The Regulation and Quality Improvement Authority





Unannounced Critical Care Inspection

Ulster Hospital Critical Care Unit

Year 3 Inspection

11 June 2018

Contents

1.0 Profile of Service

The RQIA three year improvement programme of unannounced inspections to critical care areas commenced in Ulster Hospital Critical Care Unit (CCU), South Eastern Health and Social Care Trust (SEHSCT), on 19 May 2014.

The unit provides intensive care services to patients with life threatening illness, following major, complex surgery and following serious accidents.

Service Details

Responsible Person: **Mr Hugh McCaughey**	Position: **Chief Executive of the South Eastern Health and Social Care Trust**

What We Look for

Inspection Audit Tools

During a three year cycle all critical care units were initially 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

These Inspection tools are available on the RQIA website www.rqia.org.uk.

2.0 Inspection Summary

This is the third inspection of a three year inspection cycle undertaken within critical care units. Initially, in year one of this inspection cycle all critical care units were assessed against all three audit tools: the regional critical care infection prevention and control audit tool, the regional infection prevention and control clinical practices audit tool and the regional healthcare hygiene and cleanliness standards audit tool. Compliance was assessed in each separate area by taking an average score of all elements of each tool. The Department of Health (DoH) agreed overall compliance target scores were 85 per cent in the first year, rising to 90 per cent in the second year and 95 per cent in year three. The table below sets out agreed compliance targets.

	Year 1	Year 2	Year 3
Compliant	85% or above	90% or above	95% or above
Partial Compliance	76% to 84%	81 to 89%	86 to 94%
Minimal Compliance	75% or below	80% or below	85% or below

The focus of this unannounced inspection was to assess practice against standards contained within one inspection tool. Only those standards that had been identified in previous inspections as requiring improvement (in order to achieve year three compliance) were assessed. During this inspection we also reviewed the CCU's improvement plans (current and/or previous) and discussed any quality improvement initiatives established and in place since the unit's last inspection visit.

This report can be read in conjunction with year one inspection report which is available at www.rqia.org.uk.

The inspection team found evidence that the CCU in the Ulster Hospital has continued to improve and implement regionally agreed standards.

The unit was spacious, bright and in excellent decorative order. Environmental cleanliness was of a high standard. Staff delivered safe and effective care; we observed good management of invasive devices with evidence of training and monitoring of practice.

We found ongoing improvements with the clinical practice standards assessed, particularly around antimicrobial prescribing; the management of Clostridium *difficile* infection and enteral feeding or tube feeding. Staff had worked hard in providing ongoing training and monitoring of staff clinical practices.

After reviewing improvement plans with the unit sister, we were satisfied that all necessary actions identified for improvement during year one inspection had and continue to be progressed. Details of these can be found in Section 6.

We were informed of some positive improvement initiatives within the unit that have been included within the body of this report.

Escalation procedures were not required for this inspection. Our escalation policies and procedures are available on the RQIA website.

The RQIA inspection team would like to thank the South Eastern Health and Social Care Trust and in particular all staff at the Ulster Hospital CCU for their assistance during the inspection.

Please note: this inspection report should not be regarded as a comprehensive review of all strengths and areas for improvement that exist in the service. The findings reported are those which came to the attention of RQIA during the course of this inspection. The findings contained within this report do not exempt the service provider from their responsibility for maintaining compliance with all relevant legislation, standards and best practice.

3.0 Inspection Findings

The regional critical care infection prevention and control audit tool, the regional infection prevention and control clinical practices audit tool, and the regional healthcare hygiene and cleanliness audit tool provide a common set of overarching standards for all hospitals and other healthcare facilities in Northern Ireland. The audit tools cover a number of areas which are assessed individually using a number of standards.

Compliance targets in each individual area are the same as those set out earlier in relation to overall compliance scores.

	Year 1	Year 2	Year 3
Compliant	85% or above	90% or above	95% or above
Partial Compliance	76% to 84%	81 to 89%	86 to 94%
Minimal Compliance	75% or below	80% or below	85% or below

Only those standards that had been identified in previous inspections as requiring improvement (in order to achieve year three compliance) were assessed.

As the full audit tool was not required for this inspection an overall score is not available. Only those individual areas which contributed to a compliance target of 95 per cent not previously being achieved were assessed.

The Regional Infection Prevention and Control Clinical Practices Audit Tool

The table below includes the areas of this audit tool that were assessed during this inspection and also gives the compliance rates in these areas in both year one (2014/15) and this year three (2018/19) inspection.

Table 1: Clinical Practices Compliance Level

Area inspected	Year 1	Year 3
Invasive Devices	91	94
Taking Blood Cultures	94	*95
Antimicrobial Prescribing	87	93
Clostridium difficile infection	85	*100
Enteral feeding or tube feeding	85	96
Screening for MRSA colonisation and decolonisation	90	92

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

Staff had received training and competency assessment, demonstrating good knowledge and practice in relation to the management of invasive devices. Notice boards within CCU displayed information to guide staff if required (Picture 1).

