



**Health  
Information  
and Quality  
Authority**

An tÚdarás Um Fhaisnéis  
agus Cáilíocht Sláinte

# Report of the unannounced monitoring assessment at Merlin Park Hospital, Galway

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

Date of on-site monitoring assessment: 9 July 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 HIQA) 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 Merlin Park University Hospital's 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, Catherine Connolly-Gargan and Naomi Combe carried out the unannounced assessment at Merlin Park University Hospital on 09 July 2013 between 15:00hrs and 18:00hrs.

The areas assessed were:

- Orthopaedic Ward (Elective)
- Ward 4 (Rehabilitation).

The Authority would like to acknowledge the cooperation of staff at Merlin Park University Hospital with this unannounced monitoring assessment.

## 2. Merlin Park University Hospital profile<sup>‡</sup>

Merlin Park University Hospital is a model 2 hospital and provides elective medical and surgical inpatient services, Rehabilitation, Renal Dialysis, Radiology, Bronchoscopy day services, interventional Radiology, Pain service, Orthodontics and a range of outpatient services. The site currently has 59 inpatient beds of which 18 are five day beds and 14 daycase beds. There are a range of support services on site.

The site also hosts a range of other services including two long stay elderly care units, mental health services, podiatry unit, CAMHs Unit and alcohol treatment Unit.

### **Overall 2012 Figures**

- Admissions 2605
- Discharges 2858
- Daycases (includes Day Treatments) 18641
- Bed Days 3001
- Outpatients 36951

### **Existing Service Provision Profile on the MPUH site:-**

Medical Outpatients / CAPD, Orthopaedic Outpatients/Physiotherapy, Inpatient Unit – Rehab Service, Long Stay Residential, Respite and Elderly/Stroke Rehab, Renal Dialysis, Bronchoscopy Day Services, Radiology Department, Pre-Operative assessment, Elective Medicine Inpatient Ward/Infusions 5 Day, Orthopaedic, Orthodontic, PCCC services e.g. CAMHS and Mental Health Services

The plan going forward for MPUH is to further develop elective, Day and Outpatient services on the site to support the overall delivery of services within the group and ensuring the most appropriate services are delivered in the respective hospital models.

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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

The findings of the unannounced monitoring assessment at Merlin Park University Hospital on 09 July 2013 are described below.

#### 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 there were many opportunities for improvement the environment and equipment in areas assessed were generally clean with exceptions in both areas.

#### **Environment and equipment**

There was evidence of good practice which included the following:

- The Authority found that high and low surfaces, floors, electrical fixtures and patient call bells assessed were clean, intact and free of dust in both areas assessed. Beds, bed rails, mattresses, pillows, lockers and bed tables assessed were also clean, intact and dust free.
- Patient equipment in both areas, including cardiac monitors, blood pressure cuffs, oxygen monitoring and administration equipment, suction and temperature probes, was found to be clean and intact.
- Work station equipment, including telephones and work surfaces, was observed to be clean and free of dust, dirt and debris in all the areas assessed.
- Intravenous stands and pumps were clean in the areas assessed.
- Environmental and patient equipment related audits were in place with a process of automatic re-audit of areas scoring below 85%.

