



**Health  
Information  
and Quality  
Authority**

An tÚdarás Um Fhaisnéis  
agus Cáilíocht Sláinte

# **Report of the announced monitoring assessment at South Tipperary General Hospital, Clonmel, Co Tipperary**

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

Date of announced on-site monitoring assessment: 9 April 2013

## About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is the independent Authority established to drive continuous improvement in Ireland's health and personal social care services, monitor the safety and quality of these services 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.
- **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. Background

The Health Information and Quality Authority (the Authority or HIQA) has the national statutory role<sup>‡</sup> for developing standards for the quality and safety of healthcare services. The *National Standards for the Prevention and Control of Healthcare Associated Infections* (NSPCHCAI) were approved by the Minister for Health and Children on 26 May 2009. Under the Health Act 2007, the Authority has the statutory responsibility, amongst other functions, for monitoring compliance with National Standards and advising the Minister for Health as to the level of compliance.

The NSPCHCAI provide a framework for health and social care providers to prevent or minimise the occurrence of Healthcare Associated Infections (HCAIs) in order to maximise the safety and quality of care delivered to all health and social care service users in Ireland. The NSPCHCAI aim to drive a culture of responsibility and accountability among all staff involved in the management and delivery of health and social care services – all of whom must play their part in preventing and controlling HCAIs. While services may differ in terms of scale, service-user population, the nature of care provided, staffing levels, location and history, the principles for the prevention and control of HCAIs are applicable to all health and social care services.

The Authority commenced Phase 1 of the monitoring programme for the *National Standards for the Prevention and Control of Healthcare Associated Infections* (the National Standards) in the last quarter of 2012. This initially focused on announced and unannounced assessment of acute hospitals' compliance with the National Standards.

Phase 2 commenced in January 2013, and will continue throughout 2013 and into 2014 to include announced assessments at all acute hospitals in Ireland, and the National Ambulance Service.

This phase of monitoring is a contributory phase towards preparing service providers for the eventual monitoring of services against the *National Standards for Safer Better Healthcare*. In line with this aim, the Authority reviewed the NSPCHCAI and framed them within three themes of the *National Standards for Safer Better Healthcare*. These themes are:

- Theme 1: Leadership, Governance and Management
- Theme 2: Workforce
- Theme 3: Safe Care.

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<sup>‡</sup> The Authority is given the remit for setting standards for quality and safety in healthcare services under section 8 of the Health Act 2007.

## 1.1. Essential elements for safe, high quality care

To facilitate the overall NSPCHCAI monitoring programme, the NSPCHCAI and their respective criteria were reviewed and amalgamated in order to develop **essential elements** which would be representative of what an organisation must have in place as the foundation for the provision of safe, high quality care through the prevention and control of Healthcare Associated Infections (see Appendix 1). Accordingly, the monitoring methodology was developed to assess organisations for their compliance with these overarching essential elements. Therefore it is important to note that the Authority is not assessing against each of the individual standards and their criteria. It should also be noted that hygiene forms only one component of this announced assessment approach.

## 2. Overview

### 2.1. South Tipperary General Hospital Profile<sup>¥</sup>

South Tipperary General Hospital was established in 2007. The hospital is a 193-bed (168 inpatient and 25 day patient) Level III acute general hospital providing emergency department, general medicine, general surgery, obstetrics/gynaecology, paediatrics and day case oncology services to the catchment area of South Tipperary, West Waterford and part of North Tipperary. Thus individual speciality catchment population varies from 92,000 to 134,000. Outreach clinics are provided at several locations including Thurles, Tipperary Town, and Cashel.

## 3. Findings

This announced monitoring assessment was a follow-up assessment undertaken by the Authority in South Tipperary General Hospital, subsequent to the unannounced assessment which took place on 6 November 2012. The follow-up findings are described below. Published reports from previous monitoring assessments may be viewed on the Authority's website, [www.hiqa.ie](http://www.hiqa.ie).

Authorised Persons from the Authority, Breeda Desmond, Naomi Combe and Catherine Connelly Gargan carried out the on-site component of the monitoring assessment on 9 April 2013 between 08:30hrs and 15:15hrs. HIQA Authorised Persons commenced the monitoring assessment in the Emergency Department (ED).

The areas assessed were:

- Emergency Department
- Maternity ward
- Surgical 1 (female gynaecological surgery and male surgery)

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

### 3.2. Theme 1: Leadership, Governance and Management

#### **Theme 1: Leadership, Governance and Management**

Robust leadership, governance and management structures and processes underpin what hospitals should have in place to assure the public and themselves that the arrangements for the prevention and control of Healthcare Associated Infections (PCHCAI) are effective.

There are robust local, monitoring and reporting arrangements in place thereby ensuring infection control is managed at a consistently high level of quality with minimal variation in the delivery of that care. There are effective regional and national PCHCAI reporting arrangements in place, infection control activities provided are compliant with the relevant legislation, clinical care programmes and evidenced-based practice, and the organisation is acting on national standards and recommendations from statutory bodies.

**Essential Element 1(a).** A comprehensive corporate and PCHCAI governance structure supported by an integrated organisational framework is in place. The governance arrangements will include PCHCAI specific strategies, aligned cost effective initiatives and defined responsibilities for externally contracted services.

#### **Findings Essential Element 1 (a)**

South Tipperary General Hospital (STGH) is a stand-alone hospital with formal working arrangements with Waterford Regional Hospital.

#### **PCHCAI governance**

#### **Infection Prevention and Control Committee (IPCC)**

There is an Infection Prevention and Control Committee (IPCC) in South Tipperary General Hospital. As per the documentation submitted to the Authority, the IPCC reports to the hospital's Quality and Patient Safety Committee, which in turn reports to the Hospital Management Team. Terms of reference listed the membership of the Committee, which included corporate and clinical representation. The Infection Prevention and Control Team (IPCT) are all members of the Infection Prevention and Control Committee. IPCC meetings are held quarterly, with quarterly reports submitted to the hospital's Quality Risk and Patient Safety Committee. An annual report is submitted by the IPCC to the Executive Management Board. This report was reviewed and comprises surveillance activity, policies and guidelines updated and distributed, staff education completed, audits completed and ongoing, consultancy/specialist advice, outbreaks/incidents, and challenges to the

implementation of the infection prevention and control plan. South Tipperary General Hospital is part of the Health Service Executive (HSE) South East Regional Infection Prevention and Control Committee, with meetings held quarterly.

Research has shown that effective communication which helps to disseminate useful and important information can improve the quality of patient care. Minutes reviewed demonstrated that information was forwarded from the Infection Prevention and Control Team to the IPCC and then to the Quality Risk and Patient Safety Committee. However, reciprocal communication links were not demonstrated. While informal communications were described by the Hospital Management Team, there was no evidence that formal feedback was received by the IPCC and the Infection Prevention and Control Team. This deficit should be immediately addressed and formal arrangements implemented to ensure appropriate feedback.

### **Infection Prevention and Control Team (IPCT)**

An Infection Prevention and Control Team (IPCT) is in place in South Tipperary General Hospital. Terms of reference are in place, with formal meetings scheduled weekly as evidenced by documentation submitted to the Authority. Members of the IPCT include two infection prevention and control nurses (IPCNs), a pharmacist and the Consultant Microbiologist from Waterford Regional Hospital.

There is no surveillance scientist in South Tipperary General Hospital. Mandatory Healthcare Associated Infection (HCAI) data is submitted by the infection prevention and control nurses to the Surveillance Scientist in Waterford Regional Hospital, with whom they have formal links.

Comprehensive surveillance programmes which feed back to clinical staff contribute to better outcomes for patients. Therefore the absence of a comprehensive PCHCAI surveillance programme potentially contributes to an increased risk of patient acquiring HCAs whilst in South Tipperary General Hospital.

