



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced monitoring assessment at St James's Hospital, Dublin

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

Date of unannounced on-site monitoring assessment: 13 August 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. This initially focused on announced and unannounced assessment of acute hospitals' compliance with the National Standards.

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 St. James' compliance 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 Authority with an opportunity to observe and assess the hygiene as experienced by the majority of patients. The Authority uses 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.

Authorised Persons from the Authority, Breeda Desmond and Catherine Connolly Gargan carried out the unannounced assessment at St James's Hospital on 13 August 2013 between 11:30hrs and 16:00hrs.

The Authorised Persons from HIOA commenced the monitoring assessment in the Emergency Department (ED).

The areas assessed were:

- Ann Young ward (plastic surgery and facial-maxillary trauma)
- the Emergency Department.

The Authority would like to acknowledge the cooperation of staff at St James' Hospital with this unannounced monitoring assessment.

2. St James' Hospital profile[‡]

St James' Hospital (SJH) is the largest academic teaching hospital in the Republic of Ireland. The hospital has 1,020 beds with 4,150 staff and places high emphasis on innovation and excellence of delivery.

St James' is a voluntary hospital established in 1971 under the Health (Corporate Bodies) Act 1960 and amended in 1984 and 1996. The hospital is governed by a Board that reports directly to the Minister for Health and Children. The Executive Management Team represents the organisation's corporate and clinical functions and is designed to support delivery of safe, effective, high-quality patient care. Clinical services are planned and delivered through a number of Clinical Directorates aligned to specific patient needs.

The Hospital's fundamental purpose is the diagnosis of illness, the provision of person-centred health treatment and care, as well as health promotion and preventative services to patients at all stages of life. This is provided by a comprehensive range of advanced clinical, diagnostic, treatment and therapeutic facilities at catchment, regional and national levels. The hospital is one of the designated national cancer treatment centres (National Cancer Control Programme) and has on-site St Luke's Radiation Oncology Centre, which is part of the Radiation Oncology Network.

St James' has strong links with Trinity College Dublin (TCD), the oldest university and medical school in Ireland. The hospital is a major teaching hospital for TCD and houses the Trinity health Sciences centre on the campus which incorporates the Medical School, a Postgraduate Medical centre, School of Nursing, School of Physiotherapy, Occupational therapy, Nutrition, Speech and Language Therapy, the only School of Radiation Therapy in the country and the first Academic Unit of Oncology in the Republic of Ireland.

In all its endeavours, the hospital aspires to meet the highest possible standards and levels of efficiency, effectiveness and quality and is driven by the principles of excellence, continuous improvement, innovation and accountability to patients and service users.

[‡] 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

The findings of the unannounced monitoring assessment at St James' Hospital on 13 August 2013 are described below.

During the course of the monitoring assessment, the Authority identified a specific issue that they believed may have presented a serious risk to the health and welfare of patients receiving care at St James' Hospital.

The Authority observed that:

- Hand hygiene practices of staff were not in line with best practice guidelines or Standard 6 of the NSPCHCAI.

In line with the Authority's Risk Escalation Process¹, the Authorised Persons brought this risk to the immediate attention of the Hospital Manager during the monitoring assessment who agreed to put in place interventions to mitigate this risk. The Authorised Persons also notified the persons accountable for the services at St James' Hospital in writing of the identified risk and requested details of actions taken to mitigate the serious risk identified.

¹ Further information in relation to the Authority's Risk Escalation Process can be found in our Guide to the monitoring programme at <http://www.hiqa.ie/publications/guide-monitoringprogramme-national-standards-prevention-and-control-healthcare-associa>.

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.

Ann Young ward (plastic surgery and facial-maxillary trauma)

Overall, the Authority found that improvements were identified to ensure compliance with the *National Standards for the Prevention and Control of Healthcare Associated Infections* (NSPCHCAI).

Environment and equipment

There was evidence of good practice which included the following:

- Bedframes, bedrails, pillows, and mattresses assessed were clean and free of dust
- patient equipment, for example, dressing trolleys, observation equipment stands and near-patient equipment were clean and free of dust
- chairs in clinical areas were covered with an impermeable material and were clean and intact
- isolation rooms had appropriate signage displayed in the ante-rooms. Appropriate protective equipment was available and both clinical and non-clinical waste bins were in place.

