

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

Date of announced inspection: 06 December 2016

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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 personcentred 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 University Hospital Waterford

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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 in 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.

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 includes 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 University Hospital Waterford by Authorised Persons from HIQA; Aileen O' Brien, Kathryn Hanly and Shane Grogan. The inspection was carried out on 06 December 2016 between 09:30hrs and 16:30hrs. Interviews were held in University Hospital Waterford with the following groups of managers and clinical staff:

- Group one: a medical senior house officer, a surgical intern and a basic grade pharmacist
- Group two: the Chairperson of Drugs and Therapeutics Committee, the Chief Pharmacist and the Head of Risk Management
- Group three: the General Manager, a clinical director and the Director of Nursing. The Director of Midwifery also attended.

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

- Surgical 7 Ward
- Medical 5 Ward

Medical 3 Ward and Medical 2 Ward were also briefly visited.

In addition a survey was conducted among outpatients in the Outpatients department.

HIQA would like to acknowledge the cooperation of staff who facilitated and contributed to this announced inspection and the hospital outpatients who spoke with inspectors.

2. Findings at University Hospital Waterford

The following sections of this report outline the main findings of the inspection. The report is structured as follows:

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

2.1 Risks identified

During this announced inspection by HIQA on 06 December 2016, risks were identified in University Hospital Waterford in relation to medication safety. Specifically, risks were identified in relation to:

- The availability in clinical areas of outdated and potentially conflicting reference information for the reconstitution and administration of intravenous medication.
- The absence of strategic and operational plans detailing the development, implementation and maintenance of hospital-wide medication safety systems.
- Inadequate arrangements to identify, report and manage risks associated with medication use.
- A lack of systematic monitoring and evaluation of the effectiveness of medication management systems to ensure they are effective.
- A relative lack of policies, procedures, protocols and guidelines to support staff in the safe prescribing and administration of medications.

Details of these risks were communicated to hospital management. In response, hospital management reported that a number of measures had subsequently been taken to mitigate the risks identified by HIQA. Specifically, a medication safety pharmacist had been appointed, standardised intravenous medication administration guidelines had been provided to clinical staff and the terms of reference and reporting arrangements for the Medicines and Therapeutics Committee and the Medication Safety Sub Committee had been reviewed. In addition the hospital had developed a medication safety quality improvement plan. A copy of the letter issued to the hospital regarding the risks identified during the inspection on 06 December 2016 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.

HIQA found that University Hospital Waterford did not have essential governance arrangements in place in relation to medication safety. University Hospital Waterford is a tertiary referral hospital which provides general medical, surgical, maternity and specialist care. The hospital did not have clear objectives, goals or plans for medication safety. It was of concern that a large hospital providing complex clinical care did not have a defined medication safety programme in place. It was not apparent that medication safety was adequately supported at executive management level at the hospital.

The wider hospital governance structure had been significantly reconfigured in 2015 with the establishment of three new clinical directorates. Membership of the Safety and Quality Executive Steering Committee was revised to align with this new Directorate structure. It was reported by hospital management that medication safety governance arrangements were evolving within this new configuration.

An effective Drugs and Therapeutics Committee should have ongoing oversight of the medication management and safety system within a hospital. A reformed, and renamed medicines and therapeutics Committee was established in September 2015. There had been a Drugs and Therapeutics Committee at the hospital previously but it ceased to meet in 2012. A strategic, planned approach to managing medication safety at the hospital was not reflected in the terms of reference of the reformed committee or in the minutes of committee meetings that were reviewed. Attendance at committee meetings was variable and at the time of this inspection the committee did not have allocated administrative support.

The Medicines and Therapeutics Committee was one of 18 groups or committees that reported into the Safety and Quality Executive Steering Committee. This group, in turn reported into an Executive Management Board. The committee did not have a formalised communication strategy regarding medication safety for upward communication to executive management level in the hospital and to relevant stakeholders.

The hospital governance organogram provided to HIQA showed that the Medicines and Therapeutics Committee had two sub-committees; namely a Medicines and Therapeutics Protocols Sub Committee, and a Medication Safety Sub Committee. The terms of reference of the Medicine and Therapeutics Committee meetings indicated that an antimicrobial stewardship sub-committee reported into the Medicines and Therapeutics Committee, however, this was not reflected in the hospital governance organogram. The Medication Safety Sub-Committee was formed in late 2016. It was reported to inspectors that this committee was formed in anticipation of HIQA's medication safety monitoring programme. However, this committee was not aligned to a strategic plan for medication safety at the hospital.