### **Antimicrobial stewardship**

There is a Drugs and Therapeutic Committee (DTC) incorporating antimicrobial stewardship in South Tipperary General Hospital, which is chaired by a member of the Medical Board. Terms of reference are in place and meetings are held quarterly. While there is an absence of an antimicrobial pharmacist post in STGH, a designated pharmacist attends these meetings. Initiatives undertaken include the development and delivery of the HSE South East Hospital Network Guidelines for the Use of Antimicrobial prescribing booklet for non-consultant hospital doctors (NCHDs) and associated education sessions.

South Tipperary General Hospital is represented by a pharmacist on the HSE South East Acute Hospitals Antimicrobial Stewardship Committee, which reports to the HSE South East Infection Prevention and Control Advisory Committee. Terms of reference are in place, with clinical and corporate involvement. This committee is chaired by one of the three microbiologists in Waterford Regional Hospital, with rotation of chairperson every two years. The Chairperson of the Drugs and Therapeutics Committee in STGH receives minutes from these meetings, which enables information and up-to-date knowledge regarding prescribing, antimicrobial stewardship and antibiograms to be disseminated to clinical staff.

One of the pharmacists spends a maximum of one day a week on antimicrobial stewardship as a matter of 'goodwill', rather than any formal arrangements being in place. The Consultant Microbiologist undertakes educational sessions with new NCHDs in January and June each year to demonstrate best practice regarding antimicrobial prescribing, including intravenous to oral switch, surgical prophylaxis and restricted antimicrobials. Monitoring of antimicrobial usage by the pharmacist was reported as ongoing. The pharmacist outlined that when usage is not in adherence with best practice guidelines, it is reported to the Infection Prevention and Control Team meetings. However, audit results submitted to the Authority demonstrated that the compliance rate with antimicrobial prescribing was 40% and compliance with surgical prophylaxis was 50%.

Antimicrobial resistance can be controlled with an effective antimicrobial prescription programme, and appropriate prescribing contributes significantly to the reduction of HCAs. In discussion with members of the Hospital Management Team, it was outlined that they hoped a full-time antimicrobial pharmacist would be in place later in 2013 to deliver a comprehensive antimicrobial stewardship programme. Whilst the Authority welcomes this initiative, it was not assured that the Hospital has formal agreements secured with the HSE to ensure this would happen. In the absence of a full-time antimicrobial pharmacist to ensure comprehensive stewardship of antimicrobials, patients are at significant risk of HCAs.

### **Corporate Governance arrangements to support compliance with the NSPCHCAI**

The Hospital is governed by the Executive Management Board and is based on a divisional structure of administration comprising the Quality Risk and Patient Safety Committee, Surgical Directorate, Medical Directorate, Medical Board and Nursing. Each service is managed by a chair/consultant, director of nursing and deputy general manager. The division chair reports to the General Manager of the Hospital. The Hospital Management Team includes the General Manager (Chairperson), Director of Nursing, and Clinical Director. The Director of Nursing and the Clinical Director report to the General Manager, who in turn reports to the Area Manager,



HSE South East. The Hospital Management Team is responsible for the day-to-day operational management and governance of STGH. Terms of reference were in place for the Hospital Management Team.

Agendas of the Hospital Management Team meetings were reviewed by the Authority prior to the on-site component of the monitoring assessment. PCHCAI was not a standing item on the agenda. This was discussed during the on-site monitoring assessment. The General Manager outlined that this omission had been remedied since the initial documentation was submitted to HIQA. Consequently the Authority reviewed on-site the minutes of meetings from March and April 2013 which confirmed that PCHCAI was now a standing item. This is to be welcomed.

While there is an annual hospital business plan, there is no PCHCAI-related business plan, nor is there a budget allocated specifically for PCHCAI in South Tipperary General Hospital. The governance arrangements should include PCHCAI specific strategies with aligned cost effective initiatives to achieve better outcomes for patients.

Many of the PCHCAI related policies viewed were out of date, for example, the urinary catheter policy was due for review in March 2012; the Legionella prevention and water flushing policy was dated 2004; the policy for cleaning hand-held nebulisers was not in keeping with up-to-date best practice as these nebulisers are for once-only use and not for re-use. It is important that all policies and procedures to prevent and control HCAs reflect evidence-based information and guidance therefore arrangements should be in place to ensure these are developed, implemented, reviewed and updated in a structured manner.

**Essential Element 1(b).** There is clear monitoring and reporting of defined PCHCAI performance metrics, with trend analysis, reciprocal quality improvement initiatives and reporting at a local, regional and national level.

### **Findings Essential Element 1 (b)**

Research has shown that surgical site infections (SSI) are the third highest risk to patients in acute hospitals. Consequently, hospitals who review surgical site infection rates and initiate reciprocal quality improvement initiatives demonstrate a positive impact on the prevention and control of HCAs.

It was reported that there are no designated surveillance personnel in the hospital. Therefore, trend analysis to inform quality improvements does not occur. Surveillance data collected in South Tipperary General Hospital is submitted by the infection prevention and control nurses to the surveillance scientists in Waterford Regional Hospital.

The Authority was informed in meetings with staff that audit of Caesarean section surgical site infections were undertaken in STGH in conjunction with surgical site surveillance in Wexford General Hospital, but results and feedback were delayed due to the lack of surveillance personnel.

Catheter related bloodstream infection audits were in place at the time of the monitoring assessment. Documentation demonstrated that systems analyses were conducted by the IPCT on the catheter related bloodstream infections identified to ascertain root cause, and this was evidenced by documents reviewed by the Authority.

Audit of the efficacy and effectiveness of the provision of maintenance services at the hospital has not been undertaken. This poses both a direct and indirect risk of HCAs to patients.

The reported lack of a PCHCAI specific budget, deficit of comprehensive surveillance, lack of a designated antimicrobial pharmacist and the absence of audit of some services, indicates that PCHCAI is not optimal. Under these circumstances, it is not possible for the accountable person to be confident that the prevention and control of HCAs will be managed effectively and thus be able to make a judgment on the level of risk to patients.

This is of significant concern to the Authority given that the aforementioned deficits are essential elements in the prevention and control of Healthcare Associated Infections.

**Essential Element 1(c).** A clear PCHCAI communication strategy, supported by robust operational arrangements, to assure the effective communication of appropriate and timely information throughout the service, to service providers and appropriate agencies is in place.

### **Findings Essential Element 1 (c)**

There was no PCHCAI communication strategy/policy in place in South Tipperary General Hospital. While the Infection Prevention and Control Team gave a comprehensive description in discussions with the Authority of upward PCHCAI information communications, reflected in documentation submitted to the Authority, there appeared to be shortcomings in multi-directional communications evidenced by minutes of meetings reviewed by the Authority. It was reported to the Authority that information is relayed to patients through leaflets and admission packs as well as ward staff. However, there was no formal policy directing staff on how to inform patients that they had acquired a HCAI. An effective PCHCAI communication strategy ensures that information relating to HCAs is communicated and responded

to in an efficient, timely, effective and accurate manner. Therefore, the absence of a formal, written PCHCAI communication strategy poses an indirect risk of HCAs to patients.

### **Theme 1: Leadership, Governance and Management – Conclusion**

The absence of several fundamental roles in regard to the prevention and control of Healthcare Associated Infections poses a significant risk of HCAs, both directly and indirectly, to patients in South Tipperary General Hospital. These deficits include the lack of a reported PCHCAI-specific budget, deficit of comprehensive surveillance, lack of a designated antimicrobial pharmacist to oversee an antimicrobial stewardship programme, combined with the deficit of PCHCAI related audit in some areas. There was limited evidence provided as to how the Executive Management Board at South Tipperary General Hospital can be assured that the prevention and control of HCAs is regularly considered, assessed and managed to comply with the National Standards, and the associated risks to patients monitored and mitigated.

