



The **Regulation** and
Quality Improvement
Authority

RQIA
Unannounced Infection
Prevention/Hygiene Augmented Care
Inspection

Antrim Area Hospital Critical Care Unit

9 and 10 June 2014

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.

Contents

1.0	Inspection Summary	1
2.0	Overall Compliance Rates	3
3.0	Inspection Findings: Regional Critical Care Infection Prevention and Control Audit Tool	5
4.0	Inspection Findings: Regional Infection Prevention and Control Clinical Practices Audit Tool	15
5.0	Inspection Findings: Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool	24
6.0	Summary of Recommendations	34
7.0	Key Personnel and Information	37
8.0	Augmented Care Areas	38
9.0	Unannounced Inspection Flowchart	39
10.0	Escalation Process	40
11.0	Quality Improvement Plan	41

1.0 Inspection Summary

An unannounced inspection was undertaken to Antrim Area Hospital Critical Care Unit (CCU) on the 9 and 10 June 2014. The inspection team comprised of four RQIA inspectors and a peer reviewer. Details of the inspection team and trust representatives attending the feedback session can be found in Section 7.

The eight bed critical care unit, based at Antrim Area Hospital site, is part of the Northern Health and Social Care Trust and provides adult general intensive care and high dependency services. It is commissioned for six intensive care (level 3) and two 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 second floor of Antrim Area Hospital.

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 Antrim Area 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

Inspectors observed the following areas of good practice:

- an audit, carried out by the Canadian Critical Care Nutrition Research Group, placed Antrim Intensive Care Unit sixth in the world and fifth in Europe.
- computer aided antimicrobial prescribing tool
- the role of clinical educator was pivotal to the ongoing education and development of the unit team
- the further application of the trust wide software-based Live Automated Microbiology Pharmacy Surveillance (LAMPS) System
- the CCU has a proactive IPC link nurse team that enables individuals and their teams to develop their infection prevention practice

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 Northern HSC Trust (NHSCT), and in particular all staff at Antrim Area 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	96
General Environment – Layout and Design	57
General Environment – Environmental Cleaning	100
General Environment – Water Safety	95
Clinical and Care Practice	87
Patient Equipment	98
Average Score	89

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

Areas inspected	
Aseptic non touch technique (ANTT)	94
Invasive devices	97
Taking Blood Cultures	*81
Antimicrobial prescribing	88
Clostridium <i>difficile</i> infection (CDI)	*96
Surgical site infection	*89
Ventilated (or tracheostomy) care	100
Enteral Feeding or tube feeding	87
Screening for MRSA colonisation and decolonisation	*89
Average Score	91

*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	92
Patient linen	100
Waste	95
Sharps	100
Equipment	94
Hygiene factors	99
Hygiene practices	95
Average Score	96

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	96
General Environment – Layout and Design	57
General Environment – Environmental Cleaning	100
General Environment – Water Safety	95
Clinical and Care Practice	87
Patient Equipment	98
Average Score	89

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

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 partial compliance in this section of the audit tool.

Leadership and Management

The clinical educator, displayed good leadership and management skills, and had an excellent knowledge base on the principles of infection prevention and control (IPC). Inspectors were informed that the clinical educator 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 clinical educator facilitated unit based IPC link meetings, chaired by a member of the IPC team. The link meetings were held every three months and were specific to IPC issues within the unit. Minutes of these meetings evidenced topics such as review of outbreaks, suppression therapy,

equipment cleaning and high impact interventions. The unit had nine dedicated IPC link nursing staff that provided a visible presence within the unit for clinical teams and service users. IPC link nurses were proactive in utilising opportunities to learn and develop their own IPC knowledge and skills and also supporting individuals to develop their infection prevention and control practice.

The unit has a dedicated trust IPC nurse to advise on the management of infection control. Inspectors were informed that IPC staff visit the unit twice weekly, and provide a written report on identified or observed IPC issues. Visits by IPC staff are increased for outbreak management and members of the IPC team are available for advice by phone.

1. It is recommended that infection prevention and control staffing levels are reviewed, to facilitate daily visits to the unit.

Inspectors were informed that IPC link staff collaborate and communicate regularly with members of the IPC team. They cascade information to other unit staff for learning via staff meetings and safety briefs. A significant focus of CCU ward meetings is IPC. Meeting minutes evidenced, discussions regarding IPC precautions, preparation for RQIA inspection, learning from previous unannounced inspections, multi-resistant organisms, IPC audits, MRSA screening, hand hygiene and environmental cleanliness.

Inspectors were informed, when patients with infections are identified, staffing levels can be increased to assist in the delivery of care and ensure adherence to good infection prevention and control practices. Trust bank nurse staff can be used to supplement unit staffing levels.

Review of Documentation

The Infection Prevention and Control & Environmental Hygiene Committee, meet bimonthly. The meeting is chaired by the Director of Nursing and User Experience. Root cause analysis, healthcare Associated Infection targets and performance, surveillance activity and RQIA inspection reports are core components for discussion.

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

Accessing IPC policies and the ability to demonstrate knowledge of these policies is included as part of the IPC competency tool for staff in acute care settings. All staff questioned, had a good knowledge of IPC policies and procedures, and were able to access the relevant documents on the staff intranet site.

Inspectors observed that a number of policy documents for invasive procedures had passed their revision date. Inspectors also noted that a number of policies had no revision date appended to the approval date of the policy. Inspectors were informed that the absence of review dates on policies had been identified as part of the controls assurance process and the governance department has been informed of this issue. The new trust policy format had the review date on the front cover of the document.

2. It is recommended that all trust policies have a revision date appended to the approval date and all policies are reviewed and updated as required to ensure continued accuracy.

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 immunisation. This is required to ensure staffs own health and safety and to prevent the spread of infection to colleagues or patients /service users. Staff members questioned, were knowledgeable of the appropriate action to take in the event that they develop an infection.

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 validate practices within the unit. Recent validation audits included: management of urinary catheters, peripheral venous cannulation and hand hygiene practices.