The hospital did not have adequate arrangements in place to identify, report and manage risk related to medication safety throughout the hospital. Risks in relation to medication management did not appear to be regularly assessed and used to inform system changes which could enhance medication safety. By way of example, HIQA was informed that medication-related clinical incidents were likely under reported in the hospital. Under reporting of medication-related incidents does not facilitate understanding of the exact nature and contributory factors leading to such errors and, as a result, there is an inability to effectively engage in prevention, multi-disciplinary learning and systems improvement. Medication-related incidents that were reported by staff were attributed to medication administration and preparation errors. Review of aggregate medication-related incident data should be accompanied by targeted review of sentinel incidents to inform improved medication safety arrangements going forward. Higher incident reporting rates both demonstrate and promote an improved culture of safety.⁶

2.3 Audit and evaluation

Line of enquiry:

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

Hospital management reported that they did not use specific performance indicators to evaluate medication safety at the hospital. It was not apparent that available sources of information in relation to medication safety were regularly evaluated to identify risk and monitor the impact of interventions.

Documentation reviewed showed that some medication safety-related audits had been performed at the hospital but these were not linked to an overarching medication safety strategy. It was reported that an audit office had been established to facilitate oversight of clinical audit activity at the hospital. This should provide the hospital with the opportunity to align audits to strategic medication safety objectives.

Nursing metrics data in relation to medication safety identified good performance across a number of areas, but there were consistently less than satisfactory findings in relation to observations around medication prescribing. Although these metrics were reported into the hospital Quality and Patient Safety Executive Steering Group, the outstanding issues identified as requiring improvement were not proactively addressed.

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.

The hospital reported that they had recently established a formal process for the review of new medicine requests. However, this was a relatively new development. Prior to this, new drugs could be introduced into clinical practice without undergoing a formal evaluation for safety and suitability in use at the hospital. For example it was reported that four different direct-acting oral anticoagulants were in use in the hospital. These agents are regarded internationally as high-alert medications that bear a heightened risk of causing significant patient harm when used in error. The hospital did not have a defined hospital medicines formulary or preferred prescribing guide or a list of high-risk medications. The introduction of new medications needs to be carefully overseen, and appropriate information, supports and safety systems need to be provided for both staff and patients.

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 for preventing adverse drug events. ^{8,9,10,11,12} A limited clinical pharmacy service was provided at the hospital. Clinical pharmacy services were provided on a pilot basis in two inpatient wards and in the High Dependency, Intensive Care and Coronary Care Units since 2015. It was reported that the service provided medicines reconciliation [†] on admission,

^{*} 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.

[†] Medicines reconciliation is a formal, systematic process for obtaining a current and accurate list of medicines a patient was taking when admitted to hospital, known as a best possible medication history, and reconciling this history against the patient's medicines prescribed at admission, transfer and discharge on the medication chart.

medication administration advice, patient counselling in respect of anticoagulant medication and review of prescribing and ongoing therapeutic review in these clinical areas. It was reported that due to resource deficiencies this was not standardised practice across all clinical areas in the hospital. Medication reconciliation at time of admission is a systematic process to obtain an accurate and complete list of all medications that the patient was taking prior to admission. ^{13,14,15,16} It is also necessary that staff trained are appropriately trained to perform medicines reconciliation. ¹⁴ Hospital management had escalated this risk to hospital group level and had made a submission for additional clinical pharmacy staff.

The hospital's general medication prescribing chart had been redesigned to include separate sections for anticoagulants, sliding scale insulin, reducing dose steroids, intravenous fluids. The chart included provision for recording therapeutic drug monitoring levels for antimicrobials.

Plans were in place to work with a community pharmacist for a three month period to monitor prescribing errors in hospital discharge prescriptions in response to the identification of some prescribing errors. HIQA noted that issues around discharge prescribing were previously discussed at a Medicines and Therapeutics Committee Meeting in September 2015 and that it was also agreed at that time that community pharmacists would undertake a survey of discharge prescriptions and report their findings to the Medicines and Therapeutics Committee. This potentially highlights the need to effectively address risk in a timely manner.

The hospital had trialled an electronic discharge summary form and a discharge medication prescription form to facilitate clear communication of relevant patient care and medication information to continuing care providers in particular general practitioners. This initiative could only be progressed with enhanced information technology resources. There was no defined timeframe within which this system was expected to be implemented.

Documentation reviewed showed that medication safety alerts and a pharmacy newsletter were circulated to heads of departments and various staff members by the Pharmacy Department.

