



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced monitoring assessment at St Luke's General Hospital, Kilkenny

Monitoring programme for the National Standards for the
Prevention and Control of Healthcare Associated Infections

Date of unannounced on-site monitoring assessment: 15 January 2013

About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is the independent Authority established to drive continuous improvement in Ireland's health and personal social care services, monitor the safety and quality of these services 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.
- **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

The Health Information and Quality Authority (the Authority or HIOA) commenced Phase 1 of the monitoring programme for the *National Standards for the Prevention and Control of Healthcare Associated Infections* (the National Standards) in the last quarter of 2012.

Phase 2 commenced in January 2013, and will continue throughout 2013 and into 2014 to include announced assessments at all acute hospitals in Ireland, and the National Ambulance Service.

This report sets out the findings of the unannounced monitoring assessment by the Authority of the compliance by St Luke's Hospital, Kilkenny with the *National Standards for the Prevention and Control of Healthcare Associated Infections* (NSPCHCAI).

The purpose of the unannounced monitoring assessment is to assess the hygiene as experienced by patients at any given time. The unannounced assessment focuses specifically on the observation of the day-to-day delivery of hygiene services and in particular environment and equipment cleanliness and compliance with hand hygiene practice.

An unannounced on-site monitoring assessment focuses on gathering information about compliance with two of the NSPCHCAI Standards. These are:

- Standard 3: Environment and Facilities Management, Criterion 3.6
- Standard 6: Hand Hygiene, Criterion 6.1.

The Authority used hygiene observation tools to gather information about the cleanliness of the environment and equipment as well as hand hygiene compliance. Documents and data such as hand hygiene training records are reviewed during an unannounced monitoring assessment.

The emergency department (ED) is usually the entry point for patients who require emergency and acute hospital care with the outpatient department (OPD) the first point of contact for patients who require scheduled care. In Irish hospitals in 2011, there were over 1 million attendances at EDs and over 3 million outpatient attendances.

Accordingly, the monitoring assessment will generally commence in the ED, or in the OPD and follow a patient's journey to an inpatient ward. This provides the Authorised Persons with an opportunity to observe and assess the hygiene as experienced by the majority of patients. The Authorised Persons use hygiene observation tools to gather information about the cleanliness of at least two clinical areas. 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 journey through the hospital.

The monitoring approach taken is outlined in Appendix 1.

The unannounced assessment was carried out at St Luke's Hospital by the Authorised Persons from the Authority Breeda Desmond, Naomi Combe and Catherine Connolly Gargan on 15 January 2013 between 08:45hrs and 12:00hrs. The Authorised Persons from HIQA commenced the monitoring assessment in the Emergency Department (ED).

The areas subsequently assessed were:

- Emergency Department
- Maternity
- Surgical 2

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

2. St Luke's General Hospital Profile[†]

St. Luke's General Hospital, Carlow/Kilkenny is the Acute General Hospital for Counties Carlow and Kilkenny. The hospital was opened in 1942.

St. Luke's General Hospital has a bed capacity of 250 beds of which 21 are day case beds and provides general medical, surgical, obstetrics, gynaecology, paediatric, psychiatry, cardiology, endocrinology, hepatology, gastroenterology, oncology, palliative care and anaesthetic services to the Carlow/Kilkenny area.

The following diagnostic services are also provided: radiology including 64-slice CT scanning, ultrasound, Dexa scanning, pathology, cardiac diagnostics and endoscopy. The therapy services provided include physiotherapy, speech and language, dietetic and occupational therapy. The Hospital also facilitates regional onsite services including dermatology, haematology, microbiology, neurology, oncology, radiotherapy and a palliative care satellite unit. Furthermore, the Hospital is the site for regional services in liver diseases, ERCP (diagnostic procedure to examine diseases of the liver, bile duct and pancreas) and endo-biliary endoscopy.

[†] 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.

Table 1: St Luke's Hospital Kilkenny – Hospital Activity 2011

Item	Details
ED presentations	38,111
Inpatient discharges	13,905
Day cases	11,903
Outpatient attendances	33,879

3. Findings

The findings of the unannounced monitoring assessment at St Luke's Hospital, Kilkenny on 15 January 2013 are described below.

