglutide
	Novomix	Novorapid
CDs	Equasym	Elvanse
	Tramadol	Zapain
	Zomorph	Longtec

Direct Dial: 01727 891 800 **Email:** pharmacyservices@npa.co.uk **Online:** www.npa.co.uk

Combination products	Brinzolamide/brimonidine *(Simbrinza)*	Brinzolamide/timolol *(Azarga)*
	Budesonide/formoterol *(DuoResp, Symbicort)*	Beclometasone/formoterol *(Fostair, Fostair NEXT)*
	Dihydrocodeine/paracetamol *(Co-dydramol)*	Codeine/paracetamol *(Co-codamol)*
	Metformin/sitagliptin *(Janumet)*	Metformin/dapagliflozin *(Xigduo)* Metformin/vildagliptin *(Eucreas)*

- Many of the incidents reported as **wrong formulation** involved the following:
  - Caplets <-> capsules (*for example co-codamol*)
  - Capsules <-> tablets (*for example venlafaxine*)
  - Inhaler <-> nasal spray (*for example beclometasone*)/ breath actuated (*for example salbutamol*)

- Common trends for incorrect quantity being dispensed included antibiotic and CD medicines, therefore, extra precautions should be taken when highlighting split packs on the shelves and being vigilant for antibiotic prescriptions; duration of treatment can vary from the quantity per pack

Contributing factors

Figure 2 illustrates the most commonly reported contributing factors to patient safety incidents during Quarter 4.

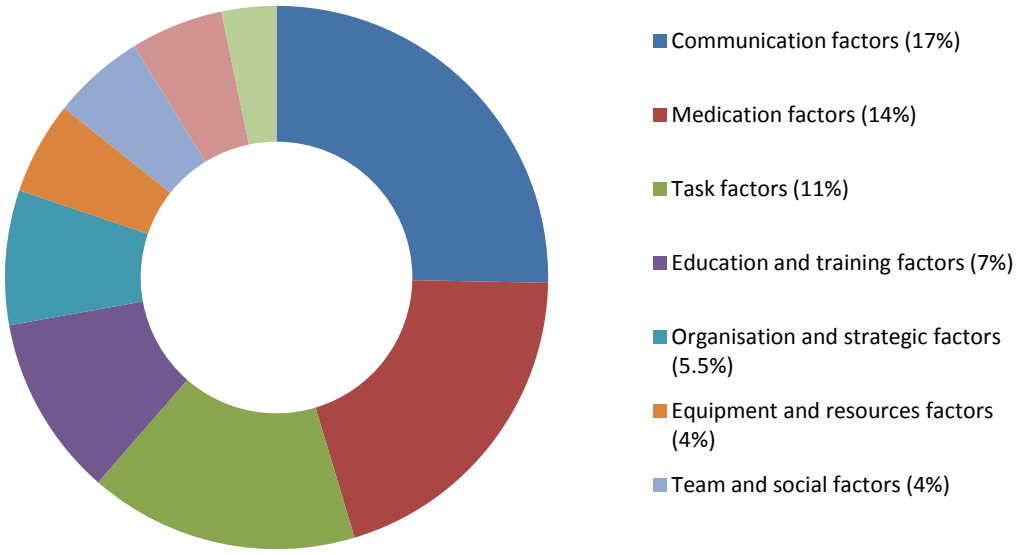


Figure 2. Contributing factors to errors reported in Quarter 4.

Key findings

- Communication factors contributed to 17 per cent of errors, which includes MDS trays which did not correspond to hospital discharge notes
- Medication factors continue to be the one of the main contributing factors, accounting for 14 per cent of errors – this figure was similar to Quarter 3 of 2017 (12 per cent)