Open disclosure occurs when staff in the health and social care service communicate with patients in an open and honest manner when things go wrong with patient care.^{3,17} Staff spoken with reported that it was practice to inform patients if an error was made in relation their medication, in line with best practice.

University Hospital Waterford did not formally collaborate with other hospitals within the South/South West Hospital Group of which the hospital was a part. There was instead collaboration with some hospitals in the Ireland East hospital Group who were previously part of the former Health Service Executive South Eastern Health Board, in relation to antimicrobial stewardship and a pharmacy newsletter.

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.

Medication counselling was provided to inpatients for example in relation to oral anticoagulant medication by a clinical pharmacist in the limited clinical areas that had a clinical pharmacy service. This service was not standardised across the hospital as not all clinical areas had this service.

Patients should be well informed about any medications they are prescribed and any possible side-effects. ¹⁸, ¹⁹ This is particularly relevant for those patients who are taking multiple medications. As part of this inspection, HIQA asked a small sample of hospital outpatients attending the Outpatients Department to complete an anonymised questionnaire in relation to prescribed medications. The questionnaire was completed by 20 people who had been inpatients in University Hospital Waterford within the past year and who were prescribed regular medications. Of the 20 people surveyed:

- 75% said that, other than being provided with a prescription form to take to their local pharmacy or general practitioner, they had not been given a list[‡] that outlined which medicines they were on in a way they could understand.
- 40% said that a staff member had explained the purpose of new medication in a way that they could understand.
- 25% said that a staff member told them about possible medication side effects to look out for following discharge home.
- 50% said they received instruction on how to take their medications at home.

It is acknowledged that this was a small sample of outpatients and therefore was not representative of all recently discharged patients taking prescribed medication. This information does however, provide some information about outpatients understanding and could be expanded upon and used to identify opportunities for improvement.

[‡] Patient-held medication lists are completed by a healthcare professional to accurately list all medications the patient is taking at time of discharge.

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 of the safe use of medicines is readily available in a user friendly format and is adhered to when prescribing, dispensing and administering medications.

A relative lack of policies, procedures, protocols and guidelines to support staff in the safe prescribing and administration of medications were identified during this inspection. There were no standardised locally adapted hospital guidelines available at point of care for clinical staff in relation to the reconstitution and administration of intravenous medications. Outdated and potentially conflicting reference information in relation to the reconstitution and administration of intravenous medication was observed in clinical areas. Following this inspection the hospital reported that up to date reconstitution and administration guidelines for intravenous medication had been made available to staff in clinical areas across the hospital.

Clinical staff had access to regional prescribing guidelines for antimicrobial medications and to clinical microbiology advice on a twenty four hour basis.

The hospital Medication Management Policy for Nursing and Midwifery staff had not been reviewed since it became effective in 2008. Notwithstanding the planned update by the Nursing and Midwifery Board of Ireland of medication management guidelines, hospital policies need to be kept up to date. Ideally, medication management policies should be multi-disciplinary.

Clinical staff reported that they had ready electronic access to patient's laboratory and radiological imaging results at clinical level.

The hospital had an electronic document control system that facilitated staff access to approved versions of hospital policies, procedures and guidelines. It was noted during inspection that staff occasionally experienced delays in accessing this system. Hospital managers were aware of this issue and reported that they were endeavouring to address it.

Generalised prescribing supports were available to clinical staff. Hard copies of the most current version of the 'British National Formulary' were available in the clinical areas visited. The hospital also provided access to a specialised website which contained printable information leaflets on the administration of injectable drugs.

Staff also had electronic access to UK guidelines for administration of medication to patients with enteral feeding tubes or swallowing difficulties.

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.

There was no standardised medication safety specific training for staff that prescribed and administered medication at the hospital. Staff education and training was not linked to an overarching medication safety strategy.

Nurses undertook mandatory competency-based training in relation to intravenous medication administration and anaphylaxis management every two years. Induction sessions for new non consultant hospital doctors included some information regarding medication errors, incident reporting, open disclosure and communication. Weekly teaching sessions for interns had included topics on medication use. Education sessions for medical staff at the hospital included 'grand rounds' at which particular aspects of prescribing might be discussed. Education sessions were delivered by the Pharmacy Department in relation to anticoagulants, antimicrobials, chemotherapy, medication for respiratory conditions, therapeutic drug monitoring for intensive care patients and general prescribing practice.

