



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced inspection at Naas General Hospital, Co Kildare.

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

Date of on-site inspection: 12 May 2015

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

The Health Information and Quality Authority (the Authority) carries out unannounced inspections in public acute hospitals in Ireland to monitor compliance with the *National Standards for the Prevention and Control of Healthcare Associated Infections*.¹ The inspection approach taken by the Authority is 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

The purpose of the unannounced inspection is to assess hygiene as experienced by patients at any given time. It focuses specifically on the observation of the day-to-day delivery of hygiene services, in particular environmental and hand hygiene under the following standards:

- Standard 3: Environment and facilities management
- Standard 6: Hand hygiene.

Other Standards may be observed and reported on if concerns arise during the course of an inspection. It is important to note that the Standards are not assessed in their entirety during an unannounced inspection and therefore findings reported are related to a particular criterion within a 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. The Authority's approach to an unannounced inspection against these Standards includes provision for re-inspection within six weeks if standards on the day of inspection are poor. This aims to drive improvement between inspections. In addition, in 2015, unannounced inspections will aim to identify progress made at each hospital since the previous unannounced inspection conducted in 2014.

An unannounced inspection was carried out at Naas General Hospital on 12 May 2015 by Authorised Persons from the Authority, Aileen O' Brien, Katrina Sugrue, Anna Delaney and Christopher Mc Cann between 10:10hrs and 16:10hrs. The areas assessed were:

- **Slaney Ward** which is a 16 bed short-stay medical and surgical admission ward.
- The **Intensive Care Unit (ICU)** which has four beds including one isolation room.
- The **Coronary Care Unit (CCU)** which has six beds including one isolation room.

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

2. Naas General Hospital Profile[‡]

Naas General Hospital provides general medical, surgical, acute psychiatric services and a 24-hour emergency service to its immediate catchment population of Kildare/West Wicklow (approx. 220,000).

The hospital has a bed capacity of 243 beds which includes inpatient beds, acute psychiatry beds and day beds. A range of diagnostic and support services, including radiology, pathology, physical medicine, pharmacy services, advanced nurse practitioners and clinical nurse specialists are provided on site.

Services provided include the following:

- Acute Medical Assessment Unit
- Minor Injury Unit
- Care of the Elderly Day Services (Day Hospital)
- Clinical Engineering, Medical Physics, Facilities Management and a Medical illustrations Department.
- Operating Theatre Department
- Endoscopy Department
- Central Sterile Supplies Department
- Outpatients Department
- Cardiology Diagnostics Department
- Cardiology Rehabilitation Department
- Occupational Therapy Department
- Pharmacy – Dispensary and team-based clinical services
- Physiotherapy Department
- Pulmonary Function Laboratory
- Radiology – X-ray, Ultrasound, CT, MRI
- Social Work Department
- Speech and Language Therapy Department
- Clinical Nutrition and Dietetics Department
- Pathology Laboratory (24 hour service)
- Oncology Care Service
- Palliative Care Service
- Phlebotomy 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.

A Stroke Unit was developed in 2009 culminating in the establishment of a Stroke Unit in 2010 with 24/7 thrombolysis. This service is also offered to patients in parts of Counties Laois, Offaly and Carlow. This service is augmented by the use of telemedicine.

2014 Hospital Activity

| Item | Details |
|------------------------------------|----------------|
| Emergency Department presentations | 27,761 |
| Total discharges | 15,215 |
| Bed days used | 68,431 |
| Outpatient attendances | 54,572 |

3. Findings

This report outlines the Authority's overall assessment in relation to the inspection, and includes key findings of relevance. A list of additional low-level findings relating to non-compliance with the standards has been provided to the hospital for information and to inform ongoing improvement measures. However, the overall nature of the key findings of relevance is within this report.

This report is structured as follows:

- **Section 3.1** describes the progress achieved since the last unannounced inspection on 21 August 2014
- **Section 3.2** presents the key findings of the unannounced inspection on 12 May 2015.
- **Section 3.3** describes the key findings relating to hand hygiene under the headings of the five key elements of the World Health Organization (WHO) multimodal improvement strategy during the unannounced inspection on 9 April 2015.³

3.1 Progress since the last unannounced inspection on 21 August 2014

The Authority reviewed the quality improvement plan (QIP) published by Naas General Hospital following the August 2014 inspection which was last updated in December 2014 on their website. The majority of actions identified in the QIP have been addressed. For example, damaged patient equipment was repaired or replaced and ongoing environmental audits are in place to ensure the effectiveness of hospital cleaning systems.

