



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced inspection at St Vincent's University Hospital, Dublin

Monitoring programme for unannounced inspections undertaken
against the National Standards for the Prevention and Control of
Healthcare Associated Infections

Date of on-site inspection: **16 June 2014**

About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is the independent Authority established to drive high quality and safe care for people using our health and social care services. HIQA's role is to promote sustainable improvements, safeguard people using health and social care services, support informed decisions on how services are delivered, 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.
- **Supporting Improvement** – Supporting services to implement standards by providing education in quality improvement tools and methodologies.
- **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

Preventing and controlling infection in healthcare facilities is a core component of high quality, safe and effective care for patients. In order to provide quality assurance and drive quality improvement in public hospitals in this critically important element of care, the Health Information and Quality Authority (the Authority or HIQA) monitors the implementation of the *National Standards for the Prevention and Control of Healthcare Associated Infections*.¹

These Standards will be referred to in this report as the Infection Prevention and Control Standards. Monitoring against these Standards began in the last quarter of 2012. This initially focused on announced and unannounced inspections of acute hospitals' compliance with the Infection Prevention and Control Standards.

The Authority's monitoring programme will continue in 2014, focusing on unannounced inspections. This approach, outlined in guidance available on the Authority's website, www.hiqa.ie – *Guide: Monitoring Programme for unannounced inspections undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections*² – will include scope for re-inspection within six weeks where necessary. The aim of re-inspection is to drive rapid improvement between inspections.

The purpose of unannounced inspections is to assess hygiene as experienced by patients at any given time. The unannounced inspection focuses specifically on observation of the day-to-day delivery of hygiene services and in particular environment and equipment cleanliness and adherence with hand hygiene practice. Monitoring against the Infection Prevention and Control Standards¹ is assessed, with a particular focus, but not limited to, environmental and hand hygiene under the following standards:

- Standard 3: Environment and Facilities Management
- Standard 6: Hand Hygiene.

Other Infection Prevention and Control Standards may be observed and reported on if concerns arise during the course of an inspection. It is important to note that the Standards may not be assessed in their entirety during an unannounced inspection and therefore findings reported are related to a criterion within a particular Standard which was observed during an inspection. The Authority uses hygiene observation tools to gather information about the cleanliness of the environment and equipment as well as monitoring hand hygiene practice in one to three clinical areas depending on the size of the hospital. 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's journey through the

hospital. The inspection approach taken is outlined in guidance available on the Authority's website.²

This report sets out the findings of the unannounced inspection by the Authority of St Vincent's University Hospital's compliance with the Infection Prevention and Control Standards. It was undertaken by Authorised Persons from the Authority, Alice Doherty and Judy Gannon, on 16 June 2014 between 09:30hrs and 14:40hrs.

The areas assessed were:

- St Luke's Ward 1 and the Acute Surgical Unit.
- St Monica's Ward located in the Nutley Wing.

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

2. St Vincent's University Hospital Profile[‡]

St Vincent's University Hospital is a voluntary hospital founded by Mother Mary Aikenhead, foundress of the Religious Sisters of Charity and established at St Stephen's Green in 1834. The hospital was transferred to its present site in Elm Park in 1970 and subsequently changed its title to St Vincent's University Hospital in 1999.

St Vincent's Healthcare Group, (incorporating St Vincent's University Hospital, St Vincent's Private Hospital and St Michael's Hospital) provides acute general care serving the South East region of Dublin and surrounding areas. St Vincent's University Hospital is the flagship of the group with St Michael's Hospital providing local community services and support and specialist services. St Vincent's Private Hospital is linked with the Group providing private healthcare to patients and facilities for consultants within St Vincent's University Hospital for private practice.

St Vincent's University Hospital is a major academic teaching hospital, with strong educational links to the Faculty of Medicine at University College Dublin at undergraduate and post-graduate level. St. Vincent's Healthcare Group is part of the Dublin Academic Medical Centre, Ireland's first patient-focused academic healthcare centre, incorporating Mater Misericordiae University Hospital and University College Dublin School of Medicine and Medical Science.