When audits identified deficits in practice, action plans were developed to address poor practices. As evidence, a recent validation audit of hand hygiene, identified deficits in practice with staff adherence to the WHO 5 moments for hygiene. As well as increasing the frequency of hand hygiene audits, staff launched a '5 Moments for Hand Hygiene' campaign to raise awareness and to ensure hand hygiene was performed at the correct moments and at the correct location, within the flow of care delivery.

Key performance data from audits was displayed publicly within the unit and reported to unit staff at staff briefings and team meetings.

Inspectors identified that the audit tool used to assess the practice of hand hygiene was not specific for augmented care areas. It did not assess that alcohol hand decontamination was carried out following hand hygiene with soap and water.

3. It is recommended that hand hygiene audit tools, should be specific for augmented care areas.

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.

Inspectors noted that mandatory and non-mandatory surveillance programmes were in place. The trust has procured a software-based Live Automated Microbiology Pharmacy Surveillance (LAMPS) System, designed to improve the management of HCAs. This software gives access to patients' full archived history of microbiology laboratory data. Clinical staff can analyse this both in real time and retrospectively to detect changing trends in the patient population, microorganisms and their sensitivities. Outbreak and anti-microbial resistance detection algorithms send alerts, in real-time, to the infection prevention and control team. Inspectors were informed that the trust has now entered the second phase of the application of this software which will allow members of the IPC nursing team to interface with the system and manage the flow of patients with alert organisms throughout the trust.

Surveillance data is analysed by the microbiology and the IPC teams and presented at the IPC & Environmental Hygiene Committee meetings.

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 were available that all unit staff have participated in the trust's induction programme and mandatory training on IPC. All staff are expected to attend face to face IPC training every three years. In between, training is supplemented by a DVD on the principles of IPC and staff members complete an IPC competency assessment. The ward manager is responsible for marking the competency assessment of each staff member and if a score of less than 90 per cent is achieved, the staff member must attend face to face IPC training.

To complement IPC training, unit staff had facilitated study days with guest speakers from the IPC team. Presentations included discussions on: pseudomonas aeruginosa, ANTT (aseptic non touch technique) and stool sampling.

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 sources was available to advise patients and visitors of infection prevention and control precautions. The inspection team were informed that nursing staff provide a one to one teaching session with relatives on how, where and when to wash hands. Leaflets and booklets were 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 unavailable. Inspectors were informed that advice for visitors to the unit on the concept of being 'bare below the elbow' was guided by advice from the IPC team. Inspectors were informed that the critical care network was in the process of developing a generic visitor information leaflet.

- 4. It is recommended that relatives and visitors advice booklets are reviewed and updated to include advice on the appropriate use of clinical hand wash sinks, the bringing of outside coats into the unit and compliance with the concept of bare below the elbow when appropriate.**

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 minimal compliance in the layout and design of the environment.

The critical care unit consists of eight beds, incorporating two side rooms. The allocation of space in clinical areas of the unit was viewed by inspectors as inadequate. The core clinical space around patients' beds for the delivery of care was not within 80 per cent of the minimum dimensions currently recommended for existing units by the DHSSPSNI. The limitations in clinical space affect staff members' ability to manoeuvre patients and equipment (Picture 1).



Picture 1: Patient bed space

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.

There were two 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 eight beds. Inspectors were informed, that due to the lack of single rooms, patients either colonised or infected with alert organisms could be nursed in the multi bedded area with other susceptible patients.

Inspectors observed that clinical hand wash sinks were located in close proximity to bed spaces, two and seven. The positions of these sinks present a splash risk to the patient, the bed and the equipment at the bed space.

There were no dedicated areas for equipment cleaning, the storage of equipment for repair and near patient testing equipment. Inspectors observed that there was no clear separation of clean and dirty storage areas. The arterial blood gas machine and dressing trolleys were located within the dirty utility room. Inspectors were informed that work was soon to commence to extend the size of the clean utility room by removing an infrequently used shower room. Inspectors evidenced that ventilation systems are routinely monitored, serviced and cleaned by estates department.

- 5. 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. The placement of clinical hand wash basins should be reviewed to comply with current guidance.**

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. 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.

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. Collection of tap water samples to facilitate microbiological organism testing and analysis was carried out. The trust carries out a quarterly schedule of water sampling for legionella and six monthly sampling for *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. The trust had recently appointed a water safety manager who would oversee provision of the water safety plan. Water safety data is presented by the water safety group to the trust IPC & Environmental Hygiene Committee.

Following a risk assessment for *Pseudomonas aeruginosa* contamination of taps and outlets in augmented care settings, the water safety group made the decision to have all water outlets that are used for direct or indirect clinical care, flushed twice daily for two to three minutes. This ensures that water does not stagnate within the water system. These actions are above what is recommended within HTM 04-01 Water Systems Addendum. The trust water safety plan needs to be updated to reflect this practice.

All flushing records were available for the inspection team to review, with the exception of the record for an infrequently used shower outlet. Inspectors informed staff of this issue which was addressed immediately.

- 6. It is recommended that the trust water safety plan is updated to include the flushing guidance as per water outlet risk assessment of augmented care areas. All water outlets should be flushed as per trust guidance and flushing records should be fully and 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 'live' and retrospective patient placement system to identify which bed the patient is in during their stay in critical care was available on the 'ward watcher' computer system and ICIPs (Intellivue Clinical Information Portfolio) software package.

To facilitate the continuity of care following the transfer of a patient to another unit, staff members completed a handover summary. This detailed a

summary of the patients critical care stay, including diagnosis and treatment, a monitoring and investigation plan and a plan for ongoing treatment, including medication and therapies, nutrition plan and infection status. Nursing staff also completed the CCaNNI (Critical Care Network in Northern Ireland) transfer form, which would accompany the patient.

Screening policies and procedures were in place and known to staff. All patients were routinely screened on admission for MRSA and weekly thereafter. Inspectors were informed that if a patients critical care admission screens were positive or if their results following discharge or transfer to another ward were positive the receiving or transferring wards were routinely informed. However, there was no clear protocol/ policy to guide staff, which outlines nominated staff responsibilities, set timeframes for completion and the recording of actions taken.

- 7. 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.**

In a set of notes inspected for a patient with an identified alert organism, there was no infection prevention and control care plan in place to guide staff of appropriate precautions and actions.

