



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the announced inspection of medication safety at Kilcreene Regional Orthopaedic Hospital.

**Date of announced inspection:
14 June 2017**

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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 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 Kilcreene Regional Orthopaedic Hospital by Authorised Persons from HIQA; Kay Sugrue and Noelle Neville. The inspection was carried out on 14 June 2017 between 10.30hrs and 16.00hrs. 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 Risk Manager†.

* The Chief Pharmacist was from St. Luke's General Hospital Kilkenny, which provides pharmacy services to Kilcreene Regional Orthopaedic Hospital.

† The Risk Manager was responsible for risk management in both University Hospital Waterford, and Kilcreene Regional Orthopaedic Hospital.

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- Group two: the Chief Executive Officer, the deputising Clinical Director and the Director of Nursing.

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

- St. Bridget's Ward.

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

2. Findings at Kilcreene Regional Orthopaedic Hospital

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

- **Sections 2.1 to 2.6** present the general findings of this announced inspection which are aligned to the 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.

2.1.1 Background

Kilcreene Regional Orthopaedic Hospital is a statutory hospital, which is owned and managed by the Health Service Executive (HSE), and is a member of the South/South West Hospital Group[‡].

The hospital was previously a member of the Health Service Executive (HSE) South Eastern Health Board before transition to the current HSE hospital group structure. The South Eastern Health Board consisted of:

- Lourdes Orthopaedic Hospital Kilcreene (now Kilcreene Regional Orthopaedic Hospital)
- South Tipperary General Hospital
- St. Luke's General Hospital Kilkenny
- Waterford Regional Hospital
- Wexford General Hospital.

Kilcreene Regional Orthopaedic Hospital was previously under the management of St. Luke's General Hospital Kilkenny when part of the HSE South Eastern Health Board. These two hospitals are in relatively close proximity to each other which facilitated day-to-day access to some shared services.

[‡] The South/ Southwest Hospital Group comprises nine hospitals operating across the counties Cork, Kerry, Waterford, Tipperary and Kilkenny. This group is led by a Group Executive Officer with delegated authority to manage statutory hospitals within the group under the Health Act 2004.

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During the course of this inspection inspectors were informed that the current hospital group boundaries were more administrative than clinical. As a result of the geographical location and long established links through previous group structures, Kilcreene Regional Orthopaedic Hospital and St. Luke's General Hospital were working within legacy arrangements for some services while the new hospital group structures evolve.

2.1.2 Findings related to medication safety governance

Kilcreene Regional Orthopaedic Hospital is a specialist Model two⁵ hospital which provides a Consultant led elective orthopaedic service to patients in the region. Consultant orthopaedic surgeons provide services at Kilcreene Regional Orthopaedic Hospital and University Hospital Waterford.

During this inspection HIQA found the governance arrangements relating to the management of medication safety at Kilcreene Regional Orthopaedic Hospital to be complex and confusing. The reporting structures are outlined in the organograms provided by the hospital (see appendices 2, 3, and 4). Elements of medication safety were reported into both the South/ South West and Ireland East Hospital Group structures. St. Luke's General Hospital was responsible for the provision of pharmacy services to Kilcreene Regional Orthopaedic Hospital while University Hospital Waterford had overall accountability and responsibility for medication safety at Kilcreene Regional Orthopaedic Hospital. It was reported that responsibility and oversight of medication safety at Kilcreene Regional Orthopaedic Hospital rests with the General Manager of University Hospital Waterford. However, ambiguity amongst some senior managers and staff over who was the accountable person with ultimate responsibility for medication safety within the hospital was evident during interview.

Inspectors were informed that the hospital was corporately and clinically managed by the General Manager of University Hospital Waterford. However, as per legacy arrangements already outlined, pharmacy services continued to be provided by St. Luke's General Hospital under a service level agreement. The following services were provided under this agreement:

- pharmacy – 0.5 whole time equivalent (WTE) pharmacy staff resourcing, and Chief Pharmacist management oversight
- supply of all pharmacy items to Kilcreene Regional Orthopaedic Hospital
- stock control
- participation in St. Luke's General Hospital's Drugs and Therapeutics Committee
- advice when required
- annual antimicrobial audit.

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The St. Luke's General Hospital Drugs and Therapeutic Committee terms of reference set out the scope of the governance arrangements relating to medication safety across Kilcreene Regional Orthopaedic Hospital, Castlecomer District Hospital and the Department of Psychiatry, St. Luke's General Hospital. These terms of reference outlined the purpose, objectives, membership, frequency of meetings, reporting relationship and key performance indicators were recently updated in November 2016. The Committee was chaired by a Consultant Physician from St. Luke's General Hospital. The Chief Pharmacist was a member of the Drugs and Therapeutics Committee and Kilcreene Regional Orthopaedic Hospital was also represented on this Committee by a member of senior nursing staff.

