



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced inspection at Kilcreene Regional Orthopaedic Hospital, Kilkenny

Monitoring programme for unannounced inspections undertaken
against the National Standards for the Prevention and Control of
Healthcare Associated Infections

Date of on-site inspection: 11 September 2014

About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is the independent Authority established to drive high quality and safe care for people using our health and social care services. HIQA's role is to promote sustainable improvements, safeguard people using health and social care services, support informed decisions on how services are delivered, and promote person-centred care for the benefit of the public.

The Authority's mandate to date extends across the quality and safety of the public, private (within its social care function) and voluntary sectors. Reporting to the Minister for Health and the Minister for Children and Youth Affairs, the Health Information and Quality Authority has statutory responsibility for:

- **Setting Standards for Health and Social Services** – Developing person-centred standards, based on evidence and best international practice, for those health and social care services in Ireland that by law are required to be regulated by the Authority.
- **Supporting Improvement** – Supporting services to implement standards by providing education in quality improvement tools and methodologies.
- **Social Services Inspectorate** – Registering and inspecting residential centres for dependent people and inspecting children detention schools, foster care services and child protection services.
- **Monitoring Healthcare Quality and Safety** – Monitoring the quality and safety of health and personal social care services and investigating as necessary serious concerns about the health and welfare of people who use these services.
- **Health Technology Assessment** – Ensuring the best outcome for people who use our health services and best use of resources by evaluating the clinical and cost effectiveness of drugs, equipment, diagnostic techniques and health promotion activities.
- **Health Information** – Advising on the efficient and secure collection and sharing of health information, 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

Preventing and controlling infection in healthcare facilities is a core component of high quality, safe and effective care for patients. In order to provide quality assurance and drive quality improvement in public hospitals in this critically important element of care, the Health Information and Quality Authority (the Authority or HIQA) monitors the implementation of the *National Standards for the Prevention and Control of Healthcare Associated Infections*.¹

These Standards will be referred to in this report as the Infection Prevention and Control Standards. Monitoring against these Standards began in the last quarter of 2012. This initially focused on announced and unannounced inspections of acute hospitals' compliance with the Infection Prevention and Control Standards.

The Authority's monitoring programme will continue in 2014, focusing on unannounced inspections. This approach, outlined in guidance available on the Authority's website, www.hiqa.ie – *Guide: Monitoring Programme for unannounced inspections undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections*² – will include scope for re-inspection within six weeks where necessary. The aim of re-inspection is to drive rapid improvement between inspections.

The purpose of unannounced inspections is to assess hygiene as experienced by patients at any given time. The unannounced inspection focuses specifically on observation of the day-to-day delivery of hygiene services and in particular environment and equipment cleanliness and adherence with hand hygiene practice. Monitoring against the Infection Prevention and Control Standards¹ is assessed, with a particular focus, but not limited to, environmental and hand hygiene under the following standards:

- Standard 3: Environment and Facilities Management
- Standard 6: Hand Hygiene.

Other Infection Prevention and Control Standards may be observed and reported on if concerns arise during the course of an inspection. It is important to note that the Standards may not be assessed in their entirety during an unannounced inspection and therefore findings reported are related to a criterion within a particular Standard which was observed during an inspection. The Authority uses hygiene observation tools to gather information about the cleanliness of the environment and equipment as well as monitoring hand hygiene practice in one to three clinical areas depending on the size of the hospital. Although specific clinical areas are assessed in detail using the hygiene observation tools, Authorised Persons from the Authority also observe general levels of cleanliness as they follow the patient's journey through the

hospital. The inspection approach taken is outlined in guidance available on the Authority's website.²

This report sets out the findings of the unannounced inspection by the Authority of Kilcreene Regional Orthopaedic Hospital's compliance with the Infection Prevention and Control Standards.¹ It was undertaken by Authorised Persons from the Authority, Alice Doherty and Katrina Sugrue, on 11 September between 15:00hrs and 16:15hrs.

The area assessed was:

- St Bridget's Ward.