- 8. It is recommended that an IPC nursing care plan is in place for patients with a known infection.**

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, patient's skin condition was recorded in care records.

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 compliance in this section of the audit tool. Specialist equipment inspected was generally clean and in a good state of repair. Staff displayed good knowledge of single use equipment.

There was no guidance or routine auditing of the cleaning, storage and replacement of specialised patient equipment, including when a patient is in isolation or during an outbreak.

Areas noted for improvement included the spirometer used by physiotherapy staff was grubby and had paper labels attached and the fabric of stored x-ray vests was worn and split and therefore could not be adequately decontaminated.

- 9. It is recommended that all guidelines should be developed for the cleaning, storage and replacement of specialised patient equipment. Adherence to guidance should be routinely audited by senior nursing staff.**

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)	94
Invasive devices	97
Taking Blood Cultures	*81
Antimicrobial prescribing	88
Clostridium <i>difficile</i> infection (CDI)	*96
Surgical site infection	*89
Ventilated (or tracheostomy) care	100
Enteral Feeding or tube feeding	87
Screening for MRSA colonisation and decolonisation	*89
Average Score	91

* 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 an improvement was required in the taking 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 compliance in this section of the audit tool. An ANTT policy was in place and available for staff to reference however the policy was published in February 2011 and had no review date present. Inspectors were informed that the ANTT policy was in the process of being reviewed by a member of the IPC team.

Staff displayed good knowledge on the principles and practical application of ANTT and were able to demonstrate when ANTT procedures should be applied. Records were available of ANTT staff assessments and on-going audits; these were independently verified by the IPC team. The clinical educator is an ANTT cascade trainer for nurses and medical staff and advised that ANTT assessments are carried out as part of care bundle assessments.

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 review.

Training on the insertion and management of invasive devices is carried out within the clinical education centre. Band 5 nursing staff; complete the CCaNNI core nursing practice skills as part of their preceptorship period. This includes demonstrating management and care of a range of invasive devices.

At local level the clinical nurse educator carries out update competency assessments for staff that carry out peripheral venous cannulation (PVC). If staff are not assessed as competent they attend training provided by the IPC team. The clinical educator identified that this process could be further developed to include other invasive devices in the future.

Trust wide, IPC nursing staff carry out refresher competency based training on PVC insertion and management for staff who have not been recently assessed. This had commenced over the last year and 19 staff from the trust had completed the training. Feedback from staff has been very positive. The IPC team have procured training devices to simulate the insertion of PVC, urinary catheters and taking blood sampling. The IPC team acknowledged that a joint strategy with the clinical education centre is required to progress the competency based assessment process.

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. As an element of the trust IPC strategy, independent verification of the management of invasive devices is facilitated by IPC nurses, who conduct twice yearly independent audits. Documentation evidenced good compliance.

Nursing staff carry out observational audits of medical staff inserting CVCs (central venous catheters) within the unit.

Inspectors observed that an arterial catheter was insitu for 25 days. The clinical decision by medical staff to leave this line insitu was not documented within the patient records. Best practice guidance (EPIC 3) advises that arterial lines should remain insitu for a period of 7-10 days.

10. It is recommended that the clinical decision taken for an invasive device to remain insitu longer than that advised within best practice guidance, should be clearly documented within patient records.

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

- zero catheter associated urinary tract infections (CAUTI),
- one central line associated blood stream infections (CLABSI),
- zero catheter related blood stream infections (CR-BSI)
- one blood stream infection with CVC
- zero ventilated associated pneumonia

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 partial 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.

A trust blood culture policy was available however this was due for review in 2012. Staff demonstrated good knowledge on how and why to take a blood culture. Inspectors reviewed the records of a number of patients that had a

blood culture taken. Records viewed did not always detail the date, time, site and clinical indicators for taking the culture.

11. It is recommended that blood cultures are documented within patient records and include the date, time, site and clinical indication for taking.

Inspectors noted that blood culture analysis to include the percentage contamination of blood samples taken was carried out. Evidence was available to show that blood culture contamination comparisons can be made between different departments within the trust. Documentation viewed evidenced that within critical care, the incidence of blood culture contamination was four per cent in March 2014. It was noted that between the months of August 2013 to March 2014, there was a fluctuation in the rate of contamination from one per cent to nine per cent. Contamination rates are discussed at the IPC & Environmental Hygiene Committee meeting.

A rate of above three per cent had been identified for action. Over November/December 2013, 41 foundation year one doctors (FY1s) in the NHSCT were trained and competency assessed in the blood culture procedure, facilitated by the IPC team. The training had two main components; a theory element and a practical element. Staff watch a DVD, carry out an assessment and then receive face to face training. If a staff member is assessed as scoring below 90 per cent, training is repeated. This process was also initiated for nursing staff that would be involved in the blood culture collection procedure.

A University of Ulster PHD student was carrying out a research project on 'the effectiveness of blood culture training and documentation' within the NHSCT. The project is due for completion in at the end of 2014.

There was no routine compliance monitoring with best practice when taking blood cultures within the unit. The IPC team were carrying out validation audits on FY1s however this was not a routine audit.

12. It is recommended that systems are implemented to routinely monitor compliance with best practice when taking blood cultures.

4.4 Antimicrobial prescribing

Antibiotic 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. Medical staff also carry out patient case reviews on

antibiotic usage; this will further underline the importance of usage and prescribing.

A department based pharmacist was available. Inspectors noted that there was a lack of alignment and collaboration between the unit pharmacist and the antimicrobial pharmacist. Links between both should be strengthened. The pharmacy team were developing a patient antibiotic usage information leaflet; it is hoped this leaflet will be available within the next six months.

13. It is recommended that the links between the unit pharmacist and the antimicrobial pharmacist are strengthened to ensure a collaborative approach to care.

Computer aided prescribing tools were available to aid antibiotic prescribing. The prescribing module of ICIP includes a drug dictionary, dispensing instructions and user alerts when medications are due.