However, HIQA found that despite the aforementioned service level agreement and terms of reference, St. Luke's General Hospital did not have the managerial authority to further enhance services needed should additional risks arise at Kilcreene Regional Orthopaedic Hospital. In addition, it was reported at interview, that the hospital's presence on St. Luke's General Hospital's Drugs and Therapeutics Committee was for information purposes rather than active participation and representation. This was further demonstrated in the terms of reference for the Committee which only refers to responsibility for all decisions relating to quality and patient safety within St Luke's General Hospital resting with the General Manager and Executive Management Team of that hospital. Governance arrangements for medication safety should clearly define direct reporting lines from the Drugs and Therapeutics Committee, to senior staff who hold both overall clinical governance responsibility, and the authority to address risk at the hospital if needed.⁷

A Drugs and Therapeutics Committee should be multidisciplinary to reflect the fact that medicines management is the responsibility of a number of clinical professional groupings. Notwithstanding the nurse representative from Kilcreene Regional Orthopaedic Hospital on St. Luke's General Hospital's Drugs and Therapeutics Committee, inspectors found through interview with senior management including the Chief Pharmacist at St. Luke's General Hospital that the Committee was not meeting its terms of reference in the following areas:

- inadequate representation of the Kilcreene Regional Orthopaedic Hospital on the Committee (specifically relates to orthopaedic or anaesthetic representation from the hospital)
- less than optimal compliance with the frequency of meetings in 2016 as outlined in terms of reference
- lack of reporting and oversight by the Committee of medication related incidents occurring in Kilcreene Regional Orthopaedic Hospital.

In addition, inspectors were informed that requests for new medications were considered by St. Luke's General Hospital's Pharmacy Department and approved if

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no clinical risk was identified. The Drugs and Therapeutics Committee was involved in new medication requests if there was a particular concern in relation to the medication request. However, inspectors concluded that the current system for approval of new medicines needed to be strengthened. There was a potential for conflict in that medicines requested by Consultants at University Hospital Waterford could be approved at its Drugs and Therapeutics Committee and supplied by St. Luke's General Hospital to Kilcreene Regional Orthopaedic Hospital without formal approval by St. Luke's General Hospital's Drugs and Therapeutics Committee.

It was determined by inspectors on the day of inspection that the complex governance arrangements in place at Kilcreene Regional Orthopaedic Hospital made it difficult for St. Luke's General Hospital's Drugs and Therapeutics Committee to comply with its own terms of reference in relation to Kilcreene Regional Orthopaedic Hospital. By way of further example, it was an objective of St. Luke's General Hospital's Drugs and Therapeutics terms of reference that clinical incident reports involving prescribing or administration of medicines would be reviewed in conjunction with the Clinical Risk Manager St Luke's Hospital. However, the Clinical Risk Manager from University Hospital Waterford jointly managed medication safety incidents for University Hospital Waterford and Kilcreene Regional Orthopaedic Hospital. Inspectors were informed that the Clinical Risk Manager would liaise with St. Luke's General Hospital with regard to serious medication incidents if required. However, there was no formal arrangement in place to ensure adequate and synchronised governance and oversight of medication safety related incidents between Kilcreene Regional Orthopaedic Hospital, St. Luke's General Hospital and University Hospital Waterford. This deficit was acknowledged by senior management interviewed at the time of inspection from Kilcreene Regional Orthopaedic Hospital, University Hospital Waterford and St. Luke's General Hospital.

A formal medication safety strategy, programme or plan for Kilcreene Regional Orthopaedic Hospital was not evident at the time of the inspection. Furthermore, there was a relative lack of evidence of linkage or alignment with any medication safety strategy, programme or plan in either St. Luke's General Hospital or University Hospital Waterford. Measures to promote the safe use of medicines for inpatients at Kilcreene Regional Orthopaedic Hospital were identified to be significantly underdeveloped during this inspection.

HIQA found that there was a fragmented approach to leadership, governance, oversight and support for medication safety at the hospital. There was evidence of shared but unsynchronised governance and reporting lines to St. Luke's General Hospital and University Hospital Waterford. Inspectors were informed by senior management that this deficit and the resulting potential for confusion were only recently considered by the hospital in preparation for HIQA's announced medication safety inspection. Effective leadership and clear lines of accountability are vital

components of any healthcare service. The lack of clarity resulted in inherent weaknesses in the management of medication safety and as a result a potential risk to the safety of patients at the hospital. The hospital must assure itself that systems are in place to ensure that accountability arrangements for medication safety are clear.

