



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte

Report of the unannounced inspection at the Coombe Women and Infants 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: 29 January 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 the Coombe Women and Infants University Hospital on 29 January 2015 by Authorised Persons from the Authority, Alice Doherty, Katrina Sugrue, Leanne Crowe and Noelle Neville between 08:25hrs and 12:00hrs. The areas assessed were:

- The **Gynae Day Ward**, which is a 14-bedded day ward and consists of one six-bedded ward, one five-bedded ward and three single rooms.
- The **Delivery Suite** including the **Emergency Theatre**, which has two high dependency rooms and 12 single delivery rooms.

In addition, St Gerard's Ward, which was inspected during an unannounced inspection by the Authority on 20 March 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. The Coombe Women and Infants University Hospital Profile[‡]

Established in 1826, the Coombe Women and Infants University Hospital is one of the largest providers of women and infant healthcare in the Republic of Ireland. It is a recognised centre for tertiary services including maternal and fetal medicine, neonatology, gynaecology and peri-operative medicine. In 2014, 9,381 mothers attended the hospital with 8,633 delivering 8,821 infants. Within these numbers were 170 sets of twins and six sets of triplets. Over 1,000 infants are admitted to the Neonatal Unit and over 5,000 gynaecology operations are performed each year.

Over the past five years, significant infrastructural developments have been completed on the hospital campus including the redevelopment and expansion of the Neonatal Intensive Care and Special Care Baby Units and the opening of a new Department of Perinatal Ultrasound and a dedicated Colposcopy Unit.

In January 2014, the Minister for Health officially opened the new Emergency Obstetric Theatre and Delivery Suite. The new Delivery Suite is the most modern in the state and consists of 11 single en suite Labour Delivery Rooms, a dedicated Emergency Obstetric Theatre, two High Dependency Rooms, a Pool Room, two Assessment Rooms and an on-call room for the Obstetric Registrar. The Unit also has a Bariatric Room to cater for women with a high BMI.

The hospital employs over 730 medical, midwifery and nursing staff, research scientists and professionals allied to medicine.

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.

This report is structured as follows:

- **Section 3.1** outlines the level of progress made by St Gerard's Ward after the unannounced inspection on 20 March 2014.
- **Section 3.2** presents the key findings of the unannounced inspection on 29 January 2015.

[‡] 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.

- **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 strategy³ during the unannounced inspection on 29 January 2015.

3.1 Progress since the last unannounced inspection on 20 March 2014

The Authority observed improvements in the cleanliness, particularly in relation to dust, and the maintenance of St Gerard's Ward during the 2015 inspection. The ward was painted and the floors were upgraded after the 2014 inspection, and the Authority was informed that supervision of cleaning practices on the ward had increased. The Authority acknowledges that the hospital and St Gerard's Ward have taken on board the recommendations of the 2014 unannounced inspection and the hospital is working towards improving the general facilities and clinical environments in other wards.

3.2 Key findings of the unannounced inspection on 29 January 2015

Unsafe injection practices

Unsafe injection practices and medication management in the Emergency Theatre were deemed to present a high risk to the health or welfare of patients and required mitigation measures to be implemented. Both the Theatre Manager and Senior Management were informed of the findings at the time of the inspection. Details of these findings are further outlined below.

During the inspection of the Emergency Theatre, the Authority observed a number of syringes containing reconstituted intravenous medications, insufficiently labelled and stored in an uncovered tray. The theatre was unlocked, potentially allowing unauthorised access to these medications. There was no means to check that the medications in the syringes were correctly reconstituted and checked to be the correct drug prior to administration during emergency procedures. It is of concern to the Authority that the practice of leaving reconstituted medication sitting in an unprotected tray for an undetermined timeframe had the potential to significantly increase the risk of transmission of infectious pathogens. Intravenous medications should be prepared in a clean environment using aseptic techniques and should be administered immediately following reconstitution where possible. Assurances could not be provided that the integrity and sterility of these medications were maintained from compounding to administration. The Authority recommends that the hospital reviews the practice relating to the preparation and administration of intravenous medication, particularly relating to anaesthetic medication, to assure itself that the potential risks to patients in this regard are fully mitigated.

Patient equipment

Patient equipment on the Gynae Day Ward was generally clean. In the Emergency Theatre, red stains were observed on the undersurfaces of the bottom shelves on two dressing trolleys and a plastic cover was adhered to both shelves on one trolley, hindering effective cleaning. Red stains were also visible in the interior of a blue tray. The undersurfaces of a further three procedure trolleys in the Delivery Suite were unclean.

