



**Health  
Information  
and Quality  
Authority**

An tÚdarás Um Fhaisnéis  
agus Cáilíocht Sláinte

# **Report of the unannounced inspection at St. Luke's Hospital, Dublin.**

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

Date of on-site inspection: 25 June 2015

## **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**

The Health Information and Quality Authority (the Authority) carries out unannounced inspections in public acute hospitals in Ireland to monitor compliance with the *National Standards for the Prevention and Control of Healthcare Associated Infections*.<sup>1</sup>

The inspection approach taken by the Authority is outlined in guidance available on the Authority's website, [www.hiqa.ie](http://www.hiqa.ie) – *Guide: Monitoring Programme for unannounced inspections undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections*.<sup>2</sup>

Following the publication of the revised *Guide*<sup>2</sup> in 2015 the Authority will continue to assess environmental and hand hygiene but in addition will assess measures in place to prevent or reduce invasive medical device related infections under the following Standards:

- Standard 3: 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.
- Standard 6: Hand hygiene practices that prevent, control and reduce the risk of spread of Healthcare Associated Infections are in place.
- Standard 8: Invasive medical device related infections are prevented or reduced.

Monitoring of compliance with Standard 8 will focus initially on peripheral vascular catheter and urinary catheter care bundles and related metrics, but monitoring of performance may include other infection prevention and control care bundles as recommended in national guidelines.

Other Standards may be observed and reported on if concerns arise during the course of an inspection. It is important to note that the Standards are not assessed in their entirety during an unannounced inspection and therefore findings reported are related to a particular criterion within a Standard which was observed during an inspection. The Authority will use observation tools to gather information about the cleanliness of the environment and equipment, hand hygiene practice and the implementation of care bundles in one to three clinical areas depending on the size of the hospital.

The Authority's approach to an unannounced inspection against these Standards includes provision for re-inspection within six weeks if findings on the day of inspection are poor. This aims to drive improvement between inspections. In addition, in 2015, unannounced inspections will aim to identify progress made at each hospital since the previous unannounced inspection conducted in 2014.

An unannounced inspection was carried out at St. Luke's Hospital, Dublin on 25 June 2015 by Authorised Persons from the Authority, Aileen O' Brien and Rachel McCarthy between 09.30hrs and 16.10hrs. The area assessed was:

- The Day Ward is an open plan unit comprising two multi bedded areas opening into a floor space containing 11 patient treatment chairs. This ward accommodates patients receiving outpatient intravenous cytotoxic chemotherapy in addition to day case admissions.

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

## **2. St Luke's Hospital Profile<sup>‡</sup>**

St Luke's Hospital, established in 1954, along with Radiation Therapy centres on the sites of St James's and Beaumont Hospitals, forms part of St Luke's Radiation Oncology Network which provides a comprehensive Radiotherapy and Oncology service to patients from Dublin area and referrals from all over Ireland. St Luke's has 116 beds, made up of four in-patient acute wards, a busy day unit and a five day unit (Oakland's Lodge), which facilities independent patients receiving treatment. Two of these wards facilitate transition (step down) patients from Tallaght and St James's Hospitals respectively. St Luke's provides post-graduate training in Radiation Oncology to a wide range of disciplines including doctors, nurses and physicists. St Luke's provides clinical education facilities for Specialist Registrars, Radiation Therapists and Oncology Nurses, amongst others. St Luke's also has an active research and development programme. Its current portfolio includes trials in prostate, lung, endometrium and breast cancer. They also conduct translational and palliative studies.

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<sup>‡</sup> 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**

This report outlines the Authority's overall assessment in relation to the inspection, and includes key findings of relevance. A list of additional low-level findings relating to non-compliance with the Standards has been provided to the hospital for completion. However, the overall nature of the key areas of non-compliance is within this report.

This report is structured as follows:

- **Section 3.1** outlines the level of progress made after the unannounced inspection on 8 September 2015.
- **Section 3.2** presents the key findings of the unannounced inspection on 25 June 2015.
- **Section 3.3** describes the key findings relating to hand hygiene under the headings of the five key elements of the World Health Organization (WHO) multimodal improvement strategy<sup>3</sup> during the unannounced inspection on 25 June 2015.
- **Section 3.4** describes the key findings relating to care bundles.

