Report of the announced inspection of medication safety at Letterkenny University Hospital.

Date of announced inspection:
26 June 2018
Report of the announced inspection of medication safety at Letterkenny 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.
Report of the announced inspection of medication safety at Letterkenny University Hospital
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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. 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. The World Health Organization (WHO) has identified Medication Safety as the theme of the next Global Patient Safety Challenge. This global safety initiative, launched in March 2017, aims to address the weaknesses in health systems that lead to medication errors and the severe harm that result.

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, 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 which is available on HIQA’s website: 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’ 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). 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.

This repeat inspection was carried out by Authorised Persons from HIQA; Nora O’ Mahony and Emma Cooke. The inspection was carried out on 26 June 2018 between 09:00hrs and 16:55hrs.

The inspection was prompted by consideration of a previous HIQA inspection of medication safety conducted at Letterkenny University Hospital on 03 August 2017, which identified an immediate high risk at the hospital related to a relative lack of leadership, governance and management of medication safety related risk at the hospital.

Interviews were held in the hospital with the following groups of managers and clinical staff:

- Group one; the chairperson of the Drugs and Therapeutics Committee, the chief pharmacist and the director of nursing as the executive lead for quality and safety.
- Group two; the general manager, the associate clinical director for medicine and the director of nursing.

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

- Surgical 1
- Medical 4

HIQA would like to acknowledge the cooperation of staff that facilitated and contributed to this announced inspection.
2. **Findings at Letterkenny 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.

- **Section 2.1** outlines risks identified during this announced inspection
- **Sections 2.2 to 2.7** present the general findings of this announced inspection.

2.1. **Risks identified**

During the course of the announced medication safety inspection conducted at Letterkenny University Hospital on 26 June 2018, risks were identified in relation to medication safety.

Overall HIQA found there was a lack of leadership, governance and management in progressing a comprehensive multidisciplinary approach to implementing effective systems for medication safety.

During the inspection HIQA found that essential elements required for medication safety were not present and was not assured that the hospital had clear plans to implement these. In addition there was limited progress in relation to addressing areas for improvement identified during a medication safety inspection in August 2017.

Specific risks identified by HIQA during this inspection included:

- an absence of clear direction and an overarching strategic plan for medication safety
- limited implementation of effective medication safety quality improvements
- a sustained lack of clinical pharmacy services in high-risk areas
- limited locally developed or adapted information to guide clinical staff in the safe use of medicines such as a hospital formulary and intravenous medicine information monographs.

Details of these risks were formally communicated to hospital management during and following the inspection. In response the hospital outlined a number of planned actions to address these risks. These included a commitment to develop a strategic plan, improvements to information provided to clinical staff and immediate improvements to enhance governance of medication safety included quarterly reports to the hospital's Executive and Quality and Patient Safety Committee. Additional actions outlined that findings from this and the previous medication safety inspection report will be tracked on a quality improvement plan.

However, a timely solution to ensure that clinical pharmacy services will be provided to high-risk areas was not evident in the response as it focused on approval of
additional pharmacy resources only. The hospital should, with support from the Saolta University Health Care Group, meaningfully assess the risks identified during this inspection and the previous inspection in relation to clinical pharmacy services to ensure that potential risks are mitigated while progressing a longer-term solution.

A copy of the letter issued to the hospital regarding the risks identified during the inspection on 26 June 2018 and a copy of the response received from the hospital are shown in appendices 2 and 3 respectively.

2.2. 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.

Letterkenny University Hospital is a model 3* acute general hospital in the Saolta University Health Care Group delivering acute, general and maternity services to the North-Western region of Ireland.

A previous inspection of medication safety in Letterkenny University Hospital on August 2017 highlighted a lack of leadership, governance and management of medication safety related risk. HIQA therefore used this repeat inspection to review the current arrangements in place to support medication safety and to assess the level of progress achieved since the last inspection.

**The Drugs and Therapeutics Committee**

The hospital had re-established its Drugs and Therapeutics Committee in August 2017. This committee was chaired by a consultant and was responsible for overall governance of medication safety within Letterkenny University Hospital.

Since the last inspection the committee had met six times as per their updated terms of reference with reporting arrangements to the Quality and Patient Safety Committee. The hospital had placed drugs and therapeutics as a regular agenda item on the Quality and Patient Safety Committee.