St Vincent's University Hospital provides a front line emergency service and national/regional medical care at inpatient, daycare and outpatient level. St Vincent's University Hospital provides a tertiary referral service for patients both regionally and nationally including a number of national centres of specialisation including Liver Transplantation, Cystic Fibrosis and Pancreatic Cancer Surgery. St Vincent's University Hospital is a centre of excellence for cancer and is one of the national eight specialist cancer centres under the Health Service Executive (HSE) National Cancer Control Programme. The hospital has 554 inpatient beds, incorporating seven-day and day care options, including intensive care, high dependency and coronary care beds as well as medical, surgical, orthopaedic, care of the elderly and psychiatry beds.

St Vincent's University Hospital is committed to providing patient focused care with the values of human dignity, compassion, justice, quality and advocacy, underlying its philosophy. The hospital's focus is to promote patient care, patient safety, clinical risk management and continuous quality improvement in a multidisciplinary culture and to ensure compliance with national and international best practice standards.

[‡] 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.

St. Vincent's University Hospital has adopted the Joint Commission International (JCI) Accreditation Standards for Hospitals and was awarded JCI Accreditation status in February 2010. It was re-accredited in March 2013 and achieved status Academic Medical Centre Hospital against new JCI standards.

3. Findings

On inspection at St Vincent's University Hospital on 16 June 2014, there was evidence of both compliance and non-compliance with the criteria selected in the Infection Prevention and Control Standards. In the findings outlined below, observed non-compliances are grouped and described alongside the relevant corresponding Standard/criterion.

3.1 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.

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 Healthcare Associated Infections. This includes but is not limited to:

- all equipment, medical and non-medical, including cleaning devices, are effectively managed, decontaminated and maintained
- the linen supply and soft furnishings used are in line with evidence-based best practice and are managed, decontaminated, maintained and stored.

St Luke's Ward 1 and the Acute Surgical Unit

In January 2014, St Luke's Ward was re-organised into St Luke's Ward 1 and St Luke's Ward 2, and the Acute Surgical Unit, which is located between the two wards was opened. Following the re-organisation, St Luke's Ward 1 and the Acute Surgical Unit are managed by the same Clinical Nurse Manager. St Luke's Ward 1 has 19 beds, which includes three cubicles and a three-bedded room that are used for the isolation of patients colonised or infected with transmissible infective diseases or multidrug resistant organisms when required. One patient was isolated at the time of the inspection. There are 14 beds in the Acute Surgical Unit.

Overall, the environment on St Luke's Ward 1 and the Acute Surgical Unit was clean and patient equipment was clean, with some exceptions. Required improvements in the maintenance of the environment were identified.

Environment and equipment

- Dust was observed in some areas inspected. For example,
 - Heavy layers of dust were observed on the bases of beds.
 - A light layer of dust was observed on the floor in one of the patient areas and there was a hole in the floor covering under the hand wash sink, hindering effective cleaning.
 - Dust was observed on the bottom ledge on the resuscitation trolley and under the oxygen cylinder at the back of the trolley.
 - Dust was observed on the wheel areas of linen trolleys and on the floor in the linen store room. The floor covering in the linen store room was also cracked, hindering effective cleaning. A water bottle and some clear plastic material were observed on the floor under shelving in the linen store room.
 - Dust and sticky substances were observed on the floors in a store room and in the waste sub-collection area. The floor covering in the waste sub-collection area was stained and torn, hindering effective cleaning.
- Staining was observed on a mattress, and pinprick holes and staining were observed on the mattress cover. This posed a potential risk to patients and staff of transmissible infective microorganisms as the integrity of the cover was compromised and thus no longer impermeable to body fluids.
- Chipped paint was observed on bed rails and on the legs of patient hoists, hindering effective cleaning. In addition, label residue was observed on the legs of two patient hoists, also hindering effective cleaning.
- The edges of patient bedside tables were chipped, hindering effective cleaning.
- A brown stain was observed on the surface of an electrocardiograph machine.
- Rust-coloured staining was observed on the wheel areas of a dressing trolley and the wheel areas of a second dressing trolley were unclean. Label residue was observed on the under surface of the top shelf on a third dressing trolley, hindering effective cleaning.
- Sticking plasters and yellow paper were fixed to the bottom surface of a temperature probe holder, hindering effective cleaning.
- The wheel areas of an intravenous stand were unclean.
- An adaptor which was plugged in at a patient bedside was unclean.
- The fabric on a hydro tilt chair was stained on the armrests and seat, and it was torn on the armrests, hindering effective cleaning.
- Two trolleys, one of which was labelled 'trolley for bloods', were observed on the ward. The trolleys were unlocked potentially allowing unauthorised access to items such as hypodermic safety needles.
- Residue was visible on the taps on the hand wash sinks in the Acute Surgical Unit.

