



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced monitoring assessment at St Michael's Hospital, Dún Laoghaire

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

Date of unannounced on-site monitoring assessment: 19 June 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.

Table of Contents

1. Introduction	2
2. St Michael's Hospital Dún Laoghaire profile	4
3. Findings	5
3.1 Standard 3. Environment and Facilities Management	5
3.2 Standard 6. Hand Hygiene.....	11
4. Overall conclusion.....	12
Appendix 1. NSPCHCAI Monitoring Assessment	14

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 Michael's Hospital Dún Laoghaire 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 Michael's Hospital on 19 June 2013 between 11:00hrs and 14:30hrs.

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

The areas assessed were:

- Emergency Department
- Male ward (medical and surgical combined).

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

2. St Michael's Hospital Dún Laoghaire profile[‡]

St Michael's Hospital was founded in 1876 and was governed by the Sisters of Mercy. Transfer of ownership of St Michael's to the Religious Sisters of Charity took place in March 2001. St. Michael's Hospital is now part of the St. Vincent's Healthcare Group which includes St. Vincent's University Hospital and St. Vincent's Private Hospital.

In 2001 additional public beds were opened in the former St. Michael's Private Hospital in conjunction with the Eastern Regional Health Authority to further reduce patient waiting lists in the region.

St. Michael's Hospital is as an acute general hospital serving the community and patients of South County Dublin and Wicklow. The hospital has 125 in-patient beds incorporating 7-day, 5-day and Day-care options. The Hospital provides facilities for acute Medical and Surgical patients, Out-Patient Clinics and an enhanced 8am – 8pm daily Accident and Emergency service, in association with St. Vincent's University Hospital. The Hospital also provides a varied range of general and specialist services which include:

- Anti-coagulant Monitoring Services
- Cardiac Rehabilitation Programme
- Diabetes Unit, a Heart Failure Unit
- Pulmonary Rehabilitation Care
- Pelvic Floor Unit.

St. Michael's is a teaching hospital and is affiliated to University College Dublin as part of the St. Vincent's Healthcare Group for Medical and Nursing training.

[‡] 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 Michael's Hospital Dún Laoghaire on 19 June 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 in the areas assessed at the 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.

Environment and equipment

Male ward: medical and surgical combined

There was evidence of good practice which included the following:

- Bedrails, pillows, mattresses, bedside table tops and curtains assessed were clean, intact 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 to alert people to don protective equipment. Appropriate protective equipment was available and both clinical and non-clinical waste bins were in place within the isolation rooms.
- It was reported to the Authority that household supervisors undertake monthly environmental audits with household personnel. Results of audits were demonstrated, which identified actions to be taken, dates for completion and the person/department to whom the responsibility is assigned.

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:

- Paintwork throughout the ward including radiators, walls, skirting boards and door frames required attention.
- The bases of patient equipment, for example, dressing trolleys, observation equipment stands and intravenous stands were unclean. These were stored inappropriately on an link corridor between the main ward and the high dependency unit.
- There was a light layer of dust on the resuscitation trolley.
- A moderate amount of dust was present on the under-surface of a bed frame. This bed was empty and awaited a patient admission. The bedside locker alongside this bed was also unclean. A mould-like substance was visible on the inside shelving. Grit was visible on the base of the bedside table.
- While patients had bedside lockers, one patient's belongings were placed on the ground alongside their bed, impeding effective cleaning.
- The portable suction machine was unclean.
- Two temperature probes were observed; one was visibly unclean and the second had a sticky residue on the screen, impeding effective cleaning.
- While hand-wash sinks were hands-free, some did not comply with the Health Service Executive's (HSE's) Health Protection Surveillance Centre's Guidelines for Hand Hygiene (2005). Water flowed directly into the water outlet, which contained a metal grid.
- The following was observed in the 'dirty'* utility room:
 - This room was not secure in line with health and safety best practice precautions.
 - It was cluttered with linen bags and domestic waste awaiting collection.
 - There was a clinical waste bin placed on top of the sink used for cleaning patient equipment, thus impeding access to the sink.
 - While there was a lockable storage unit for cleaning chemicals, this was not locked. Best practice outlines that chemicals must be secure and inaccessible to unauthorised persons, to mitigate a health and safety risk.
 - There was a locked storage unit for the temporary holding of sealed clinical waste. However, the key was attached to shelving alongside the unit and easily accessible to unauthorised persons.

