



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the announced inspection of medication safety at South Infirmary-Victoria University Hospital.

**Date of announced inspection:
10 August 2017**

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University Hospital*

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.

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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.¹ 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.²

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*³ 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*⁴ which is available on HIQA's website: www.hiqa.ie

An announced medication safety inspection was carried out at South Infirmary-Victoria University Hospital by Authorised Persons from HIQA; Kathryn Hanly, Dolores Dempsey-Ryan and Noelle Neville. The inspection was carried out on 10 August 2017 between 10.30hrs and 16.10hrs. Interviews were held in the hospital with the following groups of managers and clinical staff:

- Group one: the Chief Pharmacist, a Senior Pharmacist* and the Risk Manager.
- Group two: the Director of Nursing and a representative of the Chief Executive Officer.

* A Senior Pharmacist represented the Chair of the Drugs and Therapeutics Committee at this interview.

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

- Ground Floor Victoria Ward (trauma/rehabilitation)
- Observation Ward (elective orthopaedic surgery).

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

2. Findings at South Infirmary-Victoria University 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.

South Infirmary-Victoria University Hospital is a Model two⁵ voluntary acute hospital, and a member of the South/South West Hospital Group[†]. The hospital is the regional centre for Ear, Nose and Throat (ENT), Dermatology, Elective Orthopaedic, Ophthalmology (In Patient and Day Cases) and Chronic Pain services. In addition, South Infirmary-Victoria University Hospital is primarily an elective hospital with a particular concentration on day surgery, short length of stay and day of surgery admission.

The hospital had formalised governance arrangements and organisational structures with clear lines of accountability in place to support the safe use of medications.⁶ A Drugs and Therapeutics Committee was in place at the hospital and its primary objective was to assure rational and appropriate drug therapy, and facilitate the development of policies and procedures to ensure the safe, effective and economic use of drugs. The Committee's terms of reference were updated in January 2017 and outlined the Committee's aims, responsibilities, reporting relationships, membership and frequency of meetings.

Inspectors were informed at interview that the Drugs and Therapeutics Committee reported directly to the Clinical Governance Committee, who in turn reported upwards to the Executive Management Board, the Chief Executive Officer and the Board of Directors. Senior management told inspectors that key members of the Drugs and Therapeutics Committee were also members of the Clinical Governance Committee and this arrangement supported governance and oversight of medication safety at the hospital.

[†] The South/Southwest Hospital Group comprises nine hospitals operating across the counties Cork, Kerry, Waterford, Tipperary and Kilkenny.

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The Committee was chaired by a medical Consultant and was further composed of a multidisciplinary membership with representation from senior management and staff who participated in the medication-use process.⁷ However, a review of minutes by inspectors indicated that attendance at meetings by some members of the Committee was variable. Inspectors were informed that a community pharmacist has been invited to join the Committee and formalised representation by a general practitioner (GP) was being explored. The hospital should work to ensure more consistent attendance and broader membership of the Drugs and Therapeutics Committee.

For a Drugs and Therapeutics Committee to be effective there must be a structured drug selection system that is explicit in its methodology, and that is transparent and evidence-based.⁸ Inspectors were informed by senior management that South Infirmary-Victoria University Hospital did not have a locally approved medication formulary[‡] in place at the time of the inspection. However, an inventory of medications stocked in the hospital was maintained by the Pharmacy Department. The purpose of maintaining a formulary in the hospital is to ensure that appropriate governance exists within the Drugs and Therapeutics Committee in relation to what is approved for use and that in doing so, a proper safety evaluation occurs before medications are introduced into practice at the hospital.⁹

A formal process for evaluating requests for the supply and evaluation of new medications in the hospital had been developed and inspectors were provided with examples of where a request for the introduction of a drug was evaluated for safety, efficacy and cost-effectiveness at Drugs and Therapeutics Committee meetings. In addition, inspectors were informed by the Chief Pharmacist that the Pharmacy Department were planning to develop a locally approved medication formulary. While HIQA acknowledges that the development of a local formulary is a considerable undertaking, efforts should be extended to formalise the agreed list of all medicines used at the hospital, with the provision of supporting policies, procedures and guidelines, following this inspection.