A trust wide antimicrobial management team was in place and centrally reviews audit results, antimicrobial incidents and usage. The team meets on a quarterly basis and is attended by members of the IPC team. Antimicrobial usage auditing in line with antimicrobial prescribing guidance had not been extended to the CCU. Daily ward rounds, provided by a member of the microbiology medical team ensured that there was direct microbiological advice at the bedside and that antimicrobial prescribing was controlled.

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

Records reviewed evidenced that information to guide prescribing of antimicrobials was recorded. This included the patient antimicrobial history, indication to prescribe an antimicrobial, and the planned duration of the antimicrobial.

Antimicrobial usage was reviewed in 2012 as part of a Point Prevalence Survey; a high usage of piperacillin (tazocin) was identified within this survey. The trust is to participate within a Point Prevalence Survey in February 2015.

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 within the previous year there had been two patients with CDI. There had been no auditing of completion of the CDI care pathway however the IPC team carry out independent audits of the management of patients with CDI.

As an aspect of the second phase of the application of the LAMPs software, members of the IPC team will be provided with hand held devices. This will allow the team to interface with the system and manage the isolation requirements of patients with CDI.

15. It is recommended that the completion of the CDI care pathway is audited as applicable.

The management of CDI patients were further reviewed as part of the RCA process. The RCA is initiated within five days of the event; the findings of the RCA are then reported to unit staff at team meetings and safety briefs and to senior management team at the IPC & Environmental Hygiene Committee meetings.

Antibiotics were prescribed using national/local guidance and were reviewed daily in the micro ward round. The high impact intervention (HII) CDI care bundle was monitored within the unit.

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 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 surveillance within the trust is being carried out for caesarean sections and is reported to the PHA. The trust caesarean section SSI rate is below the Northern Ireland average. The SSI bundle is available for staff to access however the critical steps of the bundle are not routinely assessed. The lead IPC nurse is in the process of developing a trust protocol and an audit programme to address this requirement.

Unit staff were knowledgeable of the SSI care bundle for patients within critical care. Nursing staff displayed good care practices in relation to post-operative wound care and had access to the tissue viability service if required.

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.

Full compliance was achieved in this section of the audit tool. A care bundle with critical care points was available. Staff have received training on VAP and were knowledgeable on the prevention and care of a VAP.

From June 2013 to May 2014, zero VAPs were identified within the unit as per PHA figures. A VAP had been identified in April 2013; evidence was supplied to inspectors to show a case review and discussion at ward staff meeting and at the Critical Care Delivery Group Meeting.

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; however the document contained no review date. Staff have received training on enteral feeding. Enteral feed is stored and disposed of as per trust policy and in line with best practice.

Although staff had good knowledge on the management of an enteral feeding system; insertion, administration, set up and care, inspectors observed aspects of practice that required improvement. Issues identified include:

- Patients are aspirated twice daily. When aspirate is '0', staff were not recording this, therefore there was no evidence that they had carried out this procedure
- Individual single use bottles of sterile water were not disposed of after every use
- Single use purple syringes were not immediately discarded after use. They were repacked into their wrapper and kept on the work surface, with the potential to be used again.

16. It is recommended that staff adhere to best practice guidance in the management of an enteral feeding system

When necessary, staff adhere to guidance on the care of a stoma site from the trust stoma nurse or tissue viability nurse. Preparation, decanting, reconstituting or diluting of feeds is not done within the unit.

In a worldwide audit of nutritional care in ICUs, carried out by the Canadian Critical care Nutrition Research Group, the AAH ICU had been ranked sixth. The audit examined the adequacy and management of nutrition therapy for 20 patients in line with best practice guidelines. The unit is commended for this outstanding performance.

Systems were in place to monitor compliance with enteral feeding protocol and guidance.

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. Inspectors were unable to observe practice at the time of the inspection. Evidence of practice was obtained through a review of documentation and speaking with staff.

A draft 'April 2014' MRSA policy is in place however is yet to be approved by the Policy and Standard Group. Routine screening was carried out in line with DHSSPS Best Practice on Screening for MRSA colonisation with the exception of screening for elective surgical patients based on a risk assessment. Adherence to the MRSA policy was not audited for newly isolated MRSA colonisation/infection.

There was no MRSA care pathway or equivalent documentation in use. The lead ICN was developing new MRSA care bundle documentation for staff to complete on the admission of a patient with MRSA. The intention of the bundle is to provide an outline of anticipated care for those patients either

colonised or infected with MRSA. Completion of the MRSA care bundle documentation will be audited by the IPC team.

17. It is recommended that adherence to the MRSA screening and treatment policy is audited and actions plans developed were issues are identified.

18. It is recommended that the trust continue to develop and implement the new MRSA bundle of care; completion of the bundle should be audited by the IPC team.

The IPC team review the management of patients that have had an MRSA bacteraemia as part of the RCA. The RCA is initiated within five days of the event; the findings of the RCA are then reported to unit staff at team meetings and safety briefs and to senior management team at the IPC & Environmental Hygiene Committee meetings.

As an aspect of the second phase of the application of the LAMPs software, members of the IPC team will be provided with hand held devices. This will allow the team to interface with the system and manage the isolation requirements of patients with MRSA.

The IPCT carry out intermittent audits of the management of MRSA and carry out twice yearly snap shot audits of isolation.

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	80
Corridors, stairs lift	80
Public toilets	96
Ward/department - general (communal)	91
Patient bed area	89
Bathroom/washroom	90
Toilet	N/A
Clinical room/treatment room	88
Clean utility room	100
Dirty utility room	97
Domestic store	95
Kitchen	100
Equipment store	95
Isolation	97
General information	90
Average Score	92

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

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

Inspectors identified a number of maintenance and cleaning issues during the journey through the hospital public areas to the critical care unit. In the reception area, inspectors observed damage to the floor at the lift, the ceiling was dusty and had slats missing, there was damage to the paint finish on doors and there was a tear on the vinyl finish of a bench at the coffee shop.