* Model-3 hospitals admit undifferentiated acute medical patients; provide 24-seven acute surgery, acute medicine, and critical care.
Membership of the Drugs and Therapeutics Committee was multidisciplinary to reflect the fact that medicines management is the responsibility of a number of clinical professional groupings. Membership as outlined in the terms of reference included consultants, pharmacists, nurses, midwives, non consultant hospital doctors, the general manager and the quality and safety risk manager. Attendance at the Drugs and Therapeutics Committee was good with regular attendance from most representatives at the committee’s meetings.

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 Letterkenny University Hospital had representation from relevant specialties. However, membership could be further enhanced by including representatives from a general practice or community pharmacy. Staff from Letterkenny University Hospital were also members of the Saolta University Health Care Group’s Drugs and Therapeutics Committee who meet quarterly.

The hospital had recently established a Medication Safety subgroup that held its first meeting in February 2018. This subgroup was also chaired by the Drugs and Therapeutics Committee chairperson with membership from pharmacy, nursing, non consultant hospital doctors and the quality and patient safety manager, a position that was vacant at the time of the inspection.

The Medication Safety subgroup reported to the Drugs and Therapeutics Committee and its main purpose was to:

- consider data derived from medication incident reports and areas of risk identified from the literature
- to make recommendations for implementing quality improvements to eliminate or significantly reduce the potential for adverse drug event in identified areas of risk.

Overall, inspectors found that the hospital had re-established formalised governance structures for medication safety which was an improvement since the last inspection 10 months previously.

However, the governance structures had not enhanced or driven sufficient improvement in relation to medication safety. Inspectors found the hospital had no clear objectives or goals for medication safety outlined in a strategy or plan. A number of essential elements required for an effective medication safety programme

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† † Non-consultant hospital doctor: doctors that have not yet reached hospital consultant grade. Non-consultant hospital doctors include specialist registrars, registrars, senior house officers and interns.
as outlined in this monitoring programme’s lines of enquiry (see appendix 1) remained lacking since the last inspection.

Leadership, governance and management responsible for medication safety at the hospital must address these gaps including addressing findings from this and previous medication safety inspection reports.

**Formulary**

The hospital had a list of medicines stocked in the hospital but did not have an evidence-based formulary.\(^1\) The purpose of maintaining a formulary is to ensure that appropriate governance exists within the Drugs and Therapeutics Committee around what medicines are approved for use within the hospital and that in doing so, a proper safety evaluation occurs before medications are introduced into practice at the hospital.\(^8\)

The hospital had a form for requesting new medicines which was completed by the requesting consultant and reviewed by the Chief Pharmacist, when on duty, or a senior pharmacist. However, there were limited defined criteria\(^5\) required on the new medicines application form to support evaluation of new medicines through the Drugs and Therapeutics Committee. This was also highlighted in the previous medication safety report in 2017.\(^9\)

The hospital should move towards the development of a defined formulary system, to outline medicines that are approved for use in the hospital by the Drugs and Therapeutics Committee and provide information and guidance on the use of these medicines. This work could be supported through collaboration with other hospitals within the Saolta University Health Care Group.

**Medication incidents**

Incidents**\(^\text{**}\) that occurred in the hospital were reported to the State Claims Agency using the National Incident Management System\(^\text{††}\) (NIMS).\(^10\) In 2017 a total of 222 medication safety incidents were reported. Medication safety incident reporting had improved since the last inspection. Medication incidents had increased in 2018 with a

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\(^1\) Formulary: a managed list of preferred medicines that have been approved by the hospital’s Drugs and Therapeutics Committee for use at the hospital.

\(^5\) Criteria could include: indication and patient population, efficacy, safety, literature evidence, similar treatment in use or replacement therapy, potential implications for patient management and monitoring, education and financial implications.\(^7\)

\(^\text{**}\) An incident is an unplanned, unexpected or uncontrolled occurrence which causes (or has the potential to cause) injury, ill-health, and/or damage. An incident can be a harmful incident (adverse event), a no harm incident, a near miss, dangerous occurrence or complaint.