The Authority would like to acknowledge the cooperation of staff with this unannounced inspection.

2. Kilcreene Regional Orthopaedic Hospital Profile[‡]

Kilcreene Regional Orthopaedic Hospital, Kilkenny is the Regional Elective Orthopaedic Hospital for the South East and has a bed capacity of 31 beds (20 in-patient beds, five day-case beds and six day-case spaces) and two operating theatres. Elective orthopaedic (inpatient and daycase) services are provided to the population of Kilkenny, Carlow, Waterford, Wexford and South Tipperary from Kilcreene Regional Orthopaedic Hospital.

Consultant led elective orthopaedic inpatient/daycase orthopaedic services are provided on an outreach basis from Consultant Orthopaedic surgeons based at Waterford Regional Hospital with fixed sessions at Kilcreene Regional Orthopaedic Hospital. The following services are provided at Kilcreene Regional Orthopaedic Hospital:

- Consultant Orthopaedic Services (inpatient, daycases, fracture clinic, fracture fragility service and ASR review clinics and preop assessment clinics).
- Nursing, Support Services, Physiotherapy, Radiology, Infection Control, Administration, etc.
- A range of services including Anaesthetics, Medical, Supplies, Catering, Radiology, Laboratory (Blood transfusion service etc.,) Technical etc., are provided directly from St Luke's General Hospital.

Kilcreene Regional Orthopaedic Hospital has both NIMIS and IPMS systems currently in operation.

Table 1: Kilcreene Regional Orthopaedic Hospital, Kilkenny – Hospital Activity 2013

Item	Details
Inpatient discharges	998
Day cases	1044
Average Length of Stay	4.3 days

[‡] The hospital profile information contained in this section has been provided to the Authority by the hospital, and has not been verified by the Authority.

3. Findings

Overview

This section of the report outlines the findings of the unannounced inspection at Kilcreene Regional Orthopaedic Hospital on 11 September 2014. The clinical area which was inspected was St Bridget's Ward.

This report is structured as follows:

- **Section 3.1** of the report outlines the key findings relating to non-compliance with the Standards which include environment and facilities management at Kilcreene Regional Orthopaedic Hospital. In addition, a detailed description of the findings of the unannounced inspection undertaken by the Authority is shown in Appendix 1.
- **Section 3.2** presents the findings relating to hand hygiene at Kilcreene Regional Orthopaedic Hospital under the headings of the five key elements of a multimodal hand hygiene improvement strategy.
- **Section 4** provides an overall summary of findings.

3.1 Key findings relating to non-compliance with Standard 3

The Authority found evidence during the inspection of both compliance and non-compliance with Standard 3 of the Infection Prevention and Control Standards.¹ Overall, patient equipment and the environment on St Bridget's Ward was clean and well maintained with a few exceptions. For example, a mattress cover was observed to be badly stained. The Authority was informed that mattress covers are checked every time a patient is discharged and four new mattresses were recently delivered to the hospital.

3.2 Hand Hygiene

Assessment of performance in the promotion of hand hygiene best practice occurred using the Infection, Prevention and Control Standards¹ and the World Health Organization (WHO) multimodal improvement strategy.³ Findings are therefore presented under each multimodal strategy component, with the relevant Standard and criterion also listed.

WHO Multimodal Hand Hygiene Improvement Strategy

3.2.1 System change³: *ensuring that the necessary infrastructure is in place to allow healthcare workers to practice hand hygiene.*

Standard 6. Hand Hygiene

Hand hygiene practices that prevent, control and reduce the risk of the spread of Healthcare Associated Infections are in place.

Criterion 6.1. There are evidence-based best practice policies, procedures and systems for hand hygiene practices to reduce the risk of the spread of Healthcare Associated Infections. These include but are not limited to the following:

- the implementation of the *Guidelines for Hand Hygiene in Irish Health Care Settings, Health Protection Surveillance Centre, 2005*
- the number and location of hand-washing sinks
- hand hygiene frequency and technique
- the use of effective hand hygiene products for the level of decontamination needed
- readily accessible hand-washing products in all areas with clear information circulated around the service
- service users, their relatives, carers, and visitors are informed of the importance of practising hand hygiene.