The Authority concluded that the Executive Management Board could not be assured that arrangements were in place in South Tipperary General Hospital to ensure compliance with the NSPCHCAI mandated standards.

### **Theme 1: Leadership, Governance and Management – Recommendations**

***Recommendation 1.*** *The corporate and clinical governance arrangements at South Tipperary General Hospital should be reviewed in order that the Executive Management Board may be assured of its compliance with the National Standards for the Prevention and Control of Healthcare Associated Infections.*

***Recommendation 2.*** *Policies and procedures to prevent and control HCAs should be reviewed and updated to reflect evidence-based information and guidance.*

***Recommendation 3.*** *A communication strategy should be put in place which ensures information relating to HCAs is communicated and responded to in an efficient, timely, effective and accurate manner to all service users including patients, general practitioners and community services.*

***Recommendation 4.*** *There should be comprehensive surveillance in place with a named accountable person for the coordination of the PCHCAI surveillance programme.*

**Recommendation 5.** *An antimicrobial stewardship programme should be developed and implemented.*

### 3.3. Theme 2: Workforce

#### **Theme 2: Workforce**

The hospital should always be in a position to assure the service users, the public and themselves that everyone working in the service is contributing to the prevention and control of Healthcare Associated Infections. The individual members of the workforce must be skilled and competent, they must be supported to continuously update and maintain their knowledge and skills, whether they are directly employed or in contractual employment.

**Essential Element 2(a).** Members of the core PCHCAI team must have the appropriate qualifications, specific training, skills and competencies in infection control, antimicrobial stewardship and HCAI surveillance. They must undergo continuing professional education and development on a regular basis.

#### **Findings Essential Element 2(a)**

While members of the Infection Prevention and Control Team (IPCT) are appropriately qualified, it was reported to HIQA that funding for PCHCAI education and training had not been assigned and a moratorium placed on travel has inhibited ongoing professional development within the IPCT.

**Essential Element 2(b)** All hospital staff receive mandatory theoretical and practical training in relation to the prevention and control of Healthcare Associated Infections.

#### **Findings Essential Element 2(b)**

It was reported to the Authority that student nurses' hand hygiene education is completed prior to commencement of their work placement. Hospital training records reviewed demonstrated that student nurses also attended in-house hand hygiene and standard-precautions training.

Audits in 2011 and 2012 of hand hygiene training demonstrated very poor attendances, for example, in 2012, non-attendance included:

- 53% nursing
- 74% support staff
- 65% healthcare assistances
- 58% medical staff.

Audits of hand hygiene practices in June/July 2012 demonstrated poor results in some wards including 42% and 47% non-compliance. Hand hygiene training was not re-audited at the time of this assessment. Records of staff hand hygiene training held at local ward level were demonstrated and showed improved attendances since the unannounced monitoring assessment by HIQA in November 2012. However, it did not clearly show the numbers or names of staff still requiring hand hygiene training. The Authority found that line managers could not clearly identify numbers of ward staff who still required this training.

Hand hygiene compliance audits submitted to the Authority indicated low levels of compliance among grades of staff. While quality improvement plans were demonstrated within these audits, neither implementation nor outcomes were evident.

Each January and June incoming NCHDs are emailed a hospital induction pack which includes PCHCAI and standard-precautions information. Doctors are requested to acknowledge they are competent and have read the contents of the induction pack. Records reviewed by the Authority showed that while many NCHDs had acknowledged their competency, some had not. Follow up of acknowledgement of competencies by NCHDs was not undertaken. Records reviewed also demonstrated that NCHDs at registrar grade did not attend in-house induction programmes. The Clinical Director informed the Authority in discussions that there is no follow up of non-attendances of doctors at PCHCAI induction/education in STGH. The Clinical Director was unsure of the level of non-compliance regarding attendances of colleagues at PCHCAI training or poor compliance with hand hygiene practices of colleagues.

The aforementioned audit results were discussed with the Hospital Management Team along with the hospital's quality improvement plan (submitted to the Authority subsequent to the unannounced monitoring assessment by the Authority in November 2012). Members of the Hospital Management Team outlined that the issue of non-compliance with hand hygiene best practice was discussed at the EMB meeting. This has resulted in reciprocal quality improvement initiatives including greater involvement of line managers with responsibilities assigned at ward level to promote and ensure hand hygiene best practice. However, the level of involvement

of the Clinical Director with PCHCAI initiatives was unclear. The Authority found that clinical governance arrangements in South Tipperary General Hospital were not structured to ensure a comprehensive approach to PCHCAI across all groups.

Hand hygiene is recognised internationally as the most significant preventative measure to prevent HCAs in healthcare services. Poor audit results of hand hygiene practices, low attendances at hand hygiene training and lack of follow-up regarding non-attendances poses a significant risk to patients of HCAs.

**Essential Element 2(c)** There are arrangements are in place to ensure visiting clinical, undergraduates and agency staff are competent in the core principles for the prevention and control of HCAs.

### **Findings Essential Element 2(c)**

There were no arrangements in place in South Tipperary General Hospital to ensure that visiting clinical staff had completed and were competent in PCHCAI.

### **Theme 2: Workforce – Conclusion**

Training in the prevention and control of Healthcare Associated Infections in South Tipperary General Hospital is mandatory. However, arrangements are not in place to ensure that staff, both permanent and temporary, have completed theoretical and practical training in relation to the prevention and control of Healthcare Associated Infections. Documentation submitted to the Authority confirms that while attendances are audited with quality improvement plans demonstrated within these audits, neither implementation nor outcomes were evident.

The extent of non-attendance at hand hygiene training and poor hand hygiene audit results poses a significant risk to patients of HCAs at South Tipperary General Hospital.

### **Theme 2: Workforce – Recommendations**

**Recommendation 6.** *South Tipperary General Hospital Executive Management Board should ensure that PCHCAI staff should be facilitated to attend ongoing professional development.*

**Recommendation 7:** *South Tipperary General Hospital should put in place arrangements to ensure all staff attend mandatory theoretical and practical training in relation to the prevention and control of Healthcare Associated Infections.*

**Recommendation 8.** *South Tipperary General Hospital should put in place arrangements to ensure all visiting clinicians and undergraduates are competent in the core principles for the prevention and control of HCAs.*

**Recommendation 9.** *There should be clear and visible support from South Tipperary General Hospital Executive Management Board, including the Clinical Director and senior clinicians, to drive the hand hygiene campaign and ensure compliance from all disciplines and levels of seniority.*

### 3.3 Theme 3: Safe Care

#### Theme 3: Safe Care

The hospital recognises that the prevention and control of Healthcare Associated Infections is paramount. The cleanliness of the physical environment and equipment is effectively managed and maintained. The hospital learns from all information relevant to the provision of safe PCHCAI services, in addition to when things go wrong.

There is an embedded focus on quality and safety improvement, evidence-based decision making and active engagement in local, national and international initiatives to minimise the risk of HCAs.

**Essential Element 3(a).** There is 24-hour seven-days-a-week access to specialist microbiological advice and services.

#### Findings Essential Element 3(a)

There are no microbiology services based in South Tipperary General Hospital. Staff in STGH have 24-hour, seven-days-a-week access to specialist microbiological services at the accredited laboratory in Waterford Regional Hospital. A consultant microbiologist from Waterford Regional Hospital has four hours per week allocated to STGH for PCHCAI, antimicrobial stewardship and microbiological services. It was reported to the Authority that best practice policies, procedures and guidelines in place in Waterford Regional Hospital for microbiology are implemented in South Tipperary General Hospital. Microbiology samples are sent to Waterford Regional Hospital for analysis and advice is regularly sought over the telephone by physicians in STGH. There are three consultant microbiologists in Waterford Regional Hospital who cover on-call in rotation for four hospitals in the southeast region. This system is supported by formal policies, procedures and guidelines.

