**Submission ID # 75 Topic Area – Service Development**

**Title: Pharmacist led polypharmacy review in an Intellectual Disability Service – application of iSympathy achieving better outcomes for residents.**

**Authors:** 1. Ms. Helen Danaher *- Phoenix Pharmacy*, 2. Ms. Carol Mahon *– HSE*, 3. Ms. Louise Taylor *- HSE*

**Introduction**

St. Joseph’s Intellectual Disability Service (SJIDS) in Portrane, is an approved centre providing a service for adults who have an intellectual disability and mental health diagnosis. The residents in SJIDS are under the care of a consultant psychiatrist and a GP.

Currently a Clinical Pharmacist attends the 6-monthly Integrated Care Plan (ICP) meetings. The ICP is a multidisciplinary meeting to facilitate the sharing of information between team members to establish a comprehensive treatment plan to meet the clinical, psychological and social needs of the resident.

iSympathy was a European project funded to deliver holistic person-centred medicines reviews. The multiple benefits demonstrated by iSIMPATHY service evaluation has resulted in a commitment in the HSE National Service Plan 2023 to “roll out a programme to improve medication reconciliation / safety in the community”.

Our pharmacists applied the iSympathy tool to the medications prescribed to the residents in SJIDS.

**Aims**

Apply to iSympathy tool to the medication prescribed, focusing on polypharmacy.

Liaise with prescribers to make appropriate changes to resident’s medication.

Methods

A resident profile was created, looking at their medication and blood results.

3 of the iSympathy tool questions were applied:

* Does the patient take unnecessary drug therapy?
* Are therapeutic objectives being achieved?
* Does the patient have ADR/Side effects or are they at risk of ADRs/Side effects?

The pharmacist contacted the relevant prescriber to make their recommendations based on the iSympathy review.

**Results**

37 service users reviewed.

Total number of medications =511

Total number of medication post review = 476

7% reduction

Cost saving €166.88 per month.

**Conclusions**

The benefits of this review include safe, effective medication for residents and cost savings for the service. We anticipate further cost saving and reductions in prescribed medicines, however discontinuation of any long term medication needs to be de-prescribed slowly.

This tool has potential to be rolled out across the broader SJIDS service and the phoenix pharmacy department has capacity to commit to provision of this service. This quality improvement ensures a scheduled medication review using a validated tool is completed for all residents.

**Submission ID # 87 Topic Area – Service Development**

**Title: Planning the Implementation of a New Oncology Compounding Information System in an Aseptic Compounding Unit: A Mixed Methods Study.**

**Authors: 1.** **Ms. Mahreen Khosa** *- Mater Private Network Dublin,* **2.** **Ms. Fionnuala Kennedy** *- Mater Private Network Dublin,* **3.** **Ms. Alison McPhillips** *- Mater Private Network Dublin,* **4.** **Dr. Carlos Medina** *- School of Pharmacy and Pharmaceutical Sciences, University of Dublin, Trinity College, Dublin, Ireland*

**Introduction:**Systemic anti-cancer therapy (SACT) compounding is a high-risk process. Traditional mixed method systems for workflow management in aseptic compounding units (ACUs) are prone to risk. Workflow management systems (WFMSs) are recognised internationally to improve safety, reduce costs, and increase ACU capacity.  Planning of the implementation of a WFMS has not been characterised before.

**Aim**: To demonstrate how the implementation of a new WFMS can be safely planned, managed, and assessed. This aim was achieved using the following objectives:

1. Describe and risk assess the current workflows for SACT compounding.
2. Investigate agreed and published standards for SACT compounding.
3. Define the change management process.
4. Describe and evaluate the benefits, challenges and risks associated with the introduction of a new SACT compounding system.
5. Interview adopters of NCIS/BD-CATO® to assess their experience of the barriers encountered, how challenges were overcome, risks identified, mitigated, and eliminated through the change management process and ongoing.

**Methods:**The current workflow for SACT compounding was characterised and risk assessed. Semi-structured interviews were carried out to evaluate pharmacist and pharmacy technicians’ attitudes and opinions towards the implementation of BD-CATO® in their organisations. The interviews, a review of guidelines, published standards and the literature were used to guide and risk assess future process development.

**Results:** Nine participants (8 pharmacists and 1 pharmacy technician) across seven ACUs were interviewed in June-August 2023.  Thematic analysis of interview data yielded four key themes. 1. The importance of planning activities such as communication, phased implementation, and development of training material. 2. The importance of a designated individual tasked with change implementation. 3. The benefits and risks associated with BD-CATO®. 4. Lastly, reasons for perceived complexity of the system. Interview data and review of guidelines published standards and the literature were used to devise future process workflow and the change management plan.

**Conclusions:**The introduction of WFMS has been interpreted both in the literature and within the Irish healthcare setting to; increase efficiencies, reduce error rates, and improve the accuracy of SACT compounding. A formal change management strategy devised with resourcing, training, and obtaining stakeholder engagement is key to successful implementation.

