



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced inspection at Our Lady's Hospital, Navan

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

Date of on-site inspection: 26 March 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 Our Lady's Hospital's (Navan) compliance with the Infection Prevention and Control Standards. It was undertaken by Authorised Persons from the Authority, Alice Doherty and Judy Gannon, on 26 March 2014 between 09:35hrs and 13:30hrs.

The area assessed was:

- Male Medical Ward.

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

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

Our Lady's Hospital, is part of the Louth/Meath hospital group situated in Navan in Co. Meath. Our Lady's Hospital serves a population of 162,621 and provides an elective orthopaedic service to the Health Services Executive, Dublin North East with a total bed capacity of 125.

Our Lady's Hospital, Navan, provides a range of acute services including:

- General medicine
- General surgery
- Elective orthopaedics
- Regional rheumatology service.
- Paediatrics (out-patient services)
- Day services
- Gynaecology services
- Pathology services
- Out-patient services
- Orthodontic out-patients
- Intensive care unit (ICU) /coronary care unit (CCU)
- Physical medicine services

[‡] 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

On inspection at Our Lady's Hospital, Navan on 26 March 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.

Male Medical Ward

The Male Medical Ward is a 24-bedded ward consisting of three six-bedded wards and six single rooms which are used for isolation of patients colonised or infected with transmissible infective diseases or multidrug resistant organisms when required. There were five patients isolated at the time of the inspection.

The Male Medical Ward has been participating in the productive ward national programme since September 2013;³ as a result it was generally well ordered, organised and free from clutter.

Overall, the environment and patient equipment in the Male Medical Ward were clean with some exceptions. The Authority found that improvements are required in the maintenance of the environment.

Environment and equipment

- The floor covering in a patient toilet was torn and there was a brown/black damaged section in the floor covering in a patient shower room, both of which hinder effective cleaning. There was brown staining in the corners of the floor covering in a second patient toilet.
- There was sticky tape residue on the walls in a patient toilet, hindering effective cleaning.
- Black staining was visible on the sealant around shower trays and on the grouting between wall tiles in patient shower rooms.
- The wheel areas of a dressing trolley (which was labelled clean) were unclean and there was sticky residue on one of the legs.
- Plastic shelves were stored on the floor beside the fridge in the clean utility room, hindering effective cleaning.
- There was a considerable amount of sticky tape residue and scratch marks on a wall mounted cupboard in the clean utility room, hindering effective cleaning.
- While the majority of signage in the clean utility room was laminated, there was one paper notice which was not laminated, and could therefore not be cleaned.
- There was brown staining in the following areas – the corners of the floor covering under the hand wash sink outside the clean utility room, on a wall panel below the sink and at the back of the sink at the joint with the wall.
- There was staining on the carpet at the entrance to the room where patient supplies were stored. In accordance with best practice, carpet is not recommended in clinical areas. Boxes containing patient supplies were stored on a dusty window ledge in the supply room. Additional boxes were stored on the floor, hindering effective cleaning. The shelving closest to the entrance in the supply room was unclean, dried paint drips were visible on the shelving and there was sticky tape residue on the shelves, hindering effective cleaning.
- As part of the productive ward initiative, a bathroom has been converted to an additional storage room for patient equipment. A section of the floor covering and a wall tile in this room was missing, hindering effective cleaning. Access to the clinical waste disposal bin and the fire hose reel was obstructed by a number of patient crutches stored adjacent to these items.
- Also as part of the productive ward initiative, large walk-in cupboards have been set up for the storage of dry patient supplies. At the time of the inspection, materials were stored on the floors of the cupboards, hindering effective cleaning. However, the Authority observed a notice posted inside one of the cupboards stating 'Please do not store on the floor' and acknowledges the efforts being made at ward level to keep the floors clear.

- While the 'dirty'[±] utility room was unlocked during the inspection, the Authority was informed that an electronic swipe card system was due to be installed in the following two weeks which would restrict access to authorised persons only. Similarly, an electronic swipe card system was due to be installed in the clean utility room which was locked during the inspection.
- There was sticky tape residue on wall tiles in the 'dirty' utility room, hindering effective cleaning.
- The floor covering around the sluice hopper was stained.
- White staining was visible on the back rest of a commode. Rust-coloured staining was visible on the wheel areas of two commodes and the wheels areas were unclean. There was a tear in the back rest of another commode, hindering effective cleaning.