During the course of the monitoring assessment, the Authority did not identify any immediate serious risks to the health and welfare of patients receiving care at St Luke's Hospital.

3.1 Standard 3. Environment and Facilities Management

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 (HCAI).

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 HCAs.

Overall, the Authority found that while the three areas assessed were found to be generally clean, many improvements were needed. The ED and Surgical 2 were also found to be cluttered.

There was evidence of good practice which included the following:

- Displayed information was appropriate, up to date and laminated or covered with a washable surface for effective cleaning in most areas throughout the environment and patient areas assessed.
- Work station equipment in all areas assessed including telephones and computer keyboards were observed to be clean and free of dust.

- Authorised Persons from HIQA observed comprehensive cleaning schedules displayed in each of the areas assessed which were up to date and completed.
- The 'dirty'* utility rooms in the Maternity unit and Surgical 2 were lockable.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections* including:

- The Authority observed that the ward corridor on Surgical 2 was cluttered and the general environment in the ED was cluttered throughout.
- The edges of flooring and corners in patient areas assessed on Surgical 2 and ED were not free of dust and grit.
- Chipped and flaking paintwork was observed on the lower edges of walls in the ED and some radiators in Surgical 2.
- The protective varnish that was covering some lockers was eroded and the paint eroded from bases of some bedside tables in Surgical 2, thus impeding effective cleaning. In Surgical 2, the vinyl on a foot-stool was torn. The vinyl covering on all chairs in the ED waiting room was badly torn, five of which were in a grave state of disrepair. Effective cleaning of these chairs for the prevention of HCAs was impossible.
- There was no 'clean' utility in the ED. Preparation of medicines including intravenous preparations occurred in a very confined space on the worktop in the unit. This worktop also contained four computers with their accessories, patient notes, and a toxicology machine.
- The windows in the clean utility on Surgical 2 were cluttered with items such as sharps bins. While a clinical hand-wash sink was available, it was inaccessible due to the inappropriate placement of waste bins and sharps bins.
- Signage in the clean utility on the Maternity unit was not laminated which impedes effective cleaning.
- The following was noted in the 'dirty' utility room in Surgical 2:
 - while the door was lockable, it was not locked allowing unobstructed public access

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

- stainless steel surfaces of the sink, sluice hopper and bed-pan washer were stained and smeared
 - the side of the bed-pan washer was almost detached
 - light dust was noted on high and low surfaces.
-
- The 'dirty' utility room in the ED was alongside a patient cubicle. Access to this room was extremely limited. When a patient occupies a trolley in this cubicle, the privacy bed curtain must be lifted to gain access to the dirty utility room. There are no toilet facilities within the ED. Ambulant patients must walk to the waiting room area where there is one toilet; otherwise, those not able to mobilise must use a commode or a bed-pan. Used commodes or bedpans are then brought to the 'dirty' utility via the patient cubicle, posing health and safety risk. This was highlighted by the Authority to Hospital management during the monitoring assessment.
 - The water-outlet apertures in the clinical sinks in the ED were unclean.
 - The Authority observed mould-like substance around the bath-sealant on Surgical 2.
 - A shower seat on the Maternity unit was rusty and unclean at the hinges.
 - In the Maternity unit light dust was observed on the undercarriage of the neonatal transport incubator. Light dust was also noted on the wheels of the suction trolley. Moderate amounts of dust were observed on wheels of patient equipment stands in the holding area of the ED.
 - Building construction has begun on site at St Luke's Hospital. The Authority was informed that following consultation with relevant expert personnel, sealing of windows was recommended to mitigate the potential risk of Aspergillus (an airborne infection). This has resulted in lack of circulation of fresh air in many patient areas. This was brought to the attention of Hospital management during the monitoring assessment.
 - Water outlets were not thermostatically controlled. The Authorised Persons from HIQA noted that water from these taps was very hot, which posed a health and safety risk.

