Health Information and Quality Authority

An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Report of the unannounced monitoring assessment at South Infirmary Victoria University Hospital, Cork

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

Date of unannounced on-site monitoring assessment: 23 April 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 assessments 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 compliance by South Infirmary Victoria University Hospital, Cork 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 uses 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 Naomi Combe carried out the unannounced assessment at the South Infirmary Victoria University Hospital on 23 April 2013 between 08:30hrs and 12:45hrs.

The Authorised Persons from HIQA commenced the monitoring assessment in the Outpatients Department (OPD).

The areas assessed were:

- Outpatients Department (OPD)
- Victoria level 1 – Orthopaedic trauma rehabilitation
- Ground floor south 2 – Female surgical.

The Authority would like to acknowledge the cooperation of staff at the South Infirmary Victoria University Hospital (SIVUH) with this unannounced monitoring assessment.

2. South Infirmary Victoria Hospital profile[‡]

The South Infirmary Victoria University Hospital (SIVUH) is committed to providing the highest quality service to all its patients in a friendly, safe and caring environment. It aims to provide individual patient-centred care to each patient and their families.

The South Infirmary Victoria University Hospital came into existence on 1 January 1988 as a result of the amalgamation of the South Charitable Infirmary and the Victoria Hospital and is a major teaching hospital of University College Cork. The SIVUH employs approximately 850 staff.

The South Infirmary Victoria University Hospital is undergoing transformation as part of the reconfiguration of acute hospital services in Cork and Kerry. In 2011, cardiology and medicine for the elderly transferred out and in 2012 the Emergency Department closed with acute medicine and acute surgery transferring to other organisations within the city. Since 2011 a large number of services have transferred in to the SIVUH from the HSE and the following include the services now provided:

- elective orthopaedics, orthopaedic trauma rehabilitation, orthopaedic paediatrics, plastic surgery, otorhinolaryngology (regional centre), maxillo-facial surgery, general surgery, gynaecology surgery, pain medicine (regional centre), rheumatology (regional diagnostics and ambulatory centre), dermatology (regional centre), endocrinology (ambulatory care and day care centre), oncology and endoscopy.

The SIVUH has approximately 185 operational beds, 131 of those inpatient beds. In 2012 there were just over 28,000 admissions, with close to 8,500 of those inpatient admissions.

Day care facilities include a standalone Day Surgical Unit with an operating theatre, a Minor Procedures Room and pre-admission assessment; a stand-alone Day Medical Unit with an operating theatre; a stand-alone Pain Medicine Unit with procedure rooms; and an Oncology/Infusion Day Unit.

[‡] 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 the South Infirmary Victoria University Hospital, Cork on 23 April 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 HCAIs.

Overall, the Authority found the three areas assessed to be generally clean, with some areas of improvements identified.

Outpatients Department – Adult and Paediatric

Environment and equipment
There was evidence of good practice which included the following:

- Outpatients Department (OPD) comprised paediatric and adult sections. Nurses' stations in both OPD areas were clean, and free of dust and clutter.
- Floors in the clinical area were clean and free of grit, dust and spillages.
- Disposable sheets and pillow cases were in place in all patient cubicles in the OPD. Staff outlined that at the start of each session the patient consulting couches are cleaned and allowed dry before placement of the disposable sheet. Sheets are then changed before each patient consultation.

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:

- Phlebotomy trolleys (containing equipment for taking blood samples) were kept in cubicle areas during outpatient clinics. However, it was reported to the Authority that these trolleys were removed from the cubicles/rooms during paediatric clinics for safety reasons and left on corridors unsupervised. This is potentially a safety risk, and hospital management was requested by HIQA Authorised Persons to review the practice.

- While all chairs in the OPD were covered with an impermeable material, one seat was detached from the chair (adult section). This posed a safety risk and was brought to the attention of the Ward Manager. While foot stools were also covered appropriately, two foot stools were observed to be stained. There were some tears to the vinyl covering of chairs in the paediatric waiting area.

- 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.

- There was a sticky residue behind the tiles by the hand-wash sink in the 'dirty'* utility, which would impede effective cleaning.

- In one patient-assisted toilet in the OPD, the support bars were rusty.

- There was light dust on two equipment trolleys in the treatment room in the OPD (adult section). Heavy dust was observed on the underside of consulting couches in patient cubicles in the paediatric section.

- The surfaces of consulting couches in the plaster room were stained and scratched and this would impede effective cleaning.

- Paintwork throughout the OPD required attention.

