

Report of inspections at Temple Street Children's University Hospital, Dublin 1

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

Date of on-site inspections: 27 July and 6 September 2016

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 personcentred 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.

Table of Contents

1.	Introduction	1
2.	Findings	3
2	2.1 Immediate high risk findings	4
,	2.2 Additional key findings of the 2016 inspections	7
	2.3 Progress since the unannounced inspection on 22 September 2014	g
	2.4 Key findings relating to hand hygiene	<u>g</u>
	2.5 Key findings relating to infection prevention care bundles	12
3.	Summary	13
4.	Next steps	14
5	References	15

Appendix 1- Copy of letter issued to Temple Street Children's University Hospital following the unannounced inspection on 27 July 2016.

Appendix 2- Copy of response received from Temple Street Children's University Hospital to the letter issued by HIQA following the unannounced inspection on 27 July 2016.

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.*¹ The inspection approach taken by HIQA is outlined in guidance available on HIQA'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 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*, HIQA began assessing the practice in the implementation of infection prevention care bundles. In particular this monitoring focused upon peripheral vascular catheter and urinary catheter care bundles, but monitoring of performance may include other care bundles as recommended in prior national guidelines^{3,4} and international best practice.⁵

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 minimize 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. HIQA 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. 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 2016, unannounced inspections will aim to identify progress made at each hospital since the previous unannounced inspection.

Timeline of inspections:

An unannounced inspection was carried out at Temple Street Children's University Hospital on 27 July 2016. A re-inspection six weeks later examined the level of progress which had been made regarding environmental and patient equipment hygiene in the areas inspected.

A summary of these inspections is shown in Table 1. This report was prepared after the re-inspection and includes the findings of both inspections and any improvements observed between the first and second inspection.

Table 1: Summary of inspections carried out at Temple Street Children's University Hospital in 2016

Date of inspection	Authorized Persons	Clinical areas inspected and or re-visited	Time of inspection
27 July 2016	Noreen Flannelly-Kinsella Aileen O' Brien	St Patrick's Ward and St Bridget's Ward were inspected.	10:00hrs- 18:30hrs
6 September 2016	Noreen Flannelly-Kinsella Aileen O' Brien Gearóid Harrahill Liam Strahan	St Patrick's Ward and St Bridget's Ward were re-visited. St Michael's C Ward was inspected. The central location for the laundering of cleaning textiles was visited.	10.30hrs- 17.05hrs

HIQA would like to acknowledge the cooperation of staff during both inspections.

2. Findings

This section of the report outlines the findings of inspections undertaken at Temple Street Children's University Hospital on 27 July 2016 and 6 September 2016.

Overview of areas inspected

St Patrick's Ward is a 12-bedded medical ward with patient accommodation comprising five cots in the main ward area, one double cot cubicle and five single cot cubicles.

St Bridget's Ward, the National Centre for Inherited Inborn Errors of Metabolism, is a seven-bedded ward and comprises three single cubicles and two double-bed cubicles.

St Michael's C Ward, a combined renal and diabetes unit is a nine-bedded unit comprising six single rooms and one three-bed room. The national paediatric dialysis service is provided in a section of the unit where there are three dialysis stations in an open plan area and a fourth dialysis station in a single room. There is also an out-patient facility within this unit for children with renal conditions.

In addition, the central location for the laundering of cleaning textiles was visited.

Structure of this report

The structure of the remainder of this report is as follows:

- **Section 2.1** describes immediate high risk findings identified during the inspection on 27 July 2016 and the mitigating measures implemented by the hospital in response to the findings. Copies of the letter sent to the hospital regarding these findings and the response from the hospital are shown in Appendices 1 and 2 respectively.
- **Section 2.2** summarizes additional key findings relating to areas of non-compliance observed during the inspection on 27 July 2016 and the level of progress made by the hospital in response to these findings at the time of the re-inspection on 6 September 2016.
- **Section 2.3** outlines the progress made by the hospital following the unannounced inspection by HIQA on 22 September 2014.
- Section 2.4 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.⁶
- Section 2.5 describes the key findings relating to infection prevention care bundles.