**Essential Element 3(b).** There are specific care bundles and/or policies and procedures developed, communicated, implemented and their efficacy monitored with the use of:

- peripheral intravenous catheter
- urinary catheter
- central venous catheter.

### **Findings Essential Element 3(b)**

One-quarter of all HCAs are related to the use of invasive medical devices (devices that are put into a patient's body or skin, for example, urinary catheters, peripheral intravenous catheters or central venous catheters). To increase patient safety, all services should have a specific set of processes to improve patient outcomes, for example, care bundles for the prevention and control of invasive medical device related infections.

The Authority was informed that urinary catheter (UC), central venous catheter (CVC), peripheral intravenous catheter (PVC) and Clostridium Difficile care bundles were in use in the hospital.

### **Emergency Department (ED)**

Staff in the ED informed the Authority that while PVC insertion was commonplace, UC or CVC insertion in the ED was rarely undertaken. ED nursing staff trained in intravenous cannulation most often inserted PVCs. Management of PVCs, CVCs and UCs was supported by policy and procedure documents which informed practice and were demonstrated. ED-specific patient intervention records recorded key insertion details including time, date, size of catheter and signature of the inserter. A separate document titled 'National Early Warning Score Adult Patient Observation Chart', which included the PCV care bundle, accompanied each patient to the ward. This was used to record their vital signs for the period of their hospitalisation as well as PVC daily observations. PVC insertion details were not inputted in the ED but were transferred later from ED records to the PVC care bundle. This could lead to incorrect transfer of information or omissions of information. Should the need arise, it would be difficult to undertake a systems analysis to determine root cause in the absence of such vital information. A visual infusion phlebitis score (VIPS) was also completed as part of the daily PVC monitoring record. The Authority found that monitoring of PVCs also assessed patency, whether dressing was intact, NACL (Sodium Chloride) flush/in use, and hand hygiene. Coloured zones were used to highlight length of time a PVC was in situ. However, there was no evidence of audit



to monitor the adherence to SARI guidelines<sup>†</sup> for the effective management of the PVC care bundle here.

### **Maternity ward**

Care bundles were not in use in the Maternity ward. Policies and procedures were in place to support management of PVCs and UCs. Check lists were not evident but each midwife is meant to document care given and status of PVCs and UCs for patients in their care. However, neither this information nor evidence of PVC insertion and removal dates was documented in the patients' notes given to the Authority for review. Staff spoken with reported that data was collected in relation to care of patients with PVC and/or UC. There was no evidence of audits undertaken in relation to compliance of supportive documentation, to analyse and trend data to improve outcomes for patients.

### **Surgical 1**

PVC and UC care bundles were in use on Surgical 1 ward as reported by staff. The Authority was informed that PVCs were inserted by doctors and those nurses trained in intravenous cannulation. The PVC monitoring documentation was part of the vital sign observation early warning score of deterioration of patient wellbeing. However, this did not record assessment of need in line with SARI best practice recommendations. Four monitoring records were assessed and checklists, dates of insertion/removal and the name of the inserter were not comprehensively completed in any of the four patient records reviewed by the HIQA Authorised Persons. Some patient care bundles had no assessment for the duration of the PVC. One PVC remained in situ for five days (recommended maximum time is three days) and was then removed as the patient developed phlebitis at the site.

There was no evidence of audits undertaken in relation to PVC care bundle documentation, to analyse and trend data to improve outcomes for patients.

### **Conclusion**

Overall the Authority found that although PVC care bundles were in use they were not embedded into the management of invasive devices at operational level. This was demonstrated by incomplete documentation. In the absence of auditing, impact on outcomes could not be evaluated. There was no evidence provided to demonstrate monitoring of the implementation and effectiveness of care bundles.

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<sup>†</sup> *A Strategy for the Control of Antimicrobial Resistance in Ireland (SARI)*, Health Protection Surveillance Centre.

The implementation of a structured set of processes has been proven internationally to improve patient outcomes regarding PCHCAI and prevent or reduce medical device related infections. Care bundles documentation reviewed by the Authority relating to peripheral vascular catheters would suggest that the relevance and value of such a chart in reducing or preventing a HCAI is not comprehensively understood. This presents a direct risk to patients in South Tipperary General Hospital of HCAs.

**Essential Element 3(c).** There are defined PCHCAI performance metrics and audit process in place with a particular emphasis on:

- hand hygiene
- surgical site infection rates
- environmental and equipment hygiene
- antimicrobial prescribing
- infection related to the use of invasive medical devices
- HCAI trend rates and analysis.

### **Findings Essential Element 3(c)**

#### **Hand hygiene**

Hand hygiene is recognised internationally as the single most important preventative measure in the transmission of HCAs in healthcare services. It is essential that a culture of hand hygiene practice is embedded in every service at all levels.

#### **Observation of hand hygiene opportunities**

The unannounced monitoring assessment by HIQA on 6 November 2012 observed that 15 of the 25 hand hygiene opportunities were taken. Of the 15 opportunities taken, 10 complied with best practice hand hygiene technique. The remaining five opportunities that were taken were found to be non-compliant due to not following best practice technique for hand washing or use of alcohol gel and/or length of time taken to complete hand hygiene. During the onsite component of this announced monitoring assessment, the Authority observed an improvement in hand hygiene practices. During the announced assessment, 25 hand hygiene opportunities were observed. These comprised:

- 10 before touching a patient
- three after touching a patient
- 11 after touching patients' surroundings
- one after body fluid exposure risk.

The Authority observed that 24 out of 25 hand hygiene opportunities were taken. 18 were observed to comply with best practice hand hygiene technique. Non-compliance consisted of not following best practice technique for hand washing.

Whilst the Authority recognises that the Hospital had implemented a number of initiatives to improve hand hygiene since the previous HIQA assessment, the reported compliance rates for the Hospital would indicate that a culture of hand hygiene is not yet operationally embedded. This should be addressed as a priority by the Hospital.

### **Surgical site infections**

Surgical site infection rates are recognised as an important indicator of patient care and quality of service provided. Data pertaining to Caesarean section surgical site infections only was submitted by South Tipperary General Hospital for collation regionally. However, the Authority was informed that the hospital is awaiting publication of the HSE's 2012 annual regional PCHCAI report to determine rates, trends and analysis to inform quality improvement initiatives. It was relayed to the Authority that this report would not be available until June 2013. The IPCT outlined that patients re-admitted to the hospital with a surgical site infection post-caesarean section were not included in the data submitted and this may produce inaccurately low statistics. While data is collected in STGH it is not trended or analysed locally to inform remedial actions and improve patient outcomes.

### **Environment and equipment hygiene audits**

Regular audit of the environment and equipment hygiene demonstrates compliance with evidence-based best practice regarding effective management, decontamination and maintenance. There was evidence that environmental and equipment hygiene audits are undertaken regularly at STGH. Audit documentation reviewed demonstrated 'recommendations'. However, some audits did not outline actions to be taken with associated responsibilities assigned; others did not have actions or responsibilities assigned to individuals and no timelines were in place for completion of recommendations/actions. Thus, outcomes for patients could not be determined.

## **Antibiotic prescribing**

Inappropriate use of antimicrobials is associated with the emergence and rising levels of antimicrobial resistance. Antimicrobial prescribing feedback is a significant strategy that has shown demonstrable benefits in the prevention and control of HCAs. While formal antimicrobial feedback is relayed by the pharmacist to the IPCT and to the Executive Management Board and Medical and Surgical Directorates, audit results demonstrate that robust reciprocal quality improvements were not initiated to mitigate risks as evidenced by audit results submitted to the Authority for example, compliance with antimicrobial prescribing was just 40% and compliance with surgical prophylaxis was 50%. This poses a significant risk of HCAs to patients in South Tipperary General Hospital.

