



The **Regulation** and
Quality Improvement
Authority

The Regulation and Quality Improvement Authority

**Unannounced Infection Prevention/Hygiene
Augmented Care Inspection**

Altnagelvin Hospital Critical Care Unit

4 and 5 September 2014

Assurance, Challenge and Improvement in Health and Social Care

www.rqia.org.uk

The Regulation and Quality Improvement Authority

The Regulation and Quality Improvement Authority (RQIA) is the independent body responsible for regulating and inspecting the quality and availability of health and social care (HSC) services in Northern Ireland.

RQIA's reviews and inspections are designed to identify best practice, to highlight gaps or shortfalls in services requiring improvement and to protect the public interest.

Our Hygiene and Infection Prevention and Control inspections are carried out by a dedicated team of inspectors, supported by peer reviewers from all trusts who have the relevant experience and knowledge. Our reports are available on the RQIA website at www.rqia.org.uk.

Inspection Programme

The CMO's letter (HSS MD 5/2013) endorsed the use of the Regional Infection Prevention and Control Audit Tools for Augmented Care Settings by all Trusts in Northern Ireland in the relevant clinical areas www.rqia.org.uk.

- Governance Assessment Tool;
- Infection Prevention and Control Clinical Practices Audit Tool;
- Neonatal Infection Prevention and Control Audit Tool;
- Critical Care Infection Prevention and Control Audit Tool;
- Augmented Care Infection Prevention and Control Audit Tool

The introduction of this suite of audit tools is follow-on from development of the existing regional healthcare hygiene and cleanliness standards and audit tool, developed and disseminated in 2011. Both sets of tools should be used in conjunction with each other. A 'Guidance and Procedural Paper for Inspections in Augmented Care Areas' has been developed which outlines the inspection process www.rqia.org.uk.

The inspection programme for augmented care covers a range of specialist facilities and a rolling programme of unannounced inspections has been developed by RQIA to assess compliance with both of these sets of audit tools.

RQIA also carries out announced inspections. These examine the governance arrangements and systems in place to ensure that infection prevention and control and environmental cleanliness policies and procedures are working in practice.

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1.0 Inspection Summary

An unannounced inspection was undertaken to Altnagelvin Hospital Critical Care Unit on the 4 and 5 September 2014. The inspection team comprised of four RQIA inspectors. Details of the inspection team and trust representatives attending the feedback session can be found in Section 7.

The 10 bed critical care unit, based at the Altnagelvin Hospital site, is part of the Western Health and Social Care Trust and provides adult general intensive care and high dependency services. It is commissioned for seven intensive care (Level 3) and three high dependency (Level 2) care beds.

The unit provides intensive care services to patients with life threatening illness, following major and complex surgery and serious accidents. Patients in high dependency care are generally less ill than those in critical care but still require organ support which cannot be provided in an ordinary ward.

The critical care unit is located on the first floor of Altnagelvin Hospital (Picture 1).



Picture 1: Entrance to Altnagelvin Critical Care Unit

The critical care unit was assessed against the following regionally agreed standards and audit tools:

- Regional Critical Care Infection Prevention and Control Audit Tool
- Regional Infection Prevention and Control Clinical Practices Audit Tool
- Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool

This inspection is the first of a three year cycle of inspection carried out within this area. The report highlights strengths as well as areas for further improvement, and includes recommendations and a quality improvement action plan.

Overall the inspection team found evidence that the critical care unit at the Altnagelvin Hospital was working to comply with the above standards and audit tools.

Inspectors observed:

- the unit was compliant in all seven of the Regional Healthcare Hygiene and Cleanliness Standards

Inspectors found that the key areas for further improvement were:

- layout, design and storage capacity within the unit
- the overall management of blood cultures

Inspectors observed the following areas of good practice:

- The domestic staff were very thorough in their cleaning practices. A member of the team was awarded the British Institute of Cleaning, cleaner of the year.
- There was a strong emphasis on staff training and development within the unit, a number of local training initiatives had been developed.
- Training had commenced to prepare staff in the event of managing a patient suspected of having viral haemorrhagic fever.
- The unit had purchased an electronic display monitor which will continuously display custom content, such as waiting times and IPC advice. This will be used to provide necessary information to relatives/visitors to the unit while they wait.
- The initiative of 'time critical transfer' had been developed within Altnagelvin Critical Care Unit for patients requiring emergency transfer. The initiative has reduced the time taken for the emergency transfer of patients and the associated risks. This initiative is due to be rolled out regionally.
- A relative of a patient had commented positively regarding the care and compassion of staff and the cleanliness of the unit.

The inspection resulted in **26** recommendations for improvement listed in Section 6.

Detailed lists of the findings are available on request from RQIA Infection Prevention and Hygiene Team.

The final report and quality improvement action plan will be available on RQIA's website. Where required, reports and action plans will be subject to performance management by the Health and Social Care Board and the Public Health Agency (PHA).

RQIA's inspection team thanks the Western Health and Social Care Trust (WHST), and in particular all staff at Altnagelvin Hospital Critical Care Unit for their assistance during the inspection.

2.0 Overall Compliance Rates

The Regional Critical Care and Clinical Practices Infection Prevention and Control Audit Tools

RQIA uses these tools as an assessment framework to build progressive improvement over a three-year inspection cycle. Compliance scores for the first inspection are 85 per cent, rising to 95 per cent by the end of the third inspection.

Compliance rates are based on the scores achieved in the various sections.

Table 1: Regional Critical Care Infection Prevention and Control Audit Tool Compliance Levels

Areas inspected	
Local Governance Systems and Processes	93
General Environment – Layout and Design	76
General Environment – Environmental Cleaning	100
General Environment – Water Safety	95
Clinical and Care Practice	91
Patient Equipment	100
Average Score	93

Table 2: Regional Infection Prevention and Control Clinical Practices Audit Tool Compliance Levels

Areas inspected	
Aseptic non touch technique (ANTT)	83
Invasive devices	86
Taking Blood Cultures	*71
Antimicrobial prescribing	88
Clostridium <i>difficile</i> infection (CDI)	*94
Surgical site infection	100
Ventilated (or tracheostomy) care	95
Enteral Feeding or tube feeding	94
Screening for MRSA colonisation and decolonisation	98
Average Score	90

*Staff practice was not observed during the inspection.

Information was gained through staff questioning and review of unit audits.

Compliant: 85% or above
 Partial Compliance: 76% to 84%
 Minimal Compliance: 75% or below

The Regional Healthcare Hygiene and Cleanliness Audit Tool

Compliance rates are based on the scores achieved in each section of the Regional Healthcare Hygiene and Cleanliness Audit Tool. Percentage scores can be allocated a level of compliance using standard compliance categories below.

Table 3: The Regional Healthcare Hygiene and Cleanliness Audit Tool Compliance Levels

Areas Inspected	
General Environment	97
Patient Linen	100
Waste	98
Sharps	94
Patient Equipment	97
Hygiene Factors	97
Hygiene Practices	98
Average Score	97

Compliant:	85% or above
Partial Compliance:	76% to 84%
Minimal Compliance:	75% or below

Where an inspection identifies issues that are considered to be of high risk, trusts will be asked to take immediate action.

3.0 Inspection Findings: Regional Critical Care Infection Prevention and Control Audit Tool

The Regional Critical Care Infection Prevention and Control Audit Tool contains seven sections. Each section aims to consolidate existing guidance in order to improve and maintain a high standard in the quality and delivery of care and practice in critical care. This will assist in the prevention and control of healthcare associated infections.

Regional Critical Care Infection Prevention and Control Audit Tool Compliance Levels

Areas inspected	
Local Governance Systems and Processes	93
General Environment – Layout and Design	76
General Environment – Environmental Cleaning	100
General Environment – Water Safety	95
Clinical and Care Practice	91
Patient Equipment	100
Average Score	93

The findings indicate that whilst overall compliance was achieved in relation to the Regional Critical Care Infection Prevention and Control Audit Tool, inspectors identified issues in relation to the design and layout of the unit.

3.1 Local Governance Systems and Processes

For organisations to comply with this section, good governance should be displayed through management that displays effective decision-making and leadership. Systems and processes should be robust, and staff should be aware of their roles and responsibilities. Appropriate policies and procedures should be available. The unit achieved compliance in this section of the audit tool.

Leadership and Management

The management team of Altnagelvin Critical Care Unit displayed strong leadership and management qualities. Unit managers had an excellent knowledge base on the principles of infection prevention and control (IPC) and the necessary measures to take in managing infection within the unit. The lead nurse has nominated responsibility for IPC within the unit; inspectors were informed that the lead nurse can avail of protected time for appropriate IPC training opportunities. Unit staff, displayed good awareness and an appreciation of the importance of infection prevention and control.

