



**Health  
Information  
and Quality  
Authority**

An tÚdarás Um Fhaisnéis  
agus Cáilíocht Sláinte

# **Report of the unannounced inspection at Tallaght 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: 23 September 2015

## **About the Health Information and Quality Authority**

The Health Information and Quality Authority (HIQA) is an independent Authority established to drive high quality and safe care for people using our health and social care and support services in Ireland. HIQA's role is to develop standards, inspect and review health and social care and support services, and support informed decisions on how services are delivered. HIQA's ultimate aim is to safeguard people using services and improve the quality and safety of services across its full range of functions.

HIQA's mandate to date extends across a specified range of public, private and voluntary sector services. 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 health and social care and support services in Ireland.
- **Regulation** – Registering and inspecting designated centres.
- **Monitoring Children's Services** – Monitoring and inspecting children's social services.
- **Monitoring Healthcare Quality and Safety** – Monitoring the quality and safety of health services and investigating as necessary serious concerns about the health and welfare of people who use these services.
- **Health Technology Assessment** – Providing advice that enables the best outcome for people who use our health service and the best use of resources by evaluating the clinical effectiveness and cost-effectiveness of drugs, equipment, diagnostic techniques and health promotion and protection activities.
- **Health Information** – Advising on the efficient and secure collection and sharing of health information, setting standards, evaluating information resources and publishing information about the delivery and performance of Ireland's health and social care and support services.

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## 1. Introduction

The Health Information and Quality Authority (HIQA) 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*.<sup>1</sup> The inspection approach taken by HIQA is outlined in guidance available on HIQA's website, [www.hiqa.ie](http://www.hiqa.ie) – *Guide: Monitoring Programme for unannounced inspections undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections*.<sup>2</sup>

The aim of unannounced inspections is to assess hygiene in the hospital as observed by the inspection team and experienced by patients at any given time. It focuses specifically on the observation of the day-to-day delivery of services and in particular environment and equipment cleanliness and compliance with hand hygiene practice. In addition, following the publication of the 2015 *Guide: Monitoring Programme for unannounced inspections undertaken against the National Standards for the Prevention and Control of Healthcare Associated Infections*,<sup>2</sup> HIQA will assess the practice in the implementation of infection prevention care bundles. In particular this monitoring will focus upon peripheral vascular catheter and urinary catheter care bundles, but monitoring of performance may include other care bundles as recommended in prior national guidelines<sup>3-4</sup> and international best practice<sup>5</sup>.

Assessment of performance will focus on the observation of the day-to-day delivery of hygiene services, in particular environmental and hand hygiene and the implementation of care bundles for the prevention of device related infections under the following Standards:

- Standard 3: 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.
- Standard 6: Hand hygiene practices that prevent, control and reduce the risk of spread of Healthcare Associated Infections are in place.
- Standard 8: Invasive medical device related infections are prevented or reduced.

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. Authorised Persons use 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.

HIQA'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 Tallaght Hospital on 23 September 2015 by Authorised Persons from HIQA: Katrina Sugrue, Anna Delaney, Aileen O' Brien and Rachel Mc Carthy between 08:00 hrs and 16:20hrs. The areas assessed were:

- The Theatre Department
- The Radiology Department

In addition, William Stokes Unit, which was inspected during an unannounced inspection by HIQA on 17 July and a re-inspection on 28 August 2014, was re-visited to assess the level of progress which had been made.

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

## 2. Hospital Profile<sup>‡</sup>

Tallaght Hospital is open 17 years. Tallaght Hospital is part of the Dublin Midlands Hospital Group.

The hospital serves the catchment area of 450,000 covering Tallaght, Clondalkin, Firhouse, Rathfarnham, Terenure, Templeogue, West Wicklow and parts of Kildare. The hospital is part of the Dublin Midlands Hospital Group. Tallaght Hospital forms part of Trinity Health Ireland, an academic healthcare centre alliance with the School of Medicine, Trinity College Dublin and St. James's Hospital.

There is currently capacity for 667 inpatient and day care beds at Tallaght Hospital. These figures do not include South Dublin Mental Health services at Tallaght Hospital which has an additional capacity of 46 public beds. The current workforce at Tallaght Hospital is just under 2,582 whole time equivalents.