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

- Patient washbowls were decontaminated between usage. However, they were not inverted while being stored and were not dried after decontamination.
- The wheels and brake areas of commodes were visibly unclean.
- While urinals were inverted when being stored, one was visibly unclean. The urinal had a blood-like substance visible on the outer surface.

- The following was observed in one patient toilet and shower area:
 - There was visible grit by the floor edges.
 - There was a mould-like substance observed on the shower floor edges and at the base of the protective glass partition, which was in poor condition.
 - There was a mould-like substance visible on the low shelf edging alongside the toilet.

Linen

- The Authority was informed that, as standard, curtains were changed bi-annually and when necessary, by portering staff. There was a folder in place which contained the hospital schedule for curtain changing. Up until 2012, porters recorded curtain changing on spread sheets in this folder. Recording of curtain cleaning changed in 2013 and curtain changing is now written in a separate book as narrative. This book does not contain the proposed changing regimen and it was difficult to establish if confirm whether the cleaning schedule for curtain changing is adhered with.
- Used linen was segregated at source and this was evidenced by colour-coded linen bags.

Cleaning equipment

There was evidence of good practice which included the following:

- Cleaning equipment was clean, with an established cleaning process evident. HIQA observed cleaning staff decontaminating cleaning equipment when finished their duties.

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:

- Household staff responsible for cleaning have a central location from where cleaning solutions are decanted and cleaning equipment is stored. The layout of the cleaners' room is as follows: there is a washing machine, dryer and hand-wash sink to the right of the

entrance to the area; lockers for cleaning staff were opposite the entrance and to the left was a designated office space for the cleaning supervisor. The area containing the sluicing sink was a long narrow alcove with the sink position to the back of the alcove. There were two large containers alongside the sluicing sink and these held attachments and hoses for hoovers. Cleaning equipment was stored opposite the sluicing sink. Because equipment was stored on either side of this narrow alcove, the sluicing sink was almost inaccessible. The layout of this area warrants a risk assessment by the hospital regarding health and safety as well as the prevention and control of health care associated infections. This was identified to hospital management during the onsite assessment.

Water outlet flushing

There was evidence of good practice which included the following:

- Weekly flushing records were observed; flushing of outlets is undertaken by household staff.

Waste segregation

- Hazardous waste was labelled and placed in a designated holding unit within the 'dirty' utility while awaiting collection. While this unit was locked, the key was attached to the unit and thus allowed unauthorised entry. This was brought to the attention of the Ward Manager during the monitoring assessment as it is not in keeping with best practice and poses a health and safety risk.

Emergency Department (ED)

Environment and equipment

There was evidence of good practice which included the following:

- Work station equipment, including telephones and work surfaces, were observed to be clean and free of dust, dirt and debris in the ED.
- All seating in the ED was covered with an impermeable material facilitating effective cleaning.
- Intravenous pumps, blood pressure cuffs, oxygen equipment and suction apparatus were clean.
- Information displayed was clean, securely fixed, laminated and up to date in clinical areas in the Emergency Department.
- Rooms available for isolation purposes had hand wash sinks in place and clinical and non-clinical waste bins.

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:

- In the wheelchair-accessible toilet, the toilet brush in the toilet brush holder was heavily soiled.
- There was a moderate amount of dust on the base of the Electrocardiograph (ECG) machine (machine used for tracing electrical activity of the heart).
- There was no hand wash sink in the 'point of care testing' area in the ED. The unit manager demonstrated to the Authority an area which is being refurbished to accommodate 'point of care testing'. The unit manager outlined that it will contain a hand wash sink and be fit for purpose.