## **Infections related to use of invasive medical devices**

Audit of CVCs was not undertaken since 2011 and audit of UCs was last undertaken in 2012 and therefore South Tipperary General Hospital has no means of reassuring itself that infection is being effectively prevented and managed in relation to such devices.

Documentation submitted to HIOA indicated that one HCAI adverse incident occurred in relation to a peripheral vascular device in 2012. A systems analysis was undertaken and while the root cause was not identified, other areas for remedy were. This included a more timely response regarding initiation of a systems review to determine root cause and this has been implemented by the IPCT.

## **HCAI trend rates and analysis**

STGH is reporting the mandatory microbial rates (MRSA, VRE and C Diff) nationally, as directed by the HSE's Health Protection Surveillance Centre (HPSC). While trends and analyses were reviewed for these microbes, audit results demonstrate that they appear to have little impact regarding adherence to antibiograms and antimicrobial prescribing. This poses a significant risk of HCAs to patients in South Tipperary General Hospital.

**Essential Element 3(d).** There is proactive reporting, identification, evaluation and management of information to include PCHCAI-related adverse events, risks, patients' complaints, audits and satisfaction surveys.

## **Findings Essential Element 3(d)**

The hospital submitted information to the Authority that indicated that no HCAI related adverse incidents or complaints were documented in 2011 or 2012. On discussion with staff members it was clarified that no HCAI incidents or complaints were reported to the Quality Risk and Patient Safety Department in that period. Staff informed the Authority that the microbiology team reports statistics on infectious diseases in its annual report. This was confirmed by the annual reports for 2011 and 2012, submitted to the Authority. The risk register was reviewed during the on-site component of the monitoring assessment. Entries were recorded from 2009 with many of the status updates undetermined. It was impossible to establish if risks remained unresolved, reduced or closed off and thus determine how effective the risk management process is. The Authority is concerned that HCAI related adverse events and risks are not being adequately evaluated and managed. This would suggest that the hospital did not have assurances that it has effective arrangements in place to learn from HCAI incidents.

**Essential Element 3(e).** The cleanliness of the physical environment and equipment is effectively managed and maintained.

### **Findings Essential Element 3(e)**

The previous on-site unannounced monitoring assessment on 6 November 2012 determined that South Tipperary General Hospital was generally unclean with some exceptions. This monitoring assessment found that while hygiene initiatives had commenced, many areas still required improvement.

### **Maternity ward**

Overall, the Authority found the environment and patient equipment in the area assessed to be unclean with some exceptions.

### **Environment and equipment**

The Authority observed the following:

- The surfaces of mattresses, pillows and patient lockers assessed were found to be clean and intact.
- Fixtures and fittings, including light fittings and call bells, were clean.
- Hand hygiene sinks in clinical areas assessed were found to comply with the HSE's Health Protection Surveillance Centre's *Guidelines for Hand Hygiene* (2005).
- Daily cleaning sign-off sheets were displayed and were up to date.

- Displayed information was appropriate, up to date and laminated or covered with a washable surface for effective cleaning in all areas throughout the general environment and patient areas assessed.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections*, such as:

- The Authority found that the edges and corners of flooring in the patient areas were unclean. Radiator surface paint was chipped exposing the base metal surface thereby hindering effective surface cleaning.
- Moderate levels of dust were evident on the undercarriage of bed frame surfaces.
- The surfaces of assessed patients' bedside tables were severely damaged with evidence of cracked wood in some cases. Splash stains were found on patient seating although their surfaces were intact.
- The en suite of Room 3 was found to be unclean:
  - A black substance was evident on tile grouting on high and low wall surfaces.
  - There was dust and grit on the floor.
  - There was a gap between the tiles and the shower exposing the wall surface and, as such, hindering effective cleaning.
  - Staining was evident on wall tile surfaces behind the toilet.
  - A skirting board was pulled away from one of the walls.
  - Cobwebs and dust were visible on the wall behind the toilet.
  - A toilet cleaning brush was visibly unclean.
- There was no hand-wash sink located in the en suite toilet and shower facility.
- Dust was found on the wheels of the resuscitation trolley located in the patient area.
- A trolley in the nursery area had a sticky residue on its surface. Cupboard door surfaces were damaged exposing inner surfaces, thereby hindering effective cleaning. Dust was found on the top surface of notice boards in the room and splash stains were evident on chairs.
- Grit and pieces of waste paper were found on the floor surface of a room for storage of baby feeds. A step for reaching higher shelves in the room was dusty and unclean.

- While work station surfaces were visibly clean they were cluttered.

### **Waste segregation**

There was evidence of good practice, such as the following:

- Clinical waste information posters identifying waste segregation were observed in the 'dirty' utility room where waste was stored prior to collection.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections*, such as:

- Hazardous clinical waste was stored in the 'dirty' utility room for collection and hazardous cleaning chemicals were stored in a cupboard which was not locked. The 'dirty' utility room was accessible to unauthorised persons as the door was not lockable and locked in line with best practice.

### **Cleaning equipment**

There was evidence of good practice, such as the following:

- A green sticker system was in place and was demonstrated to indicate when each item of equipment cleaning was complete.
- Cleaning staff spoken with by the Authority were knowledgeable regarding infection prevention and control protocols.
- Cleaning equipment was clean and a colour-coded system was in place and demonstrated.
- Appropriate advisory signage was observed for use of products used for cleaning and disinfection. Safety data sheets were accessible within the clinical areas.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections*, such as:

- The Authority was informed that cleaning staff multitask between cleaning and kitchen duties such as providing tea and toast for patients, without any change of uniform between duties. This is not in line with best practice.
- The Authority observed that rooms containing potentially hazardous cleaning solutions were not locked and were accessible to the public which was not in line with best practice.

## **Linen**

There was evidence of good practice, such as the following:

- Used linen was segregated, evidenced by colour-coded linen bags and alginate bags used in the clinical areas.
- Clean linen was stored appropriately. The linen storage room was found to be clean and free of dust, dirt, grit or inappropriate equipment. Linen examined was free of stains and was intact.
- The Authority reviewed records which demonstrated that curtain changing was undertaken every three months as standard or as necessary and on each patient discharge from the isolation rooms.

## **Water outlet flushing**

There was evidence of good practice, such as the following:

- Records of weekly water outlet flushing were demonstrated.

## **Surgical 1 ward (female gynaecological surgery and male surgery)**

Overall the Authority found that the patient environment and the equipment assessed were generally unclean, with some exceptions.

## **Environment and equipment**

The Authority observed the following:

- Floors and walls on the main thoroughfare were observed to be clean and free of dirt, grit and spillages.
- Daily cleaning sign-off sheets were displayed and were up to date.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections*, such as:

- There was light dust found on high and low surfaces, curtain rails, bed frames and fixtures assessed in the patient areas of the ward.
- The surface of a pillow assessed was torn, hindering effective cleaning.
- Floor edges behind a toilet in a patient washroom were unclean. The area underneath a shower seat was also visibly unclean.