Tallaght Hospital provides a wide range of secondary and tertiary services across the Medical, Surgical, Paediatric and Diagnostic spectrum. It is also the regional centre for Orthopaedics, Urology and Renal Medicine/Dialysis. Tallaght Hospital is well known for its management of complex orthopaedic trauma particularly Pelvic and Acetabular fractures, Ilizarov Leg Lengthening programme, as well as, the management of Pancreaticobiliary diseases, Acute Medicine, Nephrology and Gastroenterology services and for its work in Paediatric endocrinology and growth problems in children.

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<sup>‡</sup> The hospital profile information contained in this section has been provided to HIQA by the hospital, and has not been verified by HIQA.

### **3. Findings**

This report outlines HIQA'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 the key areas of non-compliance are summarised within this report.

#### **Overview of areas inspected**

- The Theatre Department was inspected. The department comprises of a total of 12 holding bays, a day of theatre admission area with four bays, 12 theatre suites, 15 recovery bays and a three bedded post anaesthetic care unit (PACU).
- The Radiology Department was inspected with a focus on the interventional radiology facility. This facility comprises a new Interventional Radiology Suite commissioned in April 2014 and a second treatment room used for ultrasound guided procedures.

This report is structured as follows:

- **Section 3.1** outlines the level of progress made by the hospital after the unannounced inspection on 17 July 2014 and re-inspection on 28 August 2014.
- **Section 3.2** presents the key findings of the unannounced inspection on 23 September 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<sup>6</sup> during the unannounced inspection on 23 September 2015.
- **Section 3.4** describes the key findings relating to infection prevention care bundles during the unannounced inspection on 23 September 2015

### **3.1 Progress since the last unannounced inspections on 17 July and 28 August 2014**

The Health Information and Quality Authority reviewed the quality improvement plan (QIP) published by Tallaght Hospital following the 2014 inspections.<sup>7</sup> Actions required for the 22 items identified on the QIP were listed and viewed. Sixteen items on the list were documented as complete at the time of the September 2015 inspection. The remaining issues were in progress. The commitment of staff and the significant investment of time, effort and resources required to implement the QIP is acknowledged by the Authority.

Following the 2014 inspection, the hospital has reviewed the governance structure of infection prevention and control and has established a clear framework of accountability and reporting lines. The Environmental and Operational Infection Control Group are led by hospital executives and clinicians. This group reports to the overarching Governance Group within the hospital and provides updates to the Executive Management Team and Hospital Board. In addition, the hospital management team has addressed infection prevention and control team resource deficiencies through the appointment of a new Consultant Microbiologist and a Surveillance Scientist. The surgical site surveillance programme in orthopaedic implant surgery cases recommenced in early 2015 with the appointment of a surgical site surveillance nurse. A recruitment campaign for an infection prevention and control Assistant Director of Nursing was in progress at the time of the inspection which is aimed at strengthening leadership within the infection prevention and control team.

The hospital commenced a phased refurbishment programme of all of the hospital's wards in 2014. The programme allows for one six bedded and two single inpatient rooms to be refurbished per month. To date, over 60% of the multi-bedded wards and 25% of the single rooms have been completed. However, HIQA notes that high risk areas such as the Theatre Department were not prioritised for refurbishment.

William Stokes Unit was revisited to determine the progress made since the 2014 inspection. The ward was repainted following the 2014 inspections, however further opportunities for improvement were identified in relation to the ward infrastructure and the cleaning of patient equipment.

Significant progress was made in respect of the environmental audit programme following the 2014 inspection and it was apparent that the hospital was actively endeavouring to address the deficiencies previously identified. A multidisciplinary environmental audit team has been put in place with a rolling audit schedule. Four unannounced environmental hygiene audits are performed monthly. Non compliant areas are re-audited and action plans are devised for areas requiring improvement. Results are monitored by the hospital management team.

It was apparent during the inspection that the hospital is committed to improving hand hygiene practice and improving compliance in local and national hand hygiene audits. Improvements and initiatives in respect of hand hygiene are included in the hand hygiene section of this report.