- The design of clinical hand wash sinks on St Bridget's Ward did not conform to Health Building Note 00-10 Part C: Sanitary assemblies.⁴
- Access to the hand wash sink in the clean utility room was obstructed by a medication trolley stored beside the sink.

3.2.2 Training/education³: *providing regular training on the importance of hand hygiene, based on the 'My 5 Moments for Hand Hygiene' approach, and the correct procedures for handrubbing and handwashing, to all healthcare workers.*

Standard 4. Human Resource Management

Human resources are effectively and efficiently managed in order to prevent and control the spread of Healthcare Associated Infections.

Criterion 4.5. All staff receive mandatory theoretical and practical training in the prevention and control of Healthcare Associated Infections. This training is delivered during orientation/induction, with regular updates, is job/role specific and attendance is audited. There is a system in place to flag non-attendees.

- Staff in Kilcreene Regional Orthopaedic Hospital are required to carry out annual hand hygiene training. Documentation viewed by the Authority showed that 95% of staff completed hand hygiene training in 2014.

3.2.3 Evaluation and feedback³: *monitoring hand hygiene practices and infrastructure, along with related perceptions and knowledge among health-care workers, while providing performance and results feedback to staff.*

Criterion 6.3. Hand hygiene practices and policies are regularly monitored and audited. The results of any audit are fed back to the relevant front-line staff and are used to improve the service provided.

- The most recent hand hygiene audit on St Bridget's Ward was carried out in August/September 2014. The audit was based on 15 hand hygiene opportunities and showed 86.7% compliance. This was a decrease from the previous audit carried out in August 2013 where 100% compliance was achieved.
- National hand hygiene audit results which are published twice a year for St Luke's General Hospital, Kilkenny⁵ incorporate results for Kilcreene Regional Orthopaedic Hospital when St Bridget's Ward is randomly selected as part of the national auditing process. St Bridget's Ward was not included in the audit results for May/June 2014.

Observation of hand hygiene opportunities

Authorised Persons observed hand hygiene opportunities using a small sample of staff in the inspected areas. This is intended to replicate the experience at the individual patient level over a short period of time. It is important to note that the results of the small sample observed is not statistically significant and therefore results on hand hygiene compliance do not represent all groups of staff across the hospital as a whole. In addition results derived should not be used for the purpose of external benchmarking.

The underlying principles of observation during inspections are based on guidelines promoted by the WHO⁶ and the Health Service Executive.⁷ In addition, Authorised Persons may observe other important components of hand hygiene practices which are not reported in national hand hygiene audits but may be recorded as optional data. These include the duration, technique^γ and recognised barriers to good hand hygiene practice. These components of hand hygiene are only documented when they are clearly observed (uninterrupted and unobstructed) during an inspection. Such an approach aims to highlight areas where practice could be further enhanced beyond the dataset reported nationally.

- The Authority observed five hand hygiene opportunities in total during the inspection. Hand hygiene opportunities observed comprised the following:
 - one before touching a patient
 - two after touching a patient
 - two after touching patient surroundings.
- Three out of the five hand hygiene opportunities were taken. The two opportunities which were not taken comprised of the following:
 - one before touching a patient
 - one after touching a patient.
- Of the three opportunities which were taken, the hand hygiene technique was observed (uninterrupted and unobstructed) by the Authorised Persons for the three opportunities. It was noted that they lasted greater than or equal to (\geq) 15 seconds as recommended and the correct technique was observed in all three hand hygiene actions.

^γ The inspectors observe if all areas of hands are washed or alcohol hand rub applied to cover all areas of hands.

3.2.4 Reminders in the workplace³: *prompting and reminding healthcare workers about the importance of hand hygiene and about the appropriate indications and procedures for performing it.*

- Hand hygiene advisory posters were available, up-to-date, clean and appropriately displayed in the areas inspected at Kilcreene Regional Orthopaedic Hospital.