- Uncovered suction tubing was trailing on the floor, which is not in line with best practice.
- Advisory hand hygiene signage and a notice regarding discharge procedure, although covered by a washable surface, were not securely fixed.
- A large area of sticky residue was observed by the Authority on a glass panel above the door to Room 9.
- The base of an intravenous stand was stained and dust was evident on the wheel surfaces of a dressing trolley assessed.
- A domestic-style sink with an overflow port in situ was designated as the hand hygiene sink in the clean utility area, which does not comply with the HSE's Health Protection Surveillance Centre's *Guidelines for Hand Hygiene* (2005).
- Hand wash sinks in the clinical area did not comply with the Health Protection Surveillance Centre's *Guidelines for Hand Hygiene* (2005). Water flowed directly into the water outlet, which contained a metal grid.
- In the clean utility room, soap and hand towels were found within easy access to the designated hand-wash sink. A second dispenser holder located over the sink was empty and alcohol hand hygiene gel was not available in the clean utility room. The sink was stained and advisory hand wash procedure signage was not displayed.
- In the clean utility area, a mould-like substance was evident along the edge of wall tiles behind the sink and in the corners of work surfaces.
- A soiled swab was placed among clean swabs in a near patient testing glucometer kit.
- A hand-washing sink in the 'dirty' utility room was obstructed by placement of two commodes. The area around the water outlet port of the sink was unclean and a metal grid was in place.
- Wall tiles on the wall behind the sluice hopper and equipment washing sink had dried splash residue on their surfaces.
- The floor surface of the 'dirty' utility was unclean.

### **Waste segregation**

There was evidence of good practice, such as the following:

- Waste information posters identifying waste segregation were displayed in the 'dirty' utility and waste segregation area.
- The Authority was informed that all waste, including clinical waste, was tagged before leaving the point of production ensuring traceability if necessary. Waste for collection was stored in a secure area of the 'dirty' utility room.

### **Cleaning equipment**

There was evidence of good practice, such as the following:

- Authorised Persons from HIQA observed that the cleaning room containing potentially hazardous cleaning solutions were locked and the room was inaccessible to unauthorised persons in line with best practice.
- Cleaning staff spoken with by the Authority were knowledgeable regarding infection prevention and control protocols.
- Cleaning equipment was clean, with an established cleaning process evident. A colour-coded system was in place and demonstrated in the area assessed.

### **Linen**

There was evidence of good practice, such as the following:

- Clean linen was stored appropriately in a dedicated linen cupboard. Used linen was segregated in line with best practice, evidenced by colour-coded linen bags and alginate bags used in the clinical areas.
- Clean linen assessed by the Authority was found to be intact and free of stains.
- The Authority was informed that, as standard, curtains were changed on a six-monthly basis or as necessary. Curtains were changed following each patient discharge in the isolation rooms. Local records of curtain changing were demonstrated.

### **Water outlet flushing**

There was evidence of good practice, such as the following:

- Records of water outlet flushing were demonstrated.

### **Emergency Department**

Overall the Authority found that the patient environment and the equipment assessed were generally unclean, with some exceptions.

### **Environment and equipment**

There was evidence of good practice, such as the following:

- Floors in the clinical area were clean and free of grit, dust and spillages.
- All chairs were washable, trolleys were clean throughout, and trolley mattresses were clean and intact.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections*, including:

- Two commode chairs were stored in the shower of the patient toilet/shower room. The wheels of both were heavily rusted. The seat of one was stained.
- Computer keyboards and a telephone surface were unclean in the work station in the clinical area.
- The ED did not have a clean utility room; medications were prepared in the work station area which is not in line with best practice. A domestic-type sink with an overflow port was built into the worktop space. The Authority was informed that this sink was not used for hand washing but a sink immediately outside the work station in the clinical area was used.
- The 'dirty' utility room was cluttered. Paint was missing from a wall area along a skirting board. The wall surface was damaged from the brake mechanism of commodes stored in this area. The floor was stained, the edges and corners were not clean.
- A black residue was visible around the edges of metal grids located in the water outlets of designated hand-wash sinks assessed.
- In the 'dirty' utility room, a stainless steel bedpan holder was rusted and stained. While bedpans were stored inverted, neither a urinal nor bowls for the commodes were stored upright, which was not in line with best practice. One commode bowl was heavily soiled underneath its rim, while the surface of others was stained and/or worn. The surface around the wheels of a commode stored in the 'dirty' utility room was rusted.
- Used instruments were placed in an appropriate container but this was inappropriately stored on the floor under the sluice hopper and equipment

washing sink unit. Some used instruments for decontamination were observed in the container. This finding was not in line with best practice recommendations.

- While hand hygiene instruction posters were displayed by sinks, no advisory signage was available advising on the appropriate use of hand hygiene products available. Hand hygiene gel was available at each hand-wash sink but was not placed in a dispenser. Access to hand towels located to the side of one hand-wash sink was hindered by the positioning of the resuscitation trolley.
- Grime was observed in the grooves of the rubber covering the handles of the resuscitation trolley. The surface of the resuscitation trolley directly adjacent to the hand-wash sink was wet.
- Clinical and non-clinical waste bins were available but not located close enough to facilitate access to one clinical hand-wash sink.
- Curtain rails were heavily soiled with black dust. This was brought to the attention of, and demonstrated to, the Nurse Manager and Services Manager during the assessment.
- Some gridded panels located on walls of each trolley bay and the panel in the patient toilet/shower were soiled with spillage stains.
- Two bed tables were assessed; the wooden surface of one table was worn and paint was chipped from some areas of the base of the second table which hindered effective cleaning.
- Paint was missing from some areas of a radiator located along the ED corridor.
- Wall tiles were stained in the patient toilet/shower room. The floor was unclean, staining was evident on floor surfaces around the toilet
- While personal protective equipment (PPE) was available, there was evidence of some overuse of gloves, as a staff member was observed to wear the same gloves from non-clinical to clinical areas.

### **Waste segregation**

There was evidence of good practice, such as the following:

- Clinical waste information posters identifying waste segregation were displayed in the area assessed.

- Hazardous waste was tagged before leaving the point of production ensuring traceability if necessary.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections*, such as:

- Seven sharps bins of varying sizes containing hazardous waste, including that generated from the previous evening, were stored on the floor of the 'dirty' utility room and had not been collected from the area by 10.45am.
- The 'dirty utility room was accessible by two entrance doors, one of which was from the ED and the other from the main ED corridor, the door of which was adjacent to a public waiting area. Neither door was lockable and therefore access by unauthorised access was not prevented. Hazardous waste and bedpan cleaning solution were accessible in this area.
- The hospital waste management policy was issued in November 2007 and due for review in 2008.

### **Cleaning equipment**

There was evidence of good practice, such as the following:

- Cleaning staff were knowledgeable about infection prevention and control protocols and procedures.
- A colour-coded cloth system was in place and demonstrated in the area assessed.
- Cleaning schedules were displayed in all areas and recorded each time cleaning was completed.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections*, such as:

- A cleaning bucket in use was unclean, with heavy soiling in the area available for removing excess mop water. The Authority was informed that the bucket is not routinely cleaned at the end of each day. While one mop was used for cleaning the clinical area floors, a second mop was used for cleaning toilets, a third mop was neither used nor available to clean isolation rooms. This finding is not in line with best infection prevention and control procedures.
- The cleaning room was not locked during the monitoring assessment of the area. Internal cupboards were not lockable. Hazardous cleaning solutions were stored on a shelf over the hand-washing sink and accessible to unauthorised persons, which poses a safety risk to patients.

### **Linen**

There was evidence of good practice, such as the following:

- Clean linen was stored in a dedicated lockable mobile linen cupboard which was intact, neatly arranged, easily accessible, free of dust, grit or spillages. Unused linen was free of stains and was intact. Segregation of linen was demonstrated and found to be in line with best practice.
- The Authority was informed that, as standard, curtains were changed on a six-monthly basis by household staff. Curtains were changed following each patient discharge in the isolation rooms. Local records of curtain changing were demonstrated.

### **Patient isolation rooms**

There was one patient requiring care in an isolation room.

- Appropriate clear signage was in place identifying isolation procedures in progress, which described the precautionary measures to be undertaken on entering the rooms.
- Doors to isolation rooms were in a closed position at all times during the assessment.

