



**Health  
Information  
and Quality  
Authority**

An tÚdarás Um Fhaisnéis  
agus Cáilíocht Sláinte

# **Report of the announced inspection of medication safety at St. John's Hospital, Limerick.**

**Date of announced inspection:  
17 April 2018**



## **About the Health Information and Quality Authority**

The Health Information and Quality Authority (HIQA) is an independent authority established to drive high-quality and safe care for people using our health and social care services in Ireland. HIQA's role is to develop standards, inspect and review health and social care services and support informed decisions on how services are delivered.

HIQA aims to safeguard people and improve the safety and quality of health and social care services across its full range of functions.

HIQA's mandate to date extends across a specified range of public, private and voluntary sector services. Reporting to the Minister for Health and the Minister for Children and Youth Affairs, HIQA has statutory responsibility for:

**Setting Standards for Health and Social Services** — Developing person-centred standards, based on evidence and best international practice, for health and social care services in Ireland.

**Regulation** — Registering and inspecting designated centres.

**Monitoring Children's Services** — Monitoring and inspecting children's social services.

**Monitoring Healthcare Safety and Quality** — Monitoring the safety and quality of health services and investigating as necessary serious concerns about the health and welfare of people who use these services.

**Health Technology Assessment** — Providing advice that enables the best outcome for people who use our health service and the best use of resources by evaluating the clinical effectiveness and cost effectiveness of drugs, equipment, diagnostic techniques and health promotion and protection activities.

**Health Information** — Advising on the efficient and secure collection and sharing of health information, setting standards, evaluating information resources and publishing information about the delivery and performance of Ireland's health and social care services.



## Table of Contents

1.	Introduction.....	1
2.	Findings at St. John's Hospital.....	3
	2.1 Governance and risk management.....	3
	2.2 Audit and evaluation.....	8
	2.3 Medication safety support structures and initiatives .....	11
	2.4 Person-centred care .....	14
	2.5 Policies, procedures, guidelines and access to information .....	16
	2.6 Training and education .....	17
3.	Conclusion.....	19
4.	References .....	21
5.	Appendices.....	24
	Appendix 1 : Medication safety monitoring programme Phase One: Lines of Enquiry and associated <i>National Standard for Safer Better Healthcare</i> .....	24
	Appendix 2: Hierarchy of Effectiveness of Risk Reduction Strategies in Medication Safety.....	25



## 1. Introduction

Medications are the most commonly used intervention in healthcare, and advances in medication usage continue to play a key role in improving patient treatment success. However, where medicines are used, the potential for error, such as in prescribing, administering or monitoring, also exists. While most medication errors do not result in patient harm, medication errors have, in some instances, the potential to result in catastrophic harm or death to patients.

Medication related events were the third most common type of adverse event recorded in the Irish National Adverse Events Study.<sup>1</sup> Medication safety has also been identified internationally as a key focus for improvement in all healthcare settings and it is estimated that on average, at least one medication error per hospital patient occurs each day.<sup>2</sup>

HIQA's medication safety monitoring programme, which commenced in 2016, aims to examine and positively influence the adoption and implementation of evidence-based practice in public acute hospitals around medication safety. HIQA monitors medication safety against the *National Standards for Safer Better Healthcare*<sup>3</sup> to determine if hospitals have effective arrangements in place to protect patients from harm related to medication use.

An expert advisory group was formed to assist with the development of this medication safety monitoring programme. The advisory group membership included patient representation, alongside members with relevant expertise from across the Irish health service. Specific lines of enquiry were developed to facilitate medication safety monitoring. The lines of enquiry which are aligned to HIQA's *National Standards for Safer Better Healthcare* are included in Appendix 1 of this report. Further information can be found in a *Guide to the Health Information and Quality Authority's Medication Safety Monitoring Programme in Public Acute Hospitals 2016*<sup>4</sup> which is available on HIQA's website: [www.hiqa.ie](http://www.hiqa.ie)

A national overview report of the of medication safety monitoring programme '*Medication safety monitoring programme in public acute hospitals- an overview of findings*'<sup>5</sup> was published in January 2018 which presented the findings from thirty-four public acute hospitals inspected from November 2016 to October 2017 (the report is available on HIQA's website, [www.hiqa.ie](http://www.hiqa.ie)). In this report HIQA identified areas of good practice in relation to medication safety and areas that require improvement to ensure medication safety systems were effective in protecting patients.

An announced medication safety inspection was carried out at St. John's Hospital by Authorised Persons from HIQA; Emma Cooke and Nora O Mahony. The inspection was carried out on 17 April 2018 between 09.00hrs and 15.50hrs. Interviews were held in the hospital with the following groups of managers and clinical staff:

- Group One: the Chairperson of Drugs and Therapeutics Committee, the Chief Pharmacist, and the Risk Manager.
- Group Two: the Acting Chief Executive Officer, the Director of Nursing and a Consultant Physician who was identified as the most suitable person to attend in the absence of a Clinical Director role within the hospital.