### **3.2 Key findings of the unannounced inspection on 23 September 2015**

#### ***Clostridium difficile* infection incidence**

Tallaght Hospital reports local incidence of *Clostridium difficile* infection on a quarterly basis in line with national Health Service Executive (HSE) requirements. The desirable HSE key performance indicator (KPI) for *Clostridium difficile* infection is less than or equal to 2.5 cases per 10,000 bed-days used.<sup>8</sup> The hospital's KPI data for *Clostridium difficile* infection in quarter one 2015 was 3.7 cases per 10,000 bed-days used. Provisional data reported to Authorised Persons indicated that quarter two and three figures may also show an increase in the hospital's incidence of *Clostridium difficile* infection. This increase was attributed to an outbreak of *Clostridium difficile* infection which occurred on William Stokes Unit in April 2015. Ribotyping of samples taken from four patients who acquired *Clostridium difficile* infection in hospital found that they were the same strain (078). On this basis, the possibility of cross infection could not be ruled out.

At the time of the April outbreak a multidisciplinary outbreak control team was convened by the hospital. Authorised Persons viewed the outbreak report and the root cause analysis which identified that the main contributory factor in the outbreak on William Stokes Unit was likely to be inadequate cleaning of shared patient equipment. At the time of the inspection a business case had been submitted for the purchase of additional patient equipment for individual use. This needs to be progressed as a matter of urgency. The outbreak report also detailed results of recent environmental audits undertaken by the MDT, measuring the integrity and cleanliness of the patient environment and equipment on William Stokes Unit. Results indicated that compliance had increased from 75% in March 2015 to 84% in April 2015. However suboptimal hygiene observed on the spot-check carried out by Authorised Persons during the revisit of William Stokes Unit indicates that the management of equipment and environmental hygiene on the unit remains an issue. Similar to findings during the 2014 inspection, brown staining was observed on the undersurfaces of commodes. Unclean commodes are of significant importance in the context of reducing the potential for transmission of *Clostridium difficile* infection, and should be a particular focus for improvement.<sup>9</sup>

On the day of inspection, a patient was isolated on contact precautions within a multioccupancy room on William Stokes Unit. However, there was no visible precautionary signage to communicate the precautions to staff. It is recommended that doors to isolation rooms are closed where possible and that related signage is

clearly visible. Access to clinical hand wash sinks was restricted in some multi-occupancy rooms.

In view of the disparities found between the audit scores and observations on the day of the inspection, HIQA recommends that the hospital carries out an immediate deep clean of William Stokes Unit and reviews the systems and processes relating to the monitoring, management and maintenance of the physical environment and all equipment to assure its compliance with Standard 3 of the Infection Prevention and Control Standards.<sup>1</sup>

Following the April 2015 outbreak, which was declared over on 26 June, the hospital implemented measures to address the increased incidence of *Clostridium difficile*. For example, increased awareness of *Clostridium difficile* infection was promoted through circulation of a superbug bug of the month newsletter aimed particularly at doctors and fact sheets for nurses detailing the introduction of the SIGHT mnemonic protocol<sup>9</sup> to aide the management of patients with suspected potentially infectious diarrhoea.

### **Safe injection practice**

During the inspection Authorised Persons identified opportunities for improvement in the preparation and storage of anaesthetic medication in the Theatre Department. A number of syringes containing reconstituted intravenous medications were insufficiently labelled and stored directly on a worktop in anaesthetic room six. The practice of reconstituting intravenous medications prior to use was also observed in some other anaesthetic rooms during the course of the inspection. Anaesthetic medication which was drawn up prior to a patient's arrival in the interventional radiology suite was stored in a manner that was not in line with good practice guidance. The observation of this in both areas inspected may indicate that this is not an isolated practice but extends to other departments within the hospital and should be addressed from a hospital wide perspective.