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 represents a key component of all effective clinical governance programmes.⁶ Inspectors concluded that audits in relation to medication safety were limited at Kilcreene Regional Orthopaedic Hospital. Medication safety was not systematically monitored, evaluated or aligned to a formal medication strategy, programme or plan at the hospital.

Documentation reviewed showed that the majority of medication safety-related audits performed at the hospital were directed by nursing staff. The hospital conducted an annual point prevalence survey of antimicrobial prescribing. However, audits were not linked to an overarching formal medication safety strategy. Inspectors were informed that nursing staff carried out a medication management audit in each clinical area of the hospital once every three months. In addition, nursing quality care metrics⁵ were collected on a monthly basis and had been used to promote improvement. Feedback in relation to audit results was provided to staff at ward meetings via nursing management and a communications folder was in place at ward level. Inspectors concluded that current audit arrangements should be strengthened and formalised to provide assurance to the senior hospital management team in relation to medication safety at Kilcreene Regional Orthopaedic Hospital.

2.3 Medication safety support structures and initiatives

Line of enquiry:

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

⁵ Metrics are parameters or measures of quantitative assessment used for measurement and comparison or to track performance.

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Inspectors found during the inspection that medication safety quality improvement initiatives were not strategically driven by learning gained from analysis of medication incidents or near misses. However, inspectors did identify some examples of implemented quality improvement initiatives. For example, quality improvements included the introduction of:

- an allergy band to identify patients with a medication allergy
- labels for insulin pens
- a red apron to identify nursing staff not to be interrupted during a medication round
- a pre-day of surgery assessment (DOSA) clinic.

Interruptions during medication administration rounds are thought to be a prominent causative factor of medication errors.⁷ To minimise or eliminate nurse distraction during the medication administration process, red aprons were worn by nursing staff while preparing or administering medications. 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.

During the inspection, inspectors were informed that Kilcreene Regional Orthopaedic Hospital had a pre-day of surgery assessment (DOSA) unit and a pre-assessment clinic where nursing staff collected information regarding patient's medications and carried out an informal reconciliation of patient's medications. If discrepancies were identified, inspectors were told that nursing staff would contact the patient's community pharmacy or General Practitioner (GP). However, there was no policy to support this process.

An up to date local approved medication formulary** did not exist in Kilcreene Regional Orthopaedic Hospital at the time of the inspection. The purpose of maintaining an approved list of medication used in the hospital is to ensure that appropriate governance exists around what is approved for use and that in doing so, a proper safety evaluation occurs before medications are introduced into practice at the hospital.⁸ However, inspectors were informed that Kilcreene Regional Orthopaedic Hospital used preferred lists of medications in some instances, for example, a preferred list of antibiotics was in place. While HIQA acknowledges that the development of a local formulary is a considerable undertaking, given the relatively small number of core medicines required for routine use in orthopaedics, efforts should be extended to formalise the agreed list of all medicines used at the hospital, with provision of supporting policies, procedures and guidelines, following this inspection.

** Local formulary is a defined as list of medicines approved for use within a healthcare organisation.

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High-risk medicines can cause significant harm when system errors occur. A list of high-alert medicines^{††} was in place and used jointly in Kilcreene Regional Orthopaedic Hospital and St. Luke's General Hospital. The list was based on the acronym 'A PINCH' which grouped medications into categories and to facilitate education and to raise awareness of high risk medications.⁹ The medications on the list included:

- Anticoagulants and anti-thrombotics
- Potassium and intravenous paracetamol
- Insulins and intrathecal/epidural administration
- Narcotics and neuromuscular blocking agents
- Cytotoxics
- Hypertonic and hypotonic intravenous fluids.

Medication alerts were communicated to the wards at Kilcreene Regional Orthopaedic Hospital from the Pharmacy Department at St. Luke's General Hospital via nursing management. Inspectors were informed by senior management that there was no pharmacist on site at Kilcreene Regional Orthopaedic Hospital and no clinical pharmacy service was provided to patients. These deficits were recorded on the University Hospital Waterford risk register. However, staff outlined that medicines information was readily accessible through the pharmacy service at St. Luke's General Hospital as required.