The Authority was informed that some issues relating to maintenance remain outstanding. For example, replacement of damaged floor covering identified during the 2014 inspection is pending budget allocation.

3.2 Key findings of the unannounced inspection on 12 May 2015

Overall the Authority found that the patient areas inspected were generally clean. Key findings were identified in relation to safe injection practice, isolation precautions and the cleaning of patient equipment. In addition, the Authority has concerns about the use of a 10 bed room for inpatient care due to an increased risk of transmission of infection associated with this type of bed configuration.

Safe Injection Practice

During the inspection of Slaney Ward a multi-dose vial of insulin was observed in an unclean tray within a medicines refrigerator. The vial bore an opening date of greater than 28 days previously and was not labelled for single patient use.⁴

Inappropriate use of multi-dose vials has been linked to outbreaks of infection.⁵ The medication fridge contained foodstuffs which is not in line with recommended practice and the fridge temperature did not appear to be checked periodically. These findings were brought to the attention of the person in charge at the time of inspection.

Isolation Room

A blood gas analysis machine was located in the ante room of an isolation room in the Coronary Care Unit which was used for patients requiring contact transmission precautions. This ante room was used by staff for donning and doffing personal protective equipment and performing hand hygiene before and after patient contact. Placement of diagnostic equipment in this area is not appropriate particularly as access to such equipment is required by healthcare staff from other parts of the hospital. This practice may increase the risk of transmission of infection in addition to disturbing a patient during rest or sleep time. The door to the ante room of the isolation room was open throughout the inspection which is not in line with best practice of keeping isolation room doors closed.

Although signage to indicate the need for contact precautions was in place, it was unclear if sufficient information had been provided to relevant visitors regarding contact precaution procedure. Failure to advise visitors regarding required prevention and control measures may also increase the risk of transmission of infection.

Patient equipment

Opportunities for improvement were identified in the cleaning of patient equipment in the ICU. For example, dust was found on items of equipment located at high level, in the drawers of an intubation trolley, at the base of a patient's bedside chair and on bed frames. Sticky residue was visible on some patient observation chart holders and a stain was present on the base of one observation chart holder. One bedside storage unit was chipped and stained. Such a finding does not provide assurance that all equipment was cleaned completely on a daily basis in line with local cleaning schedules.

Hospital hygiene plays an important role in the prevention and control of healthcare associated infections and should be a key priority for all healthcare organisations. A clean environment not only reduces the risk of acquiring an infection but also promotes patient and public confidence and demonstrates the existence of a positive safety culture.⁶ The level of risk should determine cleaning and audit frequency.⁷ The ICU is classified as a high infection risk functional area and therefore a corresponding high standard of environmental hygiene is expected.

Slaney Ward infrastructure

Slaney ward was originally designed to accommodate day patients from Monday to Friday between the hours of nine to five. The hospital has changed the original purpose of the ward and now accommodates patients overnight in a ten bed room and a six bed room. A ten bed room is not ideal for inpatient care and does not meet guidance for inpatient accommodation.^{8, 9} As a risk mitigation measure the ward does not accommodate patients requiring isolation precautions in order to reduce the risk of transmission of infection in this setting. The hospital is currently exploring other options for the accommodation of these patients.

Storage space was quite limited with consumables and equipment stored in a room that also houses electrical control panels. Storage of equipment and consumables should be within an appropriate designated area only.¹⁰

3.3 Key findings relating to hand hygiene

3.3.1 System change³: *ensuring that the necessary infrastructure is in place to allow healthcare workers to practice hand hygiene.*

- The design of clinical hand wash sinks in the areas assessed did not conform to latest sanitary assembly guidance.¹¹ As part of the hospital's hand hygiene strategy a phased replacement programme is in place for hand wash sinks which prioritises high risk areas.
- Alcohol gel was available at each individual patient bed space observed and in addition to utility rooms.