Medication safety was a standing item on the Drugs and Therapeutics Committee agenda. However, a formal written medication safety strategy for South Infirmary-Victoria University Hospital was not evident at the time of the inspection and this was acknowledged by senior management at interview. Despite this weakness, hospital management had endeavoured to support and progress a medication safety agenda at the hospital through the formation of a Medication Safety Committee in June 2016. Following this, the Drugs and Therapeutics Committee had approved a medication safety policy in March 2017. However, inspectors concluded that the

[‡]A formulary is a hospital's approved list of medicines that staff can use as a reference document to ensure safe and cost-effective prescribing.

related medication safety programme that was to emanate from this policy was in the early stages of development.

Risk Management

Hospital staff reported medication incidents and near misses on a paper based reporting system. All hospitals covered by the Clinical Indemnity Scheme (CIS) have a statutory requirement to report all adverse clinical events and “near misses” via the National Incident Management System (NIMS)[§]. Inspectors were informed that medication incidents were graded using the Health Service Executive (HSE) risk matrix.¹⁰ In addition, senior management stated that the hospital inputted all medication incidents within the hospital to the National Incident Management System (NIMS).

HIQA noted through this inspection, a low number of medication-related incidents reported throughout 2016, even when considered in the context of the hospital’s activity levels, services provided and the population of patients cared for in the hospital. As a result, key medication-related risks were likely not being fully understood, recorded, escalated or mitigated effectively by the organisation. Low numbers of incidents reported does not necessarily mean a low number of incidents occurring. Studies have found a positive association between increased incident reporting rates and measures of safety culture where an increase in incident reporting was indicative of a positive reporting culture within the hospital.¹⁰

Important lessons can be learned from analysis of medication-related incidents and near misses. Reporting of incidents is of limited value unless the data collected are analysed and recommendations disseminated.¹¹ On the day of inspection, there was a lack of clarity by staff interviewed in relation to the number of medication-related incidents and near misses reported at the hospital. The hospital needs to begin to better quantify and understand medication related risks through improved reporting.

The hospital reported that the majority of medication incident reports were predominantly submitted by nursing staff. Therefore, inspectors concluded that the culture of reporting medication incidents needs to be extended to include other healthcare staff so that safety surveillance is improved, learning is shared, and safety culture is promoted and enhanced across the hospital.

Open disclosure occurs when staff in health and social care services communicate with patients in an open and honest manner when things go wrong with patient care.¹² Inspectors were informed that the hospital had a policy in place to promptly inform patients when medication-related incidents occurred. Staff who spoke with

[§] 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).

inspectors could provide examples of when this open disclosure policy was adhered to.

Senior management reported at interview that medication-related risks were recorded on the hospital's clinical risk register. One such medication-related risk reported to inspectors related to the continued provision of a Warfarin** dosing and counselling service at the hospital despite the relocation of the overarching cardiology service from South Infirmary-Victoria University Hospital in 2012. Inspectors were informed that this service was staffed by a team of healthcare professionals including a Haematology Registrar. However, senior management highlighted to inspectors the lack of formalised governance and oversight of the service following the relocation of the overarching cardiology service from the hospital in 2012. Inspectors were informed that this risk had been escalated to hospital group level as a result of its potential impact on patient safety. Formalised governance arrangements ensure that there are clear lines of accountability in place at individual, team and service level so that healthcare professionals, managerial staff and everyone working in the service are aware of their responsibilities and accountability.³ It is important that this identified risk be addressed following this inspection.

In addition, a second risk recorded on the hospital's clinical risk register involved issues with the continuous supply of chemotherapy for oncology outpatients. Senior management informed inspectors that a contingency plan had been developed, managed and implemented effectively in the hospital in response to a supply disruption of outsourced chemotherapy in May 2017.

2.2 Audit and evaluation

Line of enquiry:

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

Audit involves a cyclical approach to planning, standard selection, measuring performance leading to improvement in practice and sustaining that change.¹³ Senior management informed inspectors that a medication safety audit schedule was in place for 2017 with 12 planned audits for the year. However, these audits were not aligned to a formalised medication safety strategy.

The inspection team were provided with examples of hospital-specific medication safety and medication management audits which included:

** Warfarin is an anticoagulant (blood thinner) which reduces the formation of blood clots.

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- oncology monoclonal antibody compounding times
- out-of-hours pharmacy dispensing
- potassium storage
- evaluation and analysis of anticoagulation management services for patients attending the South Infirmary-Victoria University Hospital anticoagulation clinic
- oncology dose banding
- medication storage at ward level
- allergy status documentation on drug kardex
- drug non-administration
- patients self-medicating clinical incidents and near misses
- drug kardex prescribing.