\(^\text{††}\) 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).
total of 197 medication safety incidents reported for the first six months of 2018. The majority of medication safety incidents were reported by clinical pharmacists on wards to which they were assigned.

Despite the overall increase in incident reporting, underreporting of medication incidents was especially evident in wards without clinical pharmacists. A low number of medication safety incidents does not necessarily mean a low number of incidents occurring, and 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 safety culture within the hospital.11

Important lessons can be learned from analysis and trending of medication-related incidents and near misses. Data from medication incidents should be routinely analysed to identify trends or patterns in relation to risk and identify areas that need targeted improvement 6 with recommendations implemented and monitored.12

The hospital was tracking medication incidents based on numbers reported, per month/quarter and location. Medication incidents were graded in terms of severity on both the hospital’s risk management system and on NIMS. Summary reports of medication incidents were discussed at the Medication Safety Committee, the Drugs and Therapeutics Committee and the Quality and Patient Safety Committee. Medication safety incident numbers and nursing metric results were also reported at the hospital’s monthly performance meeting.

The hospital had identified some safety concerns related to medication incidents and had put measures in place to address these risks. For example, a medication safety alert was circulated in response to a near miss incident with an insulin prescription in an effort to reduce the risk of reoccurrence.

Overall inspectors found that medication safety incident reporting had improved but there was still underreporting of medication incidents and near misses as the majority of incidents were reported by clinical pharmacists on the wards to which they were assigned. Although incident numbers were reported at various meetings, there was little evidence of analysis and discussion of incident trends or recommendations to prevent reoccurrence. Reporting of incidents is of little value unless the data collected is analysed and recommendations are disseminated.13 There was also no trending of medication safety incidents. Analysis of medication variances enables targeted improvement efforts and system changes to reduce the likelihood of reoccurrences of medication-related incidents.
The hospital needs to promote incident reporting among all clinical staff within a just culture, to strengthen reporting and analysis of medication incidents so that safety surveillance is improved, learning is shared, and a safety culture is promoted and enhanced across the organisation.

### 2.3. Audit and evaluation

**Line of enquiry:**

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

Hospitals should have arrangements in place to ensure the effectiveness of healthcare is systematically monitored and continuously improved. The information gathered should be used to improve services, and the learning gained should be shared throughout the hospital.

Nursing and midwifery quality care metrics were monitored on a monthly basis and included elements of medication management. Results reviewed by inspectors for the past year outlined good compliance with medication storage and custody, schedule controlled drugs and medication administration. However, medication prescription results varied between 51% and 78% compliance. The hospital updated the medication prescription and administration records in response to improve prescribing practice. However, despite this there was still opportunity for improvement with prescribing practices.

Audits undertaken within the hospital were centrally coordinated but not strategically driven or planned. Audit topics were selected by individuals, directorates or departments. Individuals informed the Clinical Audit Coordinator when undertaking an audit and this facilitated coordination between relevant departments for example, a non-consultant hospital doctor undertaking a medication related audit liaised with the pharmacy department. Audits undertaken by non-consultant hospital doctors were assigned a consultant lead.

Examples of audits undertaken by the Pharmacy Department in the past year were reviewed by inspectors which included:

- audit of compliance with the Letterkenny University Hospital reserve and red light antimicrobial policy

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‡‡ The framework of a just culture ensures balanced accountability for both individuals and the organisation responsible for designing and improving systems in the workplace.

§§ Metrics are parameters or measures of quantitative assessment used for measurement and comparison or to track performance.
- audit of antiemetic prescribing for chemotherapy including nausea and vomiting in oncology patients
- venous thromboprophylaxis elimination initiative
- audit to improve prescription writing standards at Letterkenny University Hospital: write a CLASSIC*** prescription.

Dissemination of audit results is essential so that the clinical workforce is informed of the areas that need improvement, and also to motivate them to change practice and participate in improvement activities. The hospital had recently set up a Quality Improvement Forum to share audit findings.

Clinical audit is a cyclical process undertaken in five stages: planning, standard selection, measuring performance, making improvements and sustaining improvements. Each stage of the clinical audit cycle must be undertaken to ensure that an audit is systematic and successful. Inspectors found that more work was required to ensure that audit recommendations were identified and implemented and outcomes re-audited to ensure improvement in practice were achieved.