This report outlines HIQA's overall assessment in relation to these inspections, and includes key findings of relevance. In addition to this report, 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 is fully summarized within this report.

2.1 Immediate high risk findings

Introduction

During the unannounced inspection on 27 July 2016, immediate high risk findings in relation to infection prevention and control were identified. Specifically, risks were identified in relation to:

- Environmental hygiene,
- Patient equipment hygiene.

Cumulative findings identified were such that HIQA deemed that a re-inspection was necessary within six weeks. Details of these risks were communicated by HIQA to the hospital. A copy of the letter issued to the hospital regarding the risks identified on 27 July 2016, and a copy of the response received from the hospital, are shown in Appendices 1 and 2 respectively. Risks identified during the July inspection and the level of progress assessed during the re-inspection in September are outlined below.

Environmental hygiene

Environmental hygiene in both St Patrick's Ward and St Bridget's Ward was poor overall and was not in line with current national standards and guidelines for hospital cleaning.^{1,7,8} Cot frames, bedside storage units and recliner chairs in vacant bed spaces in St Patrick's Ward that had been cleaned following patient discharge were stained. Multiple surfaces within the wards inspected were dusty and these included bed undercarriages, chairs, examination couches, floors, over-bed lights, wall surfaces, radiators, ventilation grilles, staff workstations, a games table and horizontal ledges. Other unclean surfaces, including the interiors of waste bins, cupboards, storage units and fridges, did not appear to have been included in ward cleaning specifications. Poor finishes around radiators in St Bridget's Ward facilitated dust collection.

It was of concern that documentation reviewed included daily cleaning checklists which had been signed by cleaning operatives and supervisors to indicate that cleaning was complete. Additionally, it was reported that St Bridget's Ward, which closed every weekend, was cleaned when vacant. These findings did not provide assurance that cleaning activity had been appropriately organized to achieve desirable standards or that cleaning staff had been appropriately trained or supervised. It was reported that toilets were cleaned once a day and that a janitorial

service was available to staff if required during the day, which was not in line with recommended national minimum cleaning frequencies.⁸

Other factors which contributed to poor environmental hygiene in the wards inspected included an outdated hospital infrastructure, poor maintenance, very limited space in patient care and ancillary areas, lack of storage space, the design and positioning of beds and cots and bedside storage units which did not facilitate effective cleaning.

Results of monthly local environmental hygiene audits in both areas inspected showed over 85% compliance with desirable environmental hygiene standards. An unannounced management hygiene audit result reviewed showed that St Patrick's Ward achieved 88% compliance with desirable standards in June 2016. A high level of compliance with desirable cleaning standards in these wards was not evident in the July HIQA inspection.

In addition to monthly local environmental hygiene audits, it was reported that hygiene audits were undertaken across the hospital by the senior management team and the hygiene service provider. The 2016 hospital quality improvement plan showed unannounced management hygiene audit combined compliance scores of 50% and 75% for Quarters 1 and 2 respectively. These scores did not provide assurance that other areas of the hospital had been effectively cleaned and maintained.

Patient equipment hygiene

The standard of patient equipment hygiene in St Patrick's Ward was not in line with national best practice guidelines. There was red staining on an integrated sharps container tray. Dust and/or stains were observed on blood pressure cuffs, bedside suction catheter holders, holders for thermometers, auroscope disposable covers, an observation monitoring trolley, humidifiers, a portable suction machine, a drip stand, syringe drivers and a stainless steel trolley. It was reported that the ward did not consistently have the required compliment of staff necessary for such cleaning.

Re-inspection on 6 September 2016

The next section of this report outlines the progress made by the hospital following the unannounced inspection in July 2016.

