PATIENT SAFETY UPDATE/
MEDICATION SAFETY
OFFICER (MSO) REPORT
APRIL – JUNE (Q2) 2019

Leyla Hannbeck, Director of Pharmacy (NPA), is the Medication Safety Officer (MSO) for all independent community pharmacies in England with fewer than 50 branches.
Dear Superintendent,

This is my patient safety update / Medication Safety Officer’s (MSO) report for Quarter 2 (Q2) (April – June) of 2019.

The report contains a summary of the most common types of dispensing errors reported to the NPA during the second quarter of 2019, along with my top tips for minimising patient safety incidents.

Included in this report:

| NPA patient safety Incident Reporting Platform (IRP) — user information | Page 1 |
| Noticeboard - important updates | Page 2 |
| Examples of pharmacist’s clinical check and vigilance preventing harm to patients | Page 2 |
| Key statistics from patient safety incidents reported in Q1 2019 | Page 3 |
| Look-alike sound-alike (LASA) errors | Page 7 |
| Examples of common error themes | Page 8 |
| Contact details | Page 9 |
| NPA patient safety resources | Page 9 |

NPA patient safety Incident Reporting Platform (IRP) — user information
The NPA IRP, updated and launched end of October 2018, has proven to be user-friendly. Please continue to use the IRP to report incidents (and the MSO quarterly reports) to demonstrate evidence of sharing and learning.

Key points for using the IRP
- **Patient identifiable information must not be included when completing the report** — this is especially important since the implementation of the General Data Protection Regulation (GDPR) on 25 May 2018.
- The incident report receipt is sent via email, helping to reduce administrative time as it can be kept for pharmacy record keeping requirements. Currently there are multiple receipts not reaching the pharmacies who have submitted the report because incorrect email addresses have been submitted; before submitting the report, check the email address for correspondence submitted is accurate.
- When documenting the degree of harm caused to patients, the actual degree of harm should be documented, not the potential harm that could have arisen.
- The NPA IRP can be used to document near misses. Although it is not a requirement to report near misses, it is a requirement to record them. Reporting near misses is encouraged as learning can occur which can help prevent future events occurring.
- It is important that a detailed description of the patient safety incident in the ‘describe what happened’ field is provided (think about the sequence of events and how the error was concluded) — simply writing a brief description, for example, ‘wrong strength given’ is not enough as it does not provide sufficient information for us to conduct a full and complete data analysis which is a key part of the NPA’s role as the MSO for all community pharmacies in England with fewer than 50 branches.

Leyla Hannbeck FRPharmS, MBA, MSc, MA
Director of Pharmacy, NPA
Medication Safety Officer (MSO)
July 25, 2019
**Noticeboard - important updates**

Updated MHRA resources to support compliance with the Pregnancy Prevention programme in females taking oral retinoid medicines.

The Medicines and Healthcare products Regulatory (MHRA) has published a [drug safety update](https://www.mhra.gov.uk) to advise healthcare professionals of the revised and simplified resources available to support the Pregnancy Prevention Programme (PPP) in women taking acitretin, alitretinoin and isotretinoin. The updated materials are now consistent regardless of the brand of medicine a patient receives. Materials for each product are available on the [EMC website](https://www.emc.com) and include a prescriber’s checklist, patient card and pharmacist checklist.

Due to their high teratogenicity, oral retinoid medicines must not be used in pregnancy and their use in females of child-bearing age must be in accordance with the [terms of a PPP](https://www.mhra.gov.uk). Topical retinoids are considered to have minimal systemic exposure however, as a precautionary measure their use is contraindicated in pregnancy and females of child-bearing age should be advised to use appropriate contraception to avoid unintentional exposure.

---

**Videos to support patients in completing a Yellow Card report**

The MHRA has released [videos](https://www.mhra.gov.uk) to guide patients on reporting suspected side effects of medicines and suspected problems with medicinal devices.

---

**Updated MHRA guidance for use of valproate containing medicines in pregnancy**

The (MHRA) has published a [drug safety update](https://www.mhra.gov.uk) to help healthcare professionals, including pharmacists, to comply with the requirements of the valproate Pregnancy Prevention Programme (PPP) when supplying valproate medicines to female of child-bearing age. A new [Annual Risk Acknowledgement Form](https://www.mhra.gov.uk) has been developed which must be completed by the specialist when initiating treatment and during all future reviews; once complete, it must be countersigned by the patient/carer. This is intended to reduce and eliminate valproate exposure in pregnancy in view of its teratogenic effect.

