



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced monitoring assessment at Our Lady's Children's Hospital, Crumlin

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

Date of unannounced on-site monitoring assessment: 19 December 2012

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. Our Lady's Children's Hospital, Crumlin Profile	4
3. Findings	4
3.1 Standard 3. Environment and Facilities Management	4
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 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 the compliance by Our Lady's Children's Hospital, Crumlin 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, Naomi Combe, Íde Batan, Breeda Desmond and Catherine Connolly Gargan carried out the unannounced assessment at Our Lady's Children's Hospital, Crumlin on 19 December 2012 between 10:50hrs and 14:00hrs. The Authorised Persons from HIQA commenced the monitoring assessment in the Emergency Department (ED).

The areas assessed were:

- Emergency Department
- St Joseph's (Orthopaedics) and St Brigid's ward (Cardiology and Medicine) temporarily amalgamated
- Nazareth Ward (Medicine)
- Our Lady's Ward (Nephrology).

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

2. Our Lady's Children's Hospital, Crumlin Profile[‡]

Our Lady's Children's Hospital, Crumlin, Dublin is an acute paediatric teaching hospital employing approximately 1,600 staff. There were 227 inpatient beds and cots, and 38 day-case beds in use. It is Ireland's largest paediatric hospital and is responsible nationally for the provision of the majority of tertiary care services for children. It is the National Centre in Ireland for a range of paediatric specialities including childhood cancers and blood disorders, cardiac diseases, major burns, cystic fibrosis and rheumatology.

The Hospital is built on a site of approximately 5 hectares. It first opened its doors in 1956 and was specifically designed to care for and treat sick children.

Our Lady's Children's Hospital, Crumlin – year end activity	2012
Inpatients	10,278
Day cases	17,501
Outpatients	74,487
Emergency Department	34,699
Theatre operations	10,151

3. Findings

The findings of the unannounced monitoring assessment at Our Lady's Children's Hospital, Crumlin on 19 December 2012 are described below.

During the course of the monitoring assessment, the Authority did not identify any immediate serious risks to the health and welfare of patients receiving care at Our Lady's Children's Hospital, Crumlin. Authorised Persons from HIQA observed an uncapped needle on the floor of 'Treatment Room One' in Our Lady's ward (Nephrology) on the third floor. This was judged to be a high risk to staff and was brought to the immediate attention of the Clinical Nurse Manager II. The needle was safely disposed of and thus, the risk was mitigated.

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).

[‡] 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.

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

- Overall, the Authority found that all areas assessed, with the exception of the ED, were unclean.

There was evidence of good practice, such as the following:

- Displayed information was appropriate, up to date and laminated or covered with a washable surface for effective cleaning in all areas throughout the environment and patient areas assessed.
- Work station equipment in all areas assessed including telephones and keyboards were observed to be clean and free of dust.
- Personal protective equipment dispensers were observed in all areas assessed. Single accommodation isolation facilities for the purposes of infection control and prevention were available in each area assessed and were observed in use in St Joseph's and Nazareth ward. Appropriate signage was in place to indicate isolation protocol.
- Reusable equipment was stored and transported for decontamination and re-sterilisation in line with the Health Service Executive (HSE) Code of Practice for Contamination of Reusable Invasive Medical Devices (RIMDs), evidenced by placement in a covered tray observed by the Authority in Nazareth ward.

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

- Heavy levels of dust were observed on high and low surfaces in Our Lady's ward. Light to moderate amounts of dust were observed in St Joseph's/St Brigid's ward.
- The Authority observed that 'Treatment Room Two' in Our Lady's nephrology ward contained an inappropriately located patient shower (reported by staff to be used daily by patients) and toilet. This treatment room also contained an examination couch and a hoist. A mattress was stored in the room and clinical supplies stored on fixed shelving. The Authorised Persons from the Authority discussed their findings in relation to this room with Hospital management which were:

- Patient shower: moderate to heavy amounts of dust were found by the Authority on high and low surfaces; the shower curtain rail, shower head and a wooden bench located within the shower. Wall tiles were cracked and stained especially around the base of the wall and the floor of the shower. Edges of flooring between the shower and the surface of the treatment room floor were broken; a shower curtain was not in place to protect patient privacy. A patient's wheelchair was inappropriately placed in the shower.
 - Patient toilet: moderate amounts of dust were found on high and low surfaces. The Authority found the floor covering around the base of the toilet bowl and the hand-wash sink to be missing, exposing the concrete base which hindered effective cleaning. Disposable hand towels were available on an unenclosed roller, which was exposed to contamination from environmental dust.
 - Treatment area: moderate to heavy dust was found on high and low surfaces including shelving used for storage. There was a large hole in the wall at the base of the doorframe to the room resulting in exposure of masonry. The floor of the room was observed to be unclean with grit, fluff and dust visible on all parts including in corners. A domestic-type sink with laminate-type worktop was available for hand washing. This did not comply with hand hygiene best practice guidelines. The surface of the worktop was peeling in one area, which hindered effective cleaning.
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- The Authority observed that paintwork on walls, stair railings and the passenger lifts was damaged and missing in a number of places throughout the Hospital, but more noticeably in the passenger lifts. The lower wall surface areas of the lifts was also visibly soiled; dust and grit was present along floor edges and in corners, and the light fitting was uncovered in one of the passenger lifts.
 - Paintwork on some wall surfaces in the areas assessed in the ED, St Joseph's/St Brigid's, Nazareth and Our Lady's nephrology wards was observed to be damaged, peeling and/or missing in many places. Floor covering on floor edges and corners in St Joseph's and Our Lady's nephrology ward was also not intact in the 'dirty'* utility areas and treatment rooms, particularly around permanent fixtures such as toilets and storage cupboards, making effective cleaning of these areas impossible.

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

- In the patient areas assessed in St Joseph's and Nazareth ward, HIQA observed that there was light dust on bed frames, high surfaces above electrical fixtures and curtain rails. Light to moderate amounts of dust were observed on radiator covers, along floor edges and in corners.
- While a cleaning schedule was demonstrated in Our Lady's nephrology ward, the Authority observed heavy levels of dust on high and low surfaces in the general environment and small amounts on surfaces in the patient areas. In this ward, the lower surfaces, including wheels of patient equipment which was in use and in storage 'ready for use' were observed to be unclean, for example, intravenous fluid stands, dressing trolleys, patient cots, hoist and vital sign monitoring equipment.
- In St Joseph's ward, the Authority observed sticky residue from hospital tape on the surface of patient bed tables. These findings hindered effective cleaning.
- Paint on radiators in Nazareth and Our Lady's nephrology wards was observed to be missing with the base surface visible in a number of areas making cleaning ineffective.
- The 'dirty' utility areas of St Joseph's, Nazareth and Our Lady's nephrology wards were cluttered with visible debris on the floors including edges and corners. Light dust was observed on high surfaces in St Joseph's and Nazareth 'dirty' utilities. Some bedpans and urinals were not inverted while stored in St Joseph's ward. Washbowls, jugs and funnels were inappropriately stored on the window sill and on top of the bedpan washer in St Joseph's ward. The Authority observed inappropriate washing of equipment in the hand-wash sink and this was reported to the ward manager during the monitoring assessment.
- Moderate to heavy dust was observed on high and low surfaces in the 'dirty utility' in Our Lady's nephrology ward. Three commodes were soiled and were observed not to be emptied, decontaminated or ready for use.
- In the clean utility area in St Joseph's ward, the Authority observed that there was a mould-like substance present on the border between the sink and splashback.
- In St Joseph's ward, tiles and the shower base were unclean, with visible mould-like substance present. There was an unlabelled specimen jar on the window sill in the bathroom in St Joseph's ward which contained a yellow substance. Communal toiletries were also on the window sill, for example, body wash, emulsifying ointment and shampoo.
- The Authority observed a black mould-like substance on the surface around the edges of the glass and along the joints of the balcony doors in the patient areas of Our Lady's nephrology ward.

- While all seating equipment and examination couches were covered with a washable surface, the surface was torn on an examination couch located in 'Treatment Room One' in Our Lady's nephrology ward and two chairs in St Joseph's ward and was therefore a hygiene risk to patients using them.
- The storage room in St Joseph's ward was very full and cluttered with items such as hoists, orthopaedic equipment, bed cradles, crutches, and cot sides. Bandages and cotton wool were stored on the window sill.