The unit did not have a specific dedicated trust IPC nurse. Inspectors were informed that this was due to staffing pressures within that service; however unit staff did comment that they had a strong relationship with the IPC team who had always been very supportive in providing advice and assisting with IPC initiatives. Inspectors were informed that although IPC staff did not visit the unit on a daily basis they are readily available for advice by phone. Inspectors were informed that visits by IPC staff were increased for outbreak management.

1. It is recommended that infection prevention and control staffing levels are reviewed, to facilitate daily visits to the unit and a dedicated IPC nurse is nominated for the unit.

The lead nurse or ward sisters attended IPC hospital link meetings which were facilitated by trust IPC nursing staff. Information from link meetings was cascaded to other unit staff for learning via staff meetings, safety briefs and the communication book. The unit also developed a staff newsletter entitled 'Critical Care Safety Update'. The update was used to improve communication between staff, highlight safety issues and relevant IPC information.

Inspectors were informed, when patients with infections were identified, staffing levels could be increased to assist in the delivery of care and ensure adherence to good infection prevention and control practices. A domestic service staff member had been employed within the unit to focus on enhanced cleaning measures.

Review of Documentation

A review of documentation evidenced a range of critical care meetings, from management level to frontline staff, which feed into each other. IPC is a significant focus of CCU staff monthly meetings. Meeting minutes evidenced staff feedback relating to high impact interventions, annual audit results of the principles of environmental cleanliness, blood cultures, RQIA visits and an update on the incidence and actions taken for alert organisms identified within the unit.

A review of documentation evidenced that incidents relating to IPC were appropriately reported and acted on. The WHSCT conduct a root cause analysis (RCA) on MRSA/MSSA bacteraemia and *Clostridium difficile* infections. Documentation from RCAs evidenced that a multidisciplinary approach was taken to this process and minutes from staff meetings highlighted that staff receive timely feedback from such incidents.

Accessing relevant trust policies and the ability to demonstrate essential knowledge of key IPC legislation is included as an aspect of the critical care networks national competencies. All unit staff must progress through step one of the competency framework. Competency in IPC is included within this framework and assists staff developing knowledge, understanding and enhance skills that contribute to IPC in critical care. All staff questioned during

the inspection had a good knowledge of IPC policies and procedures, and were able to access the relevant documents on the trust intranet site.

A trust overarching occupational health/infection prevention and control policy was available to negate the potential risk and transmission of infection. The policy provides guidance to both managers and employees on necessary screening and vaccination in relation to a number of infectious conditions. This is required to maintain staff members own health and safety and to prevent the spread of infection to colleagues, patients and service users. Staff members questioned, were knowledgeable on the appropriate action to take in the event that they develop an infectious condition.

A system was in place for unit staff to identify and report maintenance and repair issues. The computerised recording system in the estates department captures this information.

Audit

Local and regional audits and the implementation of high impact interventions were undertaken to improve infection prevention and control practices and environmental cleanliness.

Inspectors evidenced that the IPC team independently validated practices within the unit. IPC baseline assessment audits within the unit included: ANTT audits observing peripheral cannulation, peripheral line therapy, administration and the collection of blood cultures. Other validation audits included hand hygiene, cleanliness of commodes, isolation precautions and compliance with the urinary catheter care bundle.

When audits identified deficits in practice, action plans were developed to address poor practices. As evidence, a validation audit of hand hygiene by the IPC team in January 2014 identified deficits in staff adherence to best practice. The frequency of hand hygiene audits was increased to daily, until compliance was achieved.

Key performance data from audits was displayed publicly at the entrance to the unit and was reported to unit staff at staff briefings, team meetings and displayed on the critical care patient care performance dashboard (Picture 2).

HSC Western Health and Special Care Trust		ALTRAEDELVIN HOSPITAL CRITICAL CARE PATIENT CARE PERFORMANCE DASHBOARD											
QUALITY INDICATOR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	
OCCUPANCY	85%	87	80	74	54%	64%	57%	77%					
ENVIRONMENTAL ASSESS - ALL	95	95	94	92	92	92	95	94					
ENVIRONMENTAL ASSESS - CCU	95	95	90	94	96%	94	94	93					
ENVIRONMENTAL ASSESS - EXTENDED CARE	99	86	N/A	90	N/A	N/A	N/A	85%					
SAF BUDGET	100	100	100	100	100%	100	88	100					
INPATIENTS	100	100	90	90	100	100	90	100					
CENTRAL LINE INFECTIONS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
CENTRAL LINE INFECTIONS	100	100	100	100	100	100	100	100					
RESPIRATORY LINE INFECTIONS	100	100	100	95	100	100	100	100					
CATHETER LINE INFECTIONS	98	N/A	100	90	100	100	100	100					
CATHETER LINE INFECTIONS	95	100	100	90	100	100	100	100					
HAND HYGIENE ASSESS	100	100	97	100	100	100	100	100					
HEALTHY WOUNDS ASSESS	95	N/A	N/A	95	N/A	N/A	100	N/A					
CONTROLLED WOUNDS ASSESS	93%	97	83	78	83	83	N/A	N/A					
WELL WOUND ASSESS	70	80	100	40	100	60	100	100					
WOUND WOUND ASSESS	100	100	90	60	100	100	100	100					
WOUND ASSESS	100	100	100	100	100	100	100	100					
RESPIRATORY ASSESS - ALL	87	89	90	89	N/A	93	N/A	N/A					
RESPIRATORY ASSESS - CCU	85	75	78	78	N/A	82	N/A	N/A					
NUMBER OF RESPIRATORY DEVICES	0	0	2	0	0	0	2	0					
NUMBER OF PULMONARY ASSES	0	0	0	0	0	0	0	0					
NUMBER OF RESPIRATORY DEVICES	0	0	0	0	1	0	1	0					
NUMBER OF COMPLAINTS	11	8	1	4	18	8	0	7					
NUMBER OF COMPLAINTS	0	1	1	0	0	0	0	0					

Picture 2: Patient care performance dashboard

Surveillance

Surveillance, the continuous monitoring of healthcare associated infection (HCAI) is key to the control of infection. A surveillance programme can be used to implement improvement initiatives, assess effectiveness of clinical interventions and can quickly identify outbreaks if infection.

Local surveillance data is analysed by the microbiology and the IPC teams and presented at the trust surveillance meeting. The lead nurse for the CCU attends this meeting monthly. This forum reviews the current trust incidence of CDI, MRSA and MSSA bacteraemia in line with set PHA targets. Each patient case is individually reviewed at this forum and the findings of the RCA investigation are examined in detail to identify learning and potential trends.

The local surveillance system alerted staff to an increased incidence of Vancomycin-resistant Enterococcus (VRE) within the CCU earlier in 2014. Reviewed documentation evidenced an investigation and measures taken to control and prevent future incidence. A new VRE policy was developed to guide staff in the appropriate management of VRE. A specific action point was introduced; the use of single use patient mouth trays.

On a daily basis, the senior nurses in ICU and HDU carry out a local surveillance initiative of alert organisms. Data was captured for each patient in relation to infection status, screening, symptoms and enhanced cleaning of the bed space. This system could be used for retrospective analysis of patient placement within the CCU.

Training and Development

Staff infection prevention and control knowledge and up-to-date practical skills are a prerequisite for clinical staff to carry out their role in an effective manner.

Records evidenced that all unit staff had participated in the trust's induction programme and mandatory training on IPC. Staff attend face to face mandatory IPC training every two years; 98 per cent of nursing staff within the critical care unit have attended this training. A critical care rolling programme of education had also been developed. This session facilitates update training for staff on interventions and issues specific to the CCU.

IPC training for HCAs within the unit had routinely been facilitated locally by CCU sisters however inspectors were informed that it is now planned that IPC training for HCAs would be a mandatory session within the training programme. IPC training for HCAs will be further augmented with unit based study days.

Unit staff organised a biannual critical care conference, guest speakers from the IPC team were invited. A presentation at the conference in June 2014, discussed H1N1 influenza.

During the inspection, unit staff were participating in a training session on viral haemorrhagic fever. Inspectors were informed that the training was to prepare staff to effectively manage any suspected cases in line with guidance recently circulated to the trust from the Chief Medical Officer.

Information and Communication

Information on infection prevention and control, and the effective communication of this information, is vital to ensure adherence to good practice.

A range of resources was available to advise patients and visitors of infection prevention and control precautions. Inspectors were informed that an electronic display monitor for the relatives' room had recently been purchased. The monitor will continuously display custom content, such as waiting times and IPC advice. This will be used to provide information to relatives/ visitors while they wait.

Inspectors were informed that it was not routine practice for relatives and visitors to the unit to receive a 1:1 session on hand hygiene. It was highlighted within the CCU meeting minutes that staff were forgetting to remind visitors to decontaminate hands before entering the unit.