#### **3.1 Progress since the last unannounced inspection on 8 September 2014**

Issues identified in the previous unannounced inspection were included in the hospital quality improvement plan. It was reported that all issues relating to cleaning had been addressed immediately following the previous inspection. The hospital plans to completely refurbish 'D Ward' and upgrade all hand hygiene sinks and is in the process of tendering for this work. The hospital has an ongoing painting programme to maintain walls and woodwork and is reviewing the process for bed frame paintwork refreshment.

#### **3.2 Key findings of the unannounced inspection on 25 June 2015**

##### **Equipment and environmental hygiene**

Overall the environment and patient equipment in the Day Ward were clean with a few exceptions. Small areas of staining and dust were observed on the under surfaces of five of eight vacant beds inspected indicating that these beds had not been completely cleaned following patient discharge. Staining was present on the wall adjacent to the patient toilet indicating that cleaning at the end of the previous day had not been comprehensive. Hand contact areas of patient chairs were visibly clean; however, dust was present on the undercarriage of eight of 11 vacant chairs inspected. In addition dust and debris was found in the crevices of treatment chair upholstery in all chairs inspected with coins and a medication capsule present in two chairs. Consideration should be given to selecting furnishings that facilitate easy and effective cleaning particularly in high risk areas with rapid patient turnover.



## **Cleaning process management**

Individual clinical areas in the hospital did not have dedicated rooms for the storage of cleaning equipment. Cleaning carts for clinical areas were stored on a corridor outside a multifunctional room used for cleaning equipment/product storage and laundering of reusable cleaning textiles. There was no clear delineation of clean and dirty areas for the laundering process which presents a risk of contamination of laundered cleaning textiles. Assurance mechanisms were not observed to be in place to ensure that recommended and validated thermal disinfection times and temperatures for machine washing reusable cleaning cloths and mop heads were in place. Spray containers collected from all clinical areas following the daily cleaning session were amassed in the sink in the 'laundry' area. The Authority was not assured that these containers were being managed and reprocessed in line with best practice and that related infection prevention and control risks were mitigated.

Access to a clinical hand wash sink in this room was obstructed. Obstructed access to hand wash sinks does not facilitate hand hygiene compliance.

The functionality and configuration of this room was not fit for purpose and not in line with best practice guidance for the reprocessing of hospital textiles or management of cleaning supplies. The Day Ward did not have a designated cleaning cart; supplies for the Day Ward were shared with another area. Failure to appropriately segregate functional areas and incomplete implementation of best practice guidelines in relation to hospital cleaning and equipment management poses a risk of cross contamination and potentially places patients at risk of infection.

## **Safe injection practice**

Opportunities for improvement in relation to injection practice was identified. At the time of inspection staff were observed leaving the patient zone to discard used infusion bags and gloves in the medication preparation room. Medication should be drawn up in a designated clean medication room that is free of any potentially contaminated items.<sup>4</sup> The clinical hand wash basin in the clean utility room was adjacent to the area used to prepare drugs and the sink is located at the distal end of the room. Such practice may result in the inadvertent contamination of clean supplies and prepared medication for intravenous administration. Used syringes and supplies infusion sets should be disposed of at the point of care into an approved container.<sup>5</sup> Some medication for intravenous administration had been prepared well in advance of use was not stored in a manner that prevented inadvertent contamination. It is recommended that syringes, intravenous solutions and medications are prepared as close as possible to administration as feasible.<sup>5</sup> Open plastic storage bins of gauze swabs, needle free connectors, plasters, tape and reusable tourniquets were located on lockers next to patient treatment chairs. Mobile

carts with pull out drawers containing multiple sterile supplies were located in the clean utility room and in a storeroom. It was reported that for specific procedures these carts are brought into the patient zone. It is recommended that only the required supplies for an individual procedure are brought into the patient zone.<sup>5</sup> Swabs required to stem blood flow following the removal of an invasive device in potentially immunosuppressed patients should be sterile, similar to other items used for such procedures.

### **Aspergillus risk management**

At the time of inspection the Authority was informed that dust control measures were in place in the hospital to mitigate the risk of aspergillus infection during the renovation project to replace the main hospital lift. Inspectors observed that windows within the Day Ward had been sealed and temporary air filtration units had been installed. However, at the time of inspection the main double doors into the unit were fully open, all windows and a door on the corridor outside the unit were open. These findings were brought to the attention of the hospital management team.