Inspectors visited the following clinical areas and spoke with staff and reviewed documentation on the:

- First Floor
- Top Floor

HIQA would like to acknowledge the cooperation of staff who facilitated and contributed to this announced inspection.

## **2. Findings at St. John's Hospital**

The following sections of this report present the general findings of this announced inspection which are aligned to the inspection lines of enquiry.

### **2.1 Governance and risk management**

#### **Lines of enquiry:**

- Patient safety is enhanced through an effective medication safety programme underpinned by formalised governance structures and clear accountability arrangements.
- There are arrangements in place to identify report and manage risk related to medication safety throughout the hospital.

St John's Hospital is an acute general public voluntary hospital and is part of the University of Limerick (UL) Hospital Group. The hospital provides a general medicine and an elective 5-day surgery (day case and in-patient) service.

St John's Hospital had formalised governance arrangements and organisational structures with clear lines of accountability in place to support the safe use of medications. An organogram provided to HIQA showed that the Drugs and Therapeutics Committee had a direct reporting line to the hospital's chief executive who in turn reported directly to the Management Committee and subsequently to the Board of Governors.

Inspectors were informed that the acting chief executive was the person with overall accountability and responsibility for medication safety at the hospital. The acting chief executive reported to and attended monthly performance management meetings for the University of Limerick (UL) Hospital Group.

#### **The Drugs and Therapeutics Committee**

The role and functions of the hospital's Drugs and Therapeutics Committee were outlined in the terms of reference, approved in April 2017, and included governance and oversight of the antimicrobial stewardship programme and the Medication Safety Working Group. Functions of the Drugs and Therapeutics committee included;

- designing, reviewing, approving and endorsing policies and guidelines pertaining to medicines
- monitoring generic prescribing in the hospital
- reviewing the use of high risk medicines
- arranging appropriate educational programmes for the hospital's professional staff on related matters

- reviewing adverse drug reactions and medication incidents.

Inspectors were informed that the hospital had arrangements in place to collaborate with the Antimicrobial Stewardship Committee at University Hospital Limerick and that plans were also in place to establish links with their Drugs and Therapeutics Committee.

The Drugs and Therapeutics Committee was chaired by a consultant physician. The committee's terms of reference detailed committee membership which included representation from the chief pharmacist, consultant staff, non-consultant medical and surgical staff at registrar grade, clinical pharmacy, nursing management and clinical grades, risk management and administrative support. Drugs and Therapeutics Committee membership should reflect the size of the hospital and services provided with representatives from all the major specialities including community partners. Inspectors found that the Drugs and Therapeutics Committee at St John's Hospital had representation from relevant specialties but did not have representatives from a general practice (GP) or community pharmacy.

Terms of reference outlined that the committee meet on a quarterly basis. However, through discussion with hospital management and following a review of minutes from Drugs and Therapeutic meetings, inspectors found that the committee was not adhering to its own terms of reference related to frequency of meetings, with only two meetings having taken place in 2017.

Despite the infrequency of the Drugs and Therapeutics Committee meetings, it was evident that medication safety issues were discussed, managed and required improvements were progressed by the hospital's Medication Safety Working Group which was a sub-committee of the Drugs and Therapeutics Committee. The Medication Safety Working Group was chaired by the chief pharmacist and membership of the group included consultant representation, nursing management, clinical pharmacy, management service co-ordinator and risk management.

The Medication Safety Working Group was accountable to the Drugs and Therapeutics Committee. The group had defined terms of reference which outlined that meetings were held on a monthly basis and had a set quorum of three members.

Operationally, the hospital's Medication Safety Working Group which encompassed the medication safety functions was driving medication safety within the hospital and had responsibility for:

- monitoring the progress of the medication safety programme and making recommendations for further development

- identifying and monitoring trends in medication incidents and making recommendations to prevent reoccurrence in identified areas of risk
- identifying and addressing education and training opportunities for clinical staff in relation to safety medication practices
- advising on medication related audits where indicated and on resultant recommended changes in practice
- ensuring regular review of medication related policies, procedures, protocols and guidelines to ensure they meet best practice and legislative requirement
- advising on design and implementation of medication safety initiatives and medication safety best practice.

The Medication Safety Working Group had developed a medication management plan for 2017-2019 listing their key priorities which included education and training, access to information, policies procedures and protocols, audit, risk management, patient involvement in service delivery and actions required with the Drugs and Therapeutics Committee. The Medication Safety Working Group was required to produce quarterly progress reports to the Drugs and Therapeutics Committee.

Overall, inspectors found that there was a multi-disciplinary approach to medication safety within the hospital driven by clinical leadership and evident throughout the hospital. From speaking with staff it was clear that medication safety was the responsibility of all disciplines within the hospital and the hospital had developed systems to ensure that a multi-disciplinary approach was applied to medication safety.

Improvements in relation to medication safety were progressing but oversight of this work and formalised reporting arrangements were not consistently taking place. This was due to the infrequency of the Drugs and Therapeutics Committee meetings to provide the required governance and oversight.