Picture 1: Guidance information displayed for staff

We observed that some invasive device policies had past their review date; however, it was reassuring to note that the CCU had recorded zero infection status associated with invasive devices. This provides evidence of the robust nature of staff training and the routine monitoring of staff practice in carrying out this procedure. Staff demonstrated a high standard of hand hygiene practices in line with current policy.

The trust blood culture policy has been reviewed and is available on the trust intranet site to guide staff in this procedure. Staff demonstrated good knowledge in the collection of blood for blood culture processing. Positive and contaminated blood culture incidences continue to be monitored, reviewed and acted upon. We identified that the contamination rate within the unit had increased above three per cent which may suggest that blood cultures are not always being collected with proper attention to aseptic technique. We observed comprehensive recording of blood culture information within medical notes.

Antimicrobial/Microbiology rounds occur three times a week. Staff report that they have good support from Microbiology and the Infection Prevention and Control Team (IPCT). We were told that the unit does not have dedicated pharmacy support, the addition of which would further support the timely review of antimicrobial usage. In patient records we observed evidence of relevant prescribed antimicrobial information and surveillance on the usage of a number of antimicrobials within the CCU; however, not all antimicrobials are audited in line with antimicrobial prescribing guidance.

The trust is currently participating in the Antibiotic Review Kit (ARK) hospital study which aims to promote the early review of antibiotics at 48-72 hours. The CCU participated in the Regional Point Prevalence Survey (PPS) 2017, the results of which will provide important information for unit staff on antimicrobial usage and stewardship.

The detection and treatment of Clostridium *difficile* infection (CDI) should be carried out in line with best practice guidance. Due to the low number of CDI cases within CCU each incidence of CDI is audited on a case by case basis and multidisciplinary root cause analysis carried out to investigate the cause.

A policy on enteral feeding was available and all staff have received initial competency based training. We observed that oral feeding tubes were labelled and nursing care records clearly detailed relevant information. When we questioned staff, they had a good knowledge of the procedure in line with current policy. Compliance with enteral feeding practice is not currently audited within the unit to ensure a consistent and standardised approach to this procedure.

A screening and treatment policy for the management of Meticillin-resistant *Staphylococcus aureus* (MRSA) is in place and up to date. There were no patients in the unit known or suspected to have MRSA at the time of the inspection. When questioned, staff displayed good knowledge on the appropriate management of patients with a history of MRSA colonisation or infection. A care pathway is in use to guide all staff on the correct management of patients in relation to screening, isolation and decolonisation for MRSA.

Quality Improvement Initiatives

There are plans to introduce a peer reviewer booklet into the unit which would incorporate an annual competency assessment for all nursing staff in clinical procedures including aseptic non touch technique (ANTT), wound care, stoma care and catheterisation. Annual competency assessment will promote the standardisation of safe and effective nursing practice.

An initiative to raise awareness of antimicrobial stewardship is now included in the trust induction programme for all staff. The trust, working collaboratively with Public Health Agency (PHA), plans to review how antimicrobial usage is reported to make the information more applicable for clinicians.

The inspection team observed that staff within the Ulster Hospital CCU were engaged and committed to quality initiatives and collaborative working in order to drive forward improvement in the delivery of care.

4.0 Key Personnel and Information

Members of the RQIA Inspection Team

Ms J Gilmour	Inspector, Healthcare Team
Mr T Hughes	Inspector, Healthcare Team

Trust Representative Attending Local Feedback Session

The key findings of this inspection were discussed with the following trust representatives:

Ms M Byers	Clinical Co-ordinator
Ms N Wilson	CCU Ward Manager
Ms M Merron	IPC Lead
Ms S Lynam	Clinical Lead Sister
Ms P Gordon	Deputy Sister and Infection Control Link

5.0 Improvement Plan – Year 3 (2018/19)

This improvement plan should be completed detailing the actions planned and returned to RQIA's Healthcare Team via the web portal for assessment by the inspector. The responsible person should note that failure to comply with the findings of this inspection may lead to further action. The responsible person should ensure that all actions for improvement are progressed within the specified timescales.

Please do not identify staff by name on the improvement plan.

Improvement Plan – Year 3 (2018/19)				
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**
Regional Infection Prevention and Control Clinical Practices Audit Tool				
No additional actions for improvement				

6.0 Improvement Plan – Year 2 and Year 1 (Updated by the Trust)

These improvement plans should be completed detailing the actions planned/progressed and returned to Healthcare Team via the web portal for assessment by the inspector. The responsible person should note that failure to comply with the findings of this inspection may lead to further action. The responsible person should ensure that all actions for improvement are progressed within the specified timescales.