- Chipped paint was observed on wall tiles in a patient toilet and the floor covering under the hand wash sink was torn, hindering effective cleaning. The sealant behind the hand wash sink was stained.
- The following non-compliances were observed in a patient shower room:
 - A small amount of black staining was observed in the joints of walls panels adjacent to the shower and a small amount of residue was observed on some joints between wall panels and the floor covering.
 - Staining was observed in the corner of the window sill adjacent to the shower. There was a towel on the second window sill, which is not in line with best practice.
 - The white paint/material around the shower outlet was not intact.
 - Rust-coloured staining was observed on a wall attachment where a white plastic cover was missing.
- A dedicated clean utility room is not available on the ward. The Authority was informed that discussions have taken place between the Ward Manager and a Consultant Microbiologist about re-organisation of the ward and it is planned that a dedicated clean utility room will be installed as part of this re-organisation. At the moment, a small area of an office used by the Ward Manager and Medical staff is assigned to clean utility room activities. A medication fridge stored in the office was unlocked at the time of the inspection. The Authority was informed that the Ward Manager has made enquires about locking the fridge.
- The Authority was informed that 'dirty'[±] utility rooms in the central block of the hospital where St Luke's Ward 1 and the Acute Surgical Unit are located are due to be upgraded. The upgrade works are expected to start in the next two months. The following non-compliances were observed in one of the 'dirty' utility rooms assessed at the time of the inspection:
 - There was no door at the entrance to the room, potentially allowing unauthorised access to a small amount of hazardous cleaning products stored in an unlocked cupboard.
 - Rust-coloured staining was observed on the wheel areas of a commode.
 - The interior and exterior surfaces of cupboards and a worktop were chipped, and the surfaces of shelves in the cupboards were peeling, hindering effective cleaning.
 - Chipped paint and sticky tape residue were observed on wall tiles, hindering effective cleaning.
 - The floor was dusty and staining was observed under the sink. Some floor tiles were chipped, hindering effective cleaning.
 - A clinical waste poster was torn and faded and was attached to the wall with sticky tape, hindering effective cleaning.

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

- Paintwork on walls, skirting boards, doors and door frames was chipped, hindering effective cleaning.
- Cardboard boxes were stored on the floors in two store rooms and brown staining and sticky residue were observed on shelving in one of the store rooms, hindering effective cleaning.
- Staff lockers are located in the day room where patients sit while 'deep cleaning' is taking place. At the start of the inspection, shoes and other items were stored on the floor beside the lockers but these items were subsequently removed during the inspection. The Authority was informed that an alternative storage for the lockers is being considered.

Linen

- Inappropriate items including a plastic bottle, plastic storage containers and pads were stored on shelving in the linen store room. This is not in line with best practice as such items attract and retain dust and therefore increase the risk of linen contamination.

St Monica's Ward

St Monica's Ward is a 20-bedded in-patient general medical ward consisting of 20 single-bedded rooms. All 20 rooms have en-suite facilities. It is located in the Nutley Wing of the hospital which is a new ward block that opened in July 2012. On the day of the inspection, all 20 beds were in use. Additional facilities in the ward include three large storage rooms, a physiotherapy treatment room and a family room.

Overall, the environment and patient equipment on St Monica's Ward were observed to be clean and well maintained with some exceptions.