Environmental hygiene

Significant improvements were made in relation to environmental hygiene in both St Patrick's Ward and St Bridget's Ward during the September 2016 re-inspection. Both ward environments were found to be clean. It was evident that enhanced cleaning had been performed in both areas.

New flooring had been installed and painting had been carried out in St Patrick's Ward. Improvement works had also been performed in St Bridget's Ward and included painting and woodwork repairs and installation of radiator covers. Service panels under hand wash sinks, floor covering and other surfaces and sanitary fittings in patient bathrooms had been upgraded. Open shelves under a blood sample analyser had been enclosed. Improvement works had also been performed in the corridor outside St Bridget's Ward and included new floor covering, painting and enclosure of some exposed pipe work.

Revised cleaning specifications had been developed for St Patrick's Ward, St Bridget's Ward and other wards across the hospital. Documentation reviewed showed that all elements to be cleaned, cleaning methodology, frequency of cleaning and staff responsible for cleaning were clearly defined. It was reported that radiator cleaning had been completed across the hospital. Radiators should be cleaned regularly in line with national cleaning frequencies and this should be included in local cleaning schedules. Cleaning frequencies for toilets were under revision. The hospital was in the process of reviewing audit practice.

A local environmental hygiene audit performed in St Bridget's Ward following deep cleaning and improvement works showed 98% compliance with desirable standards in August 2016.

Documentation reviewed showed that the hospital management team had comprehensively revised cleaning processes across the hospital. Communication in relation to cleaning processes had been enhanced. It was reported that environmental cleaning staff would receive training. It was apparent that the hospital management team and staff had worked together effectively to address the findings of the previous inspection. Learning in this regard had been shared across the hospital at management huddles and staff meetings.

Patient equipment hygiene

There was significant improvement in relation to patient equipment cleaning and related processes in St Patrick's Ward where all items of patient equipment inspected were clean. A labelling system, providing assurance that patient equipment had been cleaned, was in use.

The hospital had revised cleaning specifications for patient equipment. Elements to be cleaned, the cleaning frequency, cleaning methodology and the person responsible for cleaning were clearly defined. It was reported that dedicated staff time for equipment cleaning would be resourced.

2.2 Additional key findings of the 2016 inspections

Additional key findings observed during the July inspection are outlined below.

St Bridget's Ward inspected on 27 July 2016

Overall patient equipment in St Bridget's Ward was clean with few exceptions. A stained commode was stored in a locked cupboard on a corridor outside the ward. The commode was stored in this manner because there was not enough floor space within the 'dirty' utility room^{*}, which was the appropriate storage area for this item. In addition, bedside suction catheter holders were unclean.

Additional key findings observed during the September re-inspection are outlined below.

St Michael's C Ward

Environmental and patient equipment hygiene

Overall the environment and patient equipment in St Michael's C Ward was generally clean with a few exceptions. Heavy dust was present under pull-out beds for parents in two patient rooms and behind a fixed cupboard in the open plan renal dialysis area. The design and manner in which these items were fitted did not facilitate effective cleaning. It is recommended that fixtures or fittings installed in patient care areas should not provide a reservoir for dust. Opportunities for improvement were identified in relation to maintenance and included damaged woodwork and some stained ceiling tiles. Painting was in progress in one room in the ward at the time of inspection. Documentation reviewed indicated that there were delays in addressing maintenance requests that had been reported by ward management staff.

The inside cover of three mattresses inspected were stained indicating that these were no longer fully waterproof. It was reported that a stock of mattresses had been ordered to facilitate replacement across the hospital as required. It is recommended that a supply is available going forward so that mattresses can be replaced when required. Mattress cores and covers should be checked regularly to identify damaged mattresses. There was good local ownership in relation to infection prevention and control and hygiene in general in St Michael's C Ward.

^{*} A 'dirty' utility room is a temporary holding area for soiled/contaminated equipment, materials or waste prior to their disposal, cleaning or treatment.