An effective Drugs and Therapeutics Committee should have ongoing oversight of the medication management and safety systems within a hospital.<sup>6</sup> In order to avoid duplication of effort and resources, there may be a benefit in reorganising and consolidating the current hospital committees related to medicines and medication safety to optimise resources available to attend meetings. This could strengthen and provide appropriate governance and oversight for medication safety within the hospital.

## **Formulary**

Inspectors were informed that the hospital did not have an approved medication formulary\* but had a locally approved list of five preferred medicines to be used in the hospital. The purpose of maintaining a hospital formulary is to ensure that appropriate governance exists around what is approved for use and that in doing so, a proper safety evaluation occurs before medications are introduced into practice at the hospital.<sup>7</sup> It was explained to inspectors that requests for new medications were initially assessed by the chief pharmacist. Minutes of Drugs and Therapeutic meetings reviewed demonstrated that new medicines were discussed at these meetings. A new medicines application form had been developed in April 2018 for the purpose of establishing a formal process to add or replace a medicine to the list of medicines currently in use at the hospital. The form outlined that all applications will be reviewed by the hospital's Drugs and Therapeutics Committee.

Inspectors were informed that decisions regarding the use of medicines with significant budgetary impact were discussed with the chief executive officer.

## **Risk Management**

The hospital used a variety of sources to identify, monitor and learn from information regarding the risks associated with medication use including a pharmacy risk register, nursing metrics, incident reporting, hazard identification and risk assessment forms and direct observation.

Medication-related incident reporting facilitates the identification of risk and opportunities for improvement. A system was in place for staff to voluntarily report medication related incidents and near misses using hard copy incident report forms. Completed forms were reviewed by the chief pharmacist and risk manager and collated by the risk manager. Staff who spoke with inspectors described the hospital process for reporting medication related incidents and received feedback at ward level on medication-related incidents which were reported.

Medication safety reports were prepared quarterly by the risk manager for the Drugs and Therapeutics Committee. Considering the infrequency of meetings in the previous year, it was not evident that the Drugs and Therapeutics Committee had formal oversight of medication related incidents. However, there was evidence to

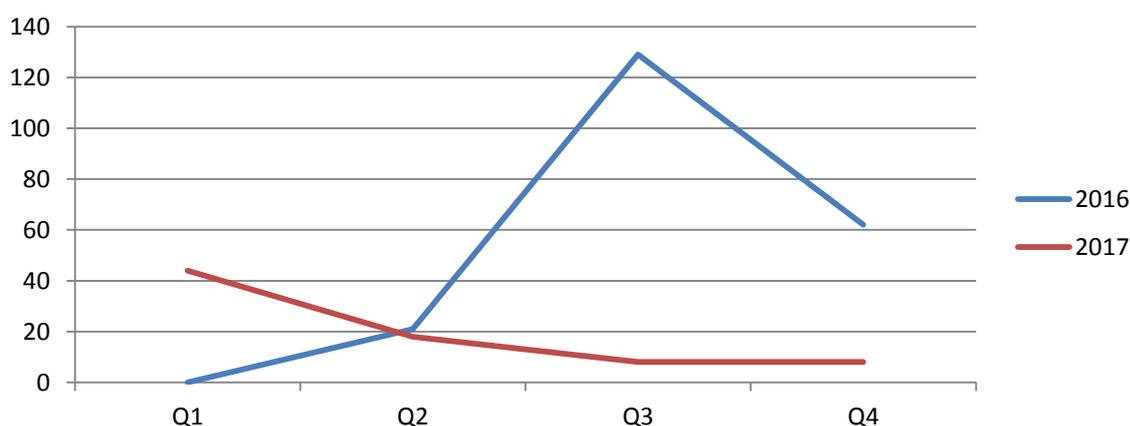
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\* A formulary is a managed list of preferred medicines that have been approved by the hospital's Drugs and Therapeutics Committee for the use at the hospital. Use of formulary ensures governance oversight of the introduction and ongoing use of medicines in practice at the hospital, and in doing so ensures an appropriate level of management control over medicines use, in the interest of both patient safety and financial management.

demonstrate that the Medication Safety Working Group reviewed medication incident reports and discussed these incidents at monthly meetings.

Medication incidents were graded using the National Co-ordinating Council Medication Error Reporting and Prevention (NCC MERP) classification system to categorise incidents in terms of patient harm (see Appendix 2). This classification system considers factors such as whether the error reached the patient and, if the patient was harmed, to what degree.<sup>8</sup> In Ireland all public hospitals covered by the Clinical Indemnity Scheme have a requirement to report adverse clinical incidents and 'near misses'<sup>†</sup> via the National Incident Management System (NIMS). However, inspectors were informed that the hospital only reported Grade D and higher incidents to the National Incident Management System<sup>‡</sup> (NIMS). The hospital should ensure that medication safety incidents reported to the National Incident Management System<sup>§</sup> (NIMS) is in line with the HSE incident reporting framework and statutory requirements.