Year 2 (2015/16)

Regional Critical Care Infection Prevention and Control Audit Tool

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2019**
Regional Critical Care Infection Prevention and Control Audit Tool					
	Not applicable				

Year 1 (2014/15)
Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool

Improvement Plan – Year 1 (2014/15)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2019**
The Regional Critical Care Infection Prevention and Control Audit Tool					
1.	It is recommended that infection prevention and control staffing levels are reviewed to facilitate daily visits to the unit.	Infection Prevention Control Lead	IPC currently undertake 3 formal visits to the unit weekly and this is complimented by at least 2 additional visits by team members. In principle this constitutes a visit Monday-Friday. This review will be undertaken.	ongoing	IPC team continue formal visit to unit three times weekly. There is a daily review for any new developing issues with liaison/visits as required.
2.	It is recommended that meeting minutes follow a standard format and IPC is a standing item on the agenda.	ICU Manager	IPC is now a standard item on the Intensive Care and ward meeting agenda and we continue to include specific items within that.	ongoing	ICU Ward Meetings follow a set agenda and IPC is one of the standing items. In the previous year we have discussed Blood Culture contamination rates, cleaning audit scores and fed back hand hygiene audits.

3.	It is recommended that staff ensure visitors adhere to IPC precautions when a patient is in isolation.	ICU Manager	Visitors currently receive an IPC pack on first contact and IPC guidance is included in this and is gone through with any relatives where the patient requires more than Standard IPC precautions, the aim is to complete this at the earliest opportunity – e.g. within 4 hrs.	completed	Ongoing. All visitors are advised to adhere to IPC precautions via literature and on discussion with staff. ICU visitor's booklet will be reviewed in 2019 and IPC will remain a key feature.
4.	It is recommended that the cleaning of patient equipment by nursing staff is routinely validated.	ICU Manager	The annual IPC improvement plan includes audit of equipment cleaning and this is to be undertaken as part of that programme. The cleanliness of equipment within the unit is routinely checked by IPC staff on visits where vacated bed-spaces are checked. Also audited on Sundays by nurse in charge, commencing November 2014.	ongoing	The cleaning of all equipment is documented and signed for on completion of task. These documentation sheets and equipment are then audited weekly by Lead Sister. We have a communication book for staff to review any feedback from the ongoing audits.

The Regional Infection Prevention and Control Clinical Practices Audit Tool					
5.	It is recommended that an audit of staff competence and adherence to guidance on the insertion and care of invasive devices is carried out.	**ICU Manager**	A process of peer review has been implemented in August 2014 on insertion and care of invasive devices included.	ongoing	Our peer review booklet was reviewed in 2018 and still includes care of all invasive devices/tubes. Each staff member's booklet is reviewed at their annual appraisal. We also audit CVC insertion and Blood Culture taking within the unit.
6.	It is recommended that an audit of staff competence and adherence to guidance on blood culture technique is carried out.	ICU Manager	A blood culture audit proforma is in existence (this may not have been shown at time of visits). Routine auditing is now in place.	ongoing	Adult policy May 2018; with associated training video for staff education/training available on iConnect. Continuing to audit the taking of blood cultures within the unit. CCANNI now working towards standardizing these audits.

7.	It is recommended that antibiotic usage is monitored at unit level as part of routine practice. Actions plans should be developed were issues are identified.	ICU Manager and Lead Consultant with Antimicrobial Pharmacy Lead	Monitoring of prescribing of antibiotics is undertaken as part of the microbiologist visits x3 per week. An intensive care pharmacist has been sought and new requests for this service will be submitted to management for urgent consideration.	ongoing	New Pharmacist now appointed for ICU. Trust also appointed new members to the Antimicrobial Pharmacy team and the work plan for ICU will be reviewed by end of June 2019 Work plan includes monitoring of Carbapenems and seeking an overall reduction in antimicrobial (Defined Daily Dose DDDs)
8.	It is recommended that the CDI guidance is updated to include advice on waste management.	IPC Team	The CDI guidance is currently under review and information regarding laundry and waste will also be reviewed.	ongoing	Waste management for CDI cases is included in appendix 2 of the current and reviewed Trust CDI policy.
9.	It is recommended that completion of the Clostridium *difficile* infection care pathway is audited	IPC Team	Work to this end is being undertaken as part of the wider review of the CD policy in the Trust.	ongoing	This continues to be reviewed for each CDI case within ICU and a summary of finding for the next three cases in ICU will be documented by IPC Team.

10.	It is recommended that the out-of-date protocol on enteral feedings be reviewed.	Policy author and ICU Manager	New NGT policy has been updated. Protocol has been updated by ICIPS lead and a peer review completed and in place. Trust enteral and parenteral feeding guidelines and other related issues are being taken forward by a Trust working group.	completed	