2. It is recommended that visitors/ relatives are educated on the correct hand washing technique.

Leaflets and booklets are provided for relatives on hand hygiene, visiting times and advice in relation to bringing food into hospital. Advice for relatives and visitors, in the appropriate use of clinical hand wash sinks and the bringing of outside coats into the unit was available. This was within the new 'Critical Care Relatives Information Booklet' developed by the critical care network for Northern Ireland (CCaNNI). Inspectors were informed that advice

for visitors to the unit on the concept of being 'bare below the elbow' is guided by advice from the IPC team.

3.2 General Environment

3.2.1 Layout and Design

For organisations to comply with this section of the audit tool they must ensure adequate facilities are available for the delivery of care. This includes the space available to carry out care, decontaminate equipment and to ensure effective isolation.

The unit has achieved partial compliance in the layout and design of the environment.

The Critical Care Unit consists of 10 beds; five beds in ICU incorporating two side rooms and five beds in HDU incorporating one side room.

The core clinical space around patients' beds for the delivery of care within the multi bedded areas of ICU and HDU was not within 80 per cent of the minimum dimensions currently recommended for existing units by the DHSSPSNI. The limitations in clinical space, with special reference to the HDU area, affected staff members' ability to manoeuvre patients and equipment.

Inspectors noted that, although the core clinical space did not meet current recommended requirements, staff were working within these limitations to deliver safe and effective care. Inspectors observed that bed spaces were free from clutter during the inspection.

In total there were three single rooms available within the unit. These rooms were used for the isolation of patients to control the spread of infection or for the protection of immunosuppressed patients. This is not in line with numbers recommended by the DHSSPS and outlined in the audit tool; a minimum of four single rooms per 8 beds is required.

There were no dedicated areas for equipment cleaning and the storage of equipment for repair. Inspectors observed that there was no clear separation of clean and dirty storage areas. Inspectors were informed that an agreement for minor capital works to convert a section of the dirty utility room into an equipment cleaning room had been agreed in principle. Inspectors evidenced that ventilation systems were routinely monitored, serviced and cleaned by estates department.

- 3. It is recommended that, there should be a review of the layout, design and storage areas of the unit for maximum space utilisation. As part of any refurbishment/new build planning, core clinical space recommendations should be complied with.**

3.2.2 Environmental Cleaning

For organisations to comply with this section they must ensure cleaning staff display knowledge of cleaning policies and procedures, and are competent in cleaning hand washing sinks. Environmental cleaning audits should be carried out, and the infection prevention and control team should be consulted when infection has been identified.

Good practice was observed and the unit was fully compliant in the section on environmental cleaning. The unit is commended for this impressive performance. Environmental cleaning; guidelines, audit and staff competency based training were in place and reviewed. On questioning, staff displayed good knowledge on appropriate cleaning procedures. There was a regular programme of de-cluttering in place. Environmental auditing was carried out every two weeks by the unit sister and the lead nurse carried out random validation audits of environmental cleaning.

3.2.3 Water Safety

For organisations to comply with this section they must ensure that an overarching water safety plan and individual area risk assessment plan is in place. Water sampling, testing, flushing and maintenance are carried out correctly, and there is a mechanism in place to report water analysis results.

The unit was compliant in relation to water safety. An overarching trust water safety plan and individual unit risk assessment plan were in place. Inspectors were informed that the trust water safety plan was currently being reviewed. Collection of tap water samples to facilitate microbiological organism testing and analysis was carried out.

The trust carries out scheduled water sampling for legionella and *pseudomonas aeruginosa* from all outlets in augmented care areas. All results of water analysis are reported to the trust water safety group. The group is inclusive of staff from IPC, estates and clinical representatives.

All infrequently used taps within the unit were flushed daily. This ensures that water does not stagnate within the water system. These actions are compliant with recommendations within HTM 04-01 Water Systems Addendum; however the trust water safety plan needs to be updated to reflect this practice.

All flushing records were available for the inspection team to review. Inspectors observed that the flushing record of infrequently used outlet had gaps in daily documentation. Inspectors were informed that the gaps on the form observed were due to a maintenance issue with the outlet. Inspectors advised in these situations the maintenance issue should be recorded on the flushing record form.

Inspectors were informed that the estates department removed all 'dead-legs' from the unit two years ago.

An infrequently used shower within the unit had tested positive for legionella and pseudomonas *aeruginosa*; appropriate actions were taken to address this issue which could be monitored on the estates 'ZetaSafe' electronic software programme.

- 4. It is recommended that the trust water safety plan is reviewed and updated to include current best practice guidance in relation to flushing of infrequently used water taps in augmented care units. Staff should ensure that all flushing records are robustly completed.**

Hand washing sinks were used correctly, only for hand washing. Bodily fluids and cleaning solutions were not disposed of down hand washing sinks. Patient equipment was not stored or washed in hand washing sinks. A system was in place to address any issues raised with the maintenance of hand washing sinks and taps.

3.3 Critical Care Clinical and Care Practice

For organisations to comply with this section they must ensure that the delivery of care is provided in a way that negates the risk of transmission of infection. This is provided through adequate staffing, monitoring of neonate movement, infection control screening policies and adherence to DHSSPS and local guidance on cleansing the critical care.

The unit achieved compliance in this section of the audit tool. During the inspection, staff allocation ensured optimal infection prevention and control practices.

A retrospective patient placement system to identify which bed the patient is in during their stay in critical care was available. The daily local surveillance initiative of alert organisms can be used to carry out this function. A staff member within the CCU was designated to develop the acquired patient computer software package 'ICIP' (Intellivue Clinical Information Portfolio) for use within the unit. It was hoped that this system will go live in early December 2014 and will also be able to provide an added function of retrospective patient placement recording.

To facilitate the continuity of care following the transfer of a patient to another unit, staff members completed the CCaNNI critical care discharge form. Staff recorded the infection status of the patient; confirmed or suspected and results including pending results. Staff were also required to record any IPC precautions that needed to be initiated.

Screening policies and procedures were in place and known to staff. All patients were routinely screened on admission for MRSA and weekly thereafter. Samples of urine and sputum from all patients present were sent for microbiological culturing, Monday, Wednesday and Friday.

Inspectors were informed that if a patient's critical care admission screens or if their results following discharge or transfer to another ward were positive, the receiving or transferring wards were routinely informed if the results were clinically significant. Inspectors were informed that these discussions were not routinely recorded. Inspectors noted that there was no clear protocol/ policy to guide staff, which outlines nominated staff responsibilities, set timeframes for completion and the recording of actions taken.

5. It is recommended that a protocol/ policy should be developed that identifies individual staff roles and responsibilities in relation to the reporting of laboratory results to receiving or transferring units. These discussions should be robustly recorded.

Staff washed patients in water from a source of known quality and used alcohol rub after hand washing when caring for patients. Staff were aware of risk factors that cause skin injury; the patients skin condition was recorded in the care records observed.

3.4 Critical Care Patient Equipment

For organisations to comply with this section they must ensure specialised equipment is effectively cleaned and maintained. Audits of equipment cleaning and education on the use of equipment should be available.

The unit achieved full compliance in this section of the audit tool and is commended for this impressive performance. Specialist equipment inspected was clean and in a good state of repair (Picture 3). Staff displayed good knowledge of single use equipment.

There was guidance and routine auditing of the cleaning, storage and replacement of specialised patient equipment, including when a patient is in isolation or during an outbreak.



Picture 3: Clean patient equipment

4.0 Inspection Findings: Regional Infection Prevention and Control Clinical Practices Audit Tool

The Regional Infection Prevention and Control Clinical Practices Audit Tool contains nine sections. The observations of key clinical procedures have shown to reduce the risk of infection if performed correctly. Each section aims to consolidate and build on existing guidance in order to improve and maintain a high standard in the quality and delivery of care and practice in critical care. This will assist in the prevention and control of healthcare associated infections.

Regional Infection Prevention and Control Clinical Practices Audit Tool Compliance Levels

Areas inspected	
Aseptic non touch technique (ANTT)	83
Invasive devices	86
Taking Blood Cultures	*71
Antimicrobial prescribing	88
Clostridium <i>difficile</i> infection (CDI)	*94
Surgical site infection	100
Ventilated (or tracheostomy) care	95
Enteral Feeding or tube feeding	94
Screening for MRSA colonisation and decolonisation	98
Average Score	90

* Staff practice was not observed during the inspection.
Information was gained through staff questioning and review of unit audits.

The findings indicate that overall compliance was achieved. Inspectors identified that immediate improvement was required in the collection of blood cultures.

During the inspection clinical practice was observed in the majority of areas. Staff were questioned on all aspects of the clinical practices audit tool and displayed good knowledge on the practical application of clinical procedures.