### **Central storage of clean linen**

A central storage for clean hospital linen was located next to the housekeeping 'laundry' room. The door to this room was open throughout the inspection; therefore clean laundry was not effectively protected from dust or other contamination.

### **Care environment**

The configuration and design of the Day Ward was out-dated and not optimal from an infection prevention and control perspective. Care delivery on this ward includes both the administration of outpatient cytotoxic cancer chemotherapy, alongside other day case admission activities. Procedures carried out on the Day Ward include intravenous cytotoxic chemotherapy administration, peripherally inserted central line placement, blood transfusions, intravenous fluid therapy, pain management, care of patients undergoing minor theatre procedures including colonoscopies and brachytherapy high dose radiation.

Although the Day Unit can potentially accommodate 19 patients there was only one designated patient toilet within the unit which may not be sufficient to comfortably meet patients' needs. Eleven treatment chairs were arranged in an open-plan room which is not in line with best practice guidance for cancer treatment facilities which state that 'open-plan areas should be divided into smaller zones of no more than six chairs'.<sup>6</sup> Spacing between treatment chairs was not optimal. Treatment of patients in close proximity to each other also increases the risk of droplet and contact transmission of respiratory pathogens such as influenza.

Limited spacial separation between patients is not unique to St Luke's as confirmed in an Oncology Medical Safety Review Report in 2014 which reported that there was less than a metre between patients receiving treatment in some units in Ireland.<sup>7</sup>

At the time of inspection, a building project was in progress to accommodate a new lift installation in the space formerly used as an isolation room. Although a single room had recently been reconfigured within the existing ward footprint this room has not been equipped with dispensers for hand hygiene consumables. It was reported that the hospital was in the process of constructing an ensuite toilet for this room, but at the time of the inspection this had not yet been completed.

Essential ancillary areas including a 'dirty' utility room, ward pantry and a linen and equipment store were located outside the unit on the opposite side of a common corridor. This corridor was also used for service access including the transport of housekeeping carts. The Day Ward did not have a designated room for the storage of housekeeping supplies and related equipment. There was no designated treatment/procedure room within the Day Ward. Such configuration is not ideal from an infection prevention and control perspective. Good practice guidelines exist for cancer treatment facilities<sup>6</sup> including chemotherapy administration and in most hospitals cytotoxic chemotherapy and other infusion therapy is provided in a unit dedicated exclusively to this purpose.<sup>4,7</sup> Administration of chemotherapy and insertion of intravascular devices in a mixed procedure day ward presents additional challenges from an infection prevention and control perspective.

It is of concern to the Authority that risks in relation to infection prevention and control were not being fully mitigated in this area. The Authority is cognisant that St Lukes's Hospital provides highly specialised concomitant cytotoxic chemotherapy and radiotherapy to service users. In consideration of the findings at the time of inspection; the configuration of the Day Ward, the mixed procedure caseload, hand hygiene practice and housekeeping processes, the Authority was not fully assured that all risks in relation to infection prevention and control were being effectively mitigated. It is recommended that infection prevention and control risks are comprehensively reviewed, and that such a review takes account of the added complexity presented by the multifunctional nature of the unit. Oncology Day Units should be designed in line with relevant guidelines for such facilities<sup>6,8</sup>

### 3.3 Key findings relating to hand hygiene

**3.3.1 System change<sup>3</sup>:** *ensuring that the necessary infrastructure is in place to allow healthcare workers to practice hand hygiene.*

- Some but not all hand wash sinks in the Day Ward conformed to Health Building Note 00-10 Part C: Sanitary assemblies.<sup>8</sup> Clinical hand wash sinks in high risk areas such as the Day Ward should be prioritised in the ongoing hospital clinical hand wash sink replacement programme.
- Access to hand washing facilities was limited on the ward one clinical hand wash basin for 11 treatment chairs in the main part of the unit. The location of the clinical hand wash basin was less than ideal. This did not facilitate optimal performance of hand hygiene by staff.
- Alcohol hand gel was not available at each point of care in the Day Ward.