Quarterly incident reports reviewed demonstrated sub-categorisation of medication incidents to aid analysis which included information on incident location, type, category and medication stage. However, inspectors observed a considerable decline in reporting medication incident rates for quarter three and quarter four of 2017 (see Figure 1). The number of incidents reported in 2017 were significantly lower than the number of incidents reported in the previous 12 months. For example, a total of 191 medication incidents had been reported for quarter three and quarter four in 2016 compared to a total of 16 incidents for the same time period in 2017.



**Figure 1: St John's Hospital Incident Reporting per Quarter**

<sup>†</sup> The State Claims Agencies (SCA) National Incident Management System (NIMS) is a risk management system that enables hospitals to report incidents in accordance with their statutory reporting obligation to the SCA (Section 11 of the National Treasury Management Agency (Amendment) Act, 2000).

Hospital management acknowledged that further improvements were needed to increase hospital wide reporting levels. The hospital should use the trended information available on incident reports to identify any contributory factors to declining incident reporting trends at the hospital.

Staff informed inspectors that they received information on incidents that had occurred throughout the hospital through regular ward meetings, updates from pharmacy, monthly senior nurse management meetings and at weekly training sessions with doctors.

Risks documented on the pharmacy medication risk register included a temporary reduction in pharmacy resources, ongoing errors associated with prescribing/recording at the point of admission, potential of harm associated with high risk drugs and the storage of patient's personal medications. The risk register detailed risks identified, controls in place to mitigate the risk and quality improvements to address any gaps in relation to control measures. Hospital management reported that risks were discussed at Medication Safety Working Group meetings and Drugs and Therapeutic meetings and risks that could not be mitigated at this level were escalated to the hospital's overall risk register. Inspectors were informed that there were no medication related incidents on the overall hospital risk register at the time of this inspection.

Hospital management and the chief pharmacist demonstrated an awareness of risks associated with medication use and identified a number of controls and quality improvement initiatives in place to address risks. For example, patient storage of personal medication was identified as a risk and additional controls had been identified. The hospital should continue to progress actions identified on the medication risk register to mitigate against known risks.

## **2.2 Audit and evaluation**

### **Line of enquiry:**

- The effectiveness of medication management systems are systematically monitored and evaluated to ensure they are effective.

Inspectors found that elements of medication safety were evaluated through audits conducted at the hospital. The hospital had developed a more structured clinical audit programme for 2018 which listed a number of medication related audits to be undertaken. Documentation viewed by inspectors about proposed audits included details of; persons responsible, guidelines and standards against which the audit would measure practice, timeframes for conducting the audits and progress reports required.

A number of medication safety audits had been completed in the previous two years or were ongoing at the time of inspection which included audits on:

- appropriate thromboprophylaxis for adult medical patients within 24 hours of admission
- safe injection practices
- examining the cause of iron deficiency anaemia.

Inspectors were informed of examples where medication safety audit results and relevant data were used as the basis for decision-making, action and change. For example, inspectors were informed that an audit of compliance with the hospital's venous thromboembolism\*\* (VTE) risk assessment form and prescribing tool found that there was overprescribing of prophylactic treatment. The hospital identified the need for further education around the use of the prescribing tool and risk assessment form and had provided additional education and training to doctors. Furthermore, appropriate thromboprophylaxis occurring within 24 hours of admission had become one of the hospital's medication safety goals for 2018.

The hospital identified the following key performance indicators to evaluate medication safety at the hospital;

- allergy/anaphylaxis training completed by doctors, nurses and pharmacists
- patient allergy status documented on drug prescription chart
- appropriate VTE thromboprophylaxis within 24 hours of admission for adult medical patients.

Nursing metrics<sup>††</sup> data in relation to medication safety identified good performance across a number of areas. However, there were consistently less than satisfactory findings in relation to observations around medication prescribing. This had been discussed as an issue at the Medication Safety Working Group and had also been placed on the pharmacy medication risk register. The hospital had put in place a number of measures to address these findings such as having clinical pharmacy intervention at the admissions stage to target the medicines reconciliation process. A slight improvement was noted in the first quarter of 2018 across the clinical areas within the hospital.

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\*\* Venous thromboembolism (VTE): a blood clot consisting of deep veins thrombus (DVT) and pulmonary embolism (PE). Blood clots (thrombus) can form within deep veins (DVT) and these clots can fragment and travel to lungs leading to Pulmonary Embolism (PE).

†† Metrics are parameters or measures of quantitative assessment used for measurement and comparison or to track performance.

Inspectors were informed that the results of audits conducted to evaluate the safety of medication management systems were communicated throughout the organisation through various forums including monthly senior nurse management meetings, weekly education sessions for doctors, ward meetings and through hospital staff email.

Minutes of Drug and Therapeutic Committee meetings reviewed demonstrated discussion around audit reports formally submitted to the Drugs and Therapeutics Committee for review such as antimicrobial stewardship audit reports and updates in respect of audits currently being undertaken at the hospital such as the hospital's venous thromboembolism (VTE) prophylaxis project.