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 hand rubbing and hand washing, to all healthcare workers.*

- The hospital delivers mandatory hand hygiene and infection control training for all staff at least once every two years. Records of staff attendance at training sessions were viewed during the inspection and indicated that 85% of hospital staff were up to date with hand hygiene and infection control training.
- Staff members who have not completed training are offered a multi-modal education and training strategy including face to face training and the HSE e-Learning programme (the HSE's online resource for learning and development).

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.*

National hand hygiene audits

Naas General Hospital participates in the HSE national hand hygiene audits which are published twice a year.¹² Results contained in Table 1 are publically available on the Health Protection Surveillance Centre's website. The hospital has demonstrated a track record of consistently meeting the required compliance target of 90% set by the HSE¹³ since the period of October/November 2012 and should aim to increase and sustain high compliance rates.

Table 1: National hand hygiene audit results

| Hand hygiene audit period | Hand hygiene compliance result |
|----------------------------------|---------------------------------------|
| Oct/Nov 2011 | 78.1% |
| May/June 2012 | 85.2% |
| Oct/Nov 2012 | 90.5% |
| May/June 2013 | 92.4% |
| Oct/Nov 2013 | 95.2% |
| May/June 2014 | 91% |
| Oct/Nov 2014 | 90% |

Source: Health Protection Surveillance Centre – national hand hygiene audit results.¹²

Local hand hygiene audits

In addition to twice yearly national hand hygiene audits, twice yearly local hand hygiene audits are also carried out across the hospital in all patient care areas by the Infection Prevention and Control Team. Detailed feedback of results is given to staff in the areas audited. In local hand hygiene audits conducted during the fourth quarter of 2014, Slaney Ward achieved 100% compliance, the ICU achieved 90% compliance and the CCU achieved 97% compliance.

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.

The underlying principles of observation during inspections are based on guidelines promoted by the WHO¹⁴ and the HSE.¹⁵ 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 33 hand hygiene opportunities in total during the inspection. Hand hygiene opportunities observed comprised the following;

- Ten before touching a patient
- One before a clean/aseptic procedure
- Three after body fluid exposure risk
- Six after touching a patient contact
- Thirteen after touching patient surroundings.

Thirty one of the 33 (94%) hand hygiene opportunities were taken of the 31 opportunities taken, hand hygiene technique was observed (uninterrupted and unobstructed) by the Authorised Persons for 27 opportunities. Of these, the correct technique was observed in 21 hand hygiene actions. A small number of staff were wearing shoulder bags during hand hygiene opportunities which is not in line with best practice. It is important to note that the results of the small sample observed are not statistically significant results for hand hygiene compliance and do not represent all groups of staff or the hospital as a whole. In addition results derived should not be used for the purpose of external benchmarking.

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.*

- Hand hygiene advisory posters were available, up-to-date, clean and appropriately displayed.
- The hospital had monthly hand hygiene initiatives during the second half of 2014 which included leaflet distribution, awareness days and practical training days.

^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 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.*

- Evidence provided and viewed at the time of the inspection indicates that the hospital is working towards improving hand hygiene compliance at all levels. The most recent national hand hygiene results for the hospital decreased from 95% compliance in October/November 2013 to 90% compliance in October/November 2014. However, Authorised persons observed the use of visual reminders and efforts to increase effective hand hygiene awareness amongst staff. The hospital needs to continue to build on hand hygiene compliances achieved to date to ensure that good hand hygiene practice is improved and maintained in all areas.

4. Summary

The Authority strongly recommends that the use of Slaney Ward for inpatient accommodation be reviewed.

The Authority recommends that the hospital reviews procedures relating to the use of multi-dose medication vials to assure itself that the potential risks to patients in this regard are fully mitigated.

Overall the Authority found the areas inspected to be clean with some exceptions. A review of the management of cleaning in the ICU is recommended so that the hospital can be assured that cleaning practices are sufficient to mitigate the risk of contamination of patient equipment and indirect spread of infection in a high risk area.

Performance in relation to hand hygiene was good on the day of inspection, and consistent with continued good performance in local and national hand hygiene audits.

5. Next steps

The provision of a well maintained, clean and safe healthcare environment is a key component of effective infection prevention and control. It also promotes public confidence and demonstrates the existence of an effective patient safety culture.⁶

Naas General Hospital must now revise and amend its QIP that prioritises the improvements necessary to fully comply with the Standards. This QIP must be approved by the service providers 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 Naas General 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 Standards, and is making quality and safety improvements that safeguard patients.

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