The NPA Pharmacy Services team has published a [Valproate standard operating procedure](https://www.mhra.gov.uk) to aid dispensing of this medicine.

---

**Examples of pharmacist’s clinical check and vigilance preventing harm to patients**

- A patient was prescribed Ciprofloxacin 500mg twice daily for a recurrent urinary tract infection. The patient had a clinical history of bad muscle cramps. Aware of this, the pharmacist counselled the patient on the side effect profile of ciprofloxacin including the [MHRA advice](https://www.mhra.gov.uk) and instructed the patient to stop treatment at the first sign of tendon pain or inflammation, muscle pain, muscle weakness, joint pain or joint swelling. The patient experienced muscle cramps after taking the first dose of ciprofloxacin and proceeded to contact the prescriber who changed the treatment. This may have been overlooked if the pharmacist had not counselled the patient appropriately.

- A pharmacy received a prescription for a seven year old child for Clobetasol ointment. The pharmacist was aware that Clobetasol is a very potent steroid and queried the suitability of this for such a young child with the prescriber. It transpired that it had been prescribed as a replacement for Clobetasone cream (a steroid of moderate potency) because this was out of stock at the time. Later that day a new prescription was issued for Clobetasone ointment.
Patient safety incidents reported in Q2 2019

There was a 19% decrease in the total number of patient safety incidents reported in Q2 of 2019 compared to Quarter 1 (Q1) of 2019. The review point for the Quality Payments Scheme was in February 2019 and there were a particularly high number of reports received during this month. This may have contributed to the decrease in reporting seen between the quarters.

- Please continue to use the IRP to report incidents (and the MSO quarterly reports) to demonstrate evidence of sharing and learning.

KEY STATISTICS from patient safety incidents reported in Q2 2019

1. **Origin** of patient safety incidents during Q2 of 2019

<table>
<thead>
<tr>
<th>Error Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy error</td>
<td>95%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
<tr>
<td>Prescriber error</td>
<td>2%</td>
</tr>
<tr>
<td>Both prescriber and pharmacy error</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Key findings**

- 95% of incidents reported originated from the pharmacy.
- Only 2% of errors reported were prescribing errors – this is a 3% decrease from Q1. **It is important to report prescribing errors because increased reporting allows identification of trends and increases learning.**
- The most common type of error reported during Q2 was ‘dispensing error’, which accounted for 88% of all reported errors.

2. **Medication error categories** and incidents reported during Q2 of 2019

<table>
<thead>
<tr>
<th>Error Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong strength</td>
<td>27.1%</td>
</tr>
<tr>
<td>Wrong drug/medicine</td>
<td>26.8%</td>
</tr>
<tr>
<td>Wrong formulation</td>
<td>13.4%</td>
</tr>
<tr>
<td>Wrong quantity</td>
<td>8.7%</td>
</tr>
<tr>
<td>Mismatching patients</td>
<td>5.3%</td>
</tr>
<tr>
<td>Other</td>
<td>4.9%</td>
</tr>
<tr>
<td>Wrong/transposed/omitted label</td>
<td>3.4%</td>
</tr>
<tr>
<td>Mismatching between patient and medicine</td>
<td>3.2%</td>
</tr>
<tr>
<td>Wrong/unclear dose</td>
<td>2.8%</td>
</tr>
<tr>
<td>Wrong frequency</td>
<td>1.9%</td>
</tr>
<tr>
<td>Omitted medicine/ingredient</td>
<td>1.4%</td>
</tr>
<tr>
<td>Wrong/omitted verbal patient directions</td>
<td>0.4%</td>
</tr>
<tr>
<td>Contra-indication to the use of medicine</td>
<td>0.4%</td>
</tr>
<tr>
<td>Delay/unable to supply due to unavailability</td>
<td>0.2%</td>
</tr>
<tr>
<td>Wrong brand/generic</td>
<td>0.1%</td>
</tr>
<tr>
<td>Patient allergic to treatment</td>
<td>0.1%</td>
</tr>
</tbody>
</table>
Key findings
The main categories of error reported were those involving medication errors such as wrong strength, drug or formulation, these accounted for 67.3% of errors reported:

1. ‘Wrong strength’ incidents (27.1%)
   - Despite the rescheduling of gabapentin and pregabalin, there continued to be wrong strength errors made with these drugs. Of all the wrong strength errors made, 5% involved either pregabalin or gabapentin.
   - Wrong strength inhalers were also dispensed (accounting for 4.5% of wrong strength errors) these included multiple errors in dispensing the wrong strength of Fostair® 100/6 or Fostair® 200/6 inhaler.

2. ‘Wrong drug/medicine’ incidents (26.8%)
   - There has been a notable number of wrong drug incidents reported involving Direct Oral Anticoagulants (DOACs) (5.6%). Rosuvastatin and rivaroxaban being dispensed in place of each other was the most common type of wrong drug error reported. As anticoagulants, these medicines are considered high risk.

3. ‘Wrong formulation’ incidents (13.4%)
   - Other than oral preparations, the main types of incorrect formulations dispensed included inhalers (6.4%), eye drops (4.5%) insulins (6.4%) and topical applications (8%).

   - Salbutamol inhaler / salbutamol easibreathe accounted for 7.3% of wrong formulation errors.
   - Symbicort turbohaler / Symbicort pressurised inhaler accounted for 5.5% of wrong formulation errors.

My advice for preventing DOAC wrong drug errors
- Consider separating out these high risk drugs to a separate ‘DOAC’ or anticoagulant area of the dispensary to help reduce picking errors.
- When patients are initiated on DOACs patient educational material should be provided.
- The NMS can be provided for patients in whom anticoagulant treatment has been newly started.
- Prescription alert stickers – can be placed onto dispensed medicine bags or prescriptions to alert the pharmacist that counselling is required, this should prompt checking on handing out.
- Check strength, check name, check dose shelf edge stickers and anticoagulant reminder shelf edge stickers.

Other significant error category
Mismatching between a patient and medicine or mismatching patients accounted for 8.5% of the errors reported. One such example reported resulted in moderate harm.
- Patient A came to collect their monitored dosage system (MDS) from the pharmacy and was given a bag of medicine which had Patient A’s label attached; however, the bag contained medication for Patient B. The patient took one day of medication from the bag which resulted in the patient being admitted to hospital after having a fall, they also had an increased state of confusion and fluid retention. The pharmacy reviewed their SOP’s and introduced an updated procedure where bagged medication is double checked for patients who receive their medicine in a MDS.

My advice to prevent bagging up errors
- Avoid printing additional bag labels.
- Confirm that the contents of the bag matches the patients expectations.
- Before placing medicine into the bag check the name on each item corresponds to the name on the prescription.
- Confirm the address against the prescription and bag when handing out.
- Do not leave boxes or bags open once they are ready for collection –numerous incidents have been reported where items have fallen into open bags / boxes.
3. **Degree of harm caused to patients by incidents reported during Q2 of 2019**

![Degree of harm chart]

**Key findings**
- The degree of harm caused to patients reported as ‘**none**’ (56%) and ‘**near miss**’ (29%) continues to make up the majority of reports.
- There were no incidents reported during Q2 which resulted in death, this has decreased from 0.1% compared to Q1 of 2019.

4. **Self-checking during Q2 of 2019**

![Self-checking chart]

**Key findings**
- ‘Self-checking’ is defined as a pharmacist carrying out all steps in the dispensing process themselves, including the clinical check of the prescription and accuracy check of the assembled items.
- There was a 4% decrease in number of errors reported which involved a pharmacist self checking compared with Q1 of 2019.
5. **Contributing factors to patient safety incidents during Q2 of 2019**

- **Work & environment factors (34%)**
- **LASA (29%)**
- **Task factors (6.9%)**
- **Unknown (6.5%)**
- **Communication factors (5.9%)**
- **Education & training factors (4.4%)**
- **Prescriber error (3.9%)**
- **Medication factors (3.7%)**
- **Equipment & resources factors (1.5%)**
- **Team & social factors (1.2%)**
- **Organisation & strategic factors (1.2%)**
- **Patient factors (0.7%)**
- **Other (describe) (0.5%)**