**Submission ID # 50 Topic Area – Service Development**

**Title: A review of anticholinergic burden in hospitalised older adults with cancer.**

**Authors: 1.** **Ms. EMER CRONIN** *- School of Pharmacy, University College Cork,* **2.** **Mr. Darren Walsh** *- School of Pharmacy, University College Cork,* **3.** **Prof. Laura Sahm** *- School of Pharmacy, University College Cork*

**Introduction**Anticholinergic Burden (ACB) refers to the cumulative effect of medications that have anticholinergic properties. A range of tools can be used to calculate a patient’s ACB score including online calculators. A medication will contribute a score of 0, 1, 2 or 3. Severe ACB refers to cumulative scores ≥3 and increases risk of falls, cognitive impairment and confusion. Appropriate use of ACB medicines and prescribing of alternatives can reduce this risk.

**Aims**To assess the prevalence of severe ACB and measure the implementation level of pharmacist recommendations..

**Methods**This was a prospective single-centre pilot service development in the hospitalised older adult (≥ 65) with cancer. A weekly multi-disciplinary team (MDT) meeting took place over 6 months with attendance of an oncologist, geriatric oncology fellow, geriatric oncology pharmacist and clinical pharmacist. ACB scores were calculated using the ACBCalc software and the CRIDECO Anticholinergic Loading Tool. Pharmacist recommendations to reduce scores were discussed and documented. At follow up (48 hours), ACB scores were re-calculated to assess implementation levels.

**Results**Sixty patients participated of which 58.4% were male; the mean age was 74.3 years with a mean Clinical Frailty Score (CFS) of 4.3 and mean Charlson Comorbidity Index (CCI) of 9.3. All patients had advanced cancer (Stage III/IV). Reasons for admission were predominantly due to progression of disease (36%) and infection (35%). Prevalence of severe cumulative ACB (≥3) was 72% at baseline, 60% with pharmacist recommendations and 63% at follow up. Mean value of 12.8 medications were prescribed at initial review. Pharmacist recommendations were made in 28 patients with no implementation (no recommendations implemented) in 50% of patients, partial implementation (where one or more recommendations were implemented but not all) in 7% and full acceptance (all recommendations implemented) in 43%.

**Conclusion**Severe ACB is prevalent in the older adult hospitalised with cancer with almost 3 in every 4 adults demonstrating scores greater than ≥3 at baseline. An admission to hospital contributes to polypharmacy and can increase scores. Further multi-site studies are needed to quantify the opportunity cost saved to the health sector through reducing ACB scores and subsequent risks of adverse events.

**Submission ID # 94 Topic Area – Research**

**Title: Where to start? The Irish Emergency Department Antimicrobial Discharge (EDAD) study: A multi-centre, prospective cohort analysis**

**Authors 1.** **Ms. Aisling Rafferty** *– CHI*

Multicentre Contributors: Aisling Rafferty1,2,Alida Fe Talento3,4,5, Richard Drew3,6,7, Patrick Fitzpatrick8,9, Kara Tedford10,Sabrina O'Regan11, Louise Delany12, Sile O'Connor13,Anna Marzec14, Donna Martin15, Clare Greene16,John Marriott2, Robert Cunney3,7,4

**Objective**: To determine the percentage of patients across Ireland that are discharged from the Emergency Department (ED) with an antimicrobial prescription, the indication, classification of infections, and guideline compliance. To identify potential areas for antimicrobial stewardship (AMS) interventions in the ED.

**Design**: A multi-centre, prospective cohort analysis study.

**Setting**: The Emergency Departments across 8 hospitals in Ireland.

**Patients**: At each site, patients one month and older who presented to the ED and were discharged directly from the ED were included.

**Methods**: A random selection of records of patients discharged from ED were reviewed until at least 30 records with an infection diagnosis resulting in an antibiotic prescription were obtained per hospital. The number of patient discharges with no antibiotic prescriptions were included to calculate the denominator. The indication, infection classification and guideline compliance data were collected on the 30 prescriptions in the participating hospitals.

**Results**: A total of 2619 patient records were reviewed. Of these, 249 (9.5%) patients were discharged with antimicrobial prescriptions from the ED. Most were classified as probable bacterial infection (158 (63%)), 21 (8%) as probable viral, and 18 (7%) had no documented evidence of infection. Three indications accounted for 73% of antimicrobial prescriptions: skin/soft tissue infection, ear, nose and throat infection, and urinary tract infection. Overall guideline compliance was 64%.

**Conclusions**: Several areas for AMS interventions to optimise antimicrobial prescribing in the ED were identified, including: targeted local and national guideline reviews, delayed prescribing, improved point of care testing and prescriber and patient education.

\*Corresponding author: rafferty.aisling@gmail.com