Overall, inspectors found that despite progress of the hospital's medication safety plan not being formally monitored by the Drugs and Therapeutics Committee due to the infrequency of meetings, the group demonstrated progress against a number of identified actions and areas for priority. The hospital should look to progress its clinical audit programme and to formalise their monitoring and evaluation systems to provide regular assurance to senior hospital management on the effectiveness of their medication safety programme and about medication safety throughout the hospital.

### **2.3 Medication safety support structures and initiatives**

#### **Line of enquiry:**

- Hospitals develop effective processes to promote medication safety that are implemented and supported by clear and up-to-date policies, procedures and or protocols.

Inspectors were informed of and reviewed some examples of quality improvement initiatives that had been implemented which included:

- medication safety goals
- venous thromboembolism<sup>††</sup> (VTE) risk assessment and prescribing tool
- patient information leaflets.

Other examples of initiatives aimed at optimising medication safety included the recently implemented 'Medication Safety Mondays' which had been adapted from another hospital with permission. The purpose of this initiative was to broaden medication safety learning across the hospital in the disciplines of medicine, nursing

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<sup>††</sup> Venous thromboembolism (VTE): a blood clot consisting of deep veins thrombus (DVT) and pulmonary embolism (PE). Blood clots (thrombus) can form within deep veins (DVT) and these clots can fragment and travel to lungs leading to Pulmonary Embolism (PE).

and pharmacy. This involved taking one minute for medication safety at handovers to provide a 'bite-size' piece of medication safety learning to all doctors, nurses and pharmacists to be shared that week. Inspectors reviewed a defined list of medication safety topics and distribution dates in place for the coming months to support the initiative and staff spoken with in the clinical areas spoke positively about the initiative and its effectiveness.

The hospital was also participating in the Health Service Executive (HSE) Quality Improvement Division venous thromboembolism (VTE) quality improvement collaborative. This is a collaborative among multidisciplinary teams in Irish adult acute public and voluntary hospitals who are working together to achieve appropriate thromboprophylaxis for hospital's inpatients, to reduce the risk of venous thromboembolism and to minimise harm and expenditure associated with unnecessary thromboprophylaxis treatment.

### **High risk medicines**

The hospital maintained a list of high-risk medications that present a heightened risk of causing significant patient harm if not used correctly. The acronym 'A PINCH'<sup>§§</sup> which grouped medications into categories was used to facilitate education and to raise awareness of high-risk medications. This list was developed using information from international literature and was also informed by the medication related incidents within the hospital. The hospital promoted medication safety awareness of high-risk medications through the 'Medication Safety Mondays' initiative and through the use of medication safety alerts prepared by the pharmacy department. Inspectors observed accessible and user friendly posters displayed in clinical areas outlining high risk medicines.

Inspectors were informed of some risk reduction strategies that were implemented in response to these high-risk medications and other medicines that had been identified as a risk also through formal risk assessments. These included;

- ordering and dispensing of high alert medicines under strict controls
- single name patient only dispensing of insulin pens.

The hospital had also carried out additional risk assessments of some medicines and documented associated risk reduction strategies in place. For example, the hospital had identified sodium chloride 3% (hypertonic solution) as a medium risk and listed the risk reductions strategies in place for this medicine such as storing the medicine in pharmacy only and the labelling of individual bags at dispensing.

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<sup>§§</sup> **A**nti-infectives, **P**otassium, **I**nsulin's, **N**arcotics, **C**hemotherapy, **H**eparin and other anticoagulants

Compliance with the risk reduction strategies in place for high risk medicines was not routinely monitored. Inspectors were informed that the hospital would rely on direct observation from staff such as clinical nurse specialists, incident reports and nursing metrics to identify any concerns.

### **Clinical pharmacy service**

There are currently no agreed national standards outlining requirements for the provision of clinical pharmacy services in hospitals. International studies support the role of clinical pharmacists in hospital wards in preventing adverse drug events.<sup>9,10,11,12,13,14</sup> The hospital had three clinical pharmacists in place and provided a team led pharmacy service whereby each pharmacist was assigned to a consultant. A defined clinical pharmacy service rota was in place which detailed ward rounds, cover for anticoagulation clinics and post-take clinical support.

The pharmacists also provided advice and guidance to staff on medicines management. Inspectors were informed that pharmacists documented pharmaceutical care in patient medical notes and on the patient prescription sheet.

Medication reconciliation is a systematic process conducted by an appropriately trained individual, to obtain an accurate and complete list of all medications that a patient was taking prior to admission.<sup>15,16,17</sup> The hospital had established a formal pharmacy-led medication reconciliation service on admission. Activities relating to medication reconciliation were detailed in a recently revised guideline on clinical pharmacy activity. Inspectors were informed that newly admitted patients were prioritised for medication reconciliation. A system was in place whereby the pharmacists on duty reviewed admissions that had come in overnight until 10:30am each working day to expedite post admission chart review, assigned a risk score and began the data collection process for medication reconciliation for the pharmacist assigned to that team. Any discrepancies were communicated with the medical team. The target set out in the guideline for the medication reconciliation process was 48 hours after admission, excluding weekends.