Infrastructure and facilities

The infrastructure and facilities in the renal dialysis area were not in line with recommended guidelines. The area used for dialysis patients was small and was located within a designated section of St Michael's C Ward and therefore was not fully self-contained.

An outpatient clinic for renal patients was also located in St Michael's C Ward which required people attending the clinic to walk through the ward. Space in the outpatient waiting area was restricted when the clinic was in progress. It was reported that dialysis waste fluid was drained into a designated outlet located in a toilet/shower room used by both inpatients and outpatients. This arrangement is not recommended from an infection control perspective and practice in this regard needs to be reviewed. Surfaces and finishes in this room did not facilitate effective cleaning.

This outpatient area did not have appropriate facilities for procedures such as handling urine samples. Hospital managers told inspectors that the renal outpatient's clinic was scheduled to move to another part of the hospital shortly.

General hospital infrastructure and maintenance

The structure and design of the wards inspected were contained within one of the oldest parts of the hospital and did not meet the desirable specifications of a modern children's hospital. This dated infrastructure did not facilitate compliance with the *National Standards for the Prevention and Control of Healthcare Associated Infections.*¹ It is planned that the hospital will relocate to a new National Children's Hospital on the St James's Hospital campus.

The infrastructure and design of the areas inspected was poor. It is acknowledged that the hospital had upgraded surfaces and finishes in patient care areas. However, space in patient care areas was very limited which made cleaning difficult. Because of the age of the hospital and associated site constraints, opportunities to improve the patient care environment were limited. Ancillary facilities in wards were poor, again due to lack of space. There were limited storage facilities for supplies and equipment. This was apparent in the dialysis area where sterile supplies were stored in the open plan patient care area.

Ward corridors were narrow and doors to storage cupboards opened onto these corridors which further restricted available space. The hospital did not have a proactive preventative maintenance programme. Woodwork and paintwork in some areas did not appear to have been appropriately maintained.

Surfaces in communal corridors and stairwells were shabby and worn and these finishes combined with electrical wiring and exposed pipe work did not facilitate effective cleaning. Documentation reviewed showed that there were delays in addressing maintenance requests. It was reported that maintenance and upgrade work was focused on patient care areas rather than communal areas. HIQA acknowledges that Temple Street Children's Hospital staff work in a compromised physical environment dealing with a high level of activity and complex cases.

The central location for the laundering of cleaning textiles Overall this area was clean.

2.3 Progress since the unannounced inspection on 22 September 2014

In 2014, HIQA conducted an unannounced inspection at Temple Street Children's University Hospital. The Quality Improvement Plan (QIP)¹⁰ produced by the hospital following the 2014 inspection was reviewed.

It was reported that mandatory annual training in relation to sharps management and waste management had been rolled out and the hospital waste management policy had been updated. The hospital had established a working group to oversee the replacement of beds and cots but progress in this area was delayed due to the need to standardize equipment selection across the Children's Hospital Group.

HIQA found that not all actions identified in the QIP had been fully implemented. For example, information technology to assist with streamlining hygiene auditing and review of storage facilities had not been implemented but both of these actions were reported to be in progress. Improvement of storage facilities was limited due to space constraints in the hospital. The hospital had completed an audit of hand hygiene sinks and was in the process of upgrading hand hygiene facilities.

2.4 Key findings relating to hand hygiene

2.4.1 System change⁶: ensuring that the necessary infrastructure is in place to allow healthcare workers to practice hand hygiene.

- Alcohol hand gel was available at each point of care in the areas inspected.
- The design of some but not all clinical hand wash sinks was compliant with Health Building Note (HBN) 00-10 Part C: Sanitary Assemblies guidelines in the wards inspected.¹¹
- There was no clinical hand wash sink in the 'dirty' utility room in St Michael's C
 Ward or in the cleaning equipment room in St Patrick's and St Bridget's Wards.
- There was no clinical hand wash sink in one of the single cubicles in St Patrick's Ward.
- **2.4.2 Training/education** ⁶: 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.