Audit of medication use and safety should be further supported and progressed. This work should be included in an overall medication safety strategy and plan to ensure that audit activity is based on priorities, driven by and with oversight from hospital management to ensure recommendations are implemented and required improvements achieved.

2.4. 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.

**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.

Inspectors found that clinical pharmacy services were provided for patients in four of the general medical wards. However, other clinical areas including high-risk areas

*** CLASSIC: Clear complete capital circle Legible Abbreviations allergies accurate Safe Signed Indelible ink Cross check.

††† Clinical pharmacy describes the activity of pharmacy teams in ward and clinic settings.
did not have a clinical pharmacy service and that may pose a risk to patient safety. An antimicrobial pharmacist provided a clinical service for patients on antimicrobials including the maternity unit, but not paediatrics unless there was a specific request to go to the paediatric unit.

As the hospital is providing complex medical and surgical care including critical care and emergency, maternity and paediatrics services the hospital should immediately review arrangements for pharmacy services. This should include pharmacy services provided, allocation of staffing resources and priority areas requiring a clinical pharmacy service to ensure that current resources are used to maximum effect and the needs of patients prioritised.

**Medication reconciliation**

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 is taking on admission, discharge and other transitions in care.\(^{17,24,25,26}\)

Medication reconciliation was undertaken on admission by clinical pharmacists for some patients on the wards to which they were assigned. The process was not formalised or supported by guidance. Inspectors found that the form used by pharmacists to document medication reconciliation was not standardised across the hospital.

Inspectors were informed that nursing staff on one ward were currently checking the discharge prescription against the inpatient prescription and administration record and discrepancies identified were resolved by the prescribing doctor prior to discharge.

Following this inspection the hospital should standardise and formalise the current medication reconciliation process, as well as working towards expanding the service to all patients at transition of care.

**Alerts and recalls**

An identified person received and circulated safety alerts. The Chief Pharmacist received alerts related to medication and recalls\(^{***}\) and acted on these as detailed in a medicinal product/device recall policy. Inspectors were informed that the General Manager also received alerts and disseminated these as appropriate.

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\(^{***}\) Recalls are actions taken by a company to remove a product from the market. Recalls may be conducted on a firm's own initiative or by authorised authority.
High-risk medicines

High-risk medicines are those that have a high risk of causing significant injury or harm if they are misused or used in error. The hospital had developed an alphabetical high-risk medications list for medicines and medicine classes categorized as high risk in Letterkenny University Hospital pharmacy. However, this initiative was not implemented to clinical wards and units to promote awareness and safety for these high-risk medicines.

Inspectors found some risk-reduction strategies (see appendix 4) for high-risk medicines were in place in the hospital, for example:

- restricted and segregated storage of potassium chloride ampoules
- red stickers on all boxes of intravenous fluids containing potassium
- flag label insulin pens with individual patient names.

Medication safety quality improvement initiatives

Medication safety quality improvement initiatives identified during the course of the inspection included:

- the development, piloting and implementation of an updated medication prescription and administration record.
- an extensive list of sound alike look alike (SALAD) developed by pharmacy
- the hospital had a ‘ward based system’ to promote medication safety initiatives at ward level.

Inspectors were informed that the ‘ward based system’ was implemented and working well on one ward at the time of the inspection but inspectors found no evidence that the SALADs list had been distributed or communicated to clinical areas. In addition, some staff were not familiar with the hospital’s high-risk medicines lists.

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555 Antimicrobial agents, Cardiovascular, Cancer Chemotherapy Drugs, Central nervous system and Anaesthetic agents, Electrolytes IV, Endocrine, Epidural and intrathecal medications, Fluids and nutrition, Growth stimulating factors, Immunosuppressants and Immunomodulators, Monoclonal antibodies, Non-steroidal anti-inflammatory agents (NSAIDs), Radiocontrast agents IV, Respiratory and all medicines administered to neonates.

**** Concentrated potassium chloride can have very serious consequences and can be fatal when not prepared and administered correctly. Removal of concentrated potassium chloride from patient care units has had a marked positive impact on the reduction of death and disabling injury associated with these agents.

†††† 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.