An open multi dose vial of heparin sodium was observed in a clean utility room adjacent to the cardiac catheterisation laboratory, the vial was not labelled to indicate the date of opening. It is recommended that multi-dose vials are designated single patient use where possible. Such vials should be labelled with the date of opening and discarded within the recommended timeframe specified by the manufacturer.<sup>10</sup>

To reduce the risk of transmission of infections to patients, intravenous medications should be prepared in a clean environment using an aseptic non touch technique and should be administered immediately where possible.<sup>10</sup> Assurances could not be provided that the integrity and sterility of these medications were maintained from compounding to administration. It is recommended 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 infection risks to patients in this regard are fully mitigated.

These findings were brought to the attention of the persons in charge of the Operating Theatre and Radiology Department for immediate mitigation and discussed with hospital management at the close out meeting.

### **Blood glucose monitoring practice**

Authorised Persons observed that blood glucose monitors along with their holding case and items for multiple fingerstick procedures were being brought to the point of care in the Theatre Department. It was reported to Authorised Persons that this is also the practice in the Radiology Department. This is not in line with best practice as it increases the risk of equipment contamination and potential transmission of blood borne viruses.<sup>11</sup> It is recommended that integrated sharps trays containing only the blood glucose monitor and items required for a single fingerstick procedure are brought to the point of care. It is recommended that this practice should be monitored to ensure that the risks to the patient of acquiring a healthcare associated infection are fully mitigated.

### **Environmental hygiene and maintenance**

The overall standard of environmental and equipment hygiene in the Theatre Department was found to be sub-optimal, with unacceptable levels of dust observed in all areas inspected. Despite cleaning records indicating that theatre eight had been cleaned on the morning of inspection, Authorised Persons observed unacceptable levels of dust on most surfaces. This indicated that cleaning and dust control measures were insufficient. Deficiencies in the maintenance in the physical environment were also observed by Authorised Persons in the Theatre Department. Surfaces, finishes and flooring were damaged and poorly maintained and as such did not facilitate effective cleaning and likely facilitated the production and accumulation of dust.

Authorised Persons observed large amounts of equipment, supplies and extraneous items stored alongside waste bins in the Theatre Department disposal corridor. Storage areas need to be appropriate and adequate for the operational requirements of each clinical area. Failure to appropriately segregate functional areas and incomplete implementation of best practice guidelines in relation to environmental cleaning and related equipment management poses a risk of cross contamination and potentially places patients at risk of infection.<sup>12</sup>

The Theatre Department was served by only one patient toilet; this does not sufficiently meet the throughput of patients. Furthermore, this toilet was only

accessible via the 'dirty'<sup>±</sup> utility room, giving unauthorised access to hazardous cleaning agents and materials. There should be separate sanitary facilities for patients. The hospital informed HIQA that a review of the sanitary facilities for the Theatre Department was in progress.

Documentation seen by Authorised Persons during the inspection indicated that the hospital has identified these risks through local environmental audits. For example, theatres five and six achieved 73% compliance in May 2015. This prompted a re-audit the following month in which compliance was only 78%. The Post Anaesthetic Care Unit (PACU)/ Recovery achieved 76% compliance in a July 2015 audit. The lack of effective reciprocal action to issues identified through internal audit is of concern to HIQA. The hospital informed HIQA that an assessment of the department has been performed and plans are in place to commence upgrading of the facility over the Christmas period.

Authorised Persons were informed that one set of theatres is audited per month. HIQA recommends stronger local ownership and oversight of cleaning processes, cleaning frequencies and monitoring systems to ensure that all areas within the Theatre Department are cleaned and audited to the specification required in this high risk area.<sup>13</sup>

### **Infrastructure and use of the Post Anaesthetic Care Unit**

The Post Anaesthetic Care Unit (PACU) was originally designed to recover mechanically ventilated patients post anaesthetic in the interim of admission to the Intensive Care Unit (ICU). However, Authorised Persons were informed that the PACU is frequently used to accommodate patients who are not post anaesthetic but require admission to the Intensive Care Unit (ICU). This practice has emerged due to a deficiency in intensive care unit bed capacity. The unit is not self contained with all through traffic from theatre to the recovery passing by the PACU. Furthermore, the unit did not have designated isolation facilities for the management of patients with transmissible infections. One patient requiring isolation precautions was accommodated in the PACU at the time of inspection. Precautionary signage was attached to the bedside curtain. However, Authorised Persons were not assured that transmission based precautions were adequately implemented. Consequently, the configuration and location of the PACU was suboptimal from an infection prevention and control perspective. Authorised Persons were informed that the hospital has submitted a business case for the development of enhanced critical care capacity which should end the inappropriate placement of ICU patients in PACU. However there was no agreed timeframe for this project. These works need to be progressed as a matter of priority.