Medication reconciliation is a systematic process conducted by an appropriately trained individual of establishing and documenting a consistent, definitive list of medicines across transitions of care and then rectifying any discrepancies.^{6,10,11,12} Inspectors were informed that medication reconciliation was nurse led and not a formal multidisciplinary process within the hospital. The lack of a formal medication reconciliation service was recorded on University Hospital Waterford's risk register. The current governance arrangements in place at Kilcreene Regional Orthopaedic Hospital did not support a collective, cohesive and coordinated approach to managing this risk. However, some assurance in relation to medication reconciliation was provided to inspectors through the hospital's system of conducting an assessment of the hospital's small cohort of patients at the pre-day of surgery assessment (DOSA) clinic.

The lack of a formal arrangement to ensure adequate and synchronised governance and oversight of medication safety related incidents between Kilcreene Regional Orthopaedic Hospital, St. Luke's General Hospital and University Hospital Waterford

^{††} High-alert medications are medicines that bear a heightened risk of causing significant patient harm when they are not used correctly. Errors with these medicines may not be more common than those from other groups but their consequences can be more harmful as they have smaller margins of safety than other medications and therefore warrant particular caution in their handling.

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has been previously outlined in section 2.1.2 of this report. HIQA noted through this inspection, a low number of medication related incidents and near misses reported throughout 2016, even when considered relative to the size of this hospital. As a result, key medication related risks were not being 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.¹³ The hospital needs to begin to better quantify and report medication related risks through improved reporting.

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, 15} Inspectors were informed that the hospital had a policy in place to promptly inform patients when medication-related incidents occurred. Documentation viewed and staff who spoke with inspectors could provide examples of when this open disclosure policy was adhered to.

Notwithstanding the limited quality improvements in place at Kilcreene Regional Orthopaedic Hospital, collective local ownership, accountability and responsibility relating to medication safety was strongly evident on the ward visited by inspectors. The size of the hospital, elective nature of the cohort of patients admitted and commitment of staff on a day to day basis had facilitated a degree of oversight of medication safety issues at local level which HIQA determined, acted to mitigate some of the risk identified as inherent in current governance arrangements.

2.4 Person-centred care

Line of enquiry:

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

Patients should be well informed about any medications they are prescribed and any possible side-effects.^{14,15} This is particularly relevant for those patients who are taking multiple medications.

Kilcreene Regional Orthopaedic Hospital had some systems in place to support the provision of patient information and education in relation to medication usage. Patient information leaflets were available to patients taking certain medications. In addition, inspectors were told that nursing staff provided education and support to patients around the management of medications. The pre-day of assessment

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(DOSAs) clinic managed by nursing staff was an important source of information for patients attending the hospital for elective procedures.

There was no outpatient clinic on the day of inspection at the hospital. As a result, HIQA were unable to ask a sample of hospital outpatients who had been inpatients at the hospital during the previous 12 months to complete an anonymised questionnaire in relation to prescribed medications as is standard practice for this phase of medication safety inspections.

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.

Medication policies, procedures, protocols and guidelines related to the elective service provided by the hospital were readily available to staff through the hospital's intranet system shared with St. Luke's General Hospital and in clinical areas. Inspectors were informed that Kilcreene Regional Orthopaedic Hospital adapted policies, procedures, protocols and guidelines where necessary from those supplied from St. Luke's General Hospital. In addition, a multidisciplinary peer group was in place at Kilcreene Regional Orthopaedic Hospital which had developed local guidelines where necessary. These local guidelines were approved by senior staff including the Director of Nursing at Kilcreene Regional Orthopaedic Hospital, the Chief Pharmacist at St. Luke's General Hospital and Consultants from University Hospital Waterford and evidence that staff had read these guidelines was provided to inspectors. However, the effectiveness of these guidelines had not been evaluated.

Healthcare professionals reported that they had ready access to patient information, relevant to the safe use of medications, at the point of clinical decision making. Inspectors observed that decision support tools were available to staff in clinical areas. These included up to date versions of the British National Formulary.

The use of mobile technology gave prescribers easy access to antimicrobial guidelines at the point of prescribing. Clinical areas had access to copies of intravenous medication administration protocols and monographs which inspectors viewed. Medicines information was also available through access to St. Luke's

General Hospital's intranet service. In addition, staff reported that they had regular access to, and support from, the Pharmacy Department at St. Luke's General 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.

Training for nursing and medical staff can be a key success factor in contributing to good, multidisciplinary engagement in medicines management.

The hospital did not have a formalised education programme for clinical staff linked to an overall medication safety strategy. However, inspectors were informed that nursing staff completed the HSE LanD online Medication Management training programme.¹⁶ Nursing staff also completed anaphylaxis training to facilitate the administration of first dose antimicrobial medications. Inspectors were also told that nursing staff could attend regular medication safety programmes provided by St. Luke's General Hospital and University Hospital Waterford. It was evident that nursing staff achieved a high level of compliance with attendance at medication safety related training and oversight of this training was well managed at a local level.