‡‡‡‡ Doctors and nurses working together at ward level to enhance medication safety.
Inspectors concluded that in relation to medication safety quality improvement initiatives and high-alert medicines there was a lack of a focused, multidisciplinary approach to drive, implement and sustain improvements.

2.5. 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.28, 29

Clinical nurse specialists working in areas such as diabetes, respiratory, stroke and heart failure provided education to patients on their medications. Clinical staff reported that doctors and nurses also provided advice to patients on prescribed medications.

Letterkenny University Hospitals, National Patient Experience Survey5555 was completed by 52% of the 865 people discharged from the hospital in May 2017. 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?

The response for Question 45 received an overall score ***** of 8.2 which was higher than the national average score of 7.8 and was highlighted as an area of good experience in the National Patient Experience Survey report for Letterkenny University Hospital.30 Question 46 received an overall score of 5.1 which was the same as the national average score of 5.1 (Figure 1).

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5555 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.

***** 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.
<table>
<thead>
<tr>
<th>Question</th>
<th>Letterkenny University score</th>
<th>National score</th>
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<tbody>
<tr>
<td>Question 45: Did a member of staff explain the purpose of the medicines you were to take at home in a way you could understand?</td>
<td>8.2</td>
<td>7.8</td>
</tr>
<tr>
<td>Question 46: Did a member of staff tell you about medication side effects to watch for when you went home?</td>
<td>5.1</td>
<td>5.1</td>
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</table>

**Figure 1: Letterkenny University Hospital’s results for Question 45 and 46 of the National Patient Experience Survey.**

Patient education is an integral component of the safe, effective and cost-effective use of medications and these results reflect positively on the systems in place within the hospital for providing education to patients. In response to the findings of the National Patient Experience Survey the hospital should expand patient education in relation to medicines to include medication side effects.

### 2.6. 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.

In a hospital such as Letterkenny University Hospital which provides complex care to patients, the following information and policies procedures and guidelines should be in place to support medication safety including:

- comprehensive up-to-date policies, procedures, guidelines to support medication management and safety
- locally developed or adapted intravenous medicine information monographs available to staff at point of medicines preparation.
It is recommended, by both the Health Service Executive\(^{31}\) and the National Clinical Effectiveness Committee\(^{32}\) that policies, procedures and guidelines are reviewed and updated every three years. A number of policies, procedure and guidelines reviewed by inspectors in the clinical areas were overdue for review. Some of these had been due for review during the previous medication safety inspection and were still not updated by the hospital.

**Medicines information resources**

A link to a ‘pharmacy folder’ was on the desk top of each computer. This folder contained links to information which was approved for use in the hospital, such as the British National Formulary within Medicines Complete.\(^{†††††}\) The pharmacy department also circulated medication safety alerts to inform staff on guidance to follow for specific medicines, for example high-strength insulin preparations.

The hospital had recently adopted intravenous monographs\(^{‡‡‡‡‡}\) from another hospital within the Saolta University Health Care Group which were also available in the ‘pharmacy folder’. However, these had not been reviewed by the hospital to ensure that the information contained within the monographs was relevant to the services in Letterkenny University Hospital which could constitute a risk to patients.

Following this inspection the hospital should use a multidisciplinary approach to review information sources to ensure that clinical staff have access to, and knowledge of, approved, locally developed or adapted, up-to-date information and/or policies, procedures and guidelines for the safe use of medicines. In addition the hospital should review and adapt the intravenous drug administration monographs in use to ensure staff have appropriate information to administer medications safely.

### 2.7. 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.\(^{33}\)

\(^{†††††}\) Medicines Complete provides online access to some of drug and healthcare references.

\(^{‡‡‡‡‡}\) Intravenous medication monographs are 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.
Inspectors were informed that nursing staff attended intravenous drug administration training on induction, with competency assessment and supervision at ward level and revalidation every 2 years. Nursing staff were also encouraged to complete the HSELanD§§§§§ medication management module. The hospital was unable to provide inspectors with the percentage of staff who had completed this training.

Inspectors were informed that non consultant hospital doctors attended medication safety education session on induction presented by pharmacists, and received ongoing education at forums such as grand rounds, journal clubs and daily educational meetings.