While it was reported that the medication reconciliation process was pharmacy-led, from speaking with staff it was clear that doctors and nurses endeavoured to play a role in ensuring medication reconciliation was achieved for patients.

## **2.4 Person-centred care**

### **Line of enquiry:**

- Patients and/ or carers are informed about the benefits and associated risks of prescribed medications in a way that is accessible and understandable.

Patients should be well informed about any medications they are prescribed and any possible side effects. This is particularly relevant for those patients who are taking multiple medications.<sup>18, 19.</sup>

St. John's Hospital had systems in place to support the provision of patient information and education in relation to medication. Clinical pharmacists were available to counsel patients in relation to medication issues on request from ward staff. A pharmacy referral form was available at ward level which enabled staff to refer a patient for a pharmacy review for the purpose of patient counselling on newly commenced medications as well as other education.

Patient information leaflets issued by the pharmacy were available for staff to access on the computer such as optimal inhaler technique, information on anti-coagulant drug therapy and information on anti-convulsant medication. The hospital had recently created a new leaflet entitled '*Medication Safety at St. John's Hospital*'. Hospital management informed inspectors that the clinical nurse specialists also played a key role in education patients on medications.

The St. Johns Hospital National Patient Experience Survey<sup>\*\*\*</sup> was completed by 54% of the 207 people discharged from the hospital in May 2017. Overall patients' rating of their experience at St. John's Hospital was above the national average.<sup>20</sup>

Two questions related directly to medication in the National Patient Experience Survey;

- **Question 45:** Did a member of staff explain the purpose of the medications you were to take at home in a way you could understand?
- **Question 46:** Did a member of staff tell you about medication side effects to watch for when you went home?

	<b>St. John's Hospital score</b>	<b>National score</b>
Question 45: Did a member of staff explain the purpose of the medicines you were to take at home	8.2	7.8

\*\*\* The National Patient Experience Survey: was a nationwide survey which asked people for feedback about their stay in hospital. The survey was a partnership between the Health Service Executive (HSE), HIQA and the Department of Health. All adult patients discharged during May 2017 who spent 24 hours or more in a public acute hospital, and have a postal address in the Republic of Ireland were asked to complete the survey.

in a way you could understand?		
Question 46: Did a member of staff tell you about medication side effects to watch for when you went home?	5.3	5.1

**Figure 2: Comparison between St. John's Hospital, Limerick and national scores for the National Patient Experience Survey questions 45 and 46.**

The response for Question 45 received an overall score<sup>+++</sup> of 8.2 marginally above the national average score of 7.8. Question 46 received an overall score of 5.3 marginally above the national average score of 5.1.

In response to the National Patient Experience Survey the hospital had created a new 'In-patient Information Booklet' in order to promote patient involvement in service delivery which was in draft format at the time of this inspection. The booklet had designated sections on medication and covered topics such as:

- your medicines while in hospital
- the role of the pharmacist
- what happens about my medicines when I go home
- medicines on discharge.

Patient involvement in service delivery was identified as a priority in the hospital's medication safety programme for 2017-2019 and numerous actions and initiatives had been identified. Hospital management outlined an initiative when a patient's family required education and information with regard to medications to support the patient on discharge. In this situation staff would contact the patient's family two or three days in advance of discharge to ensure education was provided. A further three projects had been identified in their medication safety plan aimed at involving patients in service delivery which included facilitating patient self-medication for suitable groups, standardising patient education on newly prescribed medicines during admission and the promotion of medication awareness targeted at outpatients.

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<sup>+++</sup> Score out of 10 was given for each question belonging to a stage of care or a stage as whole. A score of 0 indicates a very negative experience and a score of 10 indicates a very positive experience.

The hospital should continue to progress their work to date and implement the actions identified in their medication safety programme aimed at promoting patient involvement in service delivery.

## **2.5 Policies procedures and guidelines and access to information**

### **Lines of enquiry:**

- Hospitals develop effective processes for medication management that are implemented and supported by clear and up to date policies, procedures and/or protocols.
- Essential information supporting the safe use of medicines is readily available in a user friendly format and is adhered to when prescribing, dispensing and administering medications.

The chief pharmacist and the Drugs and Therapeutics Committee had developed and approved a suite of medication management policies, procedures and guidelines to support safe medication management systems within the hospital. A review of minutes from Drugs and Therapeutic Committee meetings also demonstrated that policy updates was a standing agenda item at the Drugs and Therapeutics Committee.

Medication related policies, procedures, protocols and guidelines were available for staff to access via the newly developed medication safety folder on the hospital's intranet. Staff demonstrated how policies pertaining to medication safety and patient information leaflets could be accessed using this system. Inspectors were informed that the quality manager was responsible for centrally co-ordinating all policies within the hospital and would alert the author or owner of the policy when it was due for revision.