### Key findings
- **‘Work and environment factors’ (34%)** continue to be the main contributing factor reported. Incidents continue to document time pressures, understaffing and cluttered or poorly organized working environments as factors contributing to these errors.
- **‘LASA’ (29%)** as a contributing factor was also listed on a significant number of the errors reported.
Look-alike sound-alike (LASA) errors

What is a LASA error?
A Look-Alike-Sound-Alike (LASA) combination is two medicines which have similar looking and/or sounding names. This refers to the medicine name only; not to the packaging. The NPA is aware of incidents which have occurred due to similar-looking packaging of different medicines; these would be reported as ‘wrong drug’, ‘wrong strength’ or ‘wrong formulation’ and the event description would provide further details about the similar-looking packaging if this contributed to the error. Please see the table below for more examples.

The second main contributing factor to the occurrence of patient safety incidents was ‘LASA’ (29%). However, on inspection of these reports, 32% of reports were not LASA errors, but were wrong strength, wrong formulation or errors involving similar packaging. There is a lot to learn from LASA errors and unclear data can prevent this from happening. To aid accurate data reporting of these incidents going forward I have included a guide below on what a LASA error is.

<table>
<thead>
<tr>
<th>Error description</th>
<th>Type of error</th>
<th>Is this a LASA error?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amlodipine dispensed in place of Amitriptyline</td>
<td>Wrong drug</td>
<td>✓ Yes</td>
</tr>
<tr>
<td>Amlodipine dispensed instead of Gliclazide as packaging looked similar</td>
<td>Wrong drug</td>
<td>✗ No</td>
</tr>
<tr>
<td>Levothyroxine 50mcg dispensed in place of Levothyroxine 25mcg as packaging looked similar</td>
<td>Wrong strength</td>
<td>✗ No</td>
</tr>
<tr>
<td>Paracetamol tablets dispensed instead of capsules</td>
<td>Wrong formulation</td>
<td>✗ No</td>
</tr>
</tbody>
</table>

The percentage of each of the top 5 LASA errors (as identified by NHS Improvement) reported in Q2 are listed in the table below.

<table>
<thead>
<tr>
<th>Top 5 LASA errors as identified by NHS Improvement</th>
<th>Percentage from total number of LASA errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amlodipine</td>
<td>4.4%</td>
</tr>
<tr>
<td>Amitriptyline</td>
<td></td>
</tr>
<tr>
<td>Atenolol</td>
<td>0.7%</td>
</tr>
<tr>
<td>Allopurinol</td>
<td></td>
</tr>
<tr>
<td>Azithromycin</td>
<td>0.7%</td>
</tr>
<tr>
<td>Azathioprine</td>
<td></td>
</tr>
<tr>
<td>Carbamazepine</td>
<td>0.7%</td>
</tr>
<tr>
<td>Carbimazole</td>
<td></td>
</tr>
<tr>
<td>Propranolol</td>
<td>1.5%</td>
</tr>
<tr>
<td>Prednisolone</td>
<td></td>
</tr>
</tbody>
</table>

Examples of LASA incidents reported during Q2 2019

- A patient was prescribed prednisolone 5mg tablets, the patient was dispensed prochlorperazine 5mg tablets in error. The patient took 4 tablets of prochlorperazine before attending hospital on advice from the GP as they felt very drowsy. The pharmacy team was briefed on this error to raise awareness.
- A patient was prescribed pantoprazole but paroxetine was dispensed. The patient experienced increased symptoms of indigestion, nightmares and itchiness. The pharmacy team was informed of the error and to reduce the chance of picking errors the two medicines were placed on different shelves so they were no longer next to each other.
Examples of common error themes

Error type: patient on long term steroids
The following is an example of an incident reported with work and environmental factors contributing to the error. A patient was issued a prescription for prednisolone tablets 5mg at a reducing dose. The pharmacy dispensed prednisolone tablets 1mg in a plain white container. The box was labelled correctly against the prescription with the dosage instructions “four tablets daily- reducing by one tablet every week”. The patient took a significantly lower dose for 3 weeks and experienced nausea and vomiting. An ambulance was called out on three separate occasions with the last ambulance visit resulting in an admission to hospital for 3 days.