University Hospital Waterford had developed a broad patient safety education programme for hospital staff. Staff education sessions were scheduled throughout 2016 and topics included national healthcare standards, open disclosure, incident and serious event reporting, risk management including medication errors, complaints and clinical audit. Staff education sessions about risk management included a breakdown of numbers of medication errors but not information regarding system changes or initiatives implemented to potentially prevent recurrence or harm.

[§] Grand rounds are formal meetings where physicians and other clinical support and administrative staff discuss the clinical case of one or more patients. Grand rounds originated as part of medical training.

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.

University Hospital Waterford did not have a defined, multidisciplinary medication safety programme in place at the time of this inspection. There were no clear objectives, goals or plans for medication safety or established means of assessing risks and evaluating medication safety across the hospital. Medication related incidents were likely significantly under reported at the hospital. It was not apparent that medication safety was sufficiently supported by senior management and clinicians at the hospital. Ultimately, to drive sustainable improvements in patient safety, senior leaders must take ownership of the organization's safety agenda. In the absence of recent specific local guidance in this area, international guidelines which outline best practice in relation to medication safety governance and improvement are available, and should be considered by staff responsible for patient safety in the hospital setting.^{5,21}

HIQA identified risks in relation to the lack of appropriate reference information to support staff in the safe prescribing and administration of medications for staff and the absence of strategic and operational plans for medication safety. Risks identified were such that HIQA needed to write to the hospital to raise concerns, and seek assurances as to how these would be addressed. Hospital management reported that a number of measures had subsequently been taken to mitigate the risks identified by HIQA during this inspection. Specifically, a medication safety pharmacist had been appointed, standardised intravenous medication administration guidelines had been provided to clinical staff and the terms of reference and reporting arrangements for the Medicines and Therapeutics Committee and the Medication Safety Sub Committee had been reviewed. In addition the hospital had developed a medication safety quality improvement plan.

In response to the risks identified by HIQA during this inspection, the hospital acted to appoint a medication safety pharmacist. University Hospital Waterford has a relatively low complement of clinical pharmacists compared to other Irish hospitals. The potential benefit of the appointment of this specialist role therefore needs to be considered in the wider assessment of resources and supports around medication safety that are required at the hospital.

Patient education is an essential component of the safe, effective and cost-effective use of medicines. Patient medication education should be initiated upon admission and continue throughout the hospital stay.^{18,19} The patient survey conducted by

HIQA provides some information about outpatients understanding of their medication and this could be used to further improve communication with patients about their medications.

Following this report, the hospital must focus its efforts to address the risks and findings identified in this report, and work to ensure that the necessary arrangements are in place to protect patients from the risk of medication-related harm.

The hospital could also further explore the potential to collaborate within its hospital group structure, to share and develop good practice pertaining to medication safety.

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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	2. 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	4. 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	5. 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	7. 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: Copy of the letter sent from HIQA to University Hospital Waterford



Richard Dooley
Hospital Manager
University Hospital Waterford
Dunmore Road
Waterford
Richard.Dooley@hse.ie

08 December 2016

Ref: MS/037

Monitoring Programme for Medication Safety in Public Acute Hospitals in the Republic of Ireland

Dear Richard

During the course of the announced Medication Safety inspection conducted at University Hospital Waterford on 06 December 2016, Authorized Persons¹ identified a specific issue that may present a serious risk to the health or welfare of patients, and immediate measures need to be put in place to mitigate this risk. The immediate risk identified related to;

 The availability of outdated and potentially conflicting reference information in clinical areas relating to advice in the reconstitution and administration of intravenous medication.

¹ Authorized Persons of the Health Information and Quality Authority (HIQA) under Section 70 of the Health Act 2007 (the Act) are authorized for the purpose of monitoring against the **National Standards for Safer Better Healthcare** pursuant to Section 8(1)(c) of the Act.

During the course of onsite observation by authorized persons on three wards, it was observed that nurses continued to use different versions of legacy IV medication reference posters. This represents a risk as these were not current approved information sources, and it is possible that the instructions on the posters may not be compatible with the intravenous medicines currently used in the hospital. The hospital must ensure that out of date intravenous drug administration information in clinical areas are immediately retrieved and replaced throughout the facility with updated and standardized versions.

In addition, in reviewing the totality of findings from the inspection, the inspection team has determined that the current approach at the hospital to the leadership, governance and management of medication safety related risk is ineffective and represents a risk to patients. The risks concerned include;

- The absence of strategic and operational plans detailing the development, implementation and maintenance of hospital wide medication safety systems.
- Inadequate arrangements in place to identify, report and manage risks associated with medication use.
- A lack of systematic monitoring and evaluation of the effectiveness of medication management systems to ensure they are effective.
- A relative lack of policies, procedures, protocols and guidelines to support medical staff in safe prescribing and administration of medications.