Waste segregation

There was evidence of good practice which included the following:

- Clinical waste information posters identifying waste segregation were observed in the 'dirty' utility and waste segregation areas where available in the Maternity unit and Surgical 2.
- Foot operated clinical non-risk and clinical risk waste bins were available and appropriately used.

- The Hospital's waste management policy was demonstrated and due for review in 2013. Authorised Persons from the Authority met with staff in the areas assessed who demonstrated their knowledge regarding safe segregation of waste.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections* including:

- On Surgical 2 there was no clinical risk waste bin available to collect waste from an occupied isolation room. While its local policy outlines that clinical waste bins are not required in isolation rooms, a review of its local Health Service Executive (HSE) South East infection prevention and control policy to reflect evidence based best practice would be beneficial.
- Waste was appropriately segregated and tagged with unique identification numbers.
- While there was a holding area for waste in the ED, it was not secure.

Cleaning equipment

There was evidence of good practice which included the following:

- Each ward had access to a locked cleaners' room. The Authority observed that rooms containing potentially hazardous cleaning solutions were locked in all areas assessed and were inaccessible to the public.
- Cleaning equipment in the areas assessed was clean. A colour-coded system was in place and demonstrated in each area assessed.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections* including:

Authorised Persons noted the following in the locked cleaners' room in ED and Surgical 2:

- it was very small with very limited storage space
- there was no hand-wash sink
- chemicals were on the floor as there was no storage shelf (ED)
- while there was appropriate signage for the dilutions of chemical cleaning solution for blood spillages and infection was displayed, dilutions for chemical cleaning solution for non-infected areas were not
- clinical waste posters identifying waste segregation were not displayed.

Linen

There was evidence of good practice which included the following:

- Clean linen was stored appropriately. Used linen was segregated in line with best practice, evidenced by colour-coded linen bags used in the clinical areas. Alginate bags were also used for soiled and infected linen.
- Clean linen assessed by Authorised Persons was found to be free of stains and tears. Clean linen was stored in dedicated linen rooms in Surgical 2 and Maternity unit.
- Curtain changing records were demonstrated with curtain changing taking place three- to six-monthly as standard. Additional clean curtains were available if required. Disposable curtains were tagged with the dates the curtains were put in place.

Water outlet flushing

There was evidence of good practice which included the following:

- The Authority was informed that a water flushing schedule to reduce the risk of waterborne infection was undertaken by household staff and records of flushing were demonstrated.
- A standard operating procedure (SOP) to inform the flushing process was available.

Conclusion

In conclusion, the Authority found that while the three clinical areas assessed in St Luke's Hospital, Kilkenny were generally clean, Surgical 2 and the ED were found to be cluttered. There were many opportunities for improvement in all areas assessed, a large proportion of which were related to general maintenance. Authorised Persons from HIQA note the challenges posed by the infrastructure of an older building. However, the degree of clutter observed would suggest that the physical environment was not effectively managed and maintained to protect patients and reduce the spread of Healthcare Associated Infections (HCAIs). This poses a serious risk of patients acquiring HCAIs.

3.2 Standard 6. 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 HCAs.

Hand hygiene

There was evidence of good hand hygiene practice which included the following:

- Alcohol-based hand gel was widely available for use.
- Laminated posters to demonstrate appropriate hand hygiene technique were widely displayed throughout the Hospital. The Authority also observed reminder hand hygiene notices and prompts displayed at various high visibility points throughout the patient's journey to the clinical areas assessed.
- Authorised Persons from the Authority spoke with staff in the areas assessed, who demonstrated their knowledge verbally regarding hand hygiene best practice.
- The Hospital demonstrated that hand hygiene practices were monitored through internal audits and national hand hygiene compliance audits.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections* including:

- Hand hygiene training and monitoring was reported to be provided by the Infection Control Nurse. It was reported that a database was maintained that recorded names of staff on completion of training which was communicated to ward managers. Hand hygiene training records were demonstrated. Authorised Persons observed that the hand hygiene records, on the wards assessed, documented that not all staff had completed hand hygiene training.