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<sup>±</sup> 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 change<sup>14</sup>: *ensuring that the necessary infrastructure is in place to allow healthcare workers to practice hand hygiene.*

- The design of all clinical hand wash sinks in the Theatre Department did not conform to Health Building Note 00-10 Part C: Sanitary assemblies.<sup>15</sup> The design of clinical hand wash sinks in the new interventional radiology suite were compliant with Health Building Note 00-10 Part C: Sanitary assemblies. The design of some clinical hand wash sinks in other areas of the Radiology Department were not HBN 00-10 compliant.<sup>15</sup>
- There were no dedicated hand hygiene facilities available in a 'dirty' utility room serving theatre eight. All 'dirty' utility rooms should include dedicated facilities for hand washing.
- Alcohol gel was available throughout the Radiology Department, and at each point of care in William Stokes Unit and in the Theatre Department.
- Access to clinical hand wash sinks in some multi-occupancy rooms was restricted.

#### 3.3.2 Training/education<sup>14</sup>: *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.*

- Staff in Tallaght Hospital are required to attend hand hygiene training on an annual basis. This is over and above the HSE requirement of two yearly training. Hospital staff can avail of either practical onsite hand hygiene training or the HSE LanD e-learning training programme (the HSE's online resource for learning and development).<sup>16</sup> Hospital staff are deemed to be trained in hand hygiene if they have completed one or both training modes.
- Documentation indicated that 80% of all hospital staff had attended mandatory hand hygiene training in the previous year and 92% of staff attended within the previous two years.
- The consultant microbiologist coordinates monthly hand hygiene lectures to consultants.
- Authorised Persons were informed that a weekly hand hygiene education compliance report is reviewed fortnightly at the Executive Management Team meeting.

#### Local area training

- July 2015 records indicated that 80% of staff in the Radiology Department had attended hand hygiene.
- Records supplied to Authorised Persons showed that all staff groups within the Theatre Department, with the exception of the consultant surgeons, had

attended hand hygiene training within the past two years. Attendance of consultant surgeons at hand hygiene training needs improvement.

**3.3.3 Evaluation and feedback<sup>14</sup>:** *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

Tallaght Hospital participates in the national hand hygiene audits which are published twice a year. The results in table 1 are taken from publically available data on the Health Protection Surveillance Centre’s website. Hand hygiene compliance has improved considerably between June 2014 and June 2015, however, the hospital has not yet achieved the desirable HSE’s current national target of 90%.

Table 1: Tallaght Hospital hand hygiene audit results

| Period                 | Result            |
|------------------------|-------------------|
| Period 1 June 2011     | No data available |
| Period 2 Oct/Nov 2011  | 81.0%             |
| Period 3 May/June 2012 | 72.4%             |
| Period 4 Oct/Nov 2012  | 82.9%             |
| Period 5 May/June 2013 | 80.0%             |
| Period 6 Oct/Nov 2013  | 70.0%             |
| Period 7 May/June 2014 | 72.4%             |
| Period 8 Oct/Nov 2014  | 80.5%             |
| Period 9 May/June 2015 | 85.2%             |

Source: Health Protection Surveillance Centre – national hand hygiene audit results.<sup>17</sup>

### Local hand hygiene audits

- Hospital wide local hand hygiene audits are carried out on a monthly basis. Multidisciplinary hand hygiene audit teams are in place. In the Theatre Department, the most recent results are displayed on the notice board and are discussed at staff meetings.