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.

Despite the complexity of governance arrangements in place at Kilcreene Regional Orthopaedic Hospital, collective local ownership, accountability and responsibility relating to medication safety was evident at ward level on the day of inspection. The size of the hospital, elective nature of the cohort of patients admitted and commitment of staff on a day to day basis had facilitated a degree of oversight of medication safety issues at local level.

However, HIQA identified during this inspection that overarching governance arrangements relating to medication safety at Kilcreene Regional Orthopaedic Hospital and at hospital group level required considerable improvement. The complex, fragmented and unsynchronised arrangements viewed by inspectors had resulted in inherent weaknesses in the management of medication safety at the hospital and represent a latent risk that needs to be addressed as a matter of priority. Indeed, the hospital had identified, in preparation for this announced inspection, that the governance arrangements in place needed to be significantly strengthened to mitigate the inherent weaknesses related to medication safety. Fundamentally, many of the identified opportunities for improvement require the clarification of governance arrangements between Kilcreene Regional Orthopaedic Hospital, St. Luke's General Hospital and University Hospital Waterford.

Following this inspection, the hospital and hospital group must focus its efforts to address the issues 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, through improved clarity around governance in the context of current rather than legacy arrangements.

4. References

1. Rafter N et al. The Irish National Adverse Events Study (INAES): the frequency and nature of adverse events in Irish hospitals—a retrospective record review study. *British Medical Journal of Quality and Safety*. 2016; 26: pp111-119. Available online from: <http://qualitysafety.bmj.com/content/26/2/111.full.pdf+html>
2. Kohn, Linda T, Janet M, Corrigan, Molla S, Donaldson. *To Err is Human: Building a Safer Health System*. Washington: Institute of Medicine; 1999. Available online from: <https://www.nap.edu/download/9728#>
3. Health Information and Quality Authority. *National Standards for Safer Better Healthcare*. Dublin: Health Information and Quality Authority; 2012. Available online from: <https://www.hiqa.ie/reports-and-publications/standards/national-standards-safer-better-healthcare>
4. Health Information and Quality Authority. *Guide to the Health Information and Quality Authority's Medication Safety Monitoring Programme in Public Acute Hospitals*. Dublin: Health Information and Quality Authority; 2016. Available online from: <https://www.hiqa.ie/reports-and-publications/guide/guide-medicationsafety-monitoring-acute-hospitals>
5. Health Service Executive. *Report of the National Acute Medicine Programme 2010*. Health Service Executive 2010. Available online from: <http://www.hse.ie/eng/about/Who/clinical/natclinprog/acutemedicineprogramme/report.pdf>
6. Australian Commission on Safety and Quality in Health Care. *Safety and Quality Improvement Guide Standard 4: Medication Safety*. Sydney: Australian Commission on Safety and Quality in Health Care; 2012. Available online from: https://www.safetyandquality.gov.au/wp-content/uploads/2012/10/Standard4_Oct_2012_WEB.pdf
7. Relihan E, Brien V, Hara S, Silke, B. The impact of a set of interventions to reduce interruptions and distractions to nurses during medication administration. *Quality and Safety in Health Care*. 2010 Oct; 19(5):pp 1-6. Available online from: <http://qualitysafety.bmj.com/content/19/5/e52.long>
8. Council of Australian Therapeutic Advisory Groups. *Achieving effective medicines governance. Guiding Principles for the roles and responsibilities of Drugs and Therapeutics Committees in Australian public hospitals*. Darlinghurst: NSW Therapeutic Advisory Group. 2013. Available online from: <http://www.catag.org.au/wp-content/uploads/2012/08/OKA9964-CATAG-Achieving-Effective-Medicines-Governance-final1.pdf>.