Inspectors were informed on the day of inspection for example, that the drug kardex prescribing audit carried out demonstrated that the drug kardex in use was not optimal. As a result, the hospital was in the process of updating their drug kardex and inspectors were informed that the Drugs and Therapeutics Committee were due to review this quality improvement initiative in September 2017.

Nursing quality care-metrics^{††} were monitored across the hospital on a monthly and quarterly basis to review practice around some aspects of medication. Nursing metrics data in relation to medication safety identified consistently good performance across all areas audited.

Overall, inspectors concluded that the hospital had conducted a number of audits relating to medication management. In order to enhance the current approach, the hospital would benefit from taking a more structured approach to the planning of audit in the area of medication safety aligned to a formal medication safety strategy.

Key performance indicators

Hospital management reported that seven key performance indicators were used to evaluate medication safety at the hospital and these included:

- venous thromboembolism^{††} (VTE) prophylaxis prescribing percentage compliance
- antimicrobial stewardship including antimicrobial consumption rates, compliance with guidelines and duration of therapy
- oncology infusion compounding times on the day of treatment

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

^{††} Thromboembolism is the obstruction of a blood vessel by a blood clot that has become dislodged from another site in the circulation.

- missed doses of medications
- patients self-medicating clinical incidents and near misses
- percentage compliance with nursing medication management metrics.

Feedback in relation to these performance parameters was given to prescribers, senior hospital management and the Drugs and Therapeutics Committee.

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.

Medication safety quality improvement initiatives were not strategically driven by learning gained from analysis of medication incidents or near misses. Nevertheless, despite this weakness, a number of good practices and initiatives were identified during this inspection.

For example, as part of the *Productive Ward*^{SS} quality improvement initiative, medication storage at ward level was reviewed and standardised to ensure generic A to Z storage of medication on all wards. In addition, a patient own drug (POD) scheme was implemented in the elective orthopaedic unit of the hospital. This scheme involved patients bringing their own medicines to the pre-admission assessment unit and on admission to hospital in order to aid drug history taking, avoid waste by duplication of supplies and to remove any discontinued or expired medicines. Inspectors were informed that a process was put in place to ensure that any medications brought into hospital by a patient were assessed and verified as being suitable for use before being administered. The hospital used a system of colour coded stickers to categorise patient's medications for use.

Senior management informed inspectors that the Pharmacy and Nursing Departments involved in this quality improvement initiative had received a hospital quality improvement award in 2016 as a result of this initiative. In addition, senior management informed inspectors that individual patient lockers for medications were installed near each patient's bed in the elective orthopaedic unit to increase the accuracy and efficiency of the medication administration process and to ensure the safe and secure storage of patient's own medications. Inspector viewed this system on the ward visited on the day of inspected.

^{SS} The Productive Ward: Releasing Time to CareTM is a quality improvement initiative designed and licensed by the UK National Health Service Institute for Innovation and Improvement to drive forward improvements in health services through redesigning and streamlining the way staff and services deliver care with an emphasis on patient safety.

Additional practices to enhance medication safety in the hospital were identified by inspectors. The hospital had compiled a list of high-risk medications used within the organisation, and was taking appropriate actions to ensure that they were stored, prescribed, dispensed and administered safely. This list included adoption of the Institute of Safe Medication Practices high-alert medications list.¹⁴ High-risk medicines can cause significant harm when system errors occur and a policy was in place at the hospital in relation to the management of high-risk medicines.

Evidence-based risk reduction strategies were implemented to reduce unwarranted clinical variation in medication prescribing and administration of high alert drugs. These included and were not limited to the introduction of:

- insulin labels to indicate that insulin was for single patient use only
- pre-filled syringes where possible to reduce the risks associated with administering these medicines
- reduced number of strengths available for certain medications to reduce selection errors
- availability of pre-mixed potassium available at ward level and the restriction of concentrated potassium to a limited number of identified areas in the hospital.

Inspectors saw examples of quality improvement initiatives that had been implemented and evaluated including the recently implemented National Cancer Control Programme (NCCP) chemotherapy dose banding tables^{***}. The implementation of the national dose banding tables will ensure a standard approach to dose banding across all hospitals thus minimising risks when staff move between different hospitals.¹⁵ It was also envisaged that dose banding will result in less chemotherapy wastage and improved safety through reducing possible dispensing errors. In addition, pre-printed chemotherapy prescriptions were available from the Pharmacy Department.