Cleaning equipment

- The cleaning room was unlocked at the time of the inspection, potentially allowing unauthorised access to hazardous cleaning products which, although stored in a lockable cupboard, were accessible at the time of the inspection as the key to unlock the cupboard was in the keyhole. The Authority was informed that this is not typical practice and the cleaning room is generally locked when not in use.
- Cleaning equipment stored in the cleaning room was unclean. In addition, the cupboard where cleaning and disinfection products were stored was unclean.
- Cardboard boxes and plastic bags were stored directly on the floor of the cleaning room, hindering effective cleaning.
- There was no sink in the cleaning room for the disposal of waste liquids. The only hand hygiene facility that was available in the room was alcohol gel. The Authority was informed that a business plan has been prepared for the installation of a sink in the room.
- Brown-staining was visible on the floor of the cleaning room.

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.

- In an isolation room inspected by the Authority, a black plastic bag (rather than a yellow clinical waste bag) was in place in a rigid container labelled as clinical

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

waste. This is not in compliance with national guidelines for waste disposal. The Authority was informed that this was an error and was not typical practice.

- Rust-coloured staining and chipped paint was visible on some non-clinical waste disposal bins.

Summary

In general, the environment and patient equipment in the Male Medical Ward were clean with some exceptions. The Male Medical Ward operates a 'traffic light' system for patient equipment with a green label indicating that the equipment is clean, a yellow label indicating that the equipment needs to be maintained and a red label indicating that the equipment is for disposal. Clean equipment that was not in use was stored in plastic bags in a store room.

The Authority found that improvements are required in the maintenance of the environment on the Male Medical Ward. Some of the maintenance issues, for example, the floor covering and repair programme, are on-going from the previous inspection carried out by the Authority on 4 July 2013 and are outlined in the hospital's quality improvement plan (QIP) which was prepared following this inspection.⁴

The Male Medical Ward has been participating in the productive ward national programme since September 2013;³ as a result it was generally well ordered, organised and free from clutter. The Authority was informed that a de-clutter programme commenced in the hospital and a standard operating procedure was developed following the inspection carried out in 2013.⁴ The hospital is also starting to implement the productive ward national programme in the orthopaedic ward and the coronary care unit. The productive ward programme aims to empower front line staff to drive changes and improvements in how healthcare is delivered. The programme also focuses on increasing the time front line staff spend with the patient and on patient safety issues by streamlining and redesigning how services are delivered. From an Infection Prevention and Control Perspective, a well ordered, de-cluttered environment is easier to clean and maintain, and is therefore safer for patients and staff.

The Authority was informed that environmental audits are carried out by multidisciplinary teams. An audit schedule showing the areas which are audited as part of a cycle were viewed by the Authority and include the environment, patient equipment, waste, linen, sharps, hand hygiene and kitchens. The audit schedule takes seven months to complete. In accordance with the hospital's audit tool, an area is re-audited within two working days if it scores 75% and below. If an area scores 75%-85%, it is re-audited within four working days. On the Male Medical Ward, audit results were available for February 2014 and showed an initial audit

score of 77% and a re-audit score of 85%. The Authority was informed by staff on the Male Medical Ward that environmental audit results for March 2014 were due to be presented to staff the following day at the monthly hygiene meeting.

Evidence was provided to the Authority of the 'Hygiene Heroes' initiative introduced by the hospital to reward staff who, 'show commitment and leadership on hygiene related matters'.

Since the inspection carried out by the Authority in 2013, the emergency department has been temporarily re-located and a new emergency department is being constructed. It is hoped that this will be completed by September 2014.

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.⁵ 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 change⁵: *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.

- The design of clinical hand wash sinks in the clean and 'dirty' utility rooms did not conform to Health Building Note 00-10 Part C: Sanitary assemblies.⁶ The Authority was informed that priority has been given to replace hand wash sinks in ward areas and that the hospital has a sink replacement programme in place.⁴
- The alcohol hand-rub dispenser at the end of the bed in the isolation room inspected by the Authority was empty.