Environment and equipment

- A blood pressure cuff attached to a blood pressure monitor on the ward corridor was observed to be badly damaged and unclean.
- The internal surfaces of two tympanic (ear) temperature probe holders were unclean. The casing of another temperature probe was damaged.
- The inner surface of an oxygen saturation probe was unclean.
- There was brown residue on the wheel areas of a patient wheelchair stored in storeroom 2.
- The wheel areas of a dressing trolley stored in storeroom 1 were unclean with rust-coloured staining and white residue.
- The following non-compliances were observed in the clean utility room:
 - One of the prescription-only medication cupboards was unlocked at the time of the inspection potentially allowing unauthorised access to these medications. Although the risk posed by this medication non-conformance

was judged to be low given that the room itself was locked, medication should be stored in locked cupboards or in medication trolleys in the clean utility room. There was also a large amount of sticky tape residue on the inner surface of the medication cupboard door, hindering effective cleaning.

- A large number of cardboard boxes containing patient supplies including infusion solutions, syringes and antiseptic cleaning products were inappropriately stored directly on the floor, hindering effective cleaning. A light layer of dust was observed on the edges of the floor and the vinyl floor covering was also coming away from the wall behind the non clinical waste bin, hindering effective cleaning.
- There were scuff marks, chipped paint and two small holes on the walls around a notice board, hindering effective cleaning.
- A white residue and a small amount of sticky residue were observed on a computer keyboard.
- There are two 'dirty' utility rooms on St Monica's Ward. The following non-compliances were observed:
 - Both rooms were not secured and a risk assessment had not been completed at ward level to assess the risk posed by this matter. A wall mounted cupboard labelled 'hazardous chemicals', which contained chemical cleaning products was located in each of the rooms. However, both of these cupboards were unlocked at the time of the inspection, potentially allowing unauthorised access to these chemicals. This risk was brought to the attention of ward management at the time of the inspection.
 - A number of patient washbowls were observed to be stored inverted on top of the bedpan washer in one of the 'dirty' utility rooms. This was brought to the attention of the ward manager who confirmed this was not usual practice.
- A number of clear plastic sign holders affixed to the wall in various clinical areas were observed to be damaged leaving sharp surfaces exposed and hindering effective cleaning. Additionally, whilst most of the signage observed was laminated, some paper signage was present, hindering effective cleaning.
- A large amount of patient equipment was stored in the physiotherapy room, hindering effective cleaning and obstructing access to the hand wash sink. The covering on a patient treatment chair in the room was damaged and there was a large amount of sticky residue on the armrest of the chair, hindering effective cleaning.

Linen

- There was a light layer of dust on the edges of the floor in the linen store room.
- Inappropriate items (plastic support cushions) were stored on shelving in the linen store room. This is not in line with best practice as such items attract and retain dust and therefore increase the risk of linen contamination.

Cleaning equipment

- The cleaning equipment room was unlocked at the time of the inspection. However, no cleaning chemicals were stored in the room. The wooden back splash underneath the hand wash sink was damaged and had come away from the wall in the room. This resulted in parts of the wall being exposed and debris including wood shavings, tissue paper and a plastic lid was visible in the space between the wall and the splash back. Cardboard boxes and paper towels in plastic wrapping were stored directly on the floor in the room, hindering effective cleaning.

3.2 Waste

Criterion 3.7. The inventory, handling, storage, use and disposal of hazardous material/equipment is in accordance with evidence-based codes of best practice and current legislation.

St Luke's Ward 1 and the Acute Surgical Unit

- A free standing sharps bin was stored on a shelf outside cubicle 21 and the safety locking mechanism was not engaged, which was not in line with best practice. The safety locking mechanisms on sharps bins on the resuscitation trolley, at the nurses' station in the Acute Surgical Unit and in the office used for clean utility room activities were also not engaged.
- Tape was attached to the edges of the lid on a non-clinical waste disposal bin in a patient shower room, hindering effective cleaning.
- Chipped paint was observed on the foot lever of a clinical waste disposal bin and on the base of a non-clinical waste disposal bin, hindering effective cleaning. The lid on a non-clinical waste disposal bin was not attached on one side. It was observed during the inspection that a clinical waste disposal bin was used to hold open a door.