Interruptions during medication administration rounds are thought to be a prominent causative factor of medication errors.¹⁶ To minimise or eliminate nurse distraction during the medication administration process, blue aprons were worn by nursing staff while preparing or administering medications at South Infirmary-Victoria University Hospital. This intervention was designed to draw attention to the fact that the medication round was in progress, and that nurses should not be interrupted while administering medications.

*** An agreed system whereby doses of chemotherapy calculated on an individual basis, that are within defined ranges or bands are rounded up or down to predetermined standard doses.¹⁵

South Infirmary-Victoria University Hospital was also participating in the Health Service Executive (HSE) Quality Improvement Division venous thromboembolism⁺⁺⁺ 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 their hospital's inpatients, to reduce the risk of venous thromboembolism and to minimise harm and expenditure associated with unnecessary thromboprophylaxis.

Clinical pharmacy services

There are currently no agreed national standards outlining requirements for the provision of clinical pharmacy services in Irish hospitals. However, international studies support the role of clinical pharmacists in hospital wards in preventing adverse drug events.^{17,18,19,20,21,22} A clinical pharmacy service was available in a number of areas, including the orthopaedic pre assessment clinic and the oncology service.

The lack of a formalised ward based clinical pharmacist at South Infirmary-Victoria University Hospital was identified as a risk by senior management during interview with inspectors. Inspectors were also informed that this risk had been recorded on the hospital's risk register. In the interim, the hospital had acted to address this deficiency through the rotation of pharmacy staff on a three-weekly basis to provide a limited clinical pharmacy service to patients on the basis of prioritisation of need. Pharmacy interventions were also logged using an online tool which facilitated tracking and trending.

Inspectors concluded that available pharmacy resources were used efficiently and effectively to provide a range of pharmacy services required at the hospital. In addition, the rotation of pharmacy staff on a three-weekly basis promoted the continuous development and maintenance of the Pharmacy Department's skills.

Medication reconciliation

The aim of medication reconciliation is to ensure the accuracy of a patient's medication information at transitions of care to ensure continuity of medication management.⁷ A significant proportion of medication errors occurring in hospitals are estimated to occur either on patient admission, patient discharge or transfer between units or facilities. Inspectors were informed that medical, pharmacy and nursing staff were responsible for medications reconciliation at South Infirmary-Victoria University Hospital. Senior management told inspectors that a pharmacist conducts a full medication reconciliation for patients attending the hospital's pre-admission assessment unit in advance of orthopaedic surgery. In addition, inspectors

⁺⁺⁺ Thromboembolism is the obstruction of a blood vessel by a blood clot that has become dislodged from another site in the circulation.

reviewed guidelines for medication reconciliation at the hospital which stated that the aim is for all new patients to be reviewed by a pharmacist and that certain patients are prioritised due to their longer length of stay. A pharmacy referral form was available to staff and was completed if patients needed to be prioritised from a medicines reconciliation perspective.

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.

Establishing and promoting a strong patient-centred approach is key for reducing medication errors. A well-informed patient and or family member can help prevent medication errors by hospital staff and is less likely to make medication errors at home. Adherence to the medication regimen is another goal achieved through patient education.

South Infirmary-Victoria University Hospital had systems in place to support the provision of information and education to patients in relation to medication. Patient information leaflets were available to patients. Inspectors were informed that clinical nurse specialists provided education and support to patients, for example, around the management of diabetes mellitus. In addition, a Pharmacy Department referral form was available to staff to request counselling for patients in relation to medications when required.

As part of the inspection, HIQA requested that a sample of hospital outpatients who had been inpatients at the hospital during the previous 12 months complete an anonymised questionnaire in relation to prescribed medications. However, it was not possible to obtain a sufficient number of completed questionnaires on the day of inspection due to the lack of suitable outpatients at the hospital.

Nonetheless, the South Infirmary-Victoria University Hospital had conducted their own Patient Medication Survey in March 2017 with the aim of assessing if the hospital was following best practice regarding medication information provision to patients. The results of this survey are as follows:

- 26 patients (42%) were given a list that outlined what medicines they were on
- 21 patients (76%) received an explanation of the purpose of new medicines prescribed in a way they could understand
- 20 patients (55%) received an explanation from staff about the possible side effects of any new medicines to look out for following discharge home

- six patients (83%) of patients were told how to take their medicines in a way they could understand.