Waste segregation

There was evidence of good practice, such as the following:

- Clinical waste information posters identifying waste segregation were observed in the 'dirty' utility and waste segregation areas were available in each area assessed.
- Foot operated clinical non-risk and clinical risk waste bins were intelligently placed and appropriately used. Clinical risk waste bins were appropriately placed to collect waste from occupied isolation rooms in line with best infection control and prevention practices. Appropriate disposal of personal protective equipment by staff was observed.
- The HSE waste management policy was demonstrated in each area assessed but the Authority observed that the policy in Nazareth ward was different to that in Our Lady's nephrology ward. The Authority met with staff in the areas assessed who demonstrated their knowledge regarding safe segregation of waste.

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

- The Authority observed an uncapped needle on the floor of 'Treatment Room One' in Our Lady's nephrology ward. This was judged to be a high risk to staff and was brought to the immediate attention of the Clinical Nurse Manager II. The needle was safely disposed of and the risk mitigated.
- The Authority observed that a sharps disposal bin in the clean utility/treatment Room in Nazareth ward did not have the temporary closure procedure actioned.
- The HSE national guidance for healthcare risk waste management recommends that dedicated rooms with coded access should be available for the short-term storage of waste in all areas. A dedicated locked waste segregation room was observed in Nazareth ward. However, the Authorised Persons from HIQA found that the healthcare waste was not

managed in line with this guidance in all areas assessed. For example, used linen and sharps bins, although inaccessible to the public, were stored on the floor in Our Lady's ward awaiting collection. This waste was obstructing access to the sink, which was used for hand washing.

Cleaning equipment

There was evidence of good practice, such as the following:

- Each ward had access to a locked cleaners' room. The Authority observed that cupboards containing potentially hazardous cleaning solutions were locked in all areas assessed and were inaccessible to the public.
- Cleaning equipment in the areas assessed was clean and a colour coded system was in place and demonstrated in each area assessed.
- Appropriate advisory signage was observed for use of products used for cleaning and disinfection. Safety data sheets were also accessible within the clinical areas.

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

- The Authority observed the base of two floor buffers in the cleaners' room used by Our Lady's ward to be unclean. Authorised Persons from HIQA were advised by staff on the ward that these machines were no longer used. While they reduced the floor space available in the room, they also posed a hygiene risk, as they were not clean.

Linen

There was evidence of good practice, such as the following:

- Clean linen was stored appropriately. Used linen was segregated in line with best practice, evidenced by colour-coded linen bags used in the clinical areas.
- Clean linen assessed by HIQA was found to be free of stains and tears. Clean linen was stored in dedicated linen rooms in the areas assessed.
- Curtain changing schedules and records were examined in all areas assessed. The records on Our Lady's nephrology ward demonstrated that curtains were changed twice yearly as standard, three-monthly for long-term patients and when necessary, for example, after discharge of a patient from isolation.

However, there was also evidence of practice that was not compliant with the Standards, such as:

- Inappropriate items were also stored in the linen rooms. For example, toys and rockers were located in the linen room on Nazareth ward. A pack of incontinence sheets was stored in the linen room used by Our Lady's ward and two wheelchairs were stored in the ED linen room.
- Curtain changing schedules were incomplete for St Joseph's ward. A 'periodic' curtain sheet was signed when curtains were changed and while staff reported that curtains were changed upon discharge of a patient, they did not have a schedule in place to guide routine curtain changing.

Water outlet flushing

There was evidence of good practice, such as the following:

- The Authority was informed that a water flushing schedule was undertaken by household staff and records of flushing were demonstrated. It was reported to the Authority that routine water flushing was not necessary in St Joseph's or on Our Lady's nephrology wards as there were no stagnant water outlets in these areas.
- A standard operating procedure (SOP) to inform the flushing process was available.

Conclusion

In conclusion, the Authority found that that all clinical areas observed in Our Lady's Children's Hospital, Crumlin were generally unclean, with the exception of the ED. The lack of cleanliness observed would suggest that the physical environment was not effectively managed and maintained to protect patients and service users and reduce the spread of HCAs. This poses a clear risk to patients.