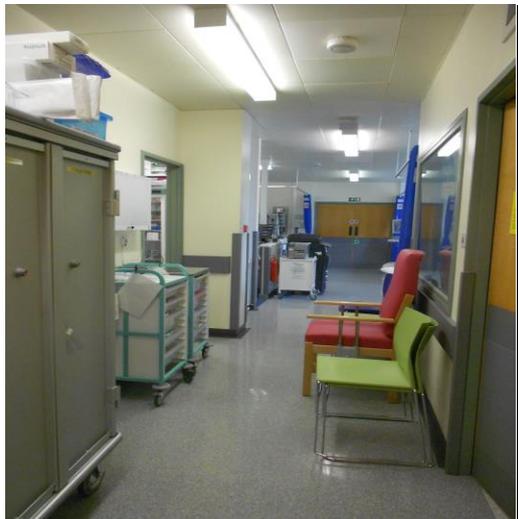
In corridors and stairs leading to the unit, light switches, radiators, window ledges and signage were dusty. There were scrapes on walls and again some minor paint damage to doors.

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 good compliance with the standard of cleaning. The issues identified for improvement in this section of the audit tool were:

- external windows were stained and dusty
- the wood trim of patient bedside tables was worn with unsealed wood exposed and the paint finish of the nurses' station desk and the door of the domestic sluice was chipped
- insufficient storage facilities had resulted in patient equipment being stored along corridors. Items included; privacy screens, stacked chairs, photocopier and treatment trolleys (Picture 2)
- the level of storage capacity in the equipment store, dirty utility room and the clinical room does not satisfy current levels of stock and equipment, this has resulted in these areas being cluttered and a barrier to effective cleaning process (Picture 3)



Picture 2: cluttered unit corridor



Picture 3: congested equipment store

- the work surface in the clinical room was cluttered with equipment leaving little room for preparation work
- cleaning schedules were available for nursing staff however they should detail all available equipment and outline staff responsibilities
- in the clinical room, daily recording of the drugs' fridge temperature was not always completed

- in the shower room, the frame of the shower chair was rusted, in the dirty utility room the macerator was stained with faecal matter and the plug hole of the equipment sink in the domestic sluice was tarnished

Recommendations

- 19. It is recommended that staff ensure all surfaces including furniture, fixtures and fittings are clean and in a good state of repair. A maintenance programme should be in place to ensure all building repairs are carried out.**
- 20. It is recommended that drugs' fridge temperature checks are carried out and recorded on the trust record sheet. Variations in temperature and actions taken to address these should be recorded.**
- 21. Nursing cleaning schedules should detail all available equipment and outline staff responsibilities.**

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 to be commended for achieving this excellent score.

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	95
Availability, use, storage of sharps	100

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:

- a household waste bin was not available in the dirty utility room and a clinical waste bin was not available within the treatment room

Recommendation

22. It is recommended that appropriate waste bins are available for staff use.

4.2 Management of Sharps

The above table indicates that the unit achieved full compliance in this standard; staff are to be commended for achieving this excellent score.

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	94

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 staff was not aware of the symbol for single use equipment
- there was an inconsistent use of trigger tape to identify equipment that had been cleaned
- some dressing trolleys had adhesive tape residue and had been stored within the dirty utility room
- the plastic runners of a dedicated airways trolley were damaged

Recommendation

23. It is recommended that general patient equipment must be clean, stored correctly and in a good state of repair. Trigger tape should be used consistently to identify items of equipment that have been cleaned 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 wash hand basin and consumables	95
Availability of alcohol rub	100
Availability of PPE	100
Materials and equipment for cleaning	100
Average Score	99

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

- the laminate finish behind a clinical hand wash sink in the multi-bedded area of the unit was damaged.

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	94
Safe handling and disposal of sharps	100
Effective use of PPE	100
Correct use of isolation	86
Effective cleaning of ward	95
Staff uniform and work wear	97
Average Score	95

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

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

- staff did not always use antimicrobial hand rub following hand washing; there were no posters at the sinks to prompt staff to comply with this action
- inspectors observed that PPE was not being worn by two members of staff in an isolation room with a patient under contact precautions. One member of staff left the room to collect supplies but failed to wash their hands on leaving or re-entering room
- COSHH data sheets were not available for nursing staff
- a member of nursing staff was wearing pearl earrings

24. All staff should comply with the WHO five moments for hand hygiene and hand washing should be supplemented with the use of antimicrobial hand rub.

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

26. It is recommended that COSHH data sheets are available for nursing staff.

Additional issues

- improvement is needed, in the signage to direct visitors to the unit and signage throughout the unit
- the buzzer at the entrance to the unit was broken, and had been poorly repaired.

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.
2. It is recommended that all trust policies have a revision date appended to the approval date and all policies are reviewed and updated as required to ensure continued accuracy.
3. It is recommended that hand hygiene audit tools, should be specific for augmented care areas.
4. It is recommended that relatives and visitors advice booklets are reviewed and updated to include advice on the appropriate use of clinical hand wash sinks, the bringing of outside coats into the unit and compliance with the concept of bare below the elbow when appropriate.
5. 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. The placement of clinical hand wash basins should be reviewed to comply with current guidance.
6. It is recommended that the trust water safety plan is updated to include the flushing guidance as per water outlet risk assessment of augmented care areas. All water outlets should be flushed as per trust guidance and flushing records should be fully and robustly completed.
7. 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.
8. It is recommended that an IPC nursing care plan is in place for patients with a known infection.
9. It is recommended that all guidelines should be developed for the cleaning, storage and replacement of specialised patient equipment. Adherence to guidance should be routinely audited by senior nursing staff.

The Regional Clinical Practices Audit Tools

10. It is recommended that the clinical decision taken for an invasive device to remain insitu longer than that advised within best practice guidance, should be clearly documented within patient records.
11. It is recommended that blood cultures are documented within patient records and include the date, time ,site and clinical indication for taking.
12. It is recommended that systems are implemented to routinely monitor compliance with best practice when taking blood cultures.
13. It is recommended that the links between the unit pharmacist and the antimicrobial pharmacist are strengthened to ensure a collaborative approach to care.
14. It is recommended that antimicrobial usage should be audited in line with current antimicrobial prescribing guidance.
15. It is recommended that the completion of the CDI care pathway is audited as applicable.
16. It is recommended that staff adhere to best practice guidance in the management of an enteral feeding system.
17. It is recommended that adherence to the MRSA screening and treatment policy is audited and actions plans developed were issues are identified.
18. It is recommended that the trust continue to develop and implement the new MRSA bundle of care; completion of the bundle should be audited by the IPC team.

Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool

Standard 2: Environment

19. It is recommended that staff ensure all surfaces including furniture, fixtures and fittings are clean and in a good state of repair. A maintenance programme should be in place to ensure all building repairs are carried out.

20. It is recommended that drugs fridge temperature checks are carried out and recorded on the trust record sheet. Variations in temperature and actions taken to address these should be recorded.

21. Nursing cleaning schedules should detail all available equipment and outline staff responsibilities.

Standard 3: Patient Linen

No recommendations

Standard 4: Waste and Sharps

22. It is recommended that appropriate waste bins are available for staff use.

Standard 5: Patient Equipment

23. It is recommended that general patient equipment must be clean, stored correctly and in a good state of repair. Trigger tape should be used consistently to identify items of equipment that have been cleaned and all staff should be aware of the symbol designating equipment as single use.

Standard 6: Hygiene Factors

No recommendations

Standard 7: Hygiene Practices

24. All staff should comply with the WHO five moments for hand hygiene and hand washing should be supplemented with the use of antimicrobial hand rub.

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

26. It is recommended that COSHH data sheets are available for nursing staff.

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
Mary Lennon	Peer Reviewer, SHSCT

Trust Representatives attending the Feedback Session

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

Maire Bermingham	Assistant Director Corporate Support Services
Kay Johnston	Lead Nurse Anaesthetics and ICU
Pauline McGaw	General Manager ATICS
David Farren	Infection Prevention and Control Doctor
Naomi Baldwin	Infection Prevention and Control, Lead Nurse
Jean Gilmore	Infection Prevention and Control Nurse
Lorraine Crymble	Senior Infection Prevention and Control Nurse
Violet Davidson	General Manager Catering and Domestic Services
Richard Knight	Domestic Services Manager
Fiona Gallagher	Antimicrobial Pharmacist
Mary Gault	Assistant Clinical Sister
Sheila Kinoulty	Clinical Educator
Dr Chris Nutt	Consultant Anaesthetist / ICU Lead
Lorna Bates	Personal Assistant to Olive Macleod

Apologies

Olive Macleod	Director of Nursing and User Experience
---------------	---

8.0 Augmented Care Areas

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

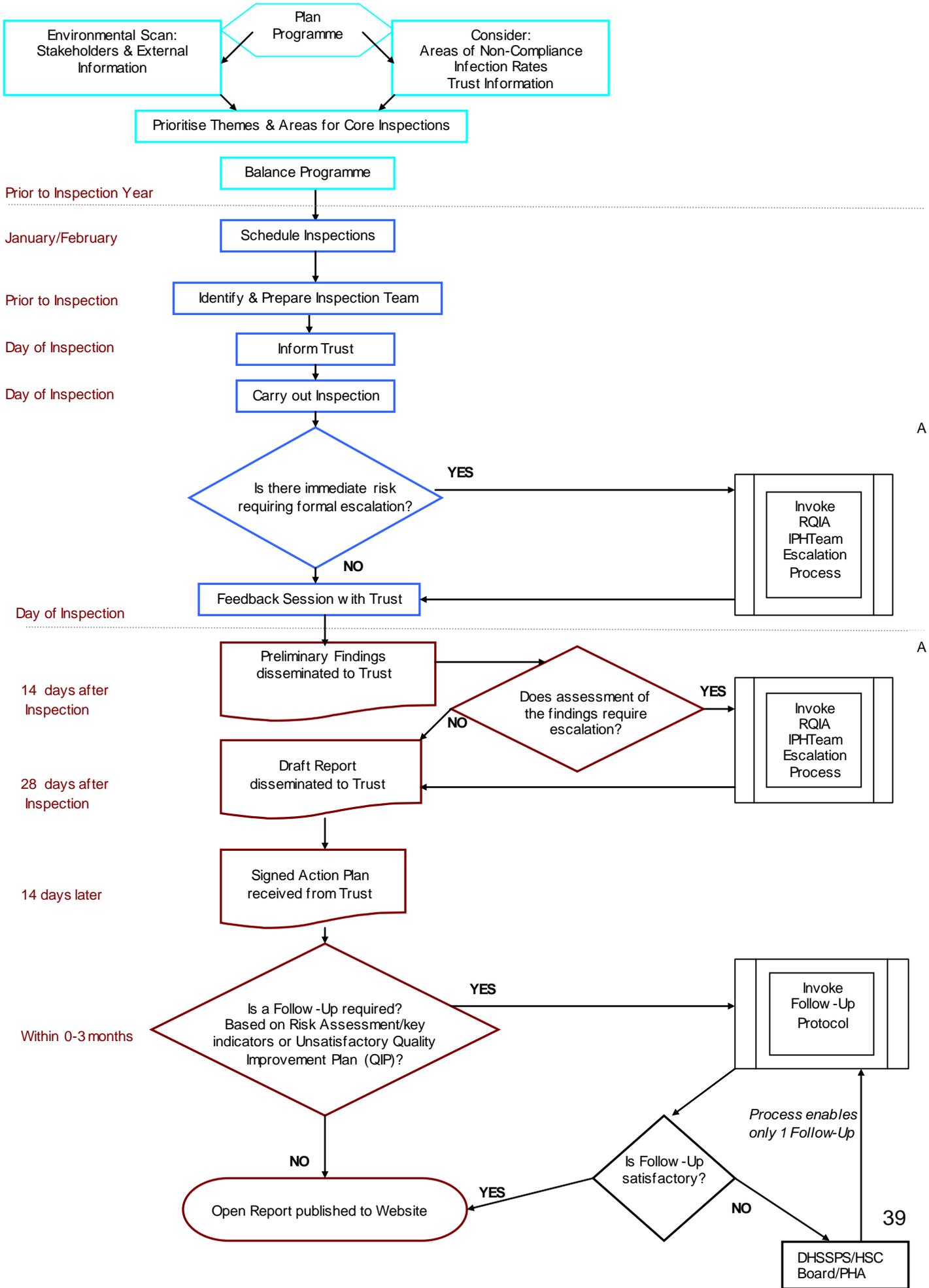
- neonatal and special care baby units
- paediatric intensive care
- all adult intensive care which includes cardiac intensive care
- burns units
- renal (dialysis) units
- renal transplant unit
- high dependency units (HDU)
- haematology
- oncology