The hospital should ensure that professionals have the necessary competencies to deliver high-quality medication safety through induction and ongoing training. This should be in the form of a structured, targeted programme of education for medication safety aligned with the hospital’s medications safety programme.6

§§§§§ The health service elearning and development service

55555 The health service elearning and development service
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 hospitals. Medication safety should therefore be a priority area for all hospitals as they seek to ensure a high quality and safe service for patients.

Since the last medication safety inspection Letterkenny University Hospital had put governance structures in place by re-establishing its Drugs and Therapeutics Committee and establishing a Medication Safety subgroup. The Drugs and Therapeutics Committee met regularly with good attendance from members. However, despite these changes inspectors found the essential elements required for an effective medication safety programme were still lacking in the hospital since the last inspection and there had been limited progress in implementing improvements since the last inspection 10 months earlier.

Inspectors found there were no clear objectives or goals for medication safety outlined in a strategy or plan. In addition, there was a lack of leadership to drive a multidisciplinary approach to implementing and sustaining effective systems for medication safety.

There was an on-going lack of clinical pharmacy services to some high-risk areas which needs to be addressed to ensure that current resources are used to maximum effect and the needs of patients prioritised.

While overall incident reporting had improved since the last inspection there was still underreporting in some clinical areas. Incident reporting needs to be promoted among all clinical staff, and incidents analysed to enable targeted improvement.

Inspectors found examples of multidisciplinary audit but audit could be better planned and coordinated based on local priorities for medication safety, driven by hospital management to ensure recommendations are implemented and required improvements achieved.

Finally, the hospital should ensure that clinical staff have access to, and knowledge of, approved, locally developed or adapted, up-to-date information and/or policies, procedures and guidelines for the safe use of medicines.

The hospital should ensure that the leadership, governance and management responsible for medication safety address the findings in this and the previous medication safety inspection report. It is recommended that this report is shared with senior managers, clinicians and other relevant staff at the Letterkenny University Hospital to highlight both what has been achieved by the hospital in
implementing medication safety activities to date, and to foster further much needed collective progression from this time point.
4. References


34 Health Service Executive. HSELanD. Available online from: http://www.hseland.ie/tohm/default.asp?message=logout
## 5. Appendices

### Appendix 1: Medication Safety Monitoring Programme Phase One: Lines of Enquiry and Associated National Standard for Safer Better Healthcare

<table>
<thead>
<tr>
<th>Area to be explored</th>
<th>Line of enquiry</th>
<th>National Standards for Safer Better Healthcare</th>
</tr>
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<tbody>
<tr>
<td>Clear lines of accountability and responsibility for medication safety</td>
<td>Patient safety is enhanced through an effective medication safety programme underpinned by formalised governance structures and clear accountability arrangements.</td>
<td>3.1, 5.1, 5.2, 5.4, 5.5, 5.6, 5.8, 5.9, 5.10, 7.1</td>
</tr>
<tr>
<td>Patient involvement in service delivery</td>
<td>Patients and or carers are informed about the benefits and associated risks of prescribed medicines in a way that is accessible and understandable.</td>
<td>1.4, 1.5, 1.7, 3.1, 4.1</td>
</tr>
<tr>
<td>Policies procedures and guidelines</td>
<td>Hospitals develop effective processes to promote medication safety that are implemented and supported by clear and up-to-date policies, procedures and or protocols.</td>
<td>2.1, 3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 5.8, 5.11, 8.1</td>
</tr>
<tr>
<td>Risk management</td>
<td>There are arrangements in place to identify, report and manage risk related to medication safety throughout the hospital.</td>
<td>3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 5.8, 5.10, 5.11, 8.1</td>
</tr>
<tr>
<td>Audit and evaluation</td>
<td>The effectiveness of medication management systems are systematically monitored and evaluated to ensure they are effective.</td>
<td>2.8, 3.1, 5.8, 8.1</td>
</tr>
<tr>
<td>Education and training</td>
<td>Safe prescribing and drug administration practices are supported by mandatory and practical training on medication management for relevant staff.</td>
<td>6.2, 6.3</td>
</tr>
<tr>
<td>Access to information</td>
<td>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.</td>
<td>2.5, 8.1</td>
</tr>
</tbody>
</table>
Appendix 2: Copy of letter sent from HIQA to Letterkenny University Hospital

Sean Murphy  
General Manager  
Letterkenny University Hospital  
Letterkenny  
sean1.murphy@hse.ie

29 June 2018

Ref: MS/206

Medication Safety Monitoring Programme in Public Acute Hospitals

Dear Sean,

During the course of the announced medication safety inspection conducted at Letterkenny University Hospital on 26 June 2018, Authorised Persons' identified risks in relation to medication safety at Letterkenny University Hospital.