Generalised prescribing supports were available to clinical staff to assist staff when prescribing or administering medicines for example:

- guidelines for the empiric use of antimicrobials
- intravenous medication administration guidelines
- British National Formulary.

Hard copies of the most current version of the British National Formulary were available at medication trolleys in the clinical areas visited by inspectors. Inspectors also observed examples of up-to-date, readily available information in user friendly format in clinical areas such as posters in relation to:

- Antidotes, Reversal Agents and Rescue agents: Location Guide (Drug, Indication, Location)

- St John's Hospital Sound-Alike Look-Alike Drugs (SALADS)<sup>+++</sup> List 2018-2019.

Healthcare staff require access to complete and accurate patient information, relevant to the safe use of medications, at the point of clinical decision making to help ensure patient safety. Clinical staff demonstrated how they could access patient's laboratory results at ward level through the hospital's lab enquiry system.

Inspectors were informed that medicines information and alerts were disseminated to staff via emails, patient safety memorandums and medication safety alerts. Inspectors observed examples of these which included a memorandum issued to nursing and medical staff outlining the addition of a medicine to ward stocks across the hospital and the storage of the medicine.

Hospital management outlined a system in place for managing safety alerts and product recall. Medicines alerts and communications in relation to medication safety from other authorities was also a standing item agenda at the Drugs and Therapeutics Committee meetings.

Doctors and nursing staff also reported that there was a high level of support available from senior medical staff around medication prescribing and related advice.

Staff spoken with identified additional computerised decision support tools that they would avail of to support decision-making. Given the diversity of medical applications available to support decision-making and future technology developments particularly in the area of smartphone applications, quality control of all information sources to guide staff is vital, and should be under the governance of the Drugs and Therapeutics Committee.<sup>21</sup>

## 2.6 Training and education

### Line of enquiry:

- Safe prescribing and drug administration practices are supported by mandatory and practical training on medication management for relevant staff.

Staff education can effectively augment error prevention when combined with other strategies that strengthen the medication-use system.<sup>22</sup>

The hospital had recently undertaken a review of medication education programmes in place for doctors, nurses, clinical pharmacists and pharmacy technicians and had

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<sup>+++</sup> SALADS: are 'Sound-alike look-alike drugs'. The existence of similar drug names is one of the most common causes of medication error and is of concern worldwide. With tens of thousands of drugs currently on the market, the potential for error due to confusing drug names is significant.

developed a medication safety education plan aligned to their medication safety programme.

Medication safety training was mandatory on induction for all new clinical staff involved in medicines management. Content included information on the Pharmacy Department, medication safety, sound-alike look-alike drugs (SALADS), medication incidents and reporting adverse events. Inspectors were informed that nursing staff could not commence in clinical areas until they had completed their mandatory medication management induction training. Nurses were also required to attend a separate study day on intravenous medication which also included anaphylaxis training.

Inspectors were informed that as of February 2018, it was now mandatory for nurses to complete the HSELand Medication Management online training programme.<sup>23</sup>

Documentation provided to inspectors outlined that 100% of medical, nursing and pharmacy staff had received medication management training on induction. Documentation reviewed also outlined 85% of medical staff, 93% of pharmacy staff and 49% of nursing staff had attended medication management training in the past two years. In order to improve the uptake of refresher training amongst nurses, a training plan was in place for all nursing staff to attend refresher training by 31 July 2018 through the completion of HSELand eLearning. Furthermore, 89% of nurses had attended the intravenous medication study day.

Inspectors were also informed that pharmacy staff were regularly invited to doctor peer review sessions to provide education to doctors on topics such as medication calculations, medication interactions and 'sound-alike look-alike drugs'. Doctors reported that there was a high level of support available from pharmacists around prescribing and advice.

Inspectors viewed pharmacy folders on wards which contained memos, updates and information from pharmacy. The purpose of the folder was to keep staff up-to-date of the latest developments or communications from pharmacy. Inspectors were informed that ward management or clinical pharmacists took ownership of this folder.

### **3. Conclusion**

Medications represent the primary measure for treatment intervention in hospitalised patients. Error associated with medication usage constitutes one of the major causes of patient harm in hospital. Medication safety should therefore be a priority area for all acute hospitals as they seek to ensure a high quality and safe service for patients.

Overall the inspection team found that systems, processes and practices were in place to support medication safety, some of which were in the process of implementation. There was multidisciplinary involvement with engagement and support from senior hospital clinicians working to improve medication safety across the hospital. The Drugs and Therapeutics Committee however, did not hold the required meetings to provide the outlined governance arrangement for medication safety within the organisation. The hospital needs to review the current governance oversight for medication safety by the Drugs and Therapeutics Committee within the hospital as a priority.

Inspectors found the hospital provided a team led clinical pharmacy service that provided advice and guidance to staff and medication reconciliation service on admission. A local medication formulary did not exist in the hospital at the time of this inspection. The hospital should work towards the development of a defined formulary process to outline medicines that are approved for use in the hospital and provide information and standard guidance on the use of these medicines. This work could be supported by collaboration with other hospitals within the hospital Group.