- Local hand hygiene audits are performed on a monthly basis in the Radiology Department. The most recent hand hygiene audit results for the Radiology Department showed compliance of 80% for August 2015 which is below the desirable HSE national target of 90%.
- In August 2015 a total of 430 hand hygiene opportunities were observed in local audits of 28 clinical areas. Results indicated that overall compliance with hand hygiene was 88.8%. Compliance was highest among allied health staff who achieved over 94% compliance. Lower compliance of 82% was identified among ancillary staff. As variation in performance among disciplines affects overall hospital hand hygiene compliance scores, it is recommended that targeted educational and audit is performed in order to drive improvement in hand hygiene 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. 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 WHO<sup>14</sup> and the HSE.<sup>18</sup> 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<sup>Y</sup> 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.

HIQA observed 24 hand hygiene opportunities in total during the inspection. Hand hygiene opportunities observed comprised the following:

- Four before touching a patient
- 11 after touching a patient
- Nine after touching patient surroundings.

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<sup>Y</sup> The inspectors observe if all areas of hands are washed or alcohol hand rub applied to cover all areas of hands.

- Fifteen of the 24 hand hygiene opportunities were taken. The nine opportunities which were not taken comprised the following:
  - Three before touching a patient
  - Five after touching a patient
  - One after touching patient surroundings.
- Of the 15 opportunities which were taken, the hand hygiene technique was observed (uninterrupted and unobstructed) by the Authorised Persons for 11 opportunities and the correct technique was observed in nine hand hygiene actions.

**3.3.4 Reminders in the workplace<sup>14</sup>:** *prompting and reminding healthcare workers about the importance of hand hygiene and about the appropriate indications and procedures for performing it.*

- The hospital has made commendable efforts in improving and promoting good hand hygiene practice for staff, visitors and patients.
- A specially commissioned hologram has been installed on the ground floor communal area which provides verbal information regarding hand hygiene.
- Banks of alcohol gel dispensers have been installed inside the main entrance to facilitate hand hygiene for people entering and leaving the hospital.
- Large floor mats have been strategically located at the entrance and a large wall poster has been placed within the ground floor communal area to promote hand hygiene.
- Hand hygiene advisory posters next to soap and alcohol gel dispensers were up-to-date, clean and appropriately displayed in the Radiology Department.
- Stickers have been placed on hand hygiene product dispensers to highlight good practice.

**3.3.5 Institutional safety climate<sup>11</sup>:** *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 hospital has prioritised the area of hand hygiene through the use of many innovative initiatives including the implementation of a zero harm awareness campaign with a focus on hand hygiene.
- HIQA notes that the hospital has adopted a multimodal strategy in improving hand hygiene practices. Authorised Persons were informed of recent initiatives, such as a hand hygiene awareness week, which involved senior management and

clinicians being present on the wards discussing and promoting improvements in hand hygiene compliance.

- However, observations by Authorised Persons during the inspection, combined with recent hand hygiene audit reports, suggested that a culture of hand hygiene best practice is not as yet fully embedded at all levels. The hospital needs to build on the achievements to date to ensure that its performance is improved particularly in reaching the national target of 90% hand hygiene compliance in both the national and local audits.<sup>17</sup>

### **3.4 Key findings relating to infection prevention care bundles\***

Care bundles to reduce the risk of different types of infection have been introduced across many health services over the past number of years, and there have been a number of guidelines published in recent years recommending their introduction across the Irish health system.<sup>3-4</sup>

Authorised Persons looked at documentation relating to care bundle implementation in William Stokes Unit. It was reported that urinary catheter care bundles have been implemented in inpatient clinical areas across the hospital. Documentation reviewed in William Stokes Ward showed that urinary catheter care bundle elements were checked daily. On the day of inspection Authorised Persons found no evidence that ongoing audit of care bundle compliance was being monitored and fed back to staff. Effective bundle implementation requires; routine implementation of evidence based measures, audit and feedback on adherence to policy, surveillance and reporting of associated device related infection, and effective staff and patient education.

Peripheral vascular catheter management was included in individualised care plans for patients however peripheral venous catheter care bundles have not been implemented by the hospital to date. Education in respect of peripheral line care bundles has commenced with hospital wide implementation expected by November 2015. The number of *Staphylococcus aureus* blood stream infections are monitored in line with HSE key performance indicators. Root cause analyses are performed when such blood stream infections are identified.