Overall HIQA found there was a lack of leadership, governance and management in progressing a comprehensive multidisciplinary approach to implementing effective systems for medication safety.

During the inspection HIQA found that essential elements required for medication safety were not present and was not assured that the hospital had clear plans to implement these. In addition there was limited progress in relation to addressing areas for improvement identified during a medication safety inspection in August 2017.

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1 Authorised persons of the Health Information and Quality Authority (HIQA) under Section 70 of the Health Act 2007 (the Act) are authorised for the purpose of monitoring against the National Standards for Safer Better Healthcare pursuant to Section 8(1)(c) of the Act.
Specific risks identified by HIQA during this inspection included:

- an absence of clear direction and an overarching strategic plan for medication safety
- limited implementation of effective medication safety quality improvements
- a sustained lack of clinical pharmacy services in high risk areas
- limited locally developed or adapted information to guide clinical staff in the safe use of medicines such as a hospital formulary and intravenous medicine information monographs.

Consequently, I am writing to you to seek assurance as to how the specific risk issues identified will be addressed following this most recent inspection.

Please note that details of this correspondence will be included in the report of the announced medication safety inspection. This will include copies of HIQA’s correspondence and the service provider’s response.

Please confirm receipt of this letter by email and formally report back to HIQA by 06 July 2018 to qualityandsafety@hiqa.ie outlining measures to address the identified risks. Should you have any queries, please do not hesitate to contact me.

Yours sincerely

NORA O MAHONY
Authorised Person

CC: Maurice Power, CEO, Saolta University Health Care Group
Mary Durnion Director of Regulation, Health Information and Quality Authority
Appendix 3: Copy of the response received by HIQA from Letterkenny University Hospital

General Manager’s Office,
Letterkenny University Hospital, Letterkenny Co. Donegal
F92 AE81

Telephone: (074) 9123501       Fax: (074) 9104651

6th July 2018

Ms. Nora O’Mahony
Authorised Person
Health Information and Quality Authority
Head Office
HIQA
Unit 1301, City Gate,
Mahon
Co Cork Ireland

Dear Nora,

I am writing in response to your letter of 29th June 2018 following the announced medication safety inspection conducted at Letterkenny University Hospital on 26th June 2018.

The LUH team have met to consider both the contents of your letter and the initially feedback on the day of the inspection. We acknowledge and accept the issues raised in your letter and assure you of our commitment to address these going forward. I would like to address the four specific risk areas identified in your letter as follows:

1) Absence of clear direction and overarching strategic plan for medication safety
We have initiated the development of a Strategic Plan for Medication Safety by our Chief Pharmacist and Chair of the Drugs & Therapeutic Committee (DTC) and lead by myself as General Manager. We are currently processing the appointment of a permanent Quality & Safety Manager post. This post will have a key role in conjunction with the Chief Pharmacist and DTC in ensuring medication safety standards at LUH.

This Strategic Plan will address:
- Governance structures and accountability
- Education Training and Audit
- Clinical Risk Management reporting and feedback – of specific data items and trend analysis. The use of clinical support tools (such as Apps) and monitoring of Policies, Procedures & Guidelines would be addressed as part of this strategy.
- Management of high risk medicines
- Polypharmacy and medicines at transitions of care
- Pharmacy Workforce Planning Strategy

This Strategic Plan will be developed in conjunction with and support from the Saolta Group Drugs & Therapeutics Committee. A Draft Strategic Plan will be presented to the August meeting of LUH DTC, following which it will be adopted by the LUH DTC in September 2018. The Strategic Plan will be circulated to the Quality & Patient Safety Committee and the Hospital Executive Board; and through these fora be cascaded throughout the hospital.
2) **Limited implementation of effective medication safety quality improvements**