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:

- Paint work throughout the ward including radiators, walls and skirting boards required attention
- light dust was noted on curtain rails, on the casement of overbed electrical fittings, and on the resuscitation trolley

- the protective varnish was eroded on the bedside lockers assessed making effective cleaning difficult. The inside of a drawer of a bedside locker ready for patient use was visibly unclean
- the shower tray in the shower room assessed was unclean and there was a mould-like substance evident on the grouting of the shower tiles.

The following was observed in the 'dirty'² utility room:

- While this room had signage indicating restrictive access, it was unsecured enabling unauthorised access
- risk waste bins were temporarily stored here while awaiting collection. These were labelled and lids were securely in place
- a cupboard containing cleaning chemicals such as Klorsept was unsecured
- a non-risk waste bin was full to the brim. Best practice outlines that waste bags should be no greater than two thirds full to allow proper closure
- high and low surfaces were marked
- there was visible grit in the corners and floor edgings.

The following was observed in the clean utility:

- This room was secure with access only by swipe card
- overall, this room was untidy
- there was debris on the floor
- blood-stained cotton wool was noted in the non-risk waste bin
- the hand wash sink was partially obstructed by empty non-risk, risk and cytotoxic waste bins
- five of the six sharps bins did not have the temporary closure mechanism activated to mitigate against needlestick injuries.

² A 'dirty' utility room is a temporary holding area for soiled/contaminated equipment, materials or waste prior to their disposal, cleaning or treatment.

The following was noted in the 'Dressing room' (Treatment room):

- The door to this room was propped ajar enabling unauthorised access
- cupboards containing hazardous solutions, for example, ethanol absolute, eucalyptus oil and flexible caustic applicators (silver nitrate 75% and potassium nitrate 25%) were not secure
- the hand wash sink was obstructed by a risk waste bin and three leg rests
- the water outlet in this hand wash sink was blocked
- inappropriate items were stored on the window sill, i.e. two used surgical instrument trays. While one used surgical tray was contained within a clinical waste bag the second was not, with just the used green drape covering the used instruments. These issues were brought to the attention of ward management.

The following was noted in the corridor leading to the dressing room and opposite the entrance to the clean utility room:

- The hand wash sink here was not fit for purpose. It was a domestic stainless steel sink and was not hands-free
- this sink was stained and grit was observed at the water outlet
- underneath this sink there was a unsecured cupboard which had containers of surgical hand scrub (chlorohexidine), Hibiscrub and alcohol hand gels.

Waste segregation

There was evidence of good practice which included the following:

- Appropriate signage was displayed describing waste segregation and waste management. This signage was clean, intact and covered appropriately.

Linen

There was evidence of good practice which included the following:

- The Authority was informed that, as standard, curtains were changed on a six-monthly basis and when necessary, by external contractors. Local records of curtain changing were demonstrated
- clean linen was stored in dedicated linen cupboards. These were found to be clean and free of dust, dirt, grit or inappropriate equipment. Linen examined was free of stains and was intact
- used linen was segregated in line with best practice, evidenced by colour-coded linen bags and alginate bags.

Cleaning equipment

There was evidence of good practice which included the following:

- Authorised Persons from HIOA observed that the 'household' room containing potentially hazardous cleaning solutions was locked and inaccessible to unauthorised persons in line with best practice
- cleaning equipment was clean, with an established cleaning process evident. A colour-coded system was in place and demonstrated in the area assessed.

Water outlet flushing

There was evidence of good practice which included the following:

- Daily flushing records were observed. Regular water sampling is also undertaken to mitigate the risk associated with impurities including Legionella.

Emergency Department

Overall, the ED was cluttered due to overcrowding which would make it difficult to ensure continuous and adequate cleaning of patient areas and flooring.

Environment and equipment

- Chairs were covered with an impermeable material, were clean and intact
- fixtures were clean, including over-trolley electrical fixtures.
- the patient toilet assessed was clean, tidy and free from debris and spillages
- patient equipment assessed included cardiac monitors, ECG machine, blood gas machine and IV pumps. These were clean and well maintained
- the work station and equipment was clean.

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:

- Some oxygen cylinder placement platforms on the undercarriage of trolleys assessed were scratched and marked; there was a spillage on the surface of one trolley assessed
- the vinyl surfaces of two stools used by staff were torn, impeding effective cleaning
- some protective borders on walls were broken and peeling away from walls
- the bases of IV stands assessed were soiled. One IV stand had several pieces of adhesive bandage tape attached to it, preventing adequate cleaning
- access to one hand wash sink was blocked by a resuscitation trolley.