Patient education is an integral component of the safe, effective and cost-effective use of medications. The hospital's patient survey provided some baseline information about patient's understanding of medications and may be used as a focus for further improvement.

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.

All medication-related policies, procedures and guidelines were approved by the Drugs and Therapeutics Committee and Clinical Governance Committee prior to implementation. Medication policies, procedures, protocols and guidelines were readily available to staff on the hospital's intranet.

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 had access to patient's diagnostic results on computers in clinical areas across the hospital.

In addition, a number of decision support tools were available to staff in clinical areas including intravenous medication monographs⁺⁺⁺, medication treatment protocols, up-to-date medicines reference material and online evidence-based clinical decision support resources for reference through the library on the hospital intranet.

There was an established system in place to respond to guidance, alerts, recalls and recommendations issued by regulatory bodies in relation to medication safety. Such information was communicated to wards at South Infirmary-Victoria University Hospital by the Pharmacy Department via nursing management. In addition, staff outlined that medicines information was readily accessible through the hospital's Pharmacy Department as required.

⁺⁺⁺ An approved set of standardised and approved instructions for the correct preparation and administration of intravenous medication, that have been designed to reduce the risk of error, and that are specifically tailored to the intravenous medicines stocked within the hospital.

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.²³ However, the hospital did not have a formalised education programme for clinical staff linked to an overall medication safety strategy. Inspectors were informed that all nursing staff were required to complete the online HSE Land Medication Management programme.²⁴ Nursing staff were also required to undertake anaphylaxis training to facilitate the administration of first dose antimicrobial medications. In addition, the hospital had developed competency frameworks for nursing staff in relation to medicines administration including a competency framework for the administration of oral and intravenous medications.

Inspectors were informed that non-consultant hospital doctors^{§§§} received induction training which included information in relation to medication safety. This training was provided by the hospital's Pharmacy Department.

In addition, education for medical staff at the hospital included Grand Rounds^{****} and intern tutorials at which particular aspects of medication safety were presented and discussed.

Senior management informed inspectors that the hospital had developed a 'buddy system' for new staff to introduce them to the hospital and facilitate integration. The Pharmacy Department developed a pharmacy induction pack for new pharmacy staff and were involved in providing education sessions to nursing staff in relation to the management of patient's own medications. Inspectors were also informed that the hospital held medication education days for staff.

^{§§§} Non-consultant hospital doctor (NCHD) is a term used in Ireland to describe qualified medical practitioners who work under the (direct or nominal) supervision of a consultant in a particular speciality.

^{****} Grand Rounds describes a formalised meeting system to facilitate the presentation and discussion of clinical cases to hospital consultants and their teams. These meetings focus on patient outcomes, promote collaboration between different medical specialities and act as a training tool and means to educate junior doctors.

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-related events were the third most common type of adverse event recorded in the recently published Irish National Adverse Events Study.¹ Medication safety should therefore be a priority area for all acute hospitals as they seek to provide a high quality and safe service for patients.

South Infirmary-Victoria University Hospital had formalised governance arrangements and organisational structures in place to support the safe use of medications.⁶ Hospital management had endeavoured to support and progress a medication safety agenda at South Infirmary-Victoria University Hospital through the formation of a Medication Safety Committee in June 2016. The hospital should build on their work to date to develop and implement a medication safety strategy and operational plan that sets out a clear vision for medication safety across the organisation.

The inspection team was provided with numerous examples of hospital-specific medication safety audit activity which was identified by HIQA as a strength at the hospital. Following this inspection, current medication safety auditing arrangements should be strengthened and formalised to provide regular assurance to the hospital corporate management team about medication safety at the hospital.

The level of reporting of medication-related incidents and near misses at the hospital was low in the context of the hospital activity levels. Inspectors determined that significant scope for improvement was needed to further develop and promote a more effective culture of medication incident and near miss reporting as part of a wider approach to the development of a more comprehensive medication safety programme at the hospital. The hospital should endeavour to track and trend medication incidents reported and improve learning mechanisms for staff following medicines incident reporting to ensure that lessons are learned and staff can see actions have been taken.

Hospital management and other staff should continue to build on their work conducted to date to develop a medicines safety strategy that sets out a clear vision for medication safety across the organisation. It is recommended that this report is shared with senior managers, clinicians and other relevant staff South Infirmary-Victoria University 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 ¹	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

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