4.1 Aseptic Non Touch Technique (ANTT)

ANTT is a standardised, best practice and safe aseptic technique used for care the overall management of invasive clinical practices and preparation of medication. For organisations to comply with this section they must have a policy in place; staff should display knowledge and practical skills on the key principles, and audit of staff competency is carried out.

The unit achieved partial compliance in this section of the audit tool. Inspectors were informed that the ANTT policy/guidance document was close to being finalised. Staff used ASAP (the Assessment of Safe Practice), the ANTT Theory and Practice Framework as guidance. There was a range of flash cards on ANTT kept at each bed space for staff to reference.

A critical care resource file was at each patient bed space for staff to reference. The file contained step by step pictorial ANTT posters in relation to a range of interventions. An ANTT video link on computer desk tops assisted in updating staff on the principle steps of ANTT. A number of staff within the unit had been trained as ANTT competency assessors in 2011/2012. They cascaded training to staff in the unit and carried out competency based assessments of unit staff. Records were available of ANTT staff assessments and on-going audits. The IPC team carried out baseline assessments of ANTT, observing peripheral cannulation, peripheral line therapy administration and the collection of blood cultures.

IPC run stand-alone face to face ANTT training four times a year; utilising clinical work stations to reinforce good practice skills. It was planned for all staff to attend one - two yearly updates. Staff displayed good knowledge on the principles of ANTT and were able to demonstrate when ANTT procedures should be applied. Inspectors observed excellent application of the key elements of ANTT in a number of practice interventions.

Inspectors were informed that there was mandatory ANTT training for newly graduated medical staff at the skills station but no mandatory ANTT training for other grades of medical staff. At the feedback trust representatives advised that ANTT training had been organised for ICU anaesthetists, and is to be held in October 2014.

6. It is recommended that the ANTT policy is circulated to all relevant staff when finalised.

4.2 Invasive Devices

Invasive devices are medical devices which in whole or in part, penetrate the body, either through a body orifice or through the surface of the body. For organisations to comply with this section they must ensure that there are systems and process in place to ensure a standardised and consistent approach by staff in the insertion and ongoing maintenance of invasive devices.

The unit achieved compliance in this section of the audit tool. Evidence of practice was obtained through observation, review of documentation and speaking with staff.

Policies/ procedures for the insertion and on-going management of invasive devices were in place however a number had passed their revision date

without being reviewed. Guidelines for IPC related to Urinary Catheter Care were still in draft. There was no Central Venous Catheters (CVC) policy, the unit used CCaNNI guidelines for insertion and maintenance of CVCs however these guidelines were due for review in July 2014.

7. It is recommended that all trust policies/ guidelines are reviewed and updated as required to ensure continued accuracy of guidance for staff

Competency in the management of invasive access devices was assessed as part of the new national competency framework for critical care nurses. This would be completed by all new nursing staff employed within the unit during their preceptorship period. New staff competency was assessed in the management of vascular, urinary, respiratory and enteral feeding access devices however inspectors noted that there was no evidence of training updates and ongoing competency assessment in a range of these devices for longer term staff.

8. It is recommended that longer term staff receive update training and ongoing competency assessment in the management of invasive devices.

Staff practice and knowledge in the insertion and management of invasive devices during the inspection was of a good standard. Audit results evidenced compliance with high impact interventions standards. Action plans were developed to address issues of non-compliance. Independent verification of compliance with the principles of ANTT and the management of invasive devices was facilitated by the IPC team.

In a review of two patient records, inspectors observed that not all the relevant information in relation to the insertion of a peripheral venous catheter (PVC) was available. The records did not record the size of device inserted, gauge and clinical indication for insertion of the PVC.

9. It is recommended that all relevant information is recorded in relation to the insertion and ongoing management of invasive devices.

The Public Health Agency (PHA) 'Device associated Infection Surveillance in Critical Care Units HCAI Monthly Report', June 2013 – May 2014 details Altnagelvin hospital critical care unit infection rates. This report identifies that the critical care unit has had:

- three VAP (ventilated associated pneumonia)
- zero CAUTI (catheter associated infection)
- zero CLABSI (central line associated blood stream infection)
- zero CR-BSI (central venous catheter- related bloodstream infection)

4.3 Taking Blood Cultures

A blood culture is a microbiological culture of blood. It is employed to detect infections that are spreading through the bloodstream. For organisations to comply with this section they must ensure that a policy is in place, staff display knowledge and practical skills on the key principles and monitoring of the rate of blood cultures is carried out.

The unit achieved minimal compliance in this section of the audit tool. Immediate attention is required to bring this section to a compliant standard.

Inspectors were unable to observe practice at the time of the inspection however evidence of practice was obtained through review of documentation and discussions with staff.

A trust blood culture policy was available. It is incorporated within the Guidelines on the Collection of Clinical Specimens for Laboratory Examination. Staff demonstrated good knowledge on how and why to collect a blood culture. Medical staff had informed inspectors that they had received no update training in the collection of blood cultures since their employment with the trust.

10. It is recommended that update training should be provided for all relevant staff involved in the collection blood cultures.

There was no routine compliance monitoring with best practice when taking blood cultures within the unit. The IPC team carried out a baseline audit on the collection blood cultures; however this was not a routine audit.

11. It is recommended that a system should be initiated to routinely monitor compliance with best practice when collecting blood cultures.

The microbiology laboratory regularly informed clinical/nursing/IPC staff of positive blood cultures within the unit and the rate was reviewed at HCAI surveillance meetings, critical care meetings and unit staff meetings. However inspectors noted that systems were not in place to review the rate of positive blood cultures between units within the trust. There was also currently no system in place to capture the incidence of blood culture contamination.

12. It is recommended that a system is developed to allow the review of positive blood cultures between units and to capture the blood culture contamination rates of the unit. Unit staff should be routinely provided with this information.

4.4 Antimicrobial prescribing

Antimicrobial prescribing should be carried out in line with evidence-based antimicrobial guidelines. This should improve and reduce the progression of antibiotic resistance and optimise patient outcomes. For organisations to

comply with this section they must ensure that there are systems and process in place to ensure a standardised and consistent approach by staff to prescribing. Prescribing should be monitored and reviewed.

Compliance was achieved in this section of the audit tool. Inspectors observed that antimicrobial guidelines were in place and cascaded to medical staff as part of induction training. These guidelines were due for review in December 2014. Inspectors were informed that new doctors attended lunch time antimicrobial teaching sessions which were facilitated by the trust microbiologist.

A trust wide anti-microbial management team meets quarterly and was chaired by the medical director. Representatives from IPC, microbiology, pharmacy and general practitioners attend these meetings. This team centrally reviews audit results, anti-microbial usage and incidents.

A one off anti-microbial usage audit was carried out in October/November 2013 by the CCU pharmacist and medical staff. Inspectors were informed that it was intended to carry this audit out on a quarterly basis, however this did not occur. Inspectors were informed by a member of the medical team that this auditing did not progress due to pharmacist availability.

13. It is recommended that antimicrobial usage should be routinely audited in line with current antimicrobial prescribing guidance.

A department based pharmacist was available and an antimicrobial ward round took place daily, facilitated by a member of the microbiology medical team. This ensures that there is direct microbiological advice at the bedside and that antimicrobial prescribing is controlled.

Computer aided prescribing tools were not available to aid antibiotic prescribing. Inspectors were informed that the prescribing module of ICIP may be used to assist in the prescribing of antimicrobials following its introduction to the unit.

14. It is recommended that the trust introduce computer aided prescribing tools where appropriate

Antimicrobial usage was reviewed in June 2012 as part of a Point Prevalence Survey (PPS). Following this audit, in house analysis of the PPS results indicated several areas for improvement in adherence to antimicrobial prescribing guidelines for the treatment of lower respiratory tract infections (LRTI) and urinary tract infections (UTI). The medical director chaired a sub group which initiated a further audit to determine the adherence to the WHSCT antimicrobial therapy guidelines for the treatment of UTI.

Inspectors were informed that there had been a roll out of a new multi-disciplinary antimicrobial prescribing sticker. Details of the prescribed antimicrobial are documented on the sticker which is placed within the

patients notes. Inspectors were disappointed that none of the notes reviewed had a sticker in place.

4.5 Clostridium *difficile* infection (CDI)

The detection and treatment of CDI should be carried out in line with best practice guidance. For organisations to comply with this section they must ensure that guidance on care is in place, staff display knowledge and implement the guidance and adherence to best practice is monitored.

The unit achieved compliance in this section of the audit tool. Inspectors were unable to observe practice at the time of the inspection. Evidence of practice was obtained through review of documentation and speaking with staff.

Up to date guidance and a care pathway on the management of CDI was available and known to staff.