In light of these findings, I am writing to you to seek both further clarification and assurance in relation to the risks identified. Please formally report back to HIQA by **2pm on 15 December 2016** to qualityandsafety@hiqa.ie, providing:

- An outline as to how you have mitigated the immediate risk.
- A time bound plan with identified accountability for resolution of the additional risks identified.

Details of these risks will be included in the report of the announced medication safety inspection. This will include copies of HIQA's notification of this risk and the service provider's response.

Should you have any queries, please do not hesitate to contact me at qualityandsafety@hiqa.ie. Please confirm receipt of this letter by email (qualityandsafety@hiqa.ie).

Yours sincerely

Alee Bias.

AILEEN O' BRIEN Authorized Person

CC: Gerry O Dwyer, CEO, South/South West Hospitals Group Mary Dunnion, Chief Inspector and Director of Regulation, Health Information and Quality Authority

Appendix 3: Copy of the response received by HIQA from University Hospital Waterford





Ms Aileen O'Brien Authorised Person Health Information and Quality Authority

15 December 2016

Ref. MS/037

Monitoring Program for Medication Safety in Public Acute Hospitals in the Republic of Ireland

Dear Ms O'Brien,

Further to your letter dated 8.12.2016 regarding the announced Medication Safety Inspection conducted at University Hospital Waterford (UHW) on Tues 6th December 2016, I have set out below the key actions taken to mitigate the immediate risk identified.

Following the inspection, an Extraordinary Executive Management Board (EMB) meeting was convened on 9th December 2016. There was further discussion and progression of the issues at the EMB on 13th December 2016.

A number of immediate actions were approved, and have been implemented since then:

- The immediate appointment of a Medication Safety Pharmacist (Chief 2) to head up the Medication Safety Project. Commenced Monday 12th December 2016.
- The IV Medications Monographs were approved on Thurs 8th December 2016 and distributed to all areas on Friday 9th December, via a desktop icon on all PCs in UHW.
- A communication exercise was executed to ensure that all medical, nursing and pharmacy staff were informed that the IV Medicines Monographs are now available via the desk top icon.
- Pre-existing hard copy IV medicines information was removed from all clinical areas on Friday 9th December.
 - There will be ongoing communication on this matter as an integral part of the Medication Safety Project.
- The Terms of Reference for both Medicines and Therapeutics Committee and Medication Safety Committee were revised and approved by the EMB on Tuesday 13th December 2016. (See attached)
- The Medication Safety Committee now reports directly to EMB, and informs Medicines and Therapeutics Committee of its work via a standing report on a quarterly basis. (Refer to attached organogram)

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"Together we will provide quality patient care delivered by skilled and valued staff through the best use of available resources".

With reference to the remaining risks raised in your letter, please find attached the UHW Medication Safety Quality Improvement Plan, with identified accountability and time frames for completion of each identified action. This QIP will be subject to formal weekly and monthly monitoring by both my office and the UHW Executive Management Board.

With regard to the requirement to develop strategic and operational plans for the development, implementation and maintenance of a hospital wide medication safety system, this will be addressed by the Medication Safety Committee as matter of urgency. It is intended that key personnel will undertake one or two site visits to high-performing hospitals in early January 2017 to inform this work.

The identification, reporting and management of risks related to Medication Safety will be addressed through the collation of medication safety information across nursing, clinical pharmacy, clinical risk management and complaints. Performance will be tracked and reported by unit/ directorate and will be monitored at Hospital EMB level. This will foster the culture of reporting incidents/ near misses related medication management.

The development of multidisciplinary policies, procedures, protocols and guidelines (PPPGs) will be supported by the new UHW Policy, which provides for multi disciplinary approval processes. This will be used immediately to address high priority PPPGs in nursing, pharmacy and medicine.

This first draft of the QIP has been approved by the EMB, and adopted as the immediate program of work for the Medication Safety Committee. Progress against the identified objectives will be reviewed weekly by the Committee Chairperson and the General Manager. The Executive Management Board will be advised of progress monthly.

The Medication Safety QIP (attached) sets out its objectives, with initial sub-objectives assigned to individuals/ functions and target time lines for completion. This is a whole-hospital plan with multiple stakeholders. It is a complex piece of work which must be implemented in a resource-constrained and technology-poor environment. We are committed to achieving this.

Yours sincerely,

Mr Richard Dooley General Manager

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/ Kilcreene Regional Orthopaedic Hospital

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