- Staff in Temple Street Children's University Hospital are required to complete mandatory hand hygiene training using the HSELanD e-learning training programme (the HSE's online resource for learning and development) annually, which is over and above the HSE requirement for training every two years.¹²
- Documentation reviewed indicated that 92% of relevant hospital staff had completed online mandatory hand hygiene training in July 2016.
- All staff were up to date with hand hygiene training in St Patrick's Ward, St Michael's C Ward and St Bridget's Ward.
- A 'Bare Below Elbows' policy for staff was implemented in 2016 and education was provided to hospital staff in this regard. Compliance with this initiative was apparent during both inspections.
- A number of multi-disciplinary staff had undertaken a 'train the trainer' programme in 2016 in order to facilitate hand hygiene training across the hospital.
- **2.4.3 Evaluation and feedback** ⁶: *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

Temple Street Children's University Hospital participates in the national hand hygiene audits which are published twice a year. Hospital hand hygiene compliance was 92.4% in October/November 2015 which exceeded the Health Service Executive (HSE) national compliance target of 90%. Results are shown in Table 2. A further improvement in hand hygiene compliance was observed in May/June 2016 when the hospital achieved 93% hand hygiene compliance in the national hand hygiene audits which is commendable.

Table 2: Temple Street Children's University Hospital national hand hygiene audit results

Time period	Result
October/November 2011	83.3%
May/June 2012	75.7%
October/November 2012	73.3%
May/June 2013	77.6%
October/November 2013	69.0%
May/June 2014	62.4%
October/November 2014	85.2%
May/June 2015	89.0%
October/November 2015	92.4%

Source: Health Protection Surveillance Centre – national hand hygiene audit results. 14

Local hand hygiene audits

St Bridget's Ward, St Patrick's Ward and St Michael's C Ward achieved hand hygiene compliance of 87%, 100% and 97% respectively in hand hygiene audits in 2016.

Observation of hand hygiene opportunities

Observations of hand hygiene practice were not performed during this inspection.

- **2.4.4 Reminders in the workplace⁶:** 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 up to date, clean and appropriately displayed in all areas inspected.
- Signage promoting 'Bare Below Elbows' was displayed in the hospital.
- **2.4.5 Institutional safety climate**⁶: *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 'Bare Below Elbows' initiative was led and supported by the senior hospital management team.

- A 'Hand Hygiene Awareness Day' was held in the hospital in May 2016 to coincide with international hand hygiene day.
- The hospital hosts an annual hygiene awareness event which also includes a focus on hand hygiene.
- St Michael's C Ward implemented a quality improvement project and as a result improved hand hygiene compliance on the ward from 42% to 92% between August 2015 and May 2016. This project included patients who acted as 'bug detectives' to promote hand hygiene among staff. The ward also had a hand hygiene awareness month in August 2016.
- Twice daily hospital management team safety huddle discussions include hospital hygiene.
- Hand hygiene training is included in induction programmes for new staff.
- Several disciplines of staff are involved in promoting hand hygiene and providing training.
- Information highlighting the importance of hand hygiene for parents is available on the hospital website in addition to printed information sheets.
- Parent satisfaction surveys were performed in the hospital.

2.5 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.^{3,4}

Evidence-based care plans for both intravenous cannulation and central venous access devices were in place in the wards inspected. It was reported that venous access device care bundles had been implemented in critical care areas. The hospital had established a working group to scope out and plan the implementation of care bundles across other clinical areas in the hospital.

Documentation reviewed showed that the hospital had completed an audit in relation to the management of peripheral vascular catheters in 2016. The hospital also audited the clinical impact of central vascular access device-related infections in order to establish a baseline infection rate prior to the implementation of central venous catheter care bundles. This is good practice and facilitates the identification of opportunities for improvement. Monthly nursing metrics recorded data in relation to elements of invasive device management.