3.3.2 Training/education⁵: *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.

- The Authority was informed that a new database, which will be operational by 1 April 2014, will allow the hospital to determine if staff have carried out hand hygiene training in the last two years and the overall percentage of staff who have attended such training.
- Hand hygiene training records provided to the Authority showed that 76% of nursing staff, 61% of care assistants and 36% of domestic/catering staff have carried out hand hygiene training in the last two years. The records indicated that a further 17% of domestic/catering staff had been pre-booked to attend training. Hand hygiene training records for medical staff within the hospital were not provided to the Authority.
- The hand hygiene training records for the Male Medical Ward showed that 50% of nursing staff had completed training in the last two years. However, the Authority was informed by staff on the Male Medical Ward that the records were out-of-date and that 64% of staff on the ward had completed training in the last two years.

3.3.3 Evaluation and feedback⁵: 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

Our Lady's Hospital, Navan participates in the national hand hygiene audits which are published twice a year.⁷ The results below taken from publically available data from the Health Protection Surveillance Centre's website demonstrate a steady increase from June 2011 to May/June 2013 but there was a decrease in compliance in October 2013. The overall compliance for 2013 was below the Health Service Executive's (HSE's) national target of 90%.⁸

Period	Results
June 2011	78.1%
October 2011	79.5%
June/July 2012	81.8%
October 2012	82.7%
May/June 2013	87.5%
October 2013	81.0%

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

Local area hand hygiene audit results

The Authority was informed that the most recent hand hygiene audit carried out on the Male Medical Ward was on 24 March 2014 and showed a compliance rate of 80%.

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 WHO⁹ and the HSE.¹⁰ 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^γ 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 12 hand hygiene opportunities in total during the inspection. Hand hygiene opportunities observed comprised of the following:
 - six before touching a patient
 - four after touching a patient
 - two after touching patient surroundings.
- All of the 12 hand hygiene opportunities were taken.
- Of the 12 opportunities which were taken, the hand hygiene technique was observed (uninterrupted and unobstructed) by the Authorised Persons for seven opportunities. Of these, the correct technique was observed in the seven hand hygiene actions.
- In addition the Authorised Persons observed:
 - nine hand hygiene actions that lasted greater than or equal to (\geq) 15 seconds as recommended
 - no barriers to the correct technique in the 12 hand hygiene actions.

3.3.4 Reminders in the workplace⁵: *prompting and reminding healthcare workers about the importance of hand hygiene and about the appropriate indications and procedures for performing it.*

Hand hygiene advisory posters were available, up-to-date, clean and appropriately displayed in the areas inspected at Our Lady's Hospital, Navan.

^γ 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 climate⁵: *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.*

Our Lady's Hospital, Navan achieved 87.5% in the national hand hygiene audit in May/June 2013 and 81% in the October 2013 audit, giving an average compliance of 84% for 2013 which is below with the HSE's national target of 90%. In response to this result, the Authority was informed that the hospital is implementing the WHO multimodal strategy. Monthly hand hygiene audits are carried out and the results of the audits are posted on each ward. It is the responsibility of the ward manager to take corrective actions where required. The hospital has a 'bare below the elbow' dress code policy. The HSElanD e-learning training programme¹¹ (the HSE's online resource for learning and development) and another electronic hand hygiene training programme are used by the hospital for hand hygiene training. In an attempt to address non-compliance in hand hygiene practices within medical staff, the Authority was informed that group SMS texts were sent to non-consultant hospital doctors informing them of the 'bare below the elbow' policy and the fact that handbags were not allowed to be worn. It is recognised by the hospital that a cultural change is necessary, and that a sustained and comprehensive approach to training amongst all staffing groups (including agency staff) will be required to ensure high performance.

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.

The Male Medical Ward has been participating in the productive ward national programme since September 2013. Overall, the environment and patient equipment were clean with some exceptions. The Authority found that improvements are required in the maintenance of the environment. The Authority notes that the hospital introduced a 'Hygiene Heroes' initiative to reward staff who, 'show commitment and leadership on hygiene related matters'.

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.

The hospital has taken a proactive approach to improving hand hygiene compliance in response to the results achieved in the national hand hygiene audits in 2013.

Our Lady's Hospital, Navan must now revise and amend its 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 Our Lady's Hospital, Navan 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.

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[¥] The URLs referenced here were inserted at the time this document was being created.

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