HIQA identified a significant decline in the reporting of medication related incidents in recent months. The hospital must promote a culture of patient safety and incident reporting among all clinical staff led and supported by senior management and clinicians, so that safety surveillance is improved, learning is shared, and the safety culture is enhanced across the organisation.

Inspectors found that a medication safety agenda was being actively progressed at St. John's Hospital through the work of the Medication Safety Working Group. The hospital had identified and were in the process of implementing a number of quality improvement initiatives aimed at improving medication safety at the hospital and involving patients in service delivery. However, this important work was not consistently overseen by the Drugs and Therapeutics Committee due to infrequency of meetings.

It is important that the medication safety programme set out for 2017-2019 be effectively governed, implemented and monitored so that the work done to date results in improved medication safety for patients. Engagement and support from

senior hospital management and clinicians is essential to drive this change and provide assurance that medication safety is prioritised.

It is recommended that this report is shared with senior managers, clinicians and other relevant staff at St. John's Hospital to highlight both what has been achieved by the hospital in implementing medication safety activities to date, and to foster further collective progression from this time point.

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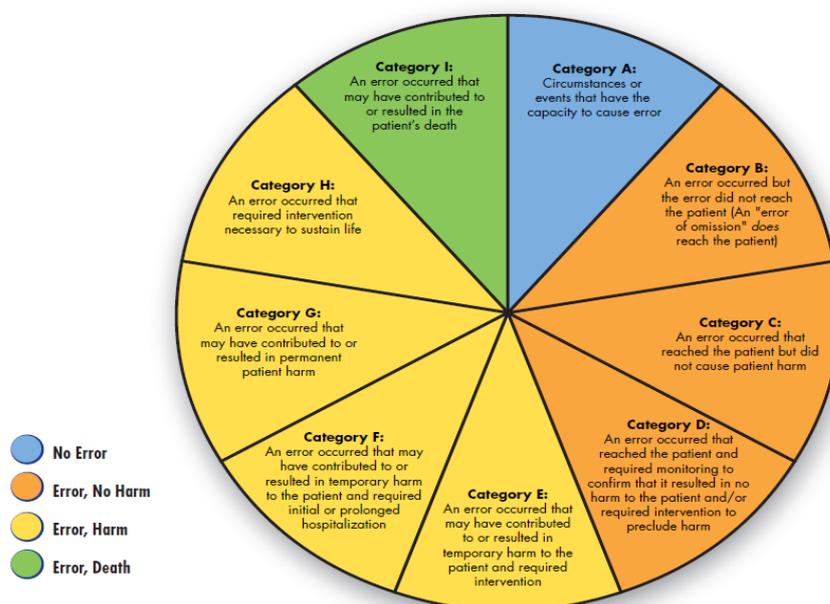


## 5. Appendices

### Appendix 1: Medication safety monitoring programme Phase One: Lines of Enquiry and associated National Standard for Safer Better Healthcare

Area to be explored	Line of enquiry <sup>1</sup>	National Standards for Safer Better Healthcare
Clear lines of accountability and responsibility for medication safety	Patient safety is enhanced through an effective medication safety programme underpinned by formalised governance structures and clear accountability arrangements.	3.1, 5.1, 5.2, 5.4, 5.5, 5.6, 5.8, 5.9, 5.10, 7.1
Patient involvement in service delivery	Patients and or carers are informed about the benefits and associated risks of prescribed medicines in a way that is accessible and understandable.	1.4, 1.5, 1.7, 3.1, 4.1
Policies procedures and guidelines	Hospitals develop effective processes to promote medication safety that are implemented and supported by clear and up-to-date policies, procedures and or protocols.	2.1, 3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 5.8, 5.11, 8.1
Risk management	There are arrangements in place to identify, report and manage risk related to medication safety throughout the hospital.	3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 5.8, 5.10, 5.11, 8.1
Audit and evaluation	The effectiveness of medication management systems are systematically monitored and evaluated to ensure they are effective.	2.8, 3.1, 5.8, 8.1
Education and training	Safe prescribing and drug administration practices are supported by mandatory and practical training on medication management for relevant staff.	6.2, 6.3
Access to information	Essential information of the safe use of medications is readily available in a user-friendly format and is adhered to when prescribing, dispensing and administering medications.	2.5, 8.1

## Appendix 2. National Coordinating Council for Medication Error Reporting and Prevention. Index for Categorizing Medication Errors.



### Definitions

#### Harm

Impairment of the physical, emotional, or psychological function or structure of the body and/or pain resulting there from.

#### Monitoring

To observe or record relevant physiological or psychological signs.

#### Intervention

May include change in therapy or active medical/surgical treatment.

#### Intervention Necessary to Sustain Life

Includes cardiovascular and respiratory support (e.g., CPR, defibrillation, intubation, etc.)

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