12

[†] A care bundle consists of a number of evidence-based practices which when consistently implemented together reduce the risk of device-related infection.

Quarterly surveillance data was produced in relation to catheter-related blood stream infection and device associated *Staphylococcus aureus* bacteraemia and were included in infection prevention and control summary reports for staff. Temple Street Children's University Hospital also had a specialist intravenous device management team.

An ongoing focus on prevention of central venous access device-related infection was evident in St Michael's C Ward. Ward staff had developed a patient safety information card for patients with a central venous access device on dialysis. The card contained important information regarding device care for healthcare staff working in other parts of the hospital or in other healthcare facilities. Parents of children on dialysis were provided with written information and training in relation to central venous access device care in the home. Data in relation to device-related care and infection was collated by staff caring for patients on dialysis.

3. Summary

During an unannounced inspection on 27 July 2016, immediate high risk findings in Temple Street Children's University Hospital were identified which included poor environmental and patient equipment hygiene. Cleaning processes in the hospital did not appear to be effectively organised or overseen. Other factors which contributed to poor environmental hygiene in the wards inspected included an outdated hospital infrastructure, poor maintenance, very limited space in patient care and ancillary areas, lack of storage space and the design and positioning of furnishings which did not facilitate effective cleaning. The hospital did not have a proactive preventative maintenance programme. Cumulative findings identified were such that HIQA carried out a re-inspection after six weeks.

HIQA observed significant improvements in relation to hygiene upon re-inspection in September 2016. Cleaning processes had been systematically revised and the hospital was endeavouring to address findings identified within the constraints of the hospital infrastructure.

The structure and design of the oldest parts of the hospital did not facilitate compliance with the *National Standards for the Prevention and Control of Healthcare Associated Infections.* HIQA acknowledges that Temple Street Children's University Hospital staff work in a compromised physical environment dealing with a high level of activity and complex cases. Notwithstanding infrastructural deficiencies, hospital environments should be kept clean and proactively maintained to facilitate effective cleaning.

The hospital achieved a hand hygiene compliance score of 93% in May/June 2016 which exceeded the Health Service Executive (HSE) national compliance target of

90%. This is commendable. At the time of the inspection, 92% of hospital staff had undertaken hand hygiene training in the previous 12 months.

Evidence-based care plans for both intravenous cannulation and central venous access devices were in place in the wards inspected. It was reported that venous access device care bundles had been implemented in critical care areas and plans were in place to implement care bundles across clinical areas in the hospital. An ongoing focus on prevention of central venous access device-related infection was evident in St Michael's C Ward for patients on renal dialysis.

4. Next steps

Temple Street Children's University Hospital must now revise and amend its QIP that prioritizes 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 Temple Street Children's University 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.

5. References[¥]

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.higa.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 ventilator-associated pneumonia in adults in Ireland. SARI Working Group.* 2011. [Online]. Available from: http://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/InfectionControlandHAI/Guidelines/File,12530, 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

_

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

- 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/.
- 7. National Hospitals Office, Quality, Risk & Customer Care. *HSE Cleaning Manual Acute Hospitals. September 2006.* [Online]. Available from: http://hse.ie/eng/services/publications/Hospitals/HSE National Cleaning Standards_Manual.pdf
- 8. National Hospitals Office, Quality, Risk & Customer Care. *HSE National Cleaning Manual Appendices*. September 2006. [Online]. Available from: http://www.hse.ie/eng/services/publications/hospitals/HSE National Cleaning Stand-ards Manual Appendices.pdf
- 9. Department of Health, UK. Renal care, Health Building Note 07-02: Main renal unit. 2013. [Online]. Available from: https://www.gov.uk/government/uploads/system/uploads/.../HBN_07-02_Final.pdf
- 10. Temple Street Children's University Hospital. Quality Improvement Action Plan. 2014. [Online]. Available from: http://www.cuh.ie/wp-content/uploads/2015/01/QIP-HIQA-22-09-2014.pdf.
- 11. 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.
- 12. Health Service Executive. HSELanD. [Online]. Available from: http://www.hseland.ie/tohm/default.asp?message=logout.
- 13. Health Service Executive. *National Service Plan 2016.* [Online]. Available from: https://www.hse.ie/eng/services/publications/serviceplans/nsp16.pdf.
- 14. The Health Protection Surveillance Centre. *National Hand Hygiene Audit Results*. [Online]. Available from: http://www.hpsc.ie/hpsc/A-Z/Gastroenteric/Handwashing/HandHygieneAudit/HandHygieneAuditResults/.