Inspectors were informed that the last recorded CDI within the unit was on the 10/09/2013. Audit tools have been developed to monitor adherence with CDI as and when appropriate. The IPC team audit the CDI bundle but not completion of the CDI pathway.

15. It is recommended that in the event of a CDI occurring within the unit, formal auditing of the completion of the CDI care pathway should be undertaken.

The management of CDI patients were further reviewed as part of the RCA process. Inspectors observed evidence of completed RCA for each CDI. The findings of the RCA were reported to unit staff at team meetings and safety briefs and to the senior management team at the surveillance meeting.

An antibiotic policy was in place for patients who have or are suspected with CDI. The appropriate antibiotic was reviewed at the daily ward round and the IPC team reviewed the prescribed antibiotics as part the care bundle audit. However there was no formal auditing of prescribed antibiotics with CDI antibiotic prescribing policy.

16. It is recommended that antibiotic prescribing is audited in line with CDI prescribing policy

4.6 Surgical site infection (SSI)

Surgical site infection (SSI) is a type of healthcare associated infection, in which a wound infection occurs after an invasive (surgical) procedure. The majority of surgical site infections are preventable. For organisations to comply with this section they must ensure that systems and processes are in place throughout perioperative (pre, intra and post-operative) care to reduce the risk of infection. A programme of surgical site infection surveillance should be in line with DHSSPS guidance.

A review of the trust and unit in the management of SSI identified full compliance in this section of the audit tool. Information was obtained from discussion with infection prevention and control staff, unit staff and a review of individual patients' records.

SSI mandatory surveillance within the trust was being carried out for orthopaedic surgery and caesarean section delivery. Results of surveillance were reviewed by the trust surveillance group. Minutes of meetings evidenced regarding incidence of SSI and actions taken to address any issues identified.

Although inspectors were unable to observe practices in relation to post-operative care, staff knowledge in reducing the risk of infection in the post-operative period was good.

4.7 Ventilated (or tracheostomy) care

Ventilator-associated pneumonia (VAP) is pneumonia that develops 48 hours or longer after mechanical ventilation is given by means of an endotracheal tube or tracheostomy. For organisations to comply with this section they must ensure that guidance on the prevention and care of a patient with VAP is in place and monitored.

Compliance was achieved in this section of the audit tool. A ventilator care bundle with critical care points was available. Staff were knowledgeable on the prevention and care of a VAP.

From August 2013 to July 2014, three VAPs were identified within the unit as per PHA figures. Evidence was provided for inspectors to show case reviews and actions taken, which were presented at staff meetings and surveillance meetings.

Lead nurses within the unit carry out daily validation audits of compliance with the VAP care bundle. Inspectors noted that there had been no independent verification of compliance with the ventilator care bundle when an above average rate of VAP had been identified.

17. It is recommended that compliance with ventilated care protocol is independently verified if infection rates and audit scores identify poor practice and if self-scoring or validation scores are poor

4.8 Enteral feeding or tube feeding

Enteral feeding or tube feeding is defined as a mode of feeding that delivers nutrients directly into the stomach, duodenum or jejunum (gastrostomy, jejunostomy, naso/orogastric tubes). For organisations to comply with this section staff should display awareness of guidelines for the management of an enteral feeding system; insertion, set up and care. Adherence to best practice should be monitored.

Compliance was achieved in this section of the audit tool. Evidence of practice was obtained through review of documentation and speaking with staff.

Enteral feeding policy/guidance was available. Enteral feed was stored and disposed of as per trust policy and in line with best practice. Staff had good knowledge on the management of an enteral feeding system; insertion, administration, set up and care.

Training for new staff on nutrition, ANTT, nasogastric (NG) tube insertion and ongoing care took place on the 25/09/2013. When necessary, staff adhered to guidance on the care of a stoma site from the trust stoma nurse, tissue viability nurse or colorectal surgeon. A clean work surface area was provided and only equipment used for enteral feeding was used when decanting, reconstituting and diluting feeds.

The unit had a sticker to affix to the patients' notes. This sticker contained sections to record; the date/time of insertion/re-insertion, who inserted the tube, size and type of enteral tube, route of administration, if aspirate was obtained, external length, PH, X- ray if required or confirmed, type and volume of feed. In a set of notes reviewed, inspectors noted that the sticker had not been used for the insertion of an orogastric tube and the written notes did not state the tube size.

18. It is recommended that staff record all relevant information in relation to the insertion and management of enteral feeding systems.

Unit staff had developed a pictorial ANTT guide in relation to the commencement of enteral feeds within the unit. Inspectors observed this poster at each bedside to guide staff in the appropriate actions to take. Compliance with enteral feeding protocol was routinely monitored as part of the series of high impact intervention (HII) auditing. Inspectors noted that in April 2014 there was no independent audit following 60 per cent compliance in care bundle.

19. It is recommended that compliance with enteral feeding protocol is independently verified if infection rates and audit scores identify poor practice and if self-scoring or validation scores are poor

4.9 Screening for Meticillin Resistant Staphylococcus Aureus (MRSA) colonisation and decolonisation

The detection and treatment of MRSA should be carried out in line with DHSSPS Best Practice on Screening for MRSA Colonisation (HSS MD 12/2008). For organisations to comply with this section they must ensure that a screening and treatment policy is in place, staff display knowledge of the policy and adherence to best practice is monitored.

The unit achieved compliance in this section of the audit tool. Evidence of practice was obtained through observation, a review of documentation and speaking with staff.

The trust MRSA screening and treatment policy was in draft. Staff confirmed it was due to go to the policy guidelines group in October 2014. Routine screening was carried out in line with DHSSPS Best Practice on Screening for MRSA colonisation and is based on a risk assessment. Adherence to the MRSA policy and care pathway was monitored by the IPC team on a monthly basis.

The management of patients that have had an MRSA bacteraemia were further reviewed as part of the RCA process. Findings of the RCA were reported to unit staff at team meetings and safety briefs and to the senior management team at the surveillance meeting.

5.0 Inspection Findings: Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool

The Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool provide a common set of overarching standards for all hospitals and other healthcare facilities in Northern Ireland. Inspections using the audit tool gather information from observations in functional areas including, direct questioning and observation of clinical practice and, where appropriate, review of relevant documentation.

The audit tool is comprised of the following sections:

- organisational systems and governance
- general environment
- patient linen
- waste and sharps
- patient equipment
- hygiene factors
- hygiene practices

The section on organisational systems and governance was not reviewed during this unannounced inspection.

Standard 2: General Environment

For organisations to comply with this standard they must provide an environment which is well maintained, visibly clean, free from dust and soilage. A clean, tidy and well maintained environment is an important foundation to promote patient, visitor and staff confidence and support other infection prevention and control measures.

The Regional Healthcare Hygiene and Cleanliness Audit Tool Compliance Levels

General Environment	
Reception	N/A
Corridors, stairs lift	100
Public toilets(Main Reception)	85
Ward/department - general (communal)	93
Patient bed area	98
Bathroom/washroom	N/A
Toilet	100
Clinical room/treatment room	100
Clean utility room	100
Dirty utility room	93
Domestic store	100
Kitchen	N/A
Equipment store	100
Isolation	98
General information	96
Average Score	97

The findings in the table above indicate that the general environment and cleaning in the critical care unit was of an excellent standard.

The hospital entrance and reception is the first area of a hospital building that most users encounter. A high standard of cleanliness in these public areas promotes public confidence in the cleaning standards set by the hospital and instils a reassuring and welcoming sense of calm and safety.

Inspectors noted that the corridors leading to the critical care unit were clean and well maintained. However a number of cleaning and maintenance issues were identified within the female public toilets at the ground floor reception area. Inspectors observed the air vent and the light fitting were dusty, there were holes and unpainted areas on the walls where fixtures had been removed and the hot water tap on one of the hand wash sinks would not turn off, it was running all day. There were excess toilet rolls stored on the floor and the cistern and the hand towel dispenser was empty.

The key findings in respect of the general environment for the unit are detailed in the following section.

Critical Care Unit

Within the environment section of the audit tool inspectors found excellent compliance with the standard of cleaning. The issues identified for improvement in this section of the audit tool were:

- Within the relatives room the exterior glass of the external windows was dirty and the vinyl covering on two easy chairs was split, not impervious to moisture.
- In the HDU the paint finish on the wooden privacy dividers was worn and damaged, inspectors were advised these were scheduled for replacement.
- In the dirty utility room there was lime-scale present on the taps of the equipment sink and pre-assembled sharps boxes were stored in the room.
- In the HDU side room, the shower was out of order and excess toilet rolls were stored in the room.
- Nursing cleaning schedules for the patient bed space did not detail all equipment present.

Recommendations

20. It is recommended that staff ensure all surfaces including furniture, fixtures and fittings are clean and in a good state of repair.