The following was noted in the 'Drugs Preparation Area':

- This was an unsecured area which opened on to the 'Major Area' for treatment of patients
- While the controlled drugs were maintained in accordance with An Bord Altranais' Guidance to Nurses and Midwives on Medication Management 2007, other medication cupboards were not secure, enabling unauthorised access
- There was no designated clean utility room for the safe preparation and storage of medication.

The following was noted in the dirty utility room:

- While the door to this room had a restricted signage displayed, the door was closed but not secure
- A large cardboard box was stored on the floor impeding effective cleaning of the floor
- Damaged items (four bedpans, two bowls, one procedure bowl and one jug) were stored on top of the bedpan washer
- A box of Klorcept was accessible on the worktop and window cleaner and Klorcept were stored on an open cupboard.

Waste segregation

- The waste disposal segregation room was unsecured enabling unauthorised access to potentially harmful waste.
- A large risk waste eurocart (clinical waste bin) was wide open
- Flooring in this area was damaged and part of the floor covering was missing, impeding effective cleaning.

Linen

- Linen was segregated into appropriate colour coded bags. Clean linen assessed was free from stains. While there was a designated linen dispensing unit, pillows were stored on top and to the side of the unit located on the corridor from the 'Major Area', which is not in keeping with good practice.

Cleaning equipment

- There were two cleaners' rooms; one was locked, in keeping with best practice, the second room was closed but not locked. Both had restrictive signage in place. Cleaning staff spoken with by the Authority were knowledgeable regarding infection prevention and control protocols.
- A colour-coded system was in place and demonstrated in the area assessed.

Conclusion

Overall, the Authority found that while many processes were in place for continuous monitoring and quality assurance, areas were identified to ensure compliance with the *National Standards for the Prevention and Control Of Healthcare Associated Infections*.

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 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. Overall, hand hygiene practices observed in St James' Hospital were poor as outlined in the statistics below. This was brought to the attention of hospital management during the monitoring assessment.

Hand hygiene

There was evidence of good practice which included the following:

- The Hospital demonstrated that hand hygiene practices were monitored through internal audits and national hand hygiene compliance audits.
- Hand hygiene gel dispensers and hand hygiene reminder signage were available throughout.

Observation of hand hygiene opportunities.

The Authority observed 29 hand hygiene opportunities throughout the monitoring assessment, comprising:

- five before touching a patient
- three after touching a patient
- two before clean/aseptic procedure
- one after body fluid exposure risk
- 18 after touching the patient's surroundings.

Eleven of 29 hand hygiene opportunities were taken. Of those, seven 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, wearing a bracelet and the length of time taken to complete the hand hygiene procedure.

Conclusion

The Authority found that hand hygiene practices observed in St James' Hospital were poor. While the Authority recognises that the hospital has implemented initiatives to improve hand hygiene compliance, this was not operationally embedded. The degree of non-compliance with standard precautions for infection prevention and control regarding hand hygiene poses a risk to patients at St James' Hospital. This was brought to the attention of hospital management during the monitoring assessment, who agreed to put in place actions to mitigate this risk.

4. Overall conclusion

The risk of the spread of Healthcare Associated Infections (HAIs) 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, while some good practices and compliance with the NSPCHCAI were described, several issues were identified which require attention including inappropriate storage, security regarding hazardous materials and non-compliance with waste management standards. Areas were cluttered, with issues identified which require attention to ensure compliance with the National Standards for PCHCAI.

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

The degree of non-compliance with hand hygiene best practices observed by the Authority poses a serious risk to patients in St James' Hospital.

St James' 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 QIP must be published by the Hospital on its website within six weeks of the date of publication of this report.

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

The unannounced monitoring assessment at St James' Hospital on 13 August 2013 was a snapshot of the hygiene levels in some areas of the Hospital at a point in time. Based on the findings of this assessment the Authority will, within the next six months, undertake a follow-up assessment against the *National Standards for the Prevention and Control of Healthcare Associated Infections*.

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 (HCAIs) in order to improve the quality and safety of health services. The NSPCHCAI are available at <http://www.hiqa.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 HCAIs and safeguard service users.

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

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