Abrupt withdrawal following prolonged treatment with corticosteroids can lead to adrenal insufficiency, hypotension and, in rare cases, death. A withdrawal syndrome with symptoms such as anorexia, nausea, vomiting, lethargy and headaches has also been seen following abrupt discontinuation of corticosteroids.

My advice for dispensing prescriptions for steroids
✓ Separate different strengths to different areas of the shelf or pharmacy if possible.
✓ Confirm with the patient what dose they are on and that they are aware of how to correctly take steroids.
✓ Advise the patient to seek medical attention if they feel unwell and make the healthcare professional aware that they are on steroids.
✓ Pharmacies should issue patients on long term steroids with a steroid treatment card which gives clear guidance on risk minimisation in addition to the drug details, prescriber, dose and treatment duration.

Error type: calculation error
A prescription was received for ranitidine 150mg/10ml (75mg/5ml) for a child with a dose instruction of 25mg twice a day. The dispenser changed the dose instructions to a volume in ml to assist the carer with dosage-administration. The dispenser misread the dose as 25ml and a label was produced instructing the patient to take “five 5ml spoonfuls”. This is approximately fifteen times the dose prescribed. This error was not identified until the next prescription was issued the following month.

My advice
✓ Always double check calculations especially for paediatric doses.
✓ Doses prescribed by patient weight should be confirmed with the patient/representative to ensure the correct dose has been prescribed.
✓ Provide specific instructions on how to give each dose - avoid vague phrases such as "take as directed" or "when required".
✓ Encourage those administering the medicine to use oral syringes or other measuring devices to facilitate accurate dose administration of liquid formulations.

Error type: medicines omitted from a monitored dosage system (MDS)
A pharmacy was requested to dispense a patients’ medicines into a MDS. The MDS was assembled and dispensed to the patient against the prescriptions received from the surgery. The surgery had omitted Epilim® from the prescription and this had also not been picked up at the pharmacy. Due to the omission of Epilim® the patient experienced an epileptic seizure.
**My advice**

- Check that the medicines requested by the patient matches the prescription issued by the GP practice.
- Any anomalies, additions and omissions should be checked with the surgery prior to dispensing to ensure a mistake has not been made.
- Exercise extreme caution and vigilance when dispensing MDS trays - particularly for patients with medications that can cause serious harm when omitted.
- Refer to company SOPs when dispensing MDS trays or the NPA “MDS SOP”.

**Error type: errors involving dispensing methadone**

Two clients presented to the pharmacy for their daily methadone instalment at the same time. Patient A had been prescribed 35ml of methadone and Patient B prescribed 80ml of methadone. The pharmacist was made aware of the patients’ arrival and the bottle for each patient was prepared and dispensed. The pharmacist called patient A into the consultation room and asked them, by name, to confirm that they were the patient in question. The patient confirmed “yes”. The daily instalment was given under supervision and the patient left. The pharmacist called Patient B, by name, into the consultation room. The pharmacist then realised that Patient A had received Patient B’s dose; patient B was then dispensed the correct dose. The Drug and Alcohol unit was informed and the pharmacy contacted patient A to make them aware of the error and to present at A&E if they experienced any side effects. Patient A experienced no harm from the error.

**My advice**

- Never use closed questions when confirming a patient’s identity.
- Request the name, address and/or date of birth and evidence of identity (where appropriate).
- Dispense and hand out one prescription at a time to avoid the wrong quantity going out to the patient.
- Refer to company SOPs when dispensing CDs. The NPA has a suite of CD resources and a collection of CD SOPs available to support members with dispensing CDs safely and effectively.
- Exercise extreme caution and vigilance when dispensing CDs.

**Contact**

For further information, advice and/or support on any patient safety or pharmacy topic/matter, please contact the NPA Pharmacy Services team on:

- 01727 891800
- pharmacyservices@npa.co.uk

**NPA Patient safety resources**

- Dispensing process: best practice.
- Eye product identification checker.
- Inhaler identification checker.
- Insulin identification checker.
- Medicines in pregnancy and patient safety.
- Preventing dispensing incidents involving liquid preparations.

The full range of the NPA patient safety resources can be accessed [here](#).