9.0 Unannounced Inspection Flowchart

Plan Programme

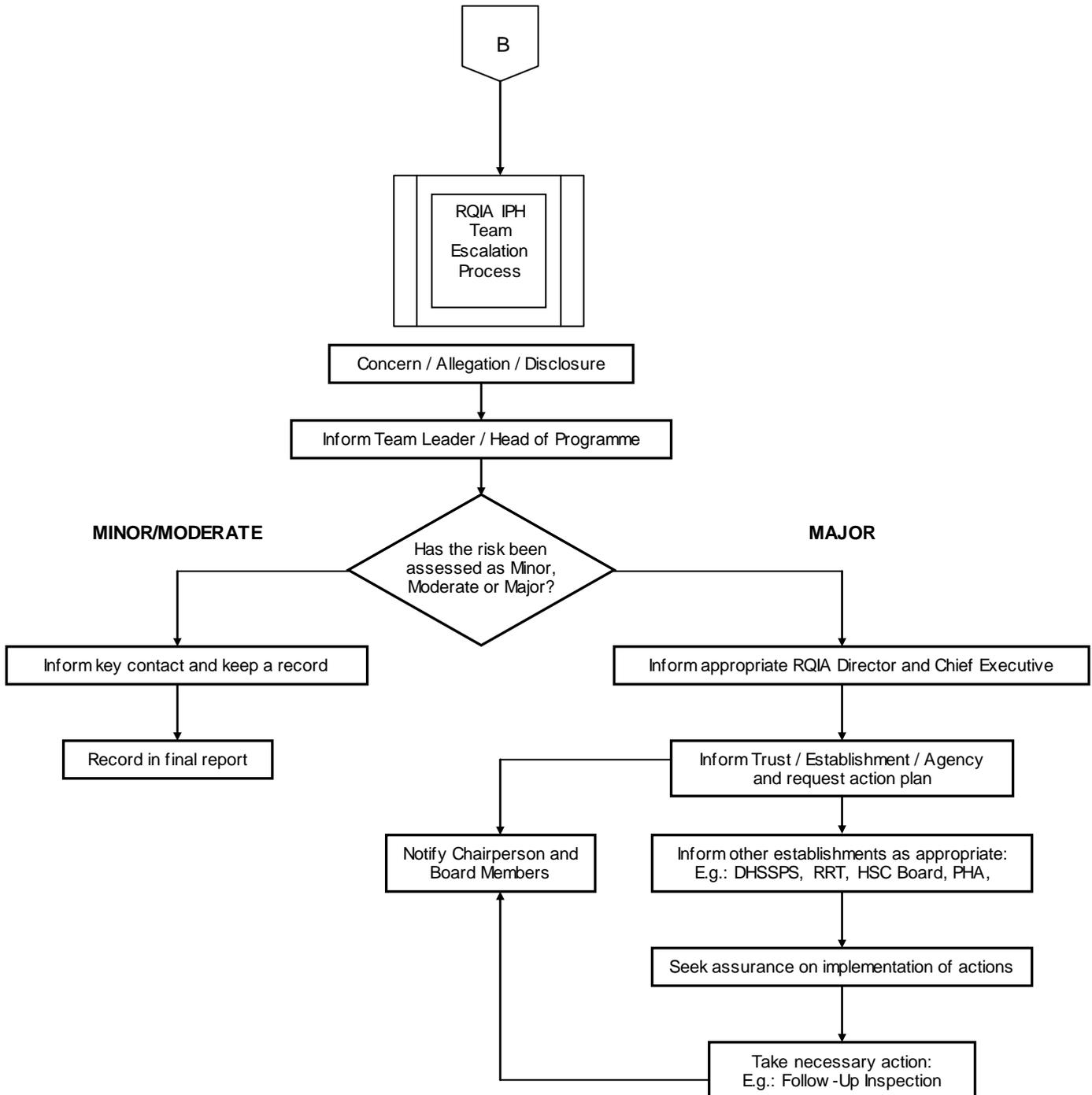
Episode of Inspection

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.	IPCT	Where possible IPC Team are endeavouring to visit ICU daily depending on other priorities in the hospital. Note IPC Nursing Team only work Mon-Friday, providing an on call service at weekends and out of hours. Staffing levels will be increased as vacant post currently being processed by HR.	September 14
2	It is recommended that all trust policies have a revision date appended to the approval date and all policies are reviewed and updated as required to ensure continued accuracy	Northern Trust Policy Committee	All NHSCT policies must note a review date on the policy template prior to being approved. This is noted on the central policy date base and a mechanism is in place to remind Policy Authors one month in advance of the need to review their policy	
3	It is recommended that hand hygiene audit tools, should be specific for augmented care areas.	IPCT	Hand Hygiene audit tool has been updated to include augmented care settings.	completed
4	It is recommended that relatives and visitors advice booklets are reviewed and updated to include advice on the appropriate use of clinical hand wash sinks, the bringing of outside coats into the unit and compliance	ICU Antrim Hospital	Critical Care Network are currently developing a generic Regional information leaflet. Which is to include advice on the appropriate use of clinical	November 2014

	with the concept of bare below the elbow when appropriate.		hand wash sinks, the bringing of outside coats into the unit and compliance with the concept of bare below the elbow as appropriate. CCaNNI Senior Nurse Group developing a Regional Patient/Relative Information leaflet to address this.	
5	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. The placement of clinical hand wash basins should be reviewed to comply with current guidance.	ICU	There is currently no available space to increase the layout or storage in the Unit. However Minor Capital Plans have been submitted to improve the clean/dirty utility and storage. There is no space within the current bed spaces to fit additional clinical hand wash basins.	
6	It is recommended that the trust water safety plan is updated to include the flushing guidance as per water outlet risk assessment of augmented care areas. All water outlets should be flushed as per trust guidance and flushing records should be fully and robustly completed.	Water Safety Manager Ward Manager	The NHSCT Water Safety Plan is currently under review and will be updated in September 2014. Flushing guidance will be updated as part of this review process. Final revision will be presented to the Water Safety Group (WSG) for sign off in October 2014. A Flushing Record Proforma was immediately implemented for the aforementioned shower outlet and the recommended standard for flushing the area has been and is currently being documented.	10/06/14