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\* A care bundle consists of a number of evidence based practices which when consistently implemented together reduce the risk of device related infection.

#### 4. Summary

The Authority acknowledges that the hospital has taken on board the recommendations of the 2014 inspections and is working towards improving the clinical environment in ward areas. However, based on the findings at the time of this inspection further improvements are required in relation to the management of the physical environment and patient equipment to ensure compliance with the Standards.<sup>1</sup> It is essential that the maintenance of high risk areas such as the Theatre Department are prioritised by the nature of the risks posed by the services provided. Concerns regarding the Theatre Department were escalated to senior hospital management at the close out meeting of the inspection to promote immediate improvement.

HIQA recommends that Tallaght Hospital reviews the deficits identified during the unannounced inspection regarding the management of patient equipment and the environment in the context of controlling the spread of *Clostridium difficile* infection and other healthcare associated infections. Lessons learnt from previous outbreaks<sup>19-20</sup> and national guidelines<sup>9</sup> recommend that multifaceted interventions are required to mitigate the risks posed by *Clostridium difficile* in a hospital environment. HIQA recommends that Tallaght Hospital review its systems and processes relating to the monitoring, management and maintenance of patient equipment to assure its compliance with Standard 3 of the Infection Prevention and Control Standards.<sup>1</sup>

Opportunities for improvement relating to medication management and unsafe injection practices were also identified during the inspection. It is recommended that the hospital reviews the practice relating to the preparation and administration of intravenous medication to assure itself that the potential risks to patients in this regard are fully mitigated.

Evidence provided and viewed at the time of the inspection indicates that the hospital is working towards improving hand hygiene compliance at all levels. However, compliance in national audits, local internal audits and practices observed by Authorised Persons during the inspection remain below the HSE national target of 90%. The hospital needs to continue to build on hand hygiene compliances achieved to date to ensure that hand hygiene practice is improved and maintained in all areas.

It is recommended that the implementation of PVC Care bundles should be progressed in line with national guidelines. The routine application of infection prevention care bundles has been proven to reduce device related infection internationally, and has been recommended in relevant national guidelines, and the *National Standards for the Prevention and Control of Healthcare Associated Infection*, for a number of years. Tallaght hospital needs to continue to build on the

work conducted to date to fully embed infection prevention care bundles into routine practice in the best interest of patients.

## **5. Next steps**

Tallaght 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 HIQA with details of the web link to the QIP.

It is the responsibility of Tallaght Hospital to formulate, resource and execute its QIP to completion. HIQA 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<sup>‡</sup>

1. Health Information and Quality Authority. *National Standards for the Prevention and Control of Healthcare Associated Infections*. Dublin: Health Information and Quality Authority; 2009. [Online]. Available 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; 2015. [Online]. Available from: <http://www.hiqa.ie/system/files/Guide-to-HCAI-Unannounced-Inspections-2015.pdf>
3. Health Protection Surveillance Centre. *Prevention of Intravascular Catheter - related Infection in Ireland. Update of 2009 National Guidelines September 2014*. 2014 [Online]. Available from: <http://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/IntravascularIVlines/Publications/File,14834,en.pdf>
4. Health Protection Surveillance Centre. *Guidelines for the prevention of catheter-associated urinary tract infection. SARI Working Group*. 2011. [Online]. Available from: <https://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,12913,en.pdf>
5. Loveday H.P., Wilson J.A., Pratt R.J., Golsorkhi M., Tingle A., Bak A., Browne J. et al (2014) epic 3: National evidence-based guidelines for preventing healthcare-associated infections in NHS hospitals in England. *Journal of Hospital Infection*. 2014 January, Volume86, Supplement 1: ppS1-S70. [Online] Available from: <http://www.sciencedirect.com/science/article/pii/S0195670113600122>
6. World Health Organization. *A Guide to the Implementation of the WHO Multimodal Hand Hygiene Improvement Strategy*. Revised August 2009. [Online]. Available from: [http://www.who.int/gpsc/5may/tools/system\\_change/en/](http://www.who.int/gpsc/5may/tools/system_change/en/).
7. Health Service Executive. *Quality & Patient Safety Department, HSE South QIP Template. Quality Improvement Plan for: Tallaght Hospital*. [Online]. Available from: <http://www.amnch.ie/About-Us/Reports/Tallaght-Hospital-Quality-Improvement-Plan-for-Prevention-of-HCAIs,-2014.html>

<sup>‡</sup> All online references were accessed at the time of preparing this report.