21. It is recommended that nursing equipment cleaning schedules detail all available equipment.

Standard 3: Patient Linen

For organisations to comply with this standard, patient linen should be clean, free of damage, handled safely and stored in a clean and tidy environment. The provision of an adequate laundry service is a fundamental requirement of direct patient care. Linen should be managed in accordance with HSG 95(18) and once published the final DHSSPS Policy for Provision of Health and Social Care Laundry and Linen Services.

Compliance of Patient Linen

Patient Linen	
Storage of clean linen	100
Storage of used linen	100
Laundry facilities	N/A
Average Score	100

The above table indicates that the unit achieved full compliance in the management of patient linen; staff are commended for this excellent performance.

Linen was clean, free from damage and stored appropriately in the designated store. Staff demonstrated good knowledge on the handling of clean and used linen.

Standard 4: Waste and Sharps

For organisations to comply with this standard they must ensure that waste is managed in accordance with HTM07-01 and Hazardous Waste (Northern Ireland) Regulations (2005). The safe segregation, handling, transport and disposal of waste and sharps can, if not properly managed, present risks to the health and safety of staff, patients, the public and the environment.

Waste bins in all clinical areas should be labelled, foot operated and encased. This promotes appropriate segregation, and prevents contamination of hands from handling the waste bin lids. Inappropriate waste segregation can be a potential hazard and can increase the cost of waste disposal.

Sharps boxes must be labelled and signed on assembly and disposal. Identification of the origin of sharps waste in the event of spillage or injury to staff is essential. This assists in the immediate risk assessment process following a sharps injury.

Compliance of Waste and Sharps

Waste and Sharps	
Handling, segregation, storage, waste	98
Availability, use, storage of sharps	94

4.1 Management of Waste

The above table indicates that the unit achieved good overall compliance in the handling and storage of waste. Issues identified for improvement in this section of the audit tool were:

- In the blood gas room the lid of the orange burn bin was blood splattered (Picture 4).



Picture 4: Blood splatters on burn bin

- The sharps boxes had inappropriate waste, paper, plastic lids and gloves.

4.2 Management of Sharps

The above table indicates that the unit achieved good overall compliance in this standard.

- The sharps boxes present on the resuscitation trolleys in ICU and HDU contained inappropriate waste and their assembly dates were October and September 2013.

Recommendation

22. It is recommended that waste is disposed of into the correct waste stream in accordance with trust policy. Sharps boxes should be cleaned and changed as per local policy

Standard 5: Patient Equipment

For organisations to comply with this standard they must ensure that patient equipment is appropriately decontaminated. The Northern Ireland Regional Infection Prevention and Control Manual, states that all staff that have specific responsibilities for cleaning of equipment must be familiar with the agents to be used and the procedures involved. COSHH regulations must be adhered to when using chemical disinfectants.

Any unit, department or facility which has an item of equipment should produce a decontamination protocol for that item. This should be in keeping with the principles of disinfection and the manufacturer's instructions.

Compliance of Patient Equipment

Patient Equipment	
Patient equipment	97

The above table indicates that the unit achieved good overall compliance in this standard.

The issues identified for improvement in this section of the audit tool were:

- A member of nursing staff did not know the symbol for single use items.
- The base of the blood glucose machine was dusty.

Recommendation

23. It is recommended that general patient equipment must remain clean and all staff should be aware of the symbol designating equipment as single use.

Standard 6: Hygiene Factors

For organisations to comply with this standard they must ensure that a range of fixtures, fittings and equipment is available so that hygiene practices can be carried out effectively.

Compliance of Hygiene Factors

Hygiene Factors	
Availability and cleanliness of WHB and consumables	99
Availability of alcohol rub	100
Availability of PPE	93
Materials and equipment for cleaning	96
Average Score	97

The above table indicates that the unit achieved good overall compliance in this standard. The issues identified for improvement in this section of the audit tool were:

- The number of hand wash sinks does not meet national guidance
- PPE located within the dirty utility room was at risk of contamination
- Cleaning chemicals were not held under locked conditions: in the dirty utility a bottle of hard surface cleaner was on the side of the sluice and in the blood gas room the metal chemical cupboard was unlocked

Recommendations

24. It is recommended that the number of clinical hand wash sinks within the unit is reviewed to meet national guidance.

25. It is recommended that all chemicals are stored in a locked, inaccessible area in accordance with COSHH regulations and PPE should be stored in an area away from a risk of contamination.

Standard 7: Hygiene Practices

For organisations to comply with this standard they must ensure that healthcare hygiene practices are embedded into the delivery of care and related services.

Compliance of Hygiene Practices

Hygiene Practices	
Effective hand hygiene procedures	100
Safe handling and disposal of sharps	100
Effective use of PPE	100
Correct use of isolation	N/A
Effective cleaning of ward	100
Staff uniform and work wear	90
Average Score	98

The above table indicates that the unit achieved good overall compliance in this standard. Staff demonstrated effective hand hygiene practices.

The issue identified for improvement in this section of the audit tool was:

- Several staff were observed wearing stoned earrings.

Recommendation

26. It is recommended that all staff adhere to the trust dress code policy.

6.0 Summary of Recommendations

The Regional Critical Care Audit Tool

1. It is recommended that infection prevention and control staffing levels are reviewed, to facilitate daily visits to the unit and a dedicated IPC nurse is nominated for the unit.
2. It is recommended that visitors/ relatives are educated on the correct hand washing technique.
3. It is recommended that, there should be a review of the layout, design and storage areas of the unit for maximum space utilisation. As part of any refurbishment/new build planning, core clinical space recommendations should be complied with.
4. It is recommended that the trust water safety plan is reviewed and updated to include current best practice guidance in relation to flushing of infrequently used water taps in augmented care units. Staff should ensure that all flushing records are robustly completed.
5. It is recommended that a protocol/ policy should be developed that identifies individual staff roles and responsibilities in relation to the reporting of laboratory results to receiving or transferring units. These discussions should be robustly recorded.

The Regional Clinical Practices Audit Tools

6. It is recommended that the ANTT policy is circulated to all relevant staff when finalised.
7. It is recommended that all trust policies/ guidelines are reviewed and updated as required to ensure continued accuracy of guidance for staff.
8. It is recommended that longer term staff receive update training and ongoing competency assessment in the management of invasive devices.
9. It is recommended that all relevant information is recorded in relation to the insertion and ongoing management of invasive devices.
10. It is recommended that update training should be provided for all relevant staff involved in the collection blood cultures.
11. It is recommended that a system should be initiated to routinely monitor compliance with best practice when collecting blood cultures.

12. It is recommended that a system is developed to allow the review of positive blood cultures between units and to capture the blood culture contamination rates of the unit. Unit staff should be routinely provided with this information.
13. It is recommended that antimicrobial usage should be routinely audited in line with current antimicrobial prescribing guidance.
14. It is recommended that the trust introduce computer aided prescribing tools where appropriate.
15. It is recommended that in the event of a CDI occurring within the unit, formal auditing of the completion of the CDI care pathway should be undertaken.
16. It is recommended that antibiotic prescribing is audited in line with CDI prescribing policy.
17. It is recommended that compliance with ventilated care protocol is independently verified if infection rates and audit scores identify poor practice and if self-scoring or validation scores are poor.
18. It is recommended that staff record all relevant information in relation to the insertion and management of enteral feeding systems.
19. It is recommended that compliance with enteral feeding protocol is independently verified if infection rates and audit scores identify poor practice and if self-scoring or validation scores are poor.

Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool

Standard 2: Environment

20. It is recommended that staff ensure all surfaces including furniture, fixtures and fittings are clean and in a good state of repair.
21. It is recommended that nursing equipment cleaning schedules detail all available equipment.

Standard 3: Patient Linen

No Recommendations

Standard 4: Waste and Sharps

22. It is recommended that waste is disposed of into the correct waste stream in accordance with trust policy. Sharps boxes should be cleaned and changed as per local policy.

Standard 5: Patient Equipment

23. It is recommended that general patient equipment must remain clean and all staff should be aware of the symbol designating equipment as single use.

Standard 6: Hygiene Factors

24. It is recommended that the number of clinical hand wash sinks within the unit is reviewed to meet national guidance.
25. It is recommended that all chemicals are stored in a locked, inaccessible area in accordance with COSHH regulations and PPE should be stored in an area away from a risk of contamination.