7	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.	ICU Staff	Multidisciplinary Protocol being developed	30/09/14
8	It is recommended that an IPC nursing care plan is in place for patients with a known infection.	IPCT	MRSA Care Bundle now in place across the Trust. Antibiotic Resistant Organism Care Bundle has been devised by IPCT and trialled and will be disseminated Trustwide.	23/07/14
9	It is recommended that all guidelines should be developed for the cleaning, storage and replacement of specialised patient equipment. Adherence to guidance should be routinely audited by senior nursing staff.	ICU Staff	Cleaning proforma and Audit tool under development as per Trust Decontamination Policy. All staff currently trained on specialised equipment at Induction.	30/09/14
The Regional Clinical Practices Audit Tools				
10	It is recommended that the clinical decision taken for an invasive device to remain insitu longer than that advised within best practice guidance, should be clearly documented within patient records.	Medical Staff	The clinical decision taken for an invasive device to remain insitu longer than that advised within best practice guidance, should be clearly documented within patient records by Medical Staff. This action will be discussed with all Medical staff at the next Anaesthetic meeting and a memo issued from the Clinical Director.	10/06/14

11	It is recommended that blood cultures are documented within patient records and include the date, time ,site and clinical indication for taking	Medical Staff	Blood cultures are now documented within patient records to include the date, time, site and the clinical indication for taking samples by Medical staff.	10/06/14
12	It is recommended that systems are implemented to routinely monitor compliance with best practice when taking blood cultures	ICU Nursing and Medical Staff	Audit tool being developed.	30/09/14
13	It is recommended that the links between the unit pharmacist and the antimicrobial pharmacist are strengthened to ensure a collaborative approach to care	Pharmacy	Links have been established and the information from the visit in relation to pharmacy discussed to ensure a collaborative approach to care.	31/07/14
14	It is recommended that antimicrobial usage should be audited in line with current antimicrobial prescribing guidance.	Pharmacy Microbiology	A user account has been set up for the unit pharmacist and they are now auditing compliance with the antimicrobial policy. The results of this audit will be fed back to the consultants, ward manager and pharmacy staff within the unit to facilitate learning. This information is also reported to the trust Antimicrobial Management Team and the Infection prevention control and environmental health committee.	31/07/14

15	It is recommended that the completion of the CDI care pathway is audited as applicable.	IPCT	CDI management is already audited 48 hours after result is issued, this includes use of the pathway. The pathway is currently under review and will be replaced with a care bundle.	Ongoing Oct 14
16	It is recommended that staff adhere to best practice guidance in the management of an enteral feeding system.	ICU Antrim Hospital	Nursing staff now record 0 aspirate when none obtained. Dispose of single use items, water and syringes immediately after single use.	10/06/14
17	It is recommended that adherence to the MRSA screening and treatment policy is audited and actions plans developed where issues are identified.	IPCT	MRSA screening/management/treatment is audited and evidence of this was provided to RQIA at time of audit. ICU staff with the support of IPCT will audit screening within the unit monthly using an addendum tool to the HII returns.	Already in place
18	It is recommended that the trust continue to develop and implement the new MRSA bundle of care; completion of the bundle should be audited by the IPC team.	IPCT	MRSA Care Bundle is now in place Trust wide	completed

Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool				
Standard 2: Environment				
19	It is recommended that staff ensure all surfaces including furniture, fixtures and fittings are clean and in a good state of repair. A maintenance programme should be in place to ensure all building repairs are carried out.	Estates Department Ward Manager	Senior staff ensure that all surfaces including furniture, fixtures and fittings are clean and in a good state of repair. All repairs are reported immediately through the Trust Action Desk.	28/07/14
20	It is recommended that drugs fridge temperature checks are carried out and recorded on the trust record sheet. Variations in temperature and actions taken to address these should be recorded.	ICU Nursing Staff	Daily fridge temperature checks completed and any variations in temperature reported Drug fridge temperature also monitored by Pharmacy.	10/06/14
21	Nursing cleaning schedules should detail available equipment and outline staff responsibilities.	ICU Nursing Staff	More detail to include available equipment to be added to cleaning schedule for each bed space.	30/09/14
Standard 3: Patient Linen				
	No recommendations			
Standard 4: Waste and Sharps				
22	It is recommended that appropriate waste bins are available for staff use.	ICU Antrim Hospital	Appropriate bins now available	10/06/14

Standard 5: Patient Equipment				
23	It is recommended that general patient equipment must be clean, stored correctly and in a good state of repair. Trigger tape should be used consistently to identify items of equipment that have been cleaned and all staff should be aware of the symbol designating equipment as single use.	ICU Antrim Hospital	Consistent labeling of all cleaned equipment after cleaning. All staff made aware of the symbol for single use equipment. New Difficult Airway trolley introduced	10/06/14 24/06/14
Standard 6: Hygiene Factors				
	No recommendations			
Standard 7: Hygiene Practices				
24	All staff should comply with the WHO five moments for hand hygiene and hand washing should be supplemented with the use of antimicrobial hand rub.	ICU Antrim Hospital	Updated weekly hand hygiene audit tool implemented which includes the use of antimicrobial hand rub.	13/07/14
25	It is recommended that all staff adhere to the trust dress code policy.	ICU Antrim Hospital	Strict adherence to dress code policy. Constantly audited by the Nurse in Charge	10/06/14
26	It is recommended that COSHH data sheets are available for nursing staff.	ICU Antrim Health and Safety Advisor	COSHH data sheets will be available for nursing staff.	30/09/14



The **Regulation** and
Quality Improvement
Authority

The Regulation and Quality Improvement Authority
9th Floor
Riverside Tower
5 Lanyon Place
BELFAST
BT1 3BT

Tel: (028) 9051 7500
Fax: (028) 9051 7501
Email: info@rqia.org.uk
Web: www.rqia.org.uk