9. The Clinical excellence Commission. *Medication Safety and Quality. High Risk Medications*. Available online from: <http://www.cec.health.nsw.gov.au/patient-safety-programs/medication-safety/high-risk-medicines/A-PINCH>
10. Health Information and Quality Authority. *Guidance for health and social care providers. Principles of good practice in medication reconciliation*. Dublin: Health Information and Quality Authority; 2014. Available online from: <https://www.hiqa.ie/reports-and-publications/guides/guidance-principles-good-practice-medication-reconciliation>
11. World Health Organisation. *The High 5s Project. Standard Operating Protocol. Assuring Medication Accuracy at Transitions in Care*. Washington: World Health Organisation; 2014. Available online from <http://www.who.int/patientsafety/implementation/solutions/high5s/h5s-sop.pdf>
12. Galvin M, Jago-Byrne MC, Fitzsimons M, Grimes, T. Clinical pharmacist's contribution to medication reconciliation on admission to hospital in Ireland. *International Journal of Clinical Pharmacists*. February 2013; 35 (1): pp14–21
13. Abstoss KM, Shaw BE, Owens TA, Juno JL, Commiskey EL, Niedner MF. Increasing medication error reporting rates while reducing harm through simultaneous cultural and system-level interventions in an intensive care unit. *British Medical Journal of Quality and Safety*. 2011;20:pp914-922. Available online from: <https://www.ncbi.nlm.nih.gov/pubmed/21690249>.
14. Health Service Executive Quality and Patient Safety Division. *Integrated Care Guidance: A practical guide to discharge and transfer from hospital*. Health Service Executive. January 2014. Available online from: <http://www.hse.ie/eng/about/Who/qualityandpatientsafety/safepatientcare/integratedcareguidance/IntegratedCareGuidancetodischargefulldoc.pdf>.
15. National Institute for Health and Care Excellence (NICE). *Clinical Guideline 76. Medicines adherence: Involving patients in decisions about prescribed medicines and supporting adherence*. National Institute for Health and Clinical Excellence; 2009. Available at <http://guidance.nice.org.uk/CG76>
16. Health Service Executive. HSELand. Available online from: <http://www.hseland.ie/dash/Account/Login>