**3.3.2 Training/education<sup>3</sup>:** *providing regular training on the importance of hand hygiene, based on the 'My 5 Moments for Hand Hygiene' approach, and the correct procedures for hand rubbing and hand washing, to all healthcare workers.*

- Staff in St Luke's Hospital are required to attend hand hygiene training every two years. Practical training sessions are carried out by the Infection Prevention and Control Nurse or staff may complete the HSELand e-learning training programme<sup>9</sup> (the Health Service Executive's (HSE's) online resource for learning and development). Hand hygiene training is also included as part of induction training.
- The Authority was informed that as of the end of 2014, 88% of all hospital staff and 98% of staff in the Day Ward had received hand hygiene training within the previous 12 months.
- Hand hygiene at the point of care in accordance with WHO hand hygiene guidelines is recommended.

**3.3.3 Evaluation and feedback<sup>3</sup>:** *monitoring hand hygiene practices and infrastructure, along with related perceptions and knowledge among health-care workers, while providing performance and results feedback to staff.*

#### National hand hygiene audits

- St Luke's Hospital participates in the national hand hygiene audits which are published twice a year.<sup>10</sup> The results below taken from publically available data from the Health Protection Surveillance Centre website demonstrates overall improvement in staff hand hygiene compliance from March/April 2011 to October/November 2014. Since that time the hospital has exceeded the required target set by the HSE<sup>11</sup> of 90% and has achieved a compliance rate of 98.6% for the second half of 2014.

**Table 1: St. Luke's Hospital, hand hygiene compliance results**

Period	Result
March/ April 2011	79.5%
Oct/Nov 2011	86.7%
May/June 2012	85.7%
Oct/Nov 2012	84.8%
May/June 2013	91.9%
Oct/Nov 2013	93.3%
May/June 2014	88.1%
Oct/Nov 2014	98.6%

Source: Health Protection Surveillance Centre – national hand hygiene audit results.<sup>10</sup>

### **Local hand hygiene audits**

- The Authority was informed that local hand hygiene audits are carried out every three months in four inpatient wards and the Day Ward. Local Hand Hygiene audits are carried out across the hospital by infection prevention and control staff. The most recent hand hygiene compliance audit was performed in May 2015 and the hospital had an overall compliance rate of 96.2%. A hand hygiene Staff achieved 97% hand hygiene compliance in a Day Ward audit in February 2015.

### **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 WHO<sup>12</sup> and the HSE.<sup>13</sup> 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<sup>Y</sup> 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 eight hand hygiene observations during the inspection. Hand hygiene opportunities observed comprised the following:
  - one before touching a patient
  - two after body fluid exposure risk
  - two after touching a patient
  - two after touching patient surroundings
  - one combination of before clean/aseptic procedure and after touching patient surroundings.
- Three of eight hand hygiene opportunities were taken.
- Of the three opportunities which were taken, hand hygiene technique was observed (uninterrupted and unobstructed) by the Authorised Persons for all three opportunities. Of these, the correct technique was observed in one hand hygiene action.

Due to the low level of patient activity at the time of inspection the sample observed was small.

**3.3.4 Reminders in the workplace<sup>3</sup>:** *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 Day Ward.

**3.3.5 Institutional safety climate<sup>3</sup>:** *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.*

Evidence provided at the time of the inspection indicates that the hospital is working towards maintaining hand hygiene compliance at all levels. Opportunities for improvement in relation hand hygiene were identified in the Day Ward. The hospital needs to continue to build on hand hygiene awareness to ensure that good hand hygiene practice is improved and maintained in all areas.

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<sup>Y</sup> The inspectors observe if all areas of hands are washed or alcohol hand rub applied to cover all areas of hands.

### **3.4 Key findings relating to care bundles**

Peripheral vascular care bundles were not in use in the Day Ward due to the short duration of device placement in day cases. Good practice was reported in that the date and time of peripheral vascular device placement is recorded for day patients requiring inpatient admission.

## **4. Summary**

The patient environment and patient equipment in the Day Ward were generally clean with some exceptions. The configuration of the Day Ward, the mixed procedure caseload, hand hygiene practice and housekeeping processes observed did not provide assurance that all risks in relation to infection prevention and control were being effectively mitigated. The Authority recommends that the hospital acts to comprehensively and effectively review and enhance the structures it has in place to ensure that the care environment, cleaning services, and infection prevention and control risks are effectively managed to reduce the risk of healthcare associated infection transmission.

## **5. Next steps**

St Luke's Hospital must now revise and amend its quality improvement plan (QIP) that prioritises the improvements necessary to fully comply with the 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 St Luke's 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 Standards, and is making quality and safety improvements that safeguard patients.

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<sup>‡</sup> All online references were accessed at the time of preparing this report.



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