Standard 7: Hygiene Practices

26. It is recommended that all staff adhere to the trust dress code policy.

7.0 Key Personnel and Information

Members of RQIA's Inspection Team

Thomas Hughes	Inspector Infection Prevention/Hygiene Team
Sheelagh O'Connor	Inspector Infection Prevention/Hygiene Team
Margaret Keating	Inspector Infection Prevention/Hygiene Team
Lyn Gawley	Inspector Infection Prevention/Hygiene Team

Trust Representatives attending the Feedback Session

The key findings of the inspection were outlined to the following trust representatives:

Anne Witherow	Assistant Director of Nursing, Governance, Quality & Performance
A Luther	Assistant Director of Nursing
Brian Mc Fetrige	Nurse Consultant in Critical Care
Helena McDonald	Lead Nurse for ATICS
Noreen Elliott	Ward Manager
Anne Sharkey	Ward Sister
Clare Robertson	Infection Prevention and Control Nurse
Noel Hemmings	Anaesthetist
Gail Quigley	Practice Educator, Critical Car
Neal McAllister	Principal Critical Care Technologist
Michael McCloskey	Water Safety Manager – Estates Dept.
Carine Gormley	Antimicrobial Pharmacist
Yvonne Black	Support Services
Anne Quinn	Physiotherapist

8.0 Augmented Care Areas

Based on DHSSPS guidance, the augmented care areas currently identified for inclusion in inspections are:

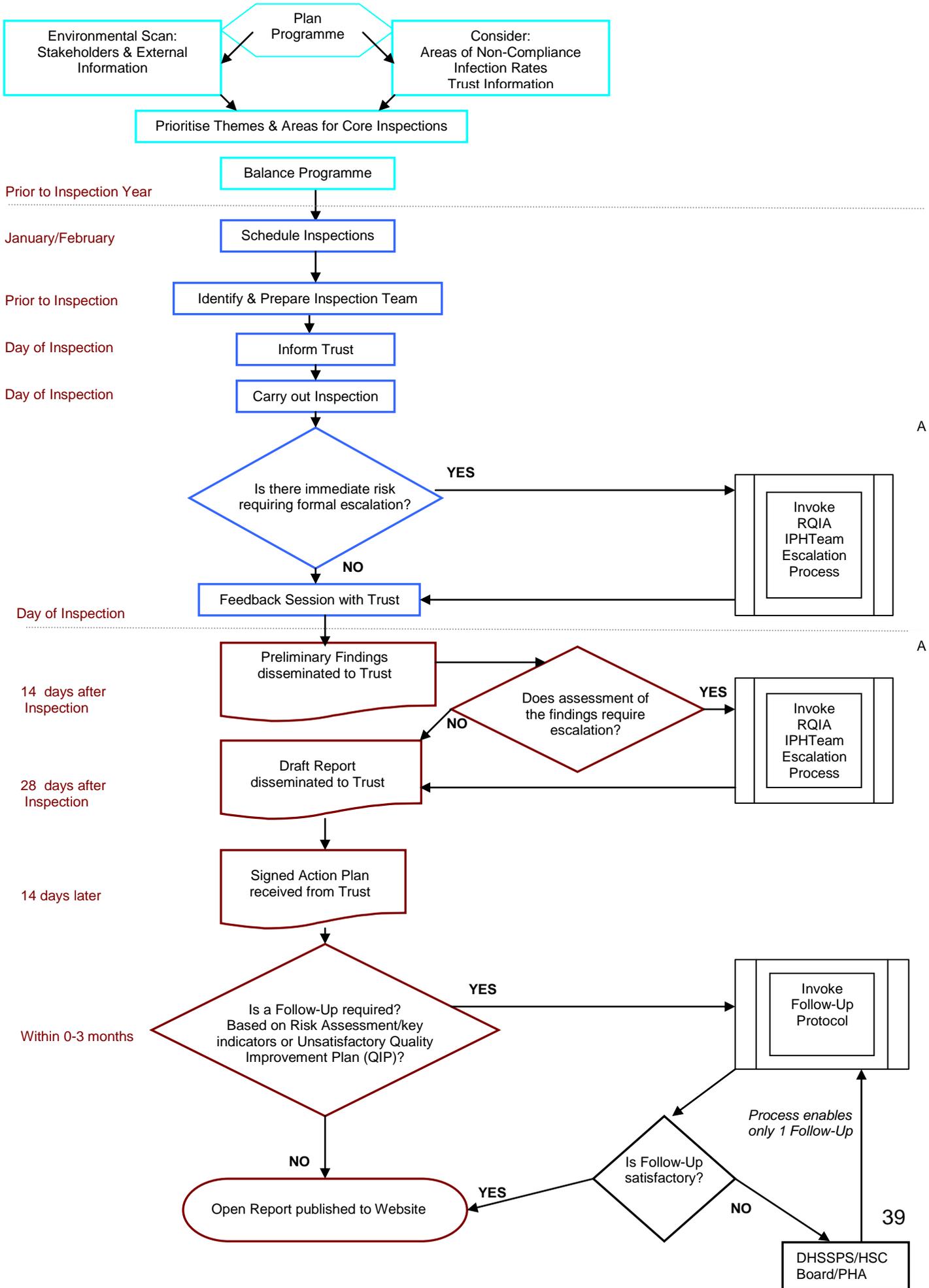
- neonatal and special care baby units
- paediatric intensive care
- all adult intensive care which includes cardiac intensive care
- burns units
- renal (dialysis) units
- renal transplant unit
- high dependency units (HDU)
- haematology
- oncology

