



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced inspection at Sligo Regional Hospital, Sligo

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

Date of on-site inspection: 4 March 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 Sligo Regional Hospital on 4 March 2015 by Authorised Persons from the Authority, Alice Doherty, Katrina Sugrue, Leanne Crowe and Noelle Neville between 08:30hrs and 13.10hrs. The areas assessed were:

- The **Day Services Unit** which has 15 bays.
- The **Oncology Day Ward** which has eight armchairs used for patients requiring infusions and two beds, one of which is located in a single room and used for isolation purposes when required.
- The **Renal Dialysis Unit** which has 11 stations and two single rooms which are used for isolation purposes if required. One of the single rooms is ensuite. One patient was isolated at the time of the inspection.

In addition, the Orthopaedic Ward, which was inspected during an unannounced inspection by the Authority on 2 July 2014, was re-visited to assess the level of progress which had been made after the 2014 inspection.

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

2. Sligo Regional Hospital Profile[‡]

Sligo Regional Hospital is a Model 3 Hospital and provides acute general and maternity services to the population of Sligo, Leitrim, West Cavan and South Donegal. In addition, Sligo Regional Hospital provides regional services across the North West to a population of 280,000 for ENT, Ophthalmology, Neurology, Dermatology, Rheumatology and Orthodontics. The hospital serves as a clinical satellite campus for NUIG Medical Academy and Department of Nursing, Health Sciences and Disability Studies, St Angela's College (affiliate of NUIG).

Human Resources = 1401 Whole Time Equivalentents

Inpatient Services

Sligo Regional Hospital has 265 operational acute beds plus 35 intermediate care beds.

Respiratory	Cancer Services	Medical Short Stay Unit	Surgery
Gastroenterology	Urology	NICU	Obstetrics
Stroke care	Oncology/Haematology	Gynaecology	Ophthalmology
Care of Elderly	Emergency Medicine	Pathology/Laboratory	Neurology
Cardiology	Intensive Care Unit	Dermatology	NICU
Nephrology	ENT	Paediatrics	Orthopaedics
Rheumatology	Acute Assessment Unit	Radiology	

Day Care Services

There are 55 beds covering the medical and surgical specialties, day and ambulatory services are also covered.

[‡] 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

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 completion. However, the overall nature of all of the findings are fully summarised within this report.

The report is structured as follows:

- **Section 3.1** outlines the level of progress made in the implementation of the quality improvement plan (QIP)³ prepared after the unannounced inspection on 10 July 2014.
- **Section 3.2** presents the key findings of the unannounced inspection on 4 March 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 strategy⁴ during the unannounced inspection on 4 March 2015.

3.1 Progress since the last unannounced inspection on 10 July 2014

The Authority reviewed the QIP³ published by Sligo Regional Hospital following the 2014 inspection. A *Legionella* risk assessment was completed by the hospital in late 2014, as recommended in the Authority's July report, and the Authority was informed that the hospital is working through recommendations from this assessment as well as continuing to monitor and implement risk management strategies to prevent and control the risk of *Legionella*.

The Authority was informed that changes had occurred in the management of the cleanliness of patient equipment. Ward managers have raised awareness with staff on the completion of patient equipment cleaning check lists and are monitoring the checklists on a regular basis. There was a change in the documentation for the cleaning of patient commodes and several commodes were replaced in the hospital. The cleaning of patient bed spaces has been a focus for improvement, and hygiene action plans are followed through and completed. However, it was explained to the Authority that recurring issues relating to maintenance can remain outstanding due to resource limitations.

Hand hygiene education for staff has focused on the appropriate use of personal protective equipment and increasing the awareness between the patient zone and healthcare area to drive improvement in hand hygiene compliance. Precautionary signage in isolation rooms, which were identified as requiring improvement during the July 2014 inspection, have been improved across the hospital.

The Authority was informed by the Ward Manager on the Orthopaedic Ward that two commodes were replaced and the responsibility for cleaning commodes after each use had been emphasised to all staff after the 2014 inspection. Commodes receive an additional scheduled full clean on a daily basis by a healthcare assistant, in addition to cleaning after each use. Additional mattress audits have been completed since the 2014 inspection and mattresses are replaced as required. A gap in cleaning services was identified when the full time cleaner for the ward was not on duty which has been addressed. The cleaning list has been revised and out of hours cleaning is recorded. The blood glucose monitor holder is no longer brought to the patient bedside on this ward and only the equipment required for the procedure is brought to the bedside in a tray in line with best practice. Finally, hand hygiene audits were displayed on a main notice board and the ward achieved 97% in a hand hygiene audit completed in November 2014.

3.2 Key findings of the unannounced inspection on 4 March 2015

Unsafe injection practices

During inspection of the Oncology Day Ward, the Authority observed some insufficiently labelled infusion bags of clear fluid with added medication sitting in a tray in the refrigerator used for storing chemotherapeutic intravenous medications. The labels did not indicate the date, time and person who reconstituted the medication. Several infusion bags of saline with primed administration sets attached were hanging from hooks which were also not labelled.

The Authority was informed that medications were reconstituted first thing in the morning in addition to the preparation of infusions of normal saline to assist with the high capacity of patients requiring intravenous medications and infusions on a daily basis. All reconstituted medications and prepared infusions are disposed of at the end of each day. This practice is of concern to the Authority as it has the potential to increase the risk of transmission of infectious pathogens to patients particularly immunocompromised patients who attend the unit for treatment.