Patient environment

The Gynae Day Ward was generally clean and well maintained. However, heavy dust was observed on the undercarriages of several beds inspected. The Authority was informed that this matter had also been identified by the hospital and specialist cleaning equipment is available for cleaning this area of the bed. Residue/staining was visible in and around the grates in the hand wash sinks in the toilets and the toilet seats were unclean. The Authority was informed that there is a high demand on the use of these toilets by visitors from outside of the ward.

The Delivery Suite and the Emergency Theatre were generally clean and well maintained and the Authority observed good cleaning practices at the time of the inspection. However some opportunities for improvement were identified. For example, red stains were observed on resuscitation equipment in an empty delivery suite which had been cleaned the previous day. The outlet of a sink used for cleaning instruments in a 'dirty'[±] utility room was unclean and heavily stained clogs were present on the floor of a second 'dirty' utility room. Heavy dust was present on the floor and on buffer pads in a dry cleaning store room.

Waste management

The sub-collection area for waste in the Delivery Suite was not locked and it was noted that there is limited storage space in the area. The temporary closing mechanisms were not activated on two sharps bins in Room 15 and four sharps bins in the Emergency Theatre; assembly details were only completed on one of the sharps bins.

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

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 some clinical hand wash sinks on the Gynae Day Ward 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.*

- Two hand hygiene training sessions are carried out by the Infection Prevention and Control Nurse each month. Staff are required to attend training every two years and at the time of the inspection, 83% of clinical staff had attended hand hygiene training in the previous two years. The Authority was informed that clinical staff who are not up-to-date with training have been notified in writing by the hospital. New staff are provided with hand hygiene information prior to induction and are advised to complete the HSE Land e-learning training programme⁵ (the Health Service Executive's (HSE) online resource for learning and development) before starting. Certificates of completion are requested by the hospital and these staff are also required to complete on-site training.
- During the previous unannounced inspection by the Authority in March 2014, the hospital was in the process of setting up a database for training records. This has now been completed and records of hand hygiene training are provided to Senior Management every month.
- Patients receive information on hand washing as part of the pregnancy booklet issued prior to attending at the hospital.

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

- The Coombe Women and Infants University Hospital participates in the national hand hygiene audits which are published twice a year.⁶ The hospital has consistently achieved an average compliance of 91% across the two audits in both 2013 and 2014, which is above the national target of 90% set by the HSE.⁷ The hospital has one lead auditor and four local auditors. An external company has also carried out hand hygiene audits at the request of the hospital.

Period 1-7	Result
Period 1 March/April 2011	83.3%
Period 2 October/November 2011	82.4%
Period 3 May/June 2012	80.9%
Period 4 October/November 2012	84.3%
Period 5 May/June 2013	89.8%
Period 6 October/November 2013	91.4%
Period 7 May/June 2014	90.0%
Period 8 October/November 2014	91.4%

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

Local hand hygiene audits

- Local hand hygiene audits are carried out by Ward Managers and the Infection Prevention and Control Nurse in the Delivery Suite, however the Authority was informed that the Ward Managers have not been trained as local auditors due to the difficulty in releasing staff from this unit. The Authority recommends that staff who carry out local hand hygiene audits should be trained as local auditors. This would be of particular benefit in the Delivery Suite, where the opportunity for hand hygiene observation by auditors from outside of the ward can be limited due to the sensitive nature of the activity that occurs there.

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 only observed one hand hygiene opportunity during the inspection. This opportunity was taken by the staff member involved.

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 in the areas inspected at the Coombe Women and Infants University Hospital.

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 Coombe Women and Infants University Hospital hospital has a regular hand hygiene training programme in place and its performance in national hand hygiene audits in 2013 and 2014 is in line with the national target set by the HSE. The hospital needs to build on the achievements to date to ensure that hand hygiene compliance is sustained.

4. Summary

Overall, the two areas inspected during the 2015 unannounced inspection were clean and well maintained. Moreover, progress had been made on St Gerard's Ward with respect to environmental hygiene compared to previous findings identified by the Authority during the announced inspection in 2014.

The hospital has consistently achieved an average compliance of 91% in national hand hygiene audits in both 2013 and 2014. Hand hygiene compliance was difficult to monitor on the day of the inspection given the type of care provided in the areas inspected which was also acknowledged by hospital staff.

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

5. Next steps

The Coombe Women and Infants University Hospital must now revise and amend its quality improvement plan (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 the Coombe Women and Infants 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 Standards, and is making quality and safety improvements that safeguard patients.

5. References[‡]

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

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