Appendix 1-Copy of letter issued to Temple Street Children's University Hospital following the unannounced inspection on 27 July 2016



Gráinne Bauer Director of Nursing Children's University Hospital Temple Street Dublin 1

grainne.bauer@cuh.ie

28 July 2016

Ref: PCHCAI/655

Dear Gráinne

National Standards for the Prevention and Control of Healthcare Associated Infections (NSPCHCAI) Monitoring Programme

I am writing as an Authorized Person under Section 70 of the Health Act 2007 (the Act) for the purpose of monitoring against the *National Standards for the Prevention and Control of Healthcare Associated Infections (NSPCHCAI)* pursuant to Section 8(1)(c) of the Act.

Under section 8(1)(c) of the Act, authorized persons from the Health Information and Quality Authority (HIQA) carried out an unannounced inspection at the National Children's Hospital on 27 July 2016.

During the course of the unannounced inspection, authorized persons identified a specific issue that may present a serious risk to the health or welfare of patients, visitors and staff and immediate measures need to be put in place to mitigate this risk.

The findings identified were such that a second unannounced re-inspection will be conducted within six weeks. The risk identified at the Children's University Hospital included, but was not limited to:

 Environmental and patient equipment hygiene – the overall standard of environmental hygiene in both St Patrick's Ward and St Bridget's Ward was poor on the day of inspection. In addition, the standard of patient equipment hygiene was poor in St Patrick's Ward.

Given the potential risk of infection associated with an unclean patient environment and unclean patient equipment; there is an urgent requirement to mitigate this risk. The above issues were brought to the attention of the senior hospital management team during the inspection.

While these issues and this correspondence will be referred to in the final inspection report, HIQA believes it is important that this risk is brought to your attention now, in advance of this. This is being done so that you may act to mitigate and manage the identified risk as a matter of urgency and in preparation for a re-inspection by HIQA within six weeks.

Please formally report back to HIQA by 5pm on Friday 05 August 2016 to qualityandsafety@hiqa.ie, outlining the measures that have been enacted to mitigate the identified risk. Details of the risk identified will be included in the report of the inspection. This will include copies of HIQA's notification of this risk and the service provider's response.

Should you have any queries, please do not hesitate to contact me at qualityandsafety@hiqa.ie. Please confirm receipt of this letter by email (qualityandsafety@hiqa.ie).

Yours sincerely,

lakes Famelly- Kniella Noreen Flannelly-Kinsella

AUTHORIZED PERSON

CC: Mona Baker, Chief Executive Officer, Children's University Hospital Eilísh Hardiman, Chief Executive Officer, Children's Hospital Group Liam Woods, National Director of Acute Services, Health Service Executive Mary Dunnion, Director of Regulation, Health Information and Quality Authority

☐ Head Office: Unit 1301, City Gate, Mahon, Cork, Ireland. Tel: +353 (0) 21 240 9300 Fax: +353 (0) 21 240 9600

Dublin Regional Office: George's Court, George's Lane, Dublin 7, Ireland Tel: +353 (0) 1 814 7400 Fax: +353 (0) 1 814 7499

e-mail: info@higa.ie_www.higa.ie

Appendix 2-Copy of response received from Temple Street Children's University Hospital to the letter issued by HIQA following the unannounced inspection on 27 July 2016



Telephone 01 8784230. Email: ceo@cuh.ie . Fax: 01 8748355

Private & Confidential

Ms Noreen Flannelly-Kinsella Authorised Person Health Information & Quality Authority Dublin Regional Office George's Court George's Lane Dublin 7

4th August 2016

Re: National Standards for the Prevention and Control of Healthcare Associated Infections (NSPCHCAI)
Monitoring Programme

Dear Ms Flannelly-Kinsella,

Thank you for your letter issued to the hospital on July 28th 2016, regarding an unannounced inspection by HIQA at Temple Street Children's University Hospital on July 27th 2016.