However, there was also evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections*, such as:

- Personal protective equipment (PPE) was disposed of into a clinical waste bin in the ED clinical area on exiting the single room in use for isolation purposes.

This is not in line with infection prevention and control best practice procedures.

### **Water outlet flushing**

There was evidence of practice that was not compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections*, such as:

- Water outlet flushing was ticked on a general cleaning checklist on completion. However, there was no reference as to which water outlet was flushed or its location. There was no evidence of a risk assessment having taken place to highlight unused water outlet points. Therefore, records reviewed demonstrated unnecessary water outlet flushing in areas which were also frequently used.

### **Theme 3: Safe Care – Conclusion**

In conclusion, the Authority found that the South Tipperary General Hospital did not adequately ensure that the cleanliness of the physical environment and equipment was effectively managed and maintained. The Authority found that the ward area environments and equipment assessed were unclean, with some exceptions in each area assessed. Floors were dusty with evidence of grit. High and low surfaces were not clean in all areas. Painting refurbishment was necessary in the areas assessed. These findings posed a moderate risk to patients of contracting HCAs.

Some hand hygiene sinks in the areas assessed were unclean and did not comply with the Health Protection Surveillance Centre's *Guidelines for Hand Hygiene* (2005).

Appropriate information was displayed outside isolation rooms, but disposal of personal protective equipment was inappropriate. There was also some evidence of glove overuse as a staff member was observed to wear the same gloves from non-clinical to clinical areas. Linen was stored and segregated appropriately. Clinical and non-clinical waste management required improvement, with updating of the waste management policy to inform best practice in this area. Cleaning procedures for isolation facilities were not in line with recommended infection prevention and control guidelines.

There was no evidence of a risk assessment to identify unused water outlet points. Records reviewed demonstrated unnecessary routine water outlet flushing in areas which were frequently used.

### Theme 3: Safe Care – Recommendations

**Recommendation 10.** *South Tipperary General Hospital should put in place arrangements to ensure that care bundles are communicated, implemented and managed in line with evidence-based best practice, and their efficacy monitored.*

**Recommendation 11.** *South Tipperary General Hospital should put in place systems to reduce and control antimicrobial resistance.*

**Recommendation 12.** *South Tipperary General Hospital should put processes and procedures in place to ensure the cleanliness of the physical environment and that equipment is effectively managed and maintained.*

## 4. Overall Conclusion

### 4.1. Overview

In South Tipperary General Hospital, the Authority concluded the following:

#### **Hand hygiene compliance**

Whilst the Authority recognises that the hospital had implemented a number of initiatives to improve hand hygiene, the reported compliance rates for the hospital indicates that a culture of hand hygiene is not yet operationally embedded.

#### **Cleanliness of the environment**

The Authority found that the South Tipperary General Hospital did not adequately ensure that the cleanliness of the physical environment and equipment was effectively managed and maintained.

#### **Antimicrobial stewardship**

While some antimicrobial stewardship is undertaken as a matter of 'goodwill', a formal antimicrobial stewardship programme was not in place in South Tipperary General Hospital.

#### **The prevention of HCAs associated with invasive medical devices**

Care bundle documentation reviewed by the Authority relating to peripheral vascular catheters would suggest that the relevance and value of such a tool in reducing or preventing a HCAI is not comprehensively understood. In the absence of auditing,



impact on outcomes could not be evaluated in South Tipperary General Hospital. There was no evidence provided to demonstrate monitoring of the implementation and effectiveness of care bundles.

### **Workforce**

Arrangements are not in place to ensure that staff, both permanent and temporary, had completed theoretical and practical training in relation to the prevention and control of Healthcare Associated Infections. Poor attendance at hand hygiene training and poor hand hygiene audit results were significant.

### **Corporate and clinical governance of PCHCAI**

The absence of several roles fundamental to the prevention and control of HCAs poses a significant risk, both directly and indirectly, to patients in South Tipperary General Hospital. These deficits included the lack of a PCHCAI specific budget, deficit of comprehensive of a surveillance, lack of a designated antimicrobial pharmacist to oversee an antimicrobial stewardship programme, combined with the deficit of PCHCAI related audit in some areas and lack of a formal PCHCAI communication strategy. There was very little evidence provided as to how the Executive Management Board at South Tipperary General Hospital can be assured that the prevention and control of HCAs is regularly considered, assessed and managed to comply with the National Standards, and the associated risks to patients monitored and mitigated.

The Authority concluded that the Executive Management Board in South Tipperary General Hospital could not be assured that it was compliant with the NSPCHCAI.

In conclusion, the Authority found South Tipperary General Hospital to be partially compliant with the *National Standards for the Prevention and Control of Healthcare Associated Infections*.

South Tipperary General Hospital must now develop a quality improvement plan (QIP) that prioritises the improvements necessary to fully comply with the *National Standards for the Prevention and Control of Healthcare Associated Infections*. This QIP must be approved by the service provider's identified individual who has the 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 webpage on the Health Service Executive (HSE) website within six weeks of the date of publication of this report.

The Hospital should ensure the continued monitoring of the Hospital's QIP as well as relevant outcome measurements and key performance indicators, in order to provide assurances to the public that it is implementing and meeting the *National Standards for the Prevention and Control of Healthcare Associated Infections* and is making quality and safety improvements that safeguard patients.

## 5. Recommendations

**Recommendation 1.** *The corporate and clinical governance arrangements at South Tipperary General Hospital should be reviewed in order that the Executive Management Board may be assured of its compliance with the National Standards for the Prevention and Control of Healthcare Associated Infections.*

**Recommendation 2.** *Policies and procedures to prevent and control HCAs should be reviewed and updated to reflect evidence-based information and guidance.*

**Recommendation 3.** *A communication strategy should be put in place which ensures information relating to HCAs is communicated and responded to in an efficient, timely, effective and accurate manner to all service users including patients, general practitioners and community services.*

**Recommendation 4.** *There should be comprehensive surveillance in place with a named accountable person for the coordination of the PCHCAI surveillance programme.*

**Recommendation 5.** *Comprehensive antimicrobial stewardship should be developed and implemented.*

**Recommendation 6.** *South Tipperary General Hospital Executive Management Board should ensure that PCHCAI staff should be facilitated to attend ongoing professional development.*

**Recommendation 7.** *South Tipperary General Hospital should put in place arrangements to ensure all staff attend mandatory theoretical and practical training in relation to the prevention and control of Healthcare Associated Infections.*

**Recommendation 8.** *South Tipperary General Hospital should put in place arrangements to ensure all visiting clinicians and undergraduates are competent in the core principles for the prevention and control of HCAs.*

**Recommendation 9.** *There should be clear and visible support from South Tipperary General Hospital Executive Management Board, including the Clinical Director and senior clinicians, to drive the hand hygiene campaign and ensure compliance from all disciplines and levels of seniority.*

**Recommendation 10.** *South Tipperary General Hospital should put in place arrangements to ensure that care bundles are communicated, implemented and managed in line with evidence-based best practice, and their efficacy monitored.*

**Recommendation 11.** *South Tipperary General Hospital should put in place systems to reduce and control antimicrobial resistance.*

***Recommendation 12.*** *South Tipperary General Hospital should put processes and procedures in place to ensure the cleanliness of the physical environment and that equipment is effectively managed and maintained.*