Summary

St Luke's Ward 1 and the Acute Surgical Unit

'Deep cleaning' was being carried out in one of the patient areas on St Luke's Ward 1 at the time of the inspection. The Authority was informed that all patient areas and associated equipment are 'deep cleaned' once per week throughout the hospital in addition to routine cleaning. This involves the movement of all furniture and equipment out of the patient area to facilitate the cleaning. Records of the 'deep cleaning' are kept by the cleaning company. If an area is not 'deep cleaned' for a particular reason, it is highlighted at cleaning meetings and this is monitored by

Facilities and Support Services. 'Deep cleaning' is also discussed at meetings of Assistant Directors of Nursing and Clinical Nurse Managers and the Infection Control Team is kept informed of the status of 'deep cleaning'. Clinical areas are inspected by the Infection Control Team and additional 'deep cleaning' may be carried out if required. The hospital also has three hydrogen peroxide misting decontamination machines which are used for environmental 'deep cleaning' where required.

The results of a glucometer cleanliness audit carried out on 22 January 2014 were viewed by the Authority on St Luke's Ward 1 and showed 95% compliance. Ten areas were assessed as part of the audit. Non-compliance related to a decontamination record not being signed.

The results of a hygiene audit carried out St Luke's Ward 1 including the Acute Surgical Unit showed a compliance of 97.5%. The Authority was informed that action plans are generated from audits and responsible persons are assigned to action items.

St Monica's Ward

A document detailing a daily checklist for the cleaning of patient equipment was observed on St Monica's ward. The Ward Manager reported that this was designed to be completed by healthcare assistants but there were no records available on the ward to demonstrate that this was being completed on a daily basis in 2014.

However, examples of good practice regarding the cleaning of patient equipment were observed on St Monica's Ward. For example, a detailed daily checklist for the cleaning, maintenance and checking of supplies on the resuscitation trolley was available and records showed that this was being completed on a daily basis.

Similarly, there was a daily cleaning checklist for glucometers with instructions on cleaning and records showed that this was also being completed on a daily basis.

A self-assessment audit of the clinical areas on St Monica's Ward was completed by the Ward Manager and another Clinical Nurse Manager in April 2014 and a score of 89.8% was achieved. Dust on patient equipment and overfilling of waste disposal bins were observed during the audit. These issues were followed up through staff education and targeted cleaning. The Authority was informed that self-assessment audits are conducted every four months and the results are sent to the Hospital's Facilities Manager.

Overall summary

The hygiene audit tools used in the hospital were changed between 2013 and 2014 and training was provided to staff on the updated tools. A red (less than 90%), amber (90-95%) or green (greater than 95%) scoring system is used for audits. The Facilities and Support Services Group will follow-up in any areas where the audit

score is less than 90% and validation of results is carried out where audit scores of 100% are achieved. Self-assessment audits which assess the level of cleaning carried out on the ward are carried out by Ward Managers. Cleaning audits are also carried out by the cleaning company and the audit tool is being tested at the moment. A validation tool is being designed and tasks are being weighted from an infection control point of view. The Authority was informed that cross-ward inspections are being considered by the Quality Improvement Group.

In addition to hygiene audits, the Authority was informed that environmental audits of clinical and non-clinical areas will be carried out by the Senior Management Team and Heads of Departments in 2014. There are 12 audit teams with two persons in each team and it is planned that each area will be audited once per year.

The Authority was informed that a point prevalence mattress audit was carried out in 2013 and 150 new mattresses were obtained. Up to this point, mattress audits were being carried out on a quarterly basis, however the frequency of the audits decreased due to the large number of mattresses that were replaced. It was reported that another mattress audit may be carried out at the end of the year.

3.3 Hand Hygiene

Assessment of performance in the promotion of hand hygiene best practice occurred using the Infection, Prevention and Control Standards¹ and the World Health Organization (WHO) multimodal improvement strategy.³ Findings are therefore presented under each multimodal strategy component, with the relevant Standard and criterion also listed.