Observation and hand hygiene opportunities

The Authorised Persons observed 35 hand hygiene opportunities throughout the monitoring assessment:

Hand hygiene opportunities taken comprised:

- 15 before touching a patient
- six after touching a patient
- one before clean/aseptic procedure
- 13 after touching a patient's surroundings.

17 of 35 hand hygiene opportunities were taken. 15 of these 17 were observed to comply with best practice hand hygiene technique. Non-compliance related to not following best practice hand-washing technique, wearing sleeves to the wrist, wearing a wristwatch and the length of time taken to complete the hand hygiene procedure. One staff member was observed neither to don protective clothing nor to attend to hand hygiene prior to entering an isolation room. This was brought to the attention of the staff member, the Ward Manager and Hospital management.

The Authority found that while endeavours were made to put the necessary procedures and systems in place for hand hygiene at St Luke's Hospital, Kilkenny, hand hygiene practices observed by Authorised Persons would suggest that a culture of hand hygiene best practice is far from operationally embedded at all levels. The low level of hand hygiene compliance observed by Authorised Persons was brought to the attention of the Hospital management. This poses a clear and serious risk to patients of contracting HCAs.

4. Overall Conclusion

The risk of the spread of Healthcare Associated Infections (HCAs) 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.

The Authority found that the three clinical areas assessed in St Luke's Hospital, Kilkenny were clean. However, there were many opportunities for improvement, a large number of them to do with general maintenance. Authorised Persons from HIQA note the infrastructural challenges of an older building. Notwithstanding, the degree of clutter observed in some areas would suggest that, overall, the physical environment was not effectively managed and maintained to protect service users and reduce the spread of HCAs. A review of the infrastructure, especially in the ED, is necessary to enable effective management of the physical environment.

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

The Authority found that while endeavours were made to put the necessary procedures and systems in place for hand hygiene at St Luke's Hospital, Kilkenny, hand hygiene practices observed by Authorised Persons from HIOA were inconsistent with the National Standards and clearly suggest that a culture of hand hygiene best practice is far from operationally embedded at all levels. This poses a clear and serious risk to patients of contracting a HCAI.

St Luke's Hospital must now develop a quality improvement plan (QIP) that prioritises the improvements necessary to fully comply with the *National Standards for the Prevention and Control of Healthcare Associated Infections*. 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 QIPs must be published by the Hospital on its individual webpage on the website of the Health Service Executive (HSE) within six weeks of the date of publication of this report.

The Authority will continue to monitor the Hospital's QIPs as well as relevant outcome measurements and key performance indicators, in order to provide assurances to the public that the service provider is implementing and meeting the NSPCHCAs and is making quality and safety improvements that safeguard patients.

Appendix 1. NSPCHCAI Monitoring Assessment

Focus of monitoring assessment

The aim of NSPCHCAI together with the Health Information and Quality Authority's monitoring programme is to contribute to the reduction and prevention of Healthcare Associated Infections (HCAs) in order to improve the quality and safety of health services. The NSPCHCAI are available at <http://www.higa.ie/standards/health/healthcare-associated-infections>.

Unannounced monitoring process

An unannounced on-site monitoring assessment focuses on gathering information about compliance with two of the NSPCHCAI Standards. These are:

Standard 3: Environment and Facilities Management, Criterion: 3.6

Standard 6: Hand Hygiene, Criterion 6.1.

The Authorised Persons use hygiene observation tools to gather information about the cleanliness of the environment and equipment as well as hand hygiene compliance. Documents and data such as hand hygiene training records are reviewed during an unannounced monitoring assessment.

The Authority reports its findings publicly in order to provide assurances to the public that service providers have implemented and are meeting the NSPCHCAI and are making the quality and safety improvements that prevent and control HCAs and safeguard service users.

Please refer to the Guide document for full details of the NSPCHCAI Monitoring Programme available at <http://www.higa.ie/publications/guide-monitoring-programme-national-standards-prevention-and-control-healthcare-associ>.

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