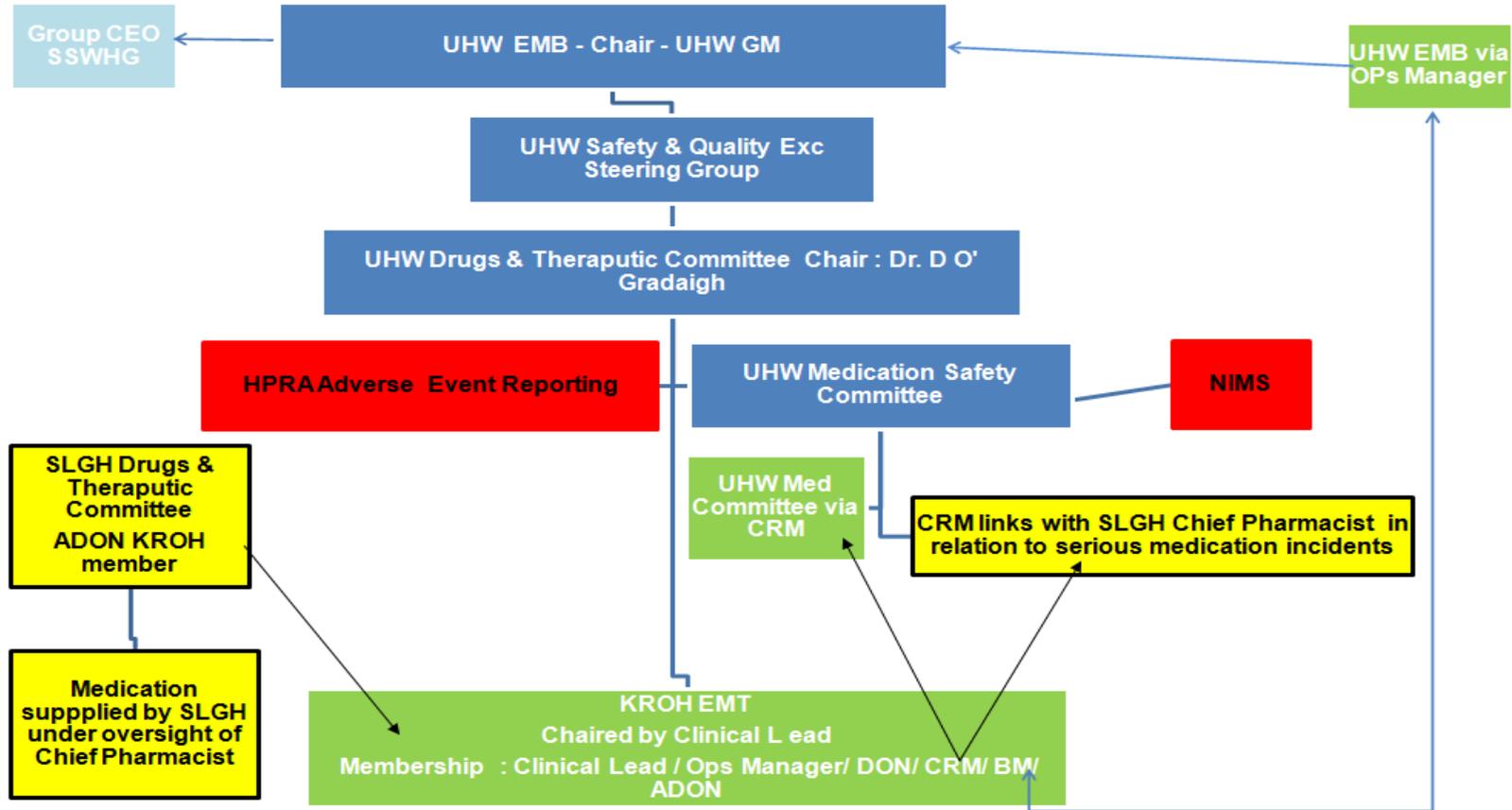
5. Appendices

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

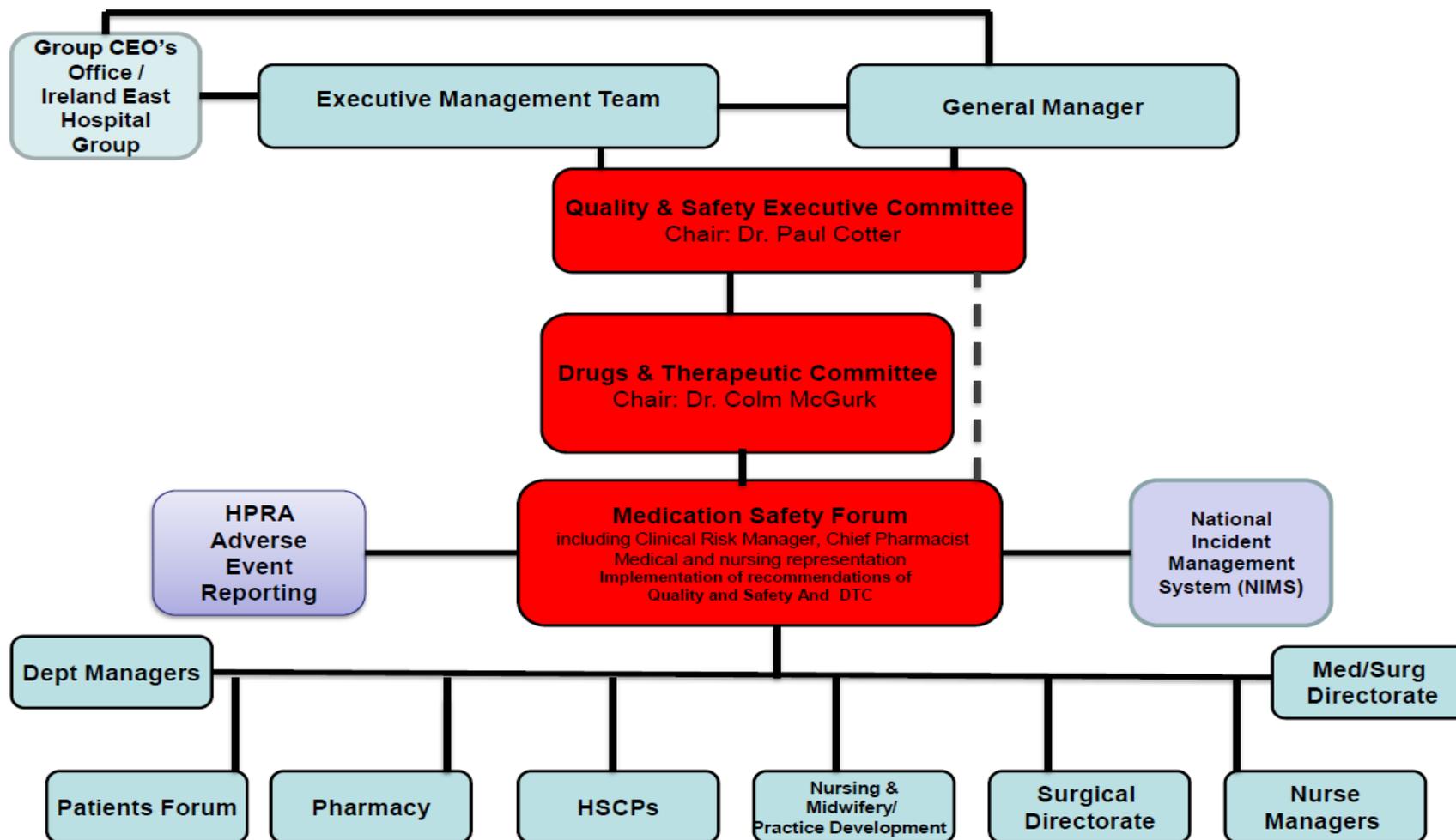
Appendix 2: Kilcreene Regional Orthopaedic Hospital Medication Safety Governance Structure