3.2.5 Institutional safety climate³: *creating an environment and the perceptions that facilitate awareness-raising about patient safety issues while guaranteeing consideration of hand hygiene improvement as a high priority at all levels.*

- In the most recent hand hygiene audit carried out on St Bridget's Ward in August/September 2014, compliance was below the HSE's national target of 90%.⁸ This was a decrease from a previous audit carried out in August 2013 where 100% compliance was achieved. Kilcreene Regional Orthopaedic Hospital needs to continue to build on compliances achieved to date, to ensure that good hand hygiene practice is improved and national targets are attained.

4. Summary

The risk of the spread of Healthcare Associated Infections is reduced when the physical environment and equipment can be readily cleaned and decontaminated. It is therefore important that the physical environment and equipment is planned, provided and maintained to maximise patient safety.

Overall, patient equipment and the environment on St Bridget's Ward was clean and well maintained with a few exceptions.

Hand hygiene is recognised internationally as the single most important preventative measure in the transmission of Healthcare Associated Infections in healthcare services. It is essential that a culture of hand hygiene practice is embedded in every service at all levels.

Hand hygiene practice at Kilcreene Regional Orthopaedic Hospital needs to be improved in line with national targets.

Kilcreene Regional Orthopaedic Hospital must now revise and amend its quality improvement plan (QIP) that prioritises the improvements necessary to fully comply with the Infection, Prevention and Control Standards. This QIP must be approved by the service provider's identified individual who has overall executive accountability, responsibility and authority for the delivery of high quality, safe and reliable services. The QIP must be published by the Hospital on its website within six weeks of the date of publication of this report and at that time, provide the Authority with details of the web link to the QIP.

It is the responsibility of Kilcreene Regional Orthopaedic Hospital to formulate, resource and execute its QIP to completion. The Authority will continue to monitor the hospital's progress in implementing its QIP, as well as relevant outcome measurements and key performance indicators. Such an approach intends to assure the public that the Hospital is implementing and meeting the Infection Prevention and Control Standards and is making quality and safety improvements that safeguard patients.

5. References[‡]

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[‡] All online references were accessed at the time of preparing this report.

6. Appendix 1 - Detailed description of findings from the unannounced inspection at Kilcreene Regional Orthopaedic Hospital on 11 September 2014

In this section, non-compliances with Criteria 3.6 and 3.7 of Standard 3 of the Infection Prevention and Control Standards¹ which were observed during the inspection are listed below.

Standard 3. Environment and Facilities Management

The physical environment, facilities and resources are developed and managed to minimise the risk of service users, staff and visitors acquiring a Healthcare Associated Infection.

Criterion 3.6. The cleanliness of the physical environment is effectively managed and maintained according to relevant national guidelines and legislation; to protect service-user dignity and privacy and to reduce the risk of the spread of Healthcare Associated Infections. This includes but is not limited to:

- all equipment, medical and non-medical, including cleaning devices, are effectively managed, decontaminated and maintained
- the linen supply and soft furnishings used are in line with evidence-based best practice and are managed, decontaminated, maintained and stored.

St Bridget's Ward

St Bridget's Ward was generally clean and well maintained with a few exceptions as listed below.

- The interior cover on a mattress was badly stained.
- The edge a patient bedside locker was chipped.
- Dust was observed on the edges of floors in some patient areas, in the 'dirty'[±] utility room and in the linen store room.
- Chipped paint was observed behind a bed in a patient area and on the radiator in the 'dirty' utility room.
- The surface of shelving in the cleaning room was not intact.
- Inappropriate items for example, abduction wedges, were stored in the linen store room.

[±] A 'dirty' utility room is a temporary holding area for soiled/contaminated equipment, materials or waste prior to their disposal, cleaning or treatment.

Waste

Criterion 3.7. The inventory, handling, storage, use and disposal of hazardous material/equipment is in accordance with evidence-based codes of best practice and current legislation.

- The temporary safety locking mechanisms were not engaged on two sharps waste disposal boxes.

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