9.0 Unannounced Inspection Flowchart

Plan Programme

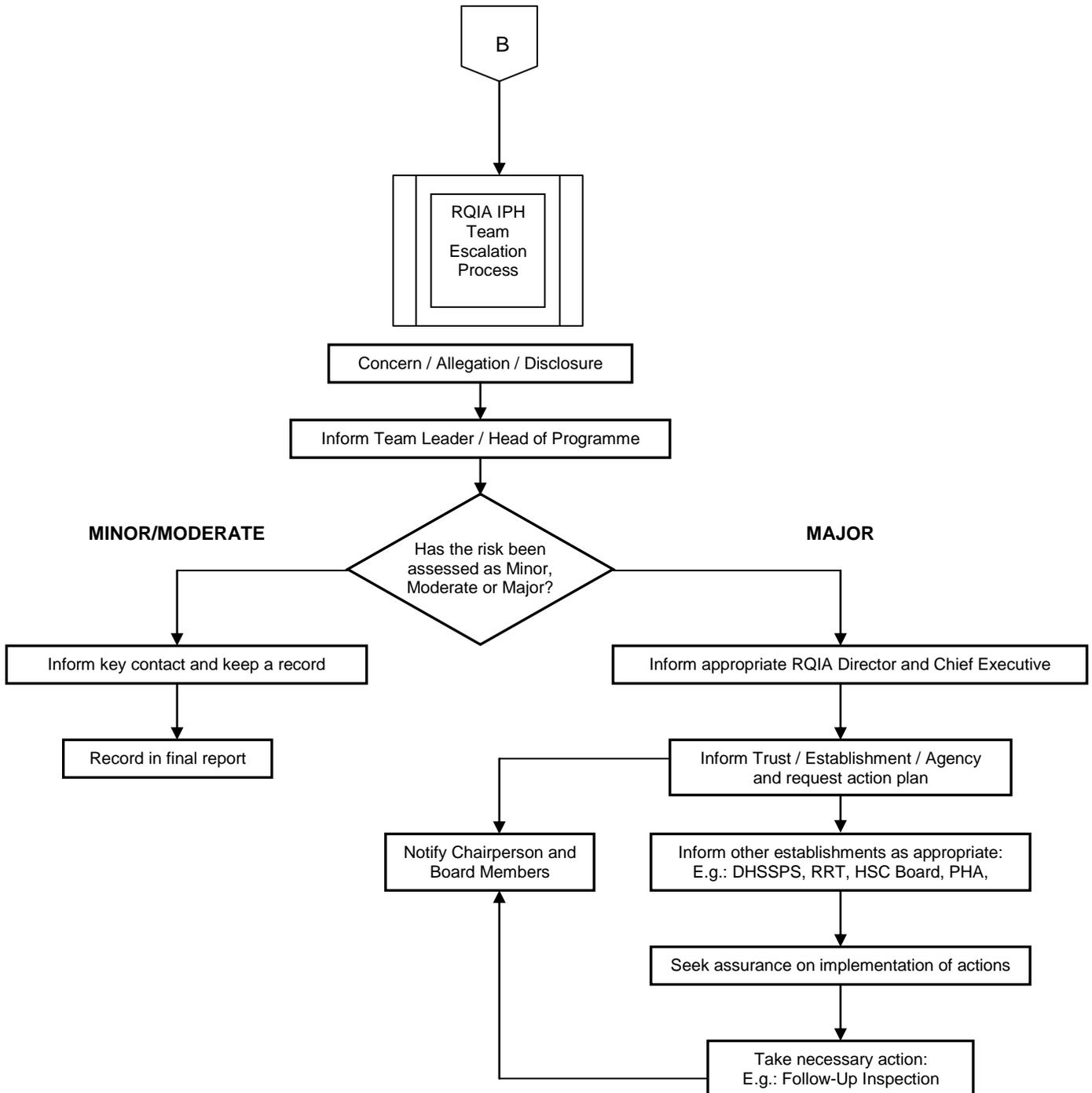
Episode of Inspection

Reporting & Re-Audit



10.0 Escalation Process

RQIA Hygiene Team: Escalation Process



11.0 Quality Improvement Plan

Reference number	Recommendations	Designated Department	Action required	Date for completion / timescale
The Regional Critical Care Audit Tool				
1	It is recommended that infection prevention and control staffing levels are reviewed, to facilitate daily visits to the unit and a dedicated IPC nurse is nominated for the unit.	IP&C	In order to comply with this requirement further staffing is required. Initial requests for funding included sufficient staff to allow this to happen, the request was rejected by the commissioners. There is an IPCN already designated for acute services, the current staff levels do not allow for a dedicated IPCN. The Trust will submit a new business case.	Unlikely to be achieved in the current financial climate.
2	It is recommended that visitors/ relatives are educated on the correct hand washing technique.	IP&C / Ward Manager	Advice on hand washing and the use of alcohol gel is included in the relatives information leaflet. Staff will reinforce to relatives when they visit. An information video display in the relatives room is commencing November 2014 Feedback from relatives in relation to hand hygiene is requested in the relatives' satisfaction survey.	Ongoing Ongoing November 2014 Ongoing
3	It is recommended that, there should be a review of the layout, design and storage areas of the unit for maximum space utilisation. As part of any refurbishment / new build planning, core clinical space	Estates / Ward Manager	A Health and Safety risk assessment has been carried out. Lack of space and associated difficulties has been included in the Divisional risk register.	Completed

Reference number	Recommendations	Designated Department	Action required	Date for completion / timescale
	recommendations should be complied with.		The critical care management team are in discussions with estate department colleagues on any potential to refit the Unit.	Ongoing
4	It is recommended that the trust water safety plan is reviewed and updated to include current best practice guidance in relation to flushing of infrequently used water taps in augmented care units. Staff should ensure that all flushing records are robustly completed.	IP&C / Estates / Ward Manager	Ward Manager will liaise with nursing auxiliary staff regarding the importance of accurate flushing records. Ward Manager will continue to monitor practice. The current water flushing schedule form will be amended to include reason for not flushing. Review Water Safety Plan	November 2014 March 2015
5	It is recommended that a protocol/ policy should be developed that identifies individual staff roles and responsibilities in relation to the reporting of laboratory results to receiving or transferring units. These discussions should be robustly recorded.	Corporate Nursing	This has been tabled at the Trust Nursing and Midwifery Governance Meeting in October 2014. A scoping exercise has been commenced following which a guidance document will be developed.	February 2015

Reference number	Recommendations	Designated Department	Action required	Date for completion / timescale
The Regional Clinical Practices Audit Tools				
6	It is recommended that the ANTT policy is circulated to all relevant staff when finalised.	IP&C	Awaiting approval by Chief Exec HCAI accountability forum.	February 2015
7	It is recommended that all trust policies/ guidelines are reviewed and updated as required to ensure continued accuracy of guidance for staff.	Corporate	This will be raised at the Trust Quality and Safety Committee and a review of existing processes carried out with a recommendation / guidance for staff to follow.	March 2015
8	It is recommended that longer term staff receive update training and ongoing competency assessment in the management of invasive devices.	Ward Manager	Update training continues through the rolling training programme. A process for peer review and assessment is being discussed.	March 2015
9	It is recommended that all relevant information is recorded in relation to the insertion and ongoing management of invasive devices.	Ward Manager / Consultant / Nurse	This is being reinforced with staff following monthly audits and is highlighted at staff meetings	Ongoing
10	It is recommended that update training should be provided for all relevant staff involved in the collection blood cultures.	IP&C / Clinical Lead Critical Care	Staffing challenges in IPC Team mean this cannot be actioned until the new year.	March 2015
11	It is recommended that a system should be initiated to routinely monitor compliance with best practice when collecting blood cultures.	IP&C	The Trust currently has insufficient numbers of IPC staff to be able to routinely monitor blood culture compliance. The IPC team will agree a system of internal audit with clinical staff and will include blood culture	March 2015

Reference number	Recommendations	Designated Department	Action required	Date for completion / timescale
			monitoring in the suite of tools used when completing planned independent audits.	
12	It is recommended that a system is developed to allow the review of positive blood cultures between units and to capture the blood culture contamination rates of the unit. Unit staff should be routinely provided with this information.	Clinical Lead Critical Care	Blood culture results are currently fed back to the Lead Nurse and Anaesthetic staff. A more structured discussion is required when these results are available.	March 2015
13	It is recommended that antimicrobial usage should be routinely audited in line with current antimicrobial prescribing guidance.	Clinical Lead / Microbiology /Pharmacy	A rolling audit programme is in place to monitor antimicrobial prescribing.	Ongoing
14	It is recommended that the trust introduce computer aided prescribing tools where appropriate.	Pharmacy	The prescribing module of ICIP will be used to assist in the prescribing of antimicrobials following its introduction to the Unit	December 2015
15	It is recommended that in the event of a CDI occurring within the unit, formal auditing of the completion of the CDI care pathway should be undertaken.	Ward Manager	CDI bundle audit form has been developed and is in practice.	Commenced Ongoing
16	It is recommended that antibiotic prescribing is audited in line with CDI prescribing policy.	Pharmacy / Ward Manager	This recommendation has been incorporated in the CDI bundle audit form	Commenced Ongoing
17	It is recommended that compliance with ventilated care protocol is independently verified if infection rates and audit scores identify poor practice and if self-scoring or	Ward Manager	The Critical Care management team will arrange for independent audit if infection rates and audit scores identify	Will occur if required

Reference number	Recommendations	Designated Department	Action required	Date for completion / timescale
	validation scores are poor.		poor practice and if self-scoring or validation scores are poor	
18	It is recommended that staff record all relevant information in relation to the insertion and management of enteral feeding systems.	Ward Manager	The recording of all relevant information in relation to the insertion and management of enteral feeding systems on the enteral feeding adhesive label will be reinforced to staff. This practice will be monitored	Ongoing
19	It is recommended that compliance with enteral feeding protocol is independently verified if infection rates and audit scores identify poor practice and if self-scoring or validation scores are poor.	Lead Nurse	The Critical Care management team will arrange for independent audit of compliance with enteral feeding protocol if infection rates and audit scores identify poor practice and if self-scoring or validation scores are poor.	Will occur if required
Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool				
Standard 2: Environment				
20	It is recommended that staff ensure all surfaces including furniture, fixtures and fittings are clean and in a good state of repair.	Ward Manager / Estates	Environmental audits are ongoing and results monitored. Any actions are identified and resolutions planned/carried out.	Ongoing
21	It is recommended that nursing equipment cleaning schedules detail all available equipment.	Ward Manager	The bed space cleaning schedule will be amended to include itemised equipment. It is planned to incorporate this into ICIP	November 2014 December 2015

Reference number	Recommendations	Designated Department	Action required	Date for completion / timescale
Standard 3: Patient Linen				
	No recommendations			
Standard 4: Waste and Sharps				
22	It is recommended that waste is disposed of into the correct waste stream in accordance with trust policy. Sharps boxes should be cleaned and changed as per local policy.	Ward Manager	This will be discussed at staff meetings. Monthly Crash Trolley audits in place. Crash trolley checks carried out monthly or after use.	November 2014
Standard 5: Patient Equipment				
23	It is recommended that general patient equipment must remain clean and all staff should be aware of the symbol designating equipment as single use.	Ward Manager	The blood glucose machine has been added to schedule for decontamination of equipment. The symbol designating equipment as single use will be highlighted to staff through staff meetings and information brochure	November 2014
Standard 6: Hygiene Factors				
24	It is recommended that the number of clinical hand wash sinks within the unit is reviewed to meet national guidance.	IP&C / Estates	ICU complies with national guidance. HDU requires 1 additional sink to comply with national guidance; this will be addressed through any department refit.	

Reference number	Recommendations	Designated Department	Action required	Date for completion / timescale
25	It is recommended that all chemicals are stored in a locked, inaccessible area in accordance with COSHH regulations and PPE should be stored in an area away from a risk of contamination.	Ward Manager	All chemicals will be stored in locked cupboards in accordance with COSHH regulations. Apron holder will be relocated away from bedpan washer & sluice	Immediate
Standard 7: Hygiene Practices				
26	It is recommended that all staff adhere to the trust dress code policy.	General Manager	The dress code policy was highlighted to all staff immediately following the RQIA visit. Unit Sisters will monitor its implementation.	Ongoing



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