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

Waste segregation
There was evidence of good practice which included the following:

- The hospital waste management policy was implemented in 2011 and was accessible to all areas through the hospital intranet.
- Clinical waste information posters identifying waste segregation were displayed in the area assessed.
- The 'dirty' utility room was locked and inaccessible to unauthorised persons. Clinical 'sharps' bins were stored on shelves and were closed in accordance with best practice.

Linen
There was evidence of good practice which included the following:

- All consulting couches were covered with disposable sheets which were changed after each consultation.
- Screens between consulting couches were made of heavy impermeable washable material enabling effective cleaning. These were observed to be clean and intact.

Cleaning equipment
There was evidence of good practice which included the following:

- While there was no cleaners' room in the OPD, household staff responsible for cleaning the OPD have a central location from where cleaning solutions are decanted. Household staff clean the OPD before clinics start in the morning, during the day and again in the evenings when clinics are finished. They are also on call for the OPD should the need arise.
- Cleaning equipment was clean, with an established cleaning process evident.

Water outlet flushing
There was evidence of good practice which included the following:

- Weekly flushing records were observed in all areas assessed.

Victoria Level 1 – Orthopaedic Trauma Rehabilitation ward

Environment and equipment

There was evidence of good practice which included the following:

- The nurses' station was clean, free of dust and clutter.
- The main corridor was clean and free of dust, dirt, debris, spillages and clutter.
- Hand hygiene gel dispensers were available throughout and were clean. Hand hygiene posters were laminated and were 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:

- The paintwork throughout the ward required attention. In Room 8, the wall area behind the hand-wash sink was chipped and the skirting board was in quite poor condition. The area above the cupboard was grubby.
- There was light dust on the underneath surface of bed frames, bedside tables, curtain rails and electrical cable mounting.
- This was a rehabilitation ward for people post-orthopaedic surgery and many patients required either walking frames or gutter frames to assist with their mobilisation. With the exception of one shower, all other showers were not fit for purpose as they were domestic-type shower units with a step up into the shower and door access. The shower room, which was fit for purpose, was part of a semi-private room and patients from the rest of the ward used this shower. However, given the throughput of patients, there was no evidence to demonstrate that the shower was cleaned between patients. This poses a risk to patients of HCAIs. In addition, most toilets were not wheelchair accessible and patients who required assistive equipment to mobilise had difficulty accessing the toilets. It was reported to the Authority that if these patients required staff assistance, it was quite difficult to facilitate this.
- Doors to isolation rooms were not closed during the monitoring assessment. One patient with two HCAIs was transferred from an isolation room to the intensive care unit overnight and was due to return to the ward later during the day. The door to this isolation room was also wide open.

- While hand-wash sinks were hands-free, they did not comply with the Health Protection Surveillance Centre's *Guidelines for Hand Hygiene* (2005). Water flowed directly into the water outlet, which contained a metal grid. There was a mould-like substance around the metal grid of the hand-wash sink in Room 6. There was rust evident around the bases of taps in the 'dirty' utility room.

- Alongside many hand-wash sinks there were posters demonstrating the use of hand hygiene gel rather than posters demonstrating hand-washing technique.

- While bedpans and urinals were decontaminated appropriately, neither were inverted while being stored. This is not in keeping with best practice, which stipulates that such items be inverted while being stored.

Waste segregation
There was evidence of good practice which included the following:

- Hazardous waste was tagged before leaving the point of production ensuring traceability if necessary.

- Clinical waste information posters identifying waste segregation were displayed in the area 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:

- Hazardous waste was temporarily left in an unused patient shower room while awaiting collection. This room was not locked or lockable. This was not in keeping with best practice and posed a health and safety risk. This was brought to the attention of the Ward Manager during the monitoring assessment.

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 by porter staff. Curtains were changed following each patient discharge in the isolation rooms. Local records of curtain changing were demonstrated.

- Clean linen was stored appropriately in a dedicated linen cupboard. The linen room was found to be clean and free of dust, dirt, grit or inappropriate equipment. Linen examined was free of stains and was intact.

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:

- Used linen was segregated in line with best practice, evidenced by colour-coded linen bags and alginate bags used in the clinical areas. However, used linen was temporarily stored in an unused patient shower room while awaiting collection. This room was not lockable. This is not in keeping with best practice and poses a potential health and safety risk. This was brought to the attention of the Ward Manager during the monitoring assessment.

Cleaning equipment
There was evidence of good practice which included the following:

- Authorised Persons from HIQA observed that the cleaning room containing potentially hazardous cleaning solutions was locked and the room was inaccessible to unauthorised persons in line with best practice.
- Cleaning staff spoken with by the Authority were knowledgeable regarding infection prevention and control protocols.
- Cleaning equipment was clean, with an established cleaning process evident. A colour-coded system was in place and demonstrated in the area assessed.
- A colour-coded cloth system was in place and demonstrated in the area assessed.