3.2 Standard 6. Hand Hygiene

Standard 6. Hand Hygiene

Hand hygiene practices that prevent, control and reduce the risk of the spread of Healthcare Associated Infections are in place.

Criterion 6.1. There are evidence-based best practice policies, procedures and systems for hand hygiene practices to reduce the risk of the spread of HCAs.

Hand hygiene

There was evidence of good hand hygiene practice, such as the following:

- Clinical hand-wash sinks were available in the ED and complied with the Health Service Executive's (HSE's) Health Protection Surveillance Centre's *Guidelines for Hand Hygiene* (2005). Alcohol-based hand gel was widely available for use. Posters to demonstrate hand hygiene technique were displayed throughout.
- It was reported that hand hygiene training was provided by the infection control team. The Authority viewed documentation maintained in the ED regarding records of mandatory hand hygiene training. 93% of staff in ED had been trained in hand hygiene in 2012.

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

- A surgical scrub was in place at each sink, but signage for its appropriate use was not in place. The hand-wash sink in the clean utility in St Joseph's ward did not have hand hygiene signage to differentiate it from the clinical sink. The hand-wash sink in this room was non-compliant with HSE guidelines as the waterjet flowed directly into the plug hole. In the childrens' communal toilet, a wall-mounted surgical scrub was detached from the wall and placed on the sink.

- Hand-wash sinks were not available in the dirty utility rooms in all areas, in the bathroom on Our Lady's nephrology ward, nor in the cleaner's rooms on Nazareth ward.

Observation and hand hygiene opportunities

The Authority observed 33 hand hygiene opportunities throughout the monitoring assessment:

- 14 before touching a patient
- three before an aseptic procedure
- four after body fluid exposure
- 12 after touching a patient's surroundings.

20 of 33 hand hygiene opportunities were taken. Of those 20, 12 were observed to comply with best practice hand hygiene technique. Non-compliance related to not following best practice for hand washing, not using a hands-free method to turn off taps and/or the length of time taken to complete the hand hygiene procedure after touching a patient's surroundings.

Conclusion

The Authority found that endeavours were made to put the necessary procedures and systems in place for hand hygiene at Our Lady's Children's Hospital, Crumlin. However, the hand hygiene practices observed by the Authority would suggest that a culture of hand hygiene best practice is not operationally embedded at all levels. The low level of hand hygiene non-compliance observed by the Authority poses a clear and serious risk of patients contracting HCAs.

4. Overall conclusion

The risk of the spread of Healthcare Associated Infections (HCAs) is reduced when the physical environment and equipment can be readily cleaned and decontaminated. It is therefore important that the physical environment and equipment is planned, provided and maintained to maximise patient safety.

The Authority found that that all clinical areas observed in Our Lady's Children's Hospital, Crumlin were generally unclean, with the exception of the ED. Authorised Persons from HIQA note the infrastructural challenges of an older building. However, the lack of cleanliness observed would suggest that the physical environment was not effectively managed and maintained to protect patients and reduce the spread of HCAs. This poses a clear and serious risk to patients.

Hand hygiene is recognised internationally as the single most important preventative measure in the transmission of HCAs in healthcare services. It is

essential that a culture of hand hygiene practice is embedded in every service at all levels.

The Authority found that endeavours were made to put the necessary procedures and systems in place for hand hygiene at Our Lady's Children's Hospital, Crumlin. However, the hand hygiene practices observed by the Authority would suggest that a culture of hand hygiene best practice is not operationally embedded at all levels. This poses a serious risk to patients and must be addressed.

Our Lady's Children's Hospital, Crumlin 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 QIPs 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 NSPCHCAIs and is making quality and safety improvements that safeguard patients.

The unannounced monitoring assessment at Our Lady's Children's Hospital, Crumlin on 19 December 2012 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 an announced 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.higa.ie/standards/health/healthcare-associated-infections>.

Unannounced monitoring process

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

Standard 3: Environment and Facilities Management, Criterion: 3.6

Standard 6: Hand Hygiene, Criterion 6.1.

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

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

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

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