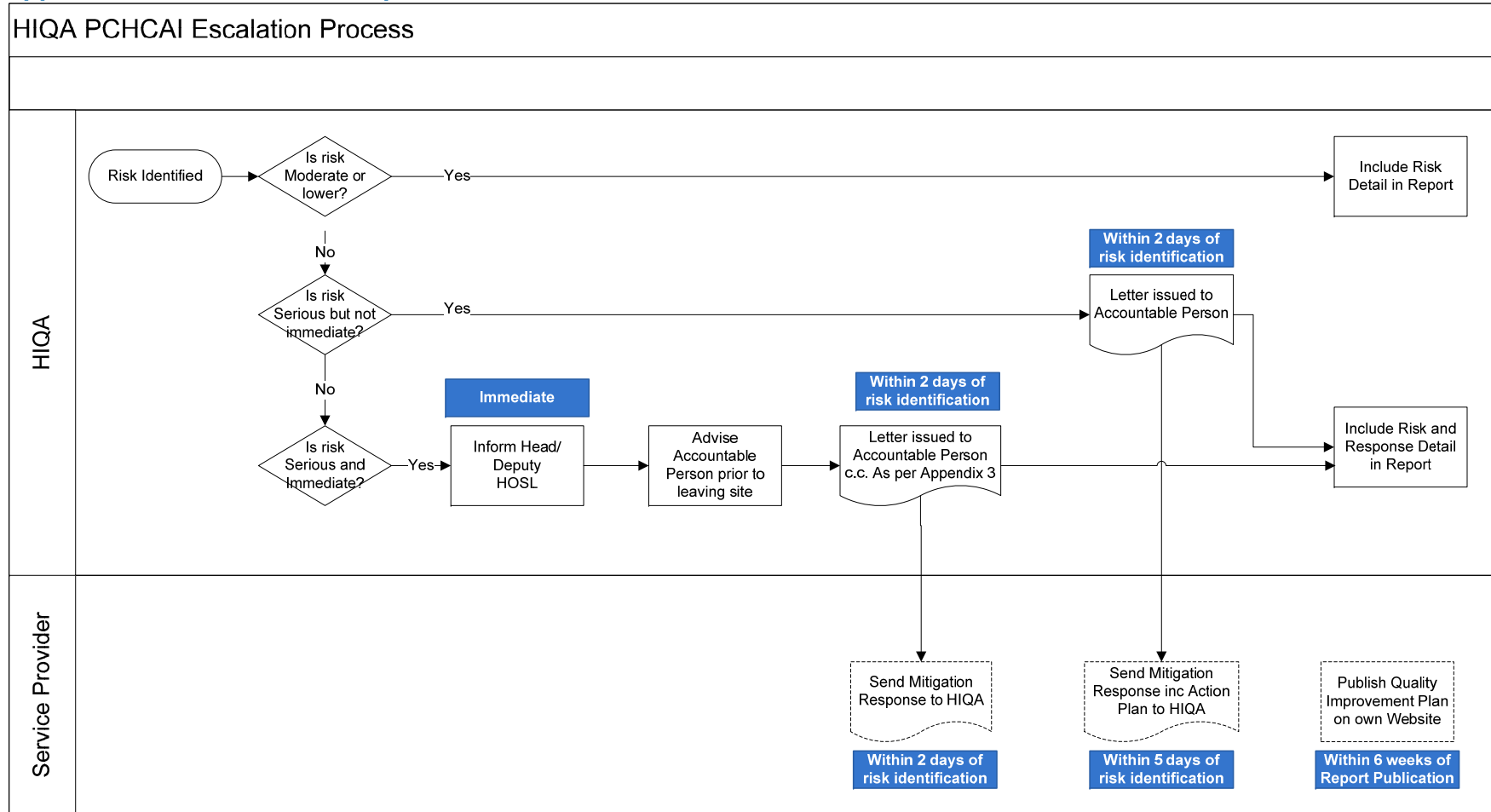
## Appendix 1 – Themes and Essential Elements

NSPCHAI Standard	Theme	Essential Element
<p>1,2,3, 4,5,6, 7,8,9, 10,11, 12.</p>	<p><b>Leadership, Governance and Management</b></p> <p>Robust leadership, governance and management structures and processes underpin what hospitals should have in place to assure the public and themselves that the arrangements for the prevention and control of Healthcare Associated Infections (PCHCAI) are effective.</p> <p>There are robust local monitoring and reporting arrangements in place thereby ensuring infection control is managed at a consistently high level of quality with minimal variation in the delivery of that care. There are effective regional and national PCHCAI reporting arrangements in place; infection control activities provided are compliant with the relevant legislation, clinical care programmes and evidenced-based practice; and the organisation is acting on national standards and recommendations from statutory bodies.</p>	<p><b>1(a)</b> A comprehensive corporate and PCHCAI governance structure supported by an integrated organisational framework is in place. The governance arrangements will include PCHCAI specific strategies, aligned cost-effective initiatives and defined responsibilities for externally contracted services.</p> <p><b>1(b)</b> There is clear monitoring and reporting of defined PCHCAI performance metrics, with trend analysis, reciprocal quality improvement initiatives and reporting at a local, regional and national level.</p> <p><b>1(c)</b> A clear PCHCAI communication strategy, supported by robust operational arrangements, to assure the effective communication of appropriate and timely information throughout the service, to service providers and appropriate agencies is in place.</p>

NSPCHAI Standard	Theme	Essential Element
1, 4, 5, 6.	<p><b>Workforce</b></p> <p>The hospital should always be in a position to assure the service users, the public and itself that everyone working in the service is contributing to the prevention and control of Healthcare Associated Infections. The individual members of the workforce must be skilled and competent, they must be supported to continuously update and maintain their knowledge and skills, whether they are directly employed or in contractual employment.</p>	<p><b>2(a)</b> Members of the core PCHCAI team must have the appropriate qualifications, specific training, skills and competencies in infection control, antimicrobial stewardship and HCAI surveillance. They must undergo continuing professional education and development on a regular basis.</p> <p><b>2(b)</b> All hospital staff receive mandatory theoretical and practical training in relation to the prevention and control of Healthcare Associated Infections.</p> <p><b>2(c)</b> There are arrangements in place to ensure that visiting clinical, undergraduates and agency staff are competent in the core principles for the prevention and control of HCAs.</p>

NSPCHAI Standard	Theme	Essential Element
1,2,3, 6,7,8, 9,11,12.	<p><b>Safe Care</b></p> <p>The hospital recognises that the prevention and control of Healthcare Associated Infections is paramount.</p> <p>The cleanliness of the physical environment and equipment is effectively managed and maintained.</p> <p>The hospital learns from all information relevant to the provision of safe PCHCAI services, in addition to learning from when things go wrong. There is an embedded focus on quality and safety improvement, evidence-based decision making and active engagement in local, national and international initiatives to minimise the risk of HCAs.</p>	<p><b>3(a)</b> There is access to specialist microbiological advice and services, 24 hours a day, seven days a week.</p> <p><b>3(b)</b> There are specific care bundles and/or policies and procedures developed, communicated, implemented and their efficacy monitored with the use of:</p> <ul style="list-style-type: none"> <li>▪ peripheral intravenous catheter</li> <li>▪ urinary catheter</li> <li>▪ central venous catheter.</li> </ul> <p><b>3(c)</b> There are defined PCHCAI performance metrics and audit process in place with a particular emphasis on: surgical site infection rates, environmental and equipment hygiene, antimicrobial prescribing, hand hygiene, infection related to the use of invasive medical devices, HCAI trend rates and analysis.</p> <p><b>3(d)</b> There is proactive reporting, identification, evaluation and management of information to include PCHCAI-related adverse events, risks, patients' complaints, audits and satisfaction surveys.</p> <p><b>3(e)</b> The cleanliness of the physical environment and equipment is effectively managed and maintained.</p>

## Appendix 2 – Risk escalation process



**Note:**

Accountable Person: identified individual who has overall executive accountability, responsibility and authority for the delivery of high quality, safe and reliable services.

HOSL: Healthcare Operations, Safety and Learning, HIQA





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