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 parts of the floor covering in Unit 4 ward was cracked and torn. Paint was also chipped and cracked on some areas of the walls, skirting boards, radiators and window ledges hindering effective cleaning. Surface paint was missing from some areas of a radiator in a patient area in the Orthopaedic ward.
- The impermeable material surface on a patient chair was cracked exposing the interior filling. This hindered effective cleaning and posed a risk of spread of HCAs to patients.
- There was a pool of yellow fluid on the floor of one toilet assessed and spillage on another toilet floor in Unit 4 ward. Although an up to date cleaning checklist was displayed in the ensuite in the 'Day Hall' area of the Orthopaedic ward with three hourly signatures confirming the area was clean, staining was observed by the Authority on the floor around the base of a toilet bowl. The area around a sink water outlet grid and a stainless steel panel located at the back of a shower in an ensuite facility were unclean. A bottle of solution in use for pre surgical preparation purposes did not have a dispenser fitted to facilitate communal use. The areas over the wheels of a shower chair were stained.
- The doors to two clinical equipment storerooms were unlocked on the Orthopaedic ward; while one door was closed, the other was wide open. There was a potential risk of access by unauthorised persons to syringes, needles and intravenous fluids. The Authority brought this to the attention of the ward manager and hospital management. A floor polisher, the surface of which was dusty, was inappropriately stored in the smaller clinical equipment storeroom. A sharps waste disposal container attached to a phlebotomy trolley stored in the large clinical storeroom was overfilled with hazardous waste protruding over the top.
- The door to the clean utility room on Unit 4 ward had a key code pad fitted but was unlocked. There was a potential risk of access by unauthorised persons to syringes, needles and intravenous fluids. The Authority brought this to the attention of the ward manager and hospital management. A light layer of dust was found on two injection trays, drawers of the blood collection trolley, shelving and two blood glucose analysis units used for near patient testing. The area around the wheels of dressing trolleys were found to be heavily soiled. There was grit and debris found on the floor.
- Not all paper based signage was laminated in the Orthopaedic ward to facilitate effective surface cleaning.
- There were six boxes of cleaning wipes stored on the floor in the clean utility room on the Orthopaedic ward.

- Key code locks were fitted to the 'dirty' utility\* room doors but were not engaged in either area assessed. There was a potential risk of access by unauthorised persons to hazardous cleaning solutions, chemicals and waste material. The Authority brought this to the attention of respective ward managers and hospital management.
- The seat of a commode assessed in Unit 4 ward was stained with a brown coloured substance. The wheels on two commodes were also soiled. Bed urinals were not stored inverted following decontamination.
- Access to the hand wash sink in the 'dirty' utility room on the Orthopaedic ward was hindered by the placement of a non clinical waste disposal bin. A separate sink was not available for cleaning of patient equipment.
- There was staining on the floor area under the sluice hopper and dust in corners in the 'dirty' utility room on the Orthopaedic ward. In addition, the surface area over commode wheels assessed was stained.

## **Cleaning Equipment**

There was evidence of good practice which included the following:

- A colour cleaning system was in operation for cleaning surfaces; mops were changed following cleaning in each room or area of the wards 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:

- Cleaning products used in Unit 4 ward were stored in the 'dirty' utility but not securely, which presented a health and safety risk if accessed by unauthorised persons.
- Cleaning products were stored on open shelves in the cleaners' room on the Orthopaedic ward; the door was lockable with a key but was found unlocked at the time of assessment. Cleaning staff reported that the door is always locked as standard. Two canvas bags of clean mop supplies and packs of hand towels were inappropriately stored on a window ledge in this room.
- The Authority was informed that cleaning staff undertook both cleaning and catering duties in the same shift of work on Unit 4 ward which presented a HCAI risk to patients.
- The Authority was informed that training was provided for cleaning staff on correct dilution procedures for cleaning products; however no written guide was available for reference.

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

## **Isolation**

There was evidence of good practice which included the following:

- Appropriate personal protective equipment dispensing units were located outside each isolation room and at intervals throughout the wards.

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

- Doors to isolation rooms were open as standard on Unit 4 ward throughout the monitoring assessment. This finding was not in line with the *National Standards for the Prevention and Control of Healthcare Associated Infections* and posed a risk of spread of HCAs to other patients in the ward.
- There was no clinical waste disposal bin available in the isolation room in line with best practice hazardous waste management.
- Isolation procedures were not fully controlled as visitors to isolated patients did not remove personal protective equipment on exiting the isolation rooms and were observed to continue wearing contaminated apron and gloves outside the isolation room for the duration of their visits. Isolated patients with confirmed communicable infections were observed by the Authority to leave the isolation facilities to use a communal bathroom and to sit outdoors.

## **Waste segregation**

There was evidence of good practice which included the following:

- The waste management policy demonstrated at ward level was approved in March 2012 and due for review in March 2014; a copy of the waste management policy was available for staff reference in the 'dirty' utility rooms.

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:

- Management of used blood product packaging was not in line with best practice in the Orthopaedic ward. Two rigid yellow hazardous waste disposal containers, one small in size was stored on a window ledge and one larger hazardous waste disposal container was stored on the floor adjacent to the designated hand wash sink. Both rigid containers had a number of small tied yellow bags containing waste blood product bags placed in them. Neither bin was secured to prevent unauthorised access.
- It was reported to the Authority by staff that hazardous clinical waste bags were temporarily stored in an open unattended cage trolley near the entrance

to Unit 4 ward which was intermittently collected by a porter. This practice presented health and safety risks to patients and visitors and was notified by the Authority to the ward manager and hospital management.