In situations where intravenous medication is not reconstituted in an aseptic clean room compounding unit, best practice dictates that it should ideally be administered immediately or potentially within 24 hours if it is stored in an appropriate and clean environment. The Authority recommends that a risk assessment of the practice of reconstituting of medication in advance of use is carried out. The hospital also needs to assure itself that where the practice of reconstituting medications in advance of treatment is continued; the sterility and integrity of these reconstituted intravenous medications and infusion bags with attached administration sets is maintained prior to use.

Patient equipment

Patient equipment in the three clinical areas inspected was generally clean and well maintained. However, practices observed on the Day Services Unit relating to blood glucose monitoring raised a concern for the Authority. A blood glucose monitor holder was brought to a patient zone and placed on the patient trolley, and blood glucose monitoring was carried out. This practice has the potential to expose equipment stored in the holder to infectious pathogens and increase the risk of transmission of blood borne viruses to other patients. The Authority recommends that the practice be reviewed and only the equipment required for each patient blood glucose monitoring procedure should be brought to the patient bedside in line with evidenced-based practice. Commitment to reviewing this practice across the hospital was given by senior management at the inspection close out meeting.

Patient environment

The three clinical areas inspected were generally clean and well maintained. However, some improvement is required in the management of dust on floor edges, trolley frames and on wall mounted suction apparatus in the Day Services Unit and the Oncology Day Ward.

3.3 Key findings relating to hand hygiene

3.3.1 System change⁴: *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 three clinical areas inspected did not conform to Health Building Note 00-10 Part C: Sanitary assemblies.⁵ The Authority notes that upgrading of sinks is part of the hospital's QIP.³

3.3.2 Training/education⁴: *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.*

- Overall, 89.32% of staff in Sligo Regional Hospital attended hand hygiene training from 1 December 2012 to 31 December 2014. All staff on the Day Services Unit and the Oncology Day ward had completed hand hygiene training in 2014. Ten out of 15 staff (67%) on the Renal Dialysis Unit had completed hand hygiene training in the previous 12 months, and all staff in this unit had received training in the previous two years.

3.3.3 Evaluation and feedback⁴: *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 audit results

- Sligo Regional Hospital participates in the national hand hygiene audits which are published twice a year.⁶ Compliance at the end of 2014 was 89.5% which is just below the Health Service Executive’s (HSE’s) target of 90% for 2015.⁷

Period 1-7	Result
Period 1 March/April 2011	79.5%
Period 2 October/November 2011	89.0%
Period 3 May/June 2012	75.5%
Period 4 October/November 2012	76.2%
Period 5 May/June 2013	84.8%
Period 6 October/November 2013	84.3%
Period 7 May/June 2014	86.2%
Period 8 October/November 2014	89.5%

Source: Health Protection Surveillance Centre – national hand hygiene audit results.⁶

Local hand hygiene audit results

- In a hand hygiene audit in February 2015, the Day Services Unit achieved 87% compliance. The Oncology Day Ward and the Renal Dialysis Unit achieved compliances of 80% and 93% respectively in hand hygiene audits in November 2014.

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 WHO⁸ and the HSE.⁹ 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 28 hand hygiene opportunities in total during the inspection. Hand hygiene opportunities observed comprised the following:

- five before clean/aseptic procedure
- four after body fluid exposure risk
- four after touching a patient
- 15 after touching patient surroundings.

Nineteen of the 28 hand hygiene opportunities were taken. The nine opportunities which were not taken comprised the following:

- three before clean/aseptic procedure
- one after body fluid exposure risk
- five after touching patient surroundings.

Of the 19 opportunities which were taken, the hand hygiene technique was observed (uninterrupted and unobstructed) by the Authorised Persons for nine opportunities and the correct technique was observed in all nine hand hygiene actions.

3.4.4 Reminders in the workplace⁴: *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 Sligo Regional Hospital.

3.4.5 Institutional safety climate⁴: *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.*

- Compliance in the national hand hygiene audit at Sligo Regional Hospital at the end of 2014 was 89.5%. The hospital needs to continue to build on hand hygiene

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

compliances achieved to date to ensure that good hand hygiene practice is improved and maintained in all areas.

4. Summary

Overall, the three clinical areas inspected during the 2015 unannounced inspection were clean and well maintained. However, opportunities for improvement relating to medication management and blood glucose monitoring were identified. It is noted that a similar issue relating to blood glucose monitoring was identified during the 2014 inspection suggesting that the learning from the inspection was not implemented throughout the hospital. Evidence was provided during the inspection that demonstrated the implementation of the QIP. Progress was also evident on the Orthopaedic Ward, in relation to commodes, mattresses, cleaning resources and the practice used in blood glucose monitoring.

The performance of Sligo Regional Hospital in the national hand hygiene audit at the end of 2014 was just below the HSE's target of 90%. Hand hygiene compliance observed by the Authority on the day of the inspection was 68%. At the end of December 2014, the majority of staff in the hospital had attended hand hygiene training in the previous two years.

5. Next steps

Sligo Regional 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 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 Sligo Regional 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.

6. References[‡]

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

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