We have taken a number of immediate actions in response to your letter:

- Communicated the risks identified to the Saolta Executive and the LUH Executive Board and other staff with responsibility for any stage in the medication management process.
- Agreed immediate improvements to the governance process to enhance accountability. Our Drugs & Therapeutic Committee will be required to produce a template driven report on a quarterly basis to the Quality & Patient Safety Committee commencing September 2018. This report will form part of the written Quality & Patient Safety Report to the Hospital Executive Board. Also the standing agenda item on the DTC for medications incidents will be strengthened to include the Preliminary Assessment Reports in respect of medication safety related Serious Incident Management Team referrals.

A Quality Improvement Plan (QIP) will be developed to address the issues identified during your inspection and outstanding issues from the 2017 inspection. This QIP will clearly identify the leads responsible and the timeframe for delivering actions. The QIP will be presented to the August DTC meeting for adoption. The adopted QIP will be subject to further development to include any issues identified locally as part of the development of our Medication Safety Strategic Plan.

As highlighted by the LUH on the day of inspection a significant focus of the local DTC has been the roll out of the new Drugs Kardex which occurred seamlessly and has enhanced the quality of medication prescribing and administration information and improved multi-disciplinary communication. The DTC has also recently established a Medication Safety Sub-Group to provide a more focused approach on medication safety, though we acknowledge that at the time of the inspection this committee did not have a defined action plan as the committee has only been recently formed. A review of the function of this committee will be included in our Quality Improvement Plan.

3) **A sustained lack of clinical pharmacy services in high risk areas**

As noted during the inspection the hospital’s capacity to develop and expand clinical pharmacy services is constrained by the lack of funding for this area in the 2018 National Service Plan. As highlighted at the inspection, the Saolta Group have included a requirement for a number of Clinical Pharmacists as part of the 2019 Service Plan Estimates process in light of representations made by hospitals including LUH. If successful in securing funding, this would allow Saolta to support the development of Clinical Pharmacy services in high risk areas and/or hospital wide Medication Safety Pharmacist.

As highlighted at the inspection, LUH, with support of Saolta, has initiated the recruitment of a Mental Health Pharmacist. Whilst I acknowledge this is not a Clinical Pharmacist in a high risk area within the hospital, it is evidence of our commitment to enhance medication safety within the wider health community which our pharmacy serves.
4) Limited locally developed or adapted information to guide clinical staff in the safe use of medicines such a hospital formulary and intravenous medicine information monographs

We fully acknowledge the lack of a hospital formulary at LUH. As noted at the inspection, there is a significant resource allocation required not only to develop a hospital formulary but equally importantly to maintain such a formulary in order that it provide a safe reference tool for prescribers. We will continue to work with our colleagues in the Saolta Group Drugs & Therapeutic Committee to explore the potential to pool resources in the development of a group wide formulary.

As noted during the inspection LUH does have a list of medications held and supplied by our Pharmacy. Work has also been undertaken in LUH on streamlining and risk assessment of exempt medicinal products. As part of our Quality Improvement Plan referenced above our local DTC will review and revise the process for authorising request for new drugs within the hospital in order to maximise patient safety.

We accept the comments in respect of the limited local adaptation of the information within the intravenous medicine information monographs. Again, our Quality Improvement Plan will identify the most effective mechanism for addressing this deficit – which will likely include securing agreement with UHG to obtain a copy of the web based monographs.

In conclusion I hope that the above comments and undertakings provide you with the necessary assurance of my personal commitment, and that of the Clinicians and Management Team in LUH to improve and enhance medication safety within our hospital, with immediate measures to be taken over the coming weeks.

Please do not hesitate to contact me should you require any further information or clarification in respect of the content of our response.

Yours sincerely

Mr. Sean Murphy
General Manager

Cc: Maurice Power, CEO, Saolta University Hospital Group
    Mary Dunnion, Director of Regulation, Health Information & Quality Authority
    Professor Ken Mulpeter, Chair of Drugs & Therapeutic Committee, LUH
    Mr. Colm Devine, Chief Pharmacist, LUH
Appendix 4: Hierarchy of Effectiveness of Risk Reduction Strategies in Medication Safety

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For further information please contact:

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