8. Health Service Executive. *National Service Plan 2015*. [Online]. Available from: <http://hse.ie/eng/services/publications/corporate/sp2015.pdf>
9. Department of Health. National Clinical Effectiveness Committee. Diagnosis and Management of Clostridium difficile Infection in Ireland. National Clinical Guideline No 3, 2014. Available online from: <http://www.hpsc.ie/A-Z/Gastroenteric/Clostridiumdifficile/Guidelines/File,13950,en.pdf>
10. Dolan et al. APIC position paper: Safe injection, infusion and medication practices in healthcare. *American Journal of Infection Control* 2010; 38:167-172. [Online]. Available from: [http://www.apic.org/Resource\\_/TinyMceFileManager/Position\\_Statements/AJIC\\_Safe\\_Injection0310.pdf](http://www.apic.org/Resource_/TinyMceFileManager/Position_Statements/AJIC_Safe_Injection0310.pdf)
11. Health Service Executive (2011) Disease Surveillance Report of HPSC. Ireland Epi-sight Vol 12(1) Jan 2011. Available online from: <http://ndsc.newsweaver.ie/epiinsight/1q4knv6wsxjzeqw6u8rbkx>
12. Loveday H.P., Wilson J.A., Pratt R.J., Golsorkhi M., Tingle A., Bak A., Browne J. et al (2014) epic 3: National evidence-based guidelines for preventing healthcare-associated infections in NHS hospitals in England. *Journal of Hospital Infection*. 2014 January, Volume86, Supplement 1: ppS1-S70. [Online] Available from: <http://www.sciencedirect.com/science/article/pii/S0195670113600122>
13. The British Standards Institute. PAS 5748:2014 Specification for the planning, measurement and review of cleanliness services in hospitals. [Online]. Available from: <http://shop.bsigroup.com/ProductDetail/?pid=000000000030292594>
14. World Health Organization. *Guide to Hand Hygiene in Healthcare and WHO Hand Hygiene Technical Reference Manual*. [Online]. Available from: [http://whqlibdoc.who.int/publications/2009/9789241597906\\_eng.pdf?ua=1](http://whqlibdoc.who.int/publications/2009/9789241597906_eng.pdf?ua=1)
15. Department of Health, United Kingdom. Health Building Note 00-10 Part C: Sanitary Assemblies. [Online]. Available from: [http://www.dhsspsni.gov.uk/hbn\\_00-10\\_part\\_c\\_l.pdf](http://www.dhsspsni.gov.uk/hbn_00-10_part_c_l.pdf)
16. Health Service Executive. HSELand. [Online]. Available from: <http://www.hseland.ie/tohm/default.asp?message=logout>
17. The Health Protection Surveillance Centre. *National Hand Hygiene Audit Results*. [Online]. [Online]. Available from: <http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/Handwashing/HandHygieneAudit/HandHygieneAuditResults/>
18. Health Service Executive. *Hand Hygiene Observation Audit Standard Operating Procedure April 2013*. [Online]. Available from: [http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/Handwashing/HandHygieneAudit/HandHygieneAuditTools/File\\_12660,en.pdf](http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/Handwashing/HandHygieneAudit/HandHygieneAuditTools/File_12660,en.pdf)
19. Healthcare Commission. Investigation into outbreaks of *Clostridium difficile* at Stoke Mandeville Hospital, Buckinghamshire Hospitals NHS Trust, 2006.

Available online from:

<http://www.buckshealthcare.nhs.uk/Downloads/healthcarecommision/HCC-Investigation-into-the-Outbreak-of-Clostridium-Difficile.pdf>

20. Health Service Executive. Review of Increased Identification of *Clostridium difficile* at Ennis General Hospital 2007. Available online from:

<http://www.lenus.ie/hse/bitstream/10147/45982/1/9779.pdf>

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