WHO Multimodal Hand Hygiene Improvement Strategy

3.3.1 System change³: *ensuring that the necessary infrastructure is in place to allow healthcare workers to practice 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 Healthcare Associated Infections. These include but are not limited to the following:

- the implementation of the *Guidelines for Hand Hygiene in Irish Health Care Settings, Health Protection Surveillance Centre, 2005*
 - the number and location of hand-washing sinks
 - hand hygiene frequency and technique
 - the use of effective hand hygiene products for the level of decontamination needed
 - readily accessible hand-washing products in all areas with clear information circulated around the service
 - service users, their relatives, carers, and visitors are informed of the importance of practising hand hygiene.
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- The design of clinical hand wash sinks in St Luke's Ward 1 and the Acute Surgical Unit did not conform to Health Building Note 00-10 Part C: Sanitary assemblies.⁴

3.3.2 Training/education³: *providing regular training on the importance of hand hygiene, based on the 'My 5 Moments for Hand Hygiene' approach, and the correct procedures for handrubbing and handwashing, to all healthcare workers.*

Standard 4. Human Resource Management

Human resources are effectively and efficiently managed in order to prevent and control the spread of Healthcare Associated Infections.

Criterion 4.5. All staff receive mandatory theoretical and practical training in the prevention and control of Healthcare Associated Infections. This training is delivered during orientation/induction, with regular updates, is job/role specific and attendance is audited. There is a system in place to flag non-attendees.

Hospital hand hygiene training

- Records viewed by the Authority showed that 81% of all staff were up-to-date with hand hygiene training on the day of the inspection. However, the Authority was informed that this may be an underestimation of overall compliance as it includes staff that may be on leave and records may not have been updated to include recent training sessions.
- The Authority was informed that staff are required to carry out annual hand hygiene training. Scheduled training sessions are carried out 6-8 times each month and unscheduled sessions are held where particular issues or poor compliance have been identified. As a means of increasing the learning from training, sessions have been carried out at a patient bedside and at a dialysis station to demonstrate the 'My 5 Moments for Hand Hygiene' in the work environment.
- Records of attendance at hand hygiene training sessions are forwarded to the Learning and Development Department and subsequently forwarded onto Ward Managers. A list of dates and venues for planned hand hygiene training sessions was viewed by the Authority. Ward Managers organise for staff to attend these training sessions as required. In addition, the Assistant Director of Nursing in each area is informed about training requirements and is responsible for following-up with Ward Managers to ensure training is being carried out. The hospital uses a red (training is out-of-date), amber (training is close to being out-of-date) or green (training is up-to-date) system of displaying dates in training records to easily identify the current status of training.

Local area hand hygiene training

- Records viewed by the Authority for St Luke's Ward 1 showed that 65% of staff was up-to-date with hand hygiene training on the day of the inspection. However, as stated above, it was suggested that this may have been an underestimation of overall compliance and that records may not have been updated to include all training carried out.
- Training records detailing the date of attendance at hand hygiene sessions were available on St Monica's Ward and showed that all nurses and healthcare assistants (19) on the ward had attended hand hygiene training in the last two years. The records were presented in a manner which allowed the Ward Manager to readily identify any staff members who were due for training.

3.3.3 Evaluation and feedback³: *monitoring hand hygiene practices and infrastructure, along with related perceptions and knowledge among health-care workers, while providing performance and results feedback to staff.*

Criterion 6.3. Hand hygiene practices and policies are regularly monitored and audited. The results of any audit are fed back to the relevant front-line staff and are used to improve the service provided.

The following sections outline audit results for hand hygiene.

National hand hygiene audit results

St Vincent's University Hospital participates in the national hand hygiene audits which are published twice a year.⁵ The results below are taken from publically available data from the Health Protection Surveillance Centre's website. The overall compliance for 2013 is in line with the HSE's national target of 90%.⁶

Period 1-6	Result
Period 1 June 2011	85.7%
Period 2 October 2011	89.5%
Period 3 June/July 2012	82.9%
Period 4 October 2012	87.1%
Period 5 May/June 2013	91.0%
Period 6 October 2013	90.0%

Source: Health Protection Surveillance Centre – national hand hygiene audit results.

The results of national hand hygiene audits completed for the first half of 2014 were viewed by the Authority and showed an overall compliance of 91%. Of the seven clinical areas which were included in this period, six areas achieved a compliance of 90% or greater.