Water outlet flushing
There was evidence of good practice which included the following:

- Weekly flushing records were observed. Water flushing was discussed with household staff on Victoria Level 1 who demonstrated knowledge regarding Legionnaires' disease and the rationale for the flushing regimen. The Infection Prevention and Control Nurse (IPCN) outlined that the flushing policy and regime was under review to ensure compliance with up-to-date research evidence.

Ground Floor South 2 – Female Surgical

Environment and equipment

There was evidence of good practice which included the following:

- The nurses' station and equipment was clean, and free of dust and clutter.
- Chairs in clinical areas were covered with an impermeable material and were clean and intact.
- Bathrooms assessed were clean and tidy.

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:

- A moderate amount of dust was observed on bed frames, intravenous stands, and the resuscitation trolley.
- The surfaces of bedside tables were chipped. Doors in the ward were chipped and damaged.
- Hand-wash sinks in the clinical area did not comply with the Health Protection Surveillance Centre's *Guidelines for Hand Hygiene* (2005). Water flowed directly into the water outlet, which contained a metal grid.
- A non-clinical waste bin was not available beside the hand-wash sink to enable disposal of paper towels.
- Some waste bins were rusted, making effective cleaning difficult.
- Dust and grime was noted on the wheels and frame of a portable sharps bin.
- Heavy dust and grime was visible behind the drugs fridge and light dust was observed on top of the fridge.
- There was a sticky residue on dressing trolleys.
- Not all signage was laminated, which would impede effective cleaning.

- Equipment was stored at the end of one ward, making it cluttered and difficult to clean.

Authorised Persons observed the following in the 'dirty' utility room:

- The dirty utility room was cluttered.
- There was a sticky residue on the walls, tile surfaces, waste bins, and bed-pan washer.
- There was black staining evident on tiles.
- Sharps bins were stored on the floor.
- There were new toothbrushes inappropriately stored on a shelf in the 'dirty' utility room, whose packaging had been opened.
- Vinyl covering on commodes was torn.
- There was grime evident on the wheels of commodes and some were rusty.

Waste segregation
There was evidence of good practice which included the following:

- Clinical waste information posters identifying waste segregation were displayed in the area assessed.

- Hazardous waste was tagged before leaving the point of production ensuring traceability if necessary and was stored securely.

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 by porter staff. Curtains were also changed following each patient discharge in the isolation rooms. This was supported by appropriate documentation.

- Clean linen was stored appropriately in a dedicated linen cupboard. Used linen was segregated in line with best practice, evidenced by colour-coded linen bags and alginate bags used in the clinical areas.

- Clean linen assessed by the Authority was found to be intact and free of stains.

Cleaning equipment
There was evidence of good practice which included the following:

- Cleaning staff spoken with by the Authority were knowledgeable regarding infection prevention and control protocols.
- Cleaning equipment was clean and a colour-coded system was in place and demonstrated in the area 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:

- The code lock to the cleaning room was broken during the monitoring assessment of the area, enabling unauthorised access. This poses a safety risk as chemicals are stored there. This was brought to the attention of the Hospital Manager during the monitoring assessment.

Water outlet flushing
There was evidence of good practice which included the following:

- Weekly flushing records were observed in all areas assessed.

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 HCAIs.

Hand hygiene

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.

Observation of hand hygiene opportunities.
The Authority observed 33 hand hygiene opportunities throughout the monitoring assessment, comprising:

- 17 before touching a patient
- 12 after touching a patient
- four after touching the patient's surroundings.

Twenty three of 33 hand hygiene opportunities were taken. Of those, 21 were observed to comply with best practice hand hygiene technique. Non-compliance related to not following best practice hand-washing technique, and the length of time taken to complete the hand hygiene procedure.

Conclusion

Whilst 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 three clinical areas assessed were generally clean. However, there were many opportunities for improvement. Authorised persons also note the infrastructural challenges of an older building. Notwithstanding this, the following findings would suggest that parts of the physical environment were not effectively managed to protect patients and service users and reduce the spread of HCAIs:

- clutter, dust and the issues in the 'dirty' utility room on the Female surgical ward
- lack of appropriate storage for equipment on the Female surgical ward
- the lack of appropriate storage space for clinical and non-clinical waste and linen on the orthopaedic rehabilitation ward
- the lack of adequate shower and assisted toilet facilities on the orthopaedic rehabilitation ward.

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 were inconsistent with the National Standards and this poses a clear risk to patients of contracting a HCAI.

The South Infirmary Victoria 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 and/or its webpage on the HSE 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.

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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