In Temple Street Children's University Hospital we promote a culture of continuous improvement which involves, but is not limited to, service user engagement, hand hygiene compliance and initiatives such as the 'Bare Below Elbows' campaign, as discussed during the inspection.

To address concerns raised following the unannounced inspection we have set up a high level response team and have initiated an immediate corrective and preventative action plan as follows:

Standard 3: Environment & Facilities

Criteria 3.6 the cleanliness of the physical environment is effectively managed and maintained according to relevant national guidelines and legislation; to protect service-user dignity and privacy and to reduce the risk of the spread of Health Care Associated Infections (HCAIs).

Company Registration No: 351404 Charity No: CHY 229

Directors: Mr. Sean Sheehan (Chairperson), Ms. Mona Baker, Ms. Siobhan Brady, Ms. Grainne Bauer, Mr. John Caird, Ms. Mary Cullen, Dr. Michael Drumm, Mr. John Fitzpatrick, Mr. Derek McGrath, Mr. Fionn MacCumhaill, Mr. Frank McManus, Ms. Aveen Murray, Sr. Margherita Rock, Ms. Phil Shovlin.

Physical Environment:

- The quality of cleaning of both the physical environment and all non medical equipment in St.
 Patrick's and St. Brigid's wards was addressed immediately with the contract cleaning company. A
 deep clean has been completed in both clinical areas covering all deficits identified.
- An overall review of all clinical areas was conducted by hospital senior management and contract cleaning management to ensure that current cleaning practices and processes are compliant with the requirements of HCAI Standards.
- · A full review of the current cleaning schedules and checklists has also been completed.

Clinical Equipment:

- Deficits regarding the cleanliness of clinical equipment as identified in St. Patrick's ward have been addressed.
- Procedures, schedules and checklists pertaining to cleaning of clinical equipment throughout all
 areas are subject to continuous review to ensure that they meet the requirements of the HCAI
 Standards.

We acknowledge the compromised physical environment and the deficits in our processes identified during the inspection. We assure you that we take the issues raised seriously and are committed to providing a quality and patient centred service, which is safe and effective and does not present a risk to the health and welfare of patients, staff and visitors.

Yours sincerely

Ms Grainne Bauer

Director of Nursing (A/CEO)

Grane Bark

cc: Mona Baker, Chief Executive Officer, Temple Street Children's University Hospital Catherine Lee, Human Resources Director, Temple Street Children's University Hospital Adrienne Foran, Clinical Director, Temple Street Children's University Hospital Sean Sheehan, Chairman, Board of Directors, Temple Street Children's University Hospital Eilish Hardiman, Group Chief Executive, Children's Hospital Group

Liam Woods, National Director of Acute Services, Health Service Executive
Mary Dunnion, Director of Regulation, Health Information and Quality Authority
Margaret Brennan, Quality & Patient Safety Lead, Acute Hospitals Division,
Dr. Steevens Hospital
Helen Byrne, Head of Planning & Performance, Acute Hospitals Division, Palmerstown

• Page 2

Published by the Health Information and Quality Authority.

For further information please contact:

Health Information and Quality Authority Dublin Regional Office George's Court George's Lane Smithfield Dublin 7

Phone: +353 (0) 1 814 7400

Email: qualityandsafety@hiqa.ie

URL: www.hiqa.ie

© Health Information and Quality Authority 2016