Corporate hand hygiene audit results

- Hand hygiene audits are carried out by lead auditors in the Infection Control Team, four times per year in all 31 clinical areas of the hospital. Results viewed by the Authority for the first quarter of 2014 showed compliances in the range of 63-100% for the different areas. The average compliance across all areas was 85% which was an increase from 84% in 2013. Of the 31 clinical areas, 15 areas achieved less than 85%. The results for each clinical area were presented in an audit report and shown in red (less than 85%) or green (greater than 85%) making it easy to see at a glance the compliance of the different areas.

Local area hand hygiene audit results

- The most recent hand hygiene audit on St Luke's Ward 1 including the Acute Surgical Unit Local Audit was carried out on 2 May 2014. A hand hygiene observational audit report was viewed by the Authority and the results showed 90% compliance (27 out of 30 hand hygiene opportunities were taken). The report shows the results for each staff group and the number of opportunities that were available and taken during the audit. The Authority was informed that audit feedback is given to the Ward Manager at the time of the audit and the results are discussed with staff at shift changeovers.
- St Monica's ward received a hand hygiene compliance score of 93% in May 2014. The results were communicated to the ward by email and internal post and to staff through inclusion in the communications book and at ward meetings.

Observation of hand hygiene opportunities

Authorised Persons observed hand hygiene opportunities using a small sample of staff in the inspected areas. This is intended to replicate the experience at the individual patient level over a short period of time. It is important to note that the results of the small sample observed is not statistically significant and therefore results on hand hygiene compliance do not represent all groups of staff across the hospital as a whole. In addition results derived should not be used for the purpose of external benchmarking.

The underlying principles of observation during inspections are based on guidelines promoted by the WHO⁷ and the HSE.⁸ In addition, Authorised Persons may observe other important components of hand hygiene practices which are not reported in national hand hygiene audits but may be recorded as optional data. These include

the duration, technique^Y and recognised barriers to good hand hygiene practice. These components of hand hygiene are only documented when they are clearly observed (uninterrupted and unobstructed) during an inspection. Such an approach aims to highlight areas where practice could be further enhanced beyond the dataset reported nationally.

- The Authority observed 19 hand hygiene opportunities in total during the inspection. Hand hygiene opportunities observed comprised of the following:
 - three before touching a patient
 - two after body fluid exposure risk
 - four after touching a patient
 - 10 after touching patient surroundings.
- Eighteen of the 19 hand hygiene opportunities were taken. The one opportunity which was not taken was after touching a patient surroundings.
- Of the 18 opportunities which were taken, the hand hygiene technique was observed (uninterrupted and unobstructed) by the Authorised Persons for 10 opportunities. Of these, the correct technique was observed in nine hand hygiene actions.
- In addition the Authorised Persons observed:
 - Eleven hand hygiene actions that lasted greater than or equal to (\geq) 15 seconds as recommended.
 - Four hand hygiene actions where there were barriers to the correct technique, such as sleeves to the wrist and wearing a wrist watch.

3.3.4 Reminders in the workplace³: *prompting and reminding healthcare workers about the importance of hand hygiene and about the appropriate indications and procedures for performing it.*

- At some of the hand wash sinks on St Luke's Ward 1 including the Acute Surgical Unit, there were no posters demonstrating the correct handwash technique or the WHO 'My 5 Moments for Hand Hygiene'.
- Posters detailing the WHO 'My 5 Moments for Hand Hygiene' were observed at hand wash sinks on St Monica's Ward. However, there were no additional posters reminding healthcare workers about the importance of hand hygiene or demonstrating correct hand hygiene technique around hand hygiene facilities or in other parts of the ward.

^Y The inspectors observe if all areas of hands are washed or alcohol hand rub applied to cover all areas of hands.

3.3.5 Institutional safety climate³: creating an environment and the perceptions that facilitate awareness-raising about patient safety issues while guaranteeing consideration of hand hygiene improvement as a high priority at all levels.