KROH Medication Safety Governance Structure- May 2017

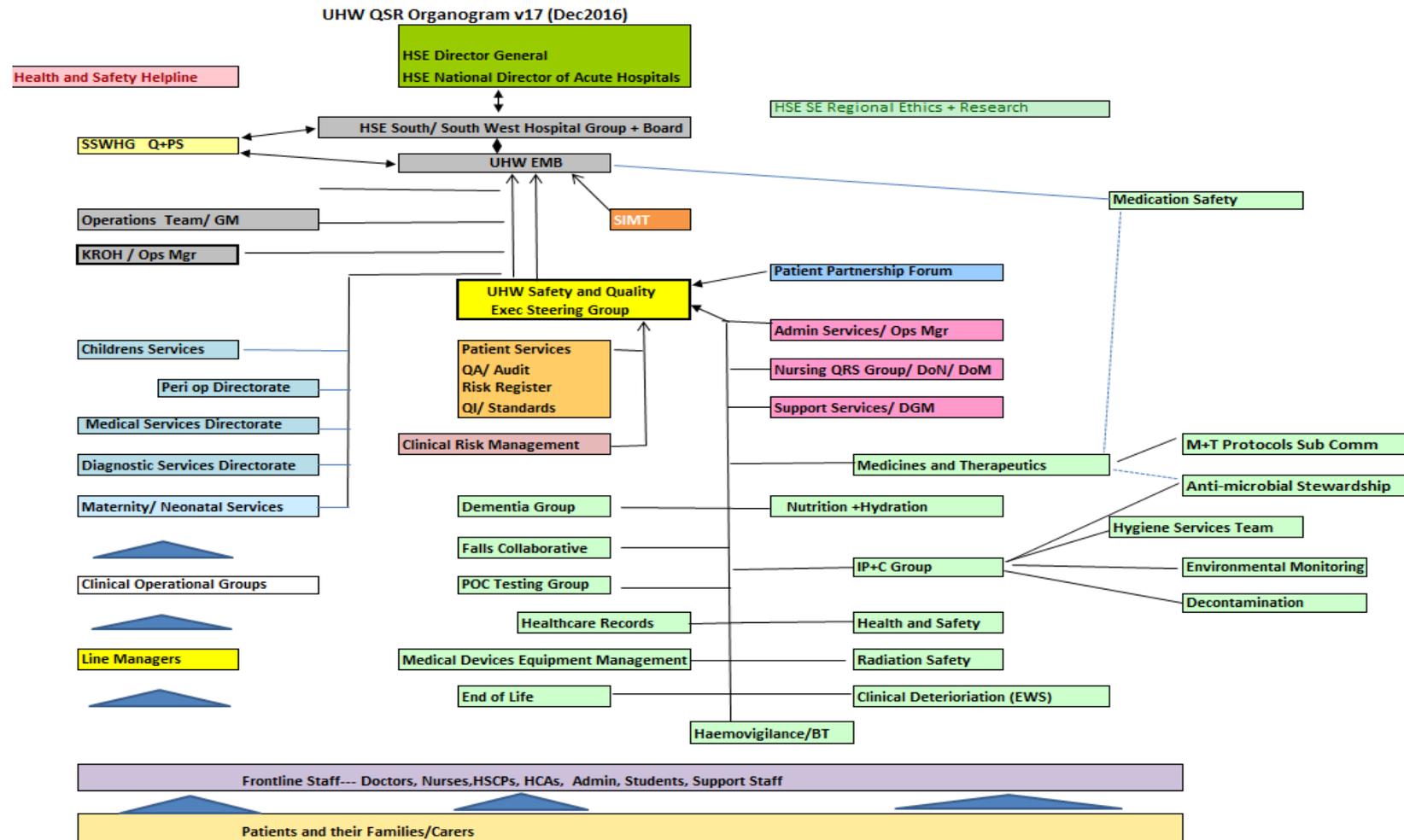


Appendix 3: St. Luke's General Hospital Medication Safety Governance Structure

SLGH Medication Safety Governance Structure



Appendix 4: University Hospital Waterford Quality, Safety and Risk Organogram



For further information please contact:

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