IMSN Medication Safety Bulletin

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IRISH MEDICATION SAFETY NETWORK

Improving patient safety with regard to the use of medicines.

IMSN Conference: Round-up of 2022 & What's in store for 2023

The 2022 IMSN Conference "Collaborative Medication Safety" took place virtually on 25th November and was attended by just over 300 delegates . A host of topics included HIQA's medication safety monitoring programme, HSE Incident management, iSimpathy project, and 'Building a prescriber' delivered by guest speaker from Northern Ireland, Prof. Roisin O'Hare, Lead Teacher Practitioner Pharmacist, NI Universities Network. In addition, a number of initiatives from Irish hospitals were presented. Sincere thanks to all speakers and attendees. Presentations from the day are available on the website (www.imsn.ie/conference)

Conference planning for 2023 (November 24th) is afoot, which will be an in-person meeting kindly facilitated by UCC. This year's theme is 'Smarter Technology for a Safer Tomorrow,' and will include presentations on the work of the IMSN eHealth working group, the National Pharmacy eHealth group, Hospital Medicines Management System progress and the national ePrescribing project.

By popular demand, Pearls will once again feature at this years conference – this event is a unique opportunity to showcase work on medication safety in a brief 3-5 slide fashion (5-7mins). The call for Pearl abstracts for Conference 2023 will open later this year - if you are involved in medication safety research or quality improvement projects, submit your PEARL!

The digital age

In 2022 the IMSN eHealth Working Group was established, whose key focus is supporting safe medication use processes on Electronic Health Records (EHRs) and eHealth systems. Many hospitals in Ireland have successfully implemented or are in the process of implementing these solutions and digitalising the medications management process. Continuous monitoring and optimisation is required to reduce the potential for risk and ensure medication and patient safety related benefits are realised. The aim of the Working Group is therefore to support cross-organisation and cross-project collaboration, sharing and learning, with a focus on driving improvements in medication safety with digital solutions.

Its membership is comprised of pharmacy-based specialists working in the areas of Informatics, Digital Health and Medication Safety nationally.

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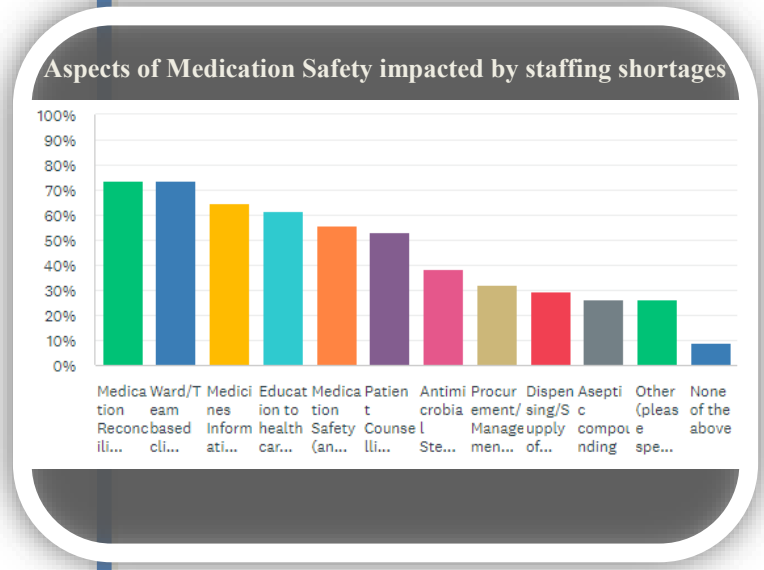
EXTENT & IMPACT OF HOSPITAL PHARMACIST SHORTAGES ON MEDICATION SAFETY IN IRISH HOSPITALS

Following reports of significant hospital pharmacist shortages to the IMSN in Sept. 22, a formal survey was developed to measure the extent and impact of hospital pharmacist shortages on Medication Safety in Irish hospitals. The survey was circulated to 55 hospitals in total, with a request that one survey be completed per hospital, encompassing model 2-4 public hospitals, community hospitals, private hospitals, maternity hospitals, with a national geographic distribution. A total of 36 responses were received (response rate 65%).



It was evident from the results of the survey that significant shortages in hospital pharmacists are being experienced by the majority of hospitals (80%) across the country irrespective of geography, type of hospital or sector.

Shortages were most stark for staff grade and senior pharmacists. 38% of respondents reporting vacancies amongst staff grade pharmacists in the range 26-50%, 10% reported vacancies for this grade between 51-75%, and 10% in excess of 75%. 34% reported a vacancy rate amongst senior grades between 26-50%, with 13% reporting a rate 51-75% for this grade.

Multiple impacts on medication safety were reported (as per graph). Overall a reduction of approximately 30% in provision of clinical pharmacy service has been reported as a result of vacancies (from ~80% to ~50%), affecting medication reconciliation and clinical/ prescription review most commonly, following by provision of medicines information. Full report can be viewed on www.imsn.ie.

TO ERR IS HUMAN, TO LEARN IS DIVINE...

Utilising the Irish Medication Safety Network, the below section is intended to highlight some medication incidents reported in Irish hospitals to share learning with others. The IMSN endorse the use of ***Assess-ERR™*** Medication System Worksheets to help error report investigations, and to collect critical information after a medication error or near-miss occurs. https://www.ismp.org/resources/assess-err-worksheets

Ten–fold dosing error

- Patient with Creatinine 200 micromol/L (eGFR 22ml/min/1.73sq.m) commenced on **spironolactone 12.5 mg** in MPAR (entry in medical notes did not indicate the dose)
- Dose prescribed on discharge prescription and letter was spironolactone **125mg** in error.
- Planned OPD appointment 4 weeks after discharge and bloods to be taken the day before
- At OPD potassium was 6.6mmol/L Creatinine 562 micromol/L
- Patient was advised to attend ED. Transcription error in discharge prescription was discovered.
- Variety of doses across 6 different licensed indications made identification of this 10-fold error very unlikely without discharge medication reconciliation.

Verbal order– Wrong drug

- Patient discharged from hospital on Lamotrigine 250mg BD (starting dose, typically 25-50mg OD)
- Item supplied by community pharmacy close to hospital (not regular community pharmacy)
- Day 3 post discharge patient presented to ED due to confusion, hallucinations, weakness/numbness on left side.
- Lamotrigine had been commenced for absent seizures following telephone call with Neurologist.
- Levetiracetam 250mg BD was the drug intended and recommended. Drug toxicity was the cause of re-admission.

Acute Kidney Injury from Gentamicin

- 200mg Gentamicin (appropriate dose) given for pyelonephritis/sepsis. Level returned day 2 supratherapeutic (2.1mg/L). 1 dose held as per guidelines (target <1mg/ml)
- Repeat doses of 200mg (no dose reduction-unintentional error) administered Day 3 and 4 with levels returning supratherapeutic each day (3.1, and 3.9 respectively).- no action on levels (unintentional error) until Day 5, when gentamicin was stopped.
- Over the next 2 weeks the patients creatinine increased from 94 to 599. Renal consult diagnosed non-oliguric, paraproteinuric, gentamicin toxicity AKI.