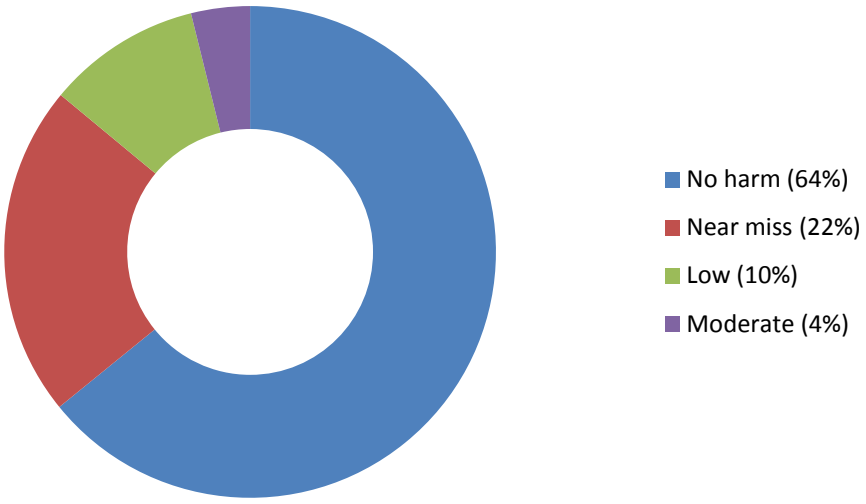
Direct Dial: 01727 891 800 **Email:** pharmacyservices@npa.co.uk **Online:** www.npa.co.uk

Patient safety quarterly report: Quarter 4 (October – December) 2017

- Work and environmental factors (4 per cent) significantly dropped compared to Quarter 3 of 2017 (34 per cent)

Degree of harm

Figure 3 illustrates the degree of harm caused to patients by incidents reported during Quarter 4.



Key findings

- Errors resulting in no harm to the patient continue to be reported and these make up the majority of submissions (64 per cent of errors reported)
- Moderate harm increased by 1 per cent from Quarter 3 of 2017 to Quarter 4, which included patients taking the medicine and experiencing side effects before realising/being informed about the error – this usually stemmed from:
    - Wrong medicines being dispensed to the patient
    - Delivering medicines to the wrong patient
    - Inaccurate hospital discharge notes
    - Incorrect assembly of MDS

Top tips for minimising risk/general action points

Managing the dispensary and stock

- ✓ Apply cautionary stickers to shelves to highlight look-alike, sound-alike medicines
- ✓ Cleary mark all split packs – consider using a marker pen and marking each side of the pack
- ✓ Rotate stock at the point of each delivery – place newer stock at the back and bring forward old stock
- ✓ Separate medicines available in different pack size – for example, terbinafine tablets 250mg in packs of 14 and 28
- ✓ Display mnemonics around the dispensary – such as HELP (how many, expiry, label, product) to support accuracy checking

Date checking

- ✓ Determine how often date-checking of all stock should be undertaken
- ✓ Divide the dispensary/pharmacy area into manageable areas to check at set regular times

Direct Dial: 01727 891 800 **Email:** pharmacyservices@npa.co.uk **Online:** www.npa.co.uk

Patient safety quarterly report: Quarter 4 (October – December) 2017

- ✓ Insert the frequency of date checking into the pharmacy SOP – refer to the NPA date-checking SOP
- ✓ Use the NPA "*Pharmacy date-checking matrix*" to record the completion of each section
- ✓ Clearly mark items with less than three months from the expiry date
- ✓ Quarantine any stock for destruction with less than one month shelf life
- ✘ Don't miss sections – fridge items, bulk items and draws are often forgotten!
- ✘ There is no set period of time as to how often date checking should be completed but pharmacy teams should consider performing this activity at least every **three months**

Dispensing CDs (Schedule 2 and 3) and managing CD stock

- ✓ Always mark on the prescription the quantity dispensed and the date – this is particularly important for owings to keep a clear audit trail
- ✓ Open each box and count the quantity – even if a full pack is dispensed
- ✓ Conduct regular CD audits and record completion –include the name of the staff member who has completed
- ✓ Conduct a full internal investigation if a CD discrepancy is identified during an audit/dispensing – attempt to identify where the error has occurred and conduct a root cause analysis
- ✓ Report any CD incidents to the Superintendent pharmacist and local CD Accountable officer (where necessary)
- ✓ Have clear designated sections in the CD cupboard for stock, out-of-date stock, patient returns and items awaiting collection/delivery
- ✓ Refer to the NPA CD SOPs when dispensing, supplying, recording or destroying CDs
- ✓ There is no set period of time how often CD audits should be complete but consider at least **every week** or more often if the pharmacy dispenses a large volume of CDs
- ✓ Ensure the CD register states the **actual quantity** of CDs in the cabinet – including any expired stock or stock awaiting collection/delivery and does not include any patient-returned CDs

Direct Dial: 01727 891 800 **Email:** pharmacyservices@npa.co.uk **Online:** www.npa.co.uk