- The Authority notes a high priority is given to hand hygiene at all levels within St Vincent's University Hospital. For example, a summary report is prepared after each hand hygiene audit which includes the results for all clinical areas. This report is circulated to all Heads of Departments which includes Clinical Nurse Managers, Assistant Directors of Nursing, Allied Health Professionals and Consultants. The report is discussed at meetings of different groups in the hospital, such as the Infection Prevention Control Committee, the Hygiene Quality Improvement Group, Clinical Audit and Patient Safety. The Authority was informed that these meetings are chaired and/or attended by senior management. The hospital also demonstrated that there are systems in place to facilitate hand hygiene training for all staff.
- St Vincent's University Hospital achieved 90% compliance in 2013 in the national hand hygiene audits which is in line with the HSE's national target. Results viewed by the Authority for Period 7 in the first half of 2014 showed 91% compliance. The hospital decided in 2013 to reduce the frequency of hand hygiene audits and use their resources to carrying out other audits in the hospital. However, following a review, it was decided that the frequency of hand hygiene audits should be increased again in 2014 which demonstrates the importance the hospital assigns to improving hand hygiene practices. The hospital needs to continue to build on the awareness and best practices relating to hand hygiene to ensure that its performance is sustained and improved.

4. Summary

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

Overall, the environment on St Luke's Ward 1 and the Acute Surgical Unit was clean, and patient equipment was clean, with some exceptions. Required improvements in the maintenance of the environment on the ward were identified. It is noted that discussions have taken place regarding re-organisation of the ward and the installation of a dedicated clean utility room is included in this re-organisation. On St Monica's Ward, the environment and patient equipment were observed to be clean and well maintained with some exceptions.

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

On the day of the inspection, 81% of all staff was up-to-date with hand hygiene training which may actually be an underestimation of overall compliance. The hospital demonstrated that there are systems in place to facilitate hand hygiene training for all staff. In the national hand hygiene audits for the first half of 2014, the hospital achieved 91% which is just above the HSE's national target. Hand hygiene audits are carried out in all clinical areas in the hospital four times a year.

St Vincent's University Hospital must now revise and amend its quality improvement plan (QIP) that prioritises the improvements necessary to fully comply with the Infection, Prevention and Control Standards. 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 and at that time, provide the Authority with details of the web link to the QIP.

It is the responsibility of St Vincent's University Hospital to formulate, resource and execute its QIP to completion. The Authority will continue to monitor the hospital's progress in implementing its QIP, as well as relevant outcome measurements and key performance indicators. Such an approach intends to assure the public that the Hospital is implementing and meeting the Infection Prevention and Control Standards and is making quality and safety improvements that safeguard patients.

5. References[‡]

1. Health Information and Quality Authority. *National Standards for the Prevention and Control of Healthcare Associated Infections*. Dublin: Health Information and Quality Authority; 2009. Available online from: <http://www.hiqa.ie/publication/national-standards-prevention-and-control-healthcare-associated-infections>
2. Health Information and Quality Authority. *Guide: Monitoring programme for unannounced inspections undertaken against the national standards for the prevention and control of Healthcare Associated Infections*. Dublin: Health Information and Quality Authority; 2014 Available online from: <http://www.hiqa.ie/publications?topic=17&type=All&date%5Bvalue%5D%5Byear%5D=>
3. World Health Organization. *A Guide to the Implementation of the WHO Multimodal Hand Hygiene Improvement Strategy*. Revised August 2009. Available online from: http://www.who.int/gpsc/5may/tools/system_change/en/
4. Department of Health, United Kingdom. *Health Building Note 00-10 Part C: Sanitary Assemblies*. Available online from: http://www.dhsspsni.gov.uk/hbn_00-10_part_c_l.pdf
5. The Health Protection Surveillance Centre. *National Hand Hygiene Audit Results*. Available online from: <http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/Handwashing/HandHygieneAudit/HandHygieneAuditResults/>
6. Health Service Executive – *National Service Plan 2014*. Available online from: <http://www.hse.ie/eng/services/Publications/corporate/serviceplan2014/nationalserviceplan2014.pdf>
7. World Health Organization. *Guide to Hand Hygiene in Healthcare and WHO Hand Hygiene Technical Reference Manual*. Available on line from: http://whqlibdoc.who.int/publications/2009/9789241597906_eng.pdf?ua=1.
8. Health Service Executive. *Hand Hygiene Observation Audit Standard Operating Procedure April 2013*. Available on line from: http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/Handwashing/HandHygieneAudit/HandHygieneAuditTools/File_12660,en.pdf

[‡] All online references were accessed at the time of preparing this report.

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