The following was observed in the clean utility drugs room:

- The door to this room was not secure. It was held ajar by a non-clinical waste bin enabling unobstructed access by unauthorised persons, which is not in keeping with best practice. The Authority brought this to the attention of the unit manager during the onsite assessment.
- There was no hand wash sink or hand gel in this room.
- There was clinical equipment, for example needles and syringes, in open shelving and solutions and magnesium sulphate paste on the worktop. As this room was unsecured, this poses a health and safety risk.

The 'dirty' utility room room was unsecured, which is not in keeping with best practice. The following was observed within:

- The room was very cluttered.
- The hand wash sink was obstructed by a commode and plastic trolley.
- There were two commode basins resting on the side of the hand wash sink.
- Unused sharps bins were stored on top of the sluice hopper.
- A separate sink for washing patient equipment was not available.
- There was visible staining on frame and wheels of commodes.
- Cleaning solutions were on top of the bedpan washer and not secure in line with best practice.
- While there was a daily, weekly and monthly cleaning schedule displayed here, it was not completed, so there was no documented evidence that the cleaning schedule was adhered with.
- There was no cleaners' room in the ED. Household staff responsible for cleaning have a central location from where cleaning solutions are decanted and cleaning equipment is stored as described previously.

Linen

- Clean linen was stocked on an open trolley, which was stored on the corridor linking the ED with the main hospital. The used linen trolley was stored alongside the clean linen trolley. While there was segregation of linen into white and red bags, alginate bags were not in use for soiled linen; all of which is not in keeping with best practice.

Waste segregation

- Clinical waste was labelled and removed immediately by the porter assigned to the ED. There was no clinical or domestic waste temporarily stored here as the porter removes the waste upon request.

Conclusion

The Authority found that while the Emergency Department was clean, many of the practices observed were not compliant with best practice and the Male ward was unclean. Authorised Persons note the infrastructural challenges of an older building. Notwithstanding this, there were many opportunities identified for improvement.

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

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:

- The hospital demonstrated that hand hygiene practices were monitored through internal audits and national hand hygiene compliance audits.
- Hand hygiene training and monitoring was reported to be provided by the Infection Control Nurse. A database was maintained that recorded names of staff on completion of training and highlighted staff whose training was overdue. Ward managers have access to this database and this was demonstrated to the Authority on the Male ward.
- Authorised Persons observed that the hand hygiene records demonstrated hand hygiene training compliance was 100% over a 24-month period.
- Hand hygiene reminders and information posters were displayed throughout the hospital.

Observation of hand hygiene opportunities.

The Authority observed 22 hand hygiene opportunities throughout the monitoring assessment, comprising:

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

Seventeen of 22 hand hygiene opportunities were taken. Of those, 16 were observed to comply with best practice hand hygiene technique. Non-compliance related to not following best practice hand-washing technique and inappropriate use of gloves.

Conclusion

While the Authority recognises that the hospital had implemented a number of initiatives to improve hand hygiene, the observations by the Authority regarding hand hygiene compliance indicates that a culture of hand hygiene is not yet operationally embedded within all staff specialities.

4. Overall conclusion

The risk of the spread of Healthcare Associated Infections (HCAIs) 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 Emergency Department was generally clean and the Male ward was generally cluttered. There were many opportunities for improvement in both areas assessed:

- lack of appropriate storage for equipment in both areas assessed
- unsecured chemical storage, clinical waste and sterile equipment in both areas assessed
- lack of a designated sink for cleaning patient equipment in the 'dirty' utility room in the ED
- clutter in the cleaners' area
- inappropriate layout of the cleaners' area.

Hand hygiene is recognised internationally as the single most important preventative measure in the transmission of HCAIs 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 hand hygiene practices in St Michael's Hospital were inconsistent with the National Standards and this poses a clear risk to patients of contracting a HCAI.

St Michael'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 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 Michael's Hospital on 19 June 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-associat>.

Published by the Health Information and Quality Authority.

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@hqa.ie
URL: www.hqa.ie

© Health Information and Quality Authority 2013