## Linen

- The Authority was informed that, as standard, curtains were changed every six months on wards assessed and when necessary. Curtains were not used in isolation rooms or in showers.
- Used linen was segregated at source and this was evidenced by use of colour-coded linen bags.

## Water outlet flushing

- While records demonstrated a weekly flushing regimen of all outlets, there was no risk assessment process in place identifying infrequently used water outlets requiring scheduled flushing.

## Conclusion

In conclusion, the Authority found that there was evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections* in the areas assessed in Merlin Park University Hospital. Although the patient environment was generally clean in both areas assessed with some exceptions, hygiene management of patient equipment identified in this report requires active management to mitigate risk to patients of contracting healthcare associated infections. There was evidence of uncontrolled access to unauthorised persons to hazardous clinical waste material and clinical equipment by failure to utilise security measures already in place, for example, key code door locks and securing lids on rigid sharps waste containers. Therefore there was evidence to conclude that some key areas were not effectively managed and maintained to protect patients and reduce the spread of Healthcare Associated Infections (HAIs).

### 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 HAIs.

## Hand hygiene

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.

There was evidence of good practice which included the following:

- Hand hygiene training and monitoring was reported to be provided by the Infection Prevention and Control Nurse specialist. A database was maintained that recorded names of staff on completion of training and which also highlighted staff still to be trained. Ward managers were forwarded training records and hand hygiene audit results.

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:

- While there were designated hand wash sinks in the clinical areas, they did not comply with the Health Service Executive's (HSE's) Health Protection Surveillance Centre's *Guidelines for Hand Hygiene* (2005).
- Not all hand hygiene sinks had hand hygiene advisory posters displayed by them; there was also no advisory signage displayed to inform appropriate use of surgical hand wash soap when non-surgical hand wash soap was also available.

### **Observation of hand hygiene opportunities.**

The Authority observed 20 hand hygiene opportunities in total throughout the monitoring assessment, comprising:

- nine before touching a patient
- six after touching a patient
- one before clean/aseptic procedure
- four after touching the patient's surroundings.

Seventeen of the 20 hand hygiene opportunities were taken. All 17 were observed to comply with best practice hand hygiene technique. Non-compliance related to failure to take hand hygiene opportunities available.

## Conclusion

The Authority recognises that the hospital has implemented initiatives to improve hand hygiene. Observations in the Orthopaedic ward and Unit 4 ward and the training record review by the Authority regarding hand hygiene compliance indicate that a culture of hand hygiene is almost fully embedded at an operational within all staff specialities.

## 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 there was evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections* in the areas assessed in Merlin Park University Hospital. Although the patient environment was generally clean in both areas assessed with some exceptions, hygiene management of patient equipment identified in this report requires active management to mitigate risk to patients of contracting healthcare associated infections. There was evidence of uncontrolled access to unauthorised persons to hazardous clinical waste material and clinical equipment by failure to utilise security measures already in place, for example, key code door locks and securing lids on rigid sharps waste containers. Therefore there was evidence to conclude that some key areas were not effectively managed and maintained to protect patients and reduce the spread of Healthcare Associated Infections (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. The observations in the Orthopaedic ward and Unit 4 ward and the training record review by the Authority regarding hand hygiene compliance indicate that a culture of hand hygiene is almost fully embedded at an operational within all staff specialities.

Merlin Park University 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 Merlin Park University Hospital on 09 July 2013 was a snapshot of the hygiene levels in two areas of the Hospital at a point in time. Based on the findings of this assessment the Authority will 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-associa>.

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For further information please contact:

Health Information and Quality Authority  
Dublin Regional Office  
George's Court  
George's Lane  
Smithfield  
Dublin 7

Phone: +353 (0) 1 814 7400

Email: [qualityandsafety@hiqa.ie](mailto:qualityandsafety@hiqa.ie)

URL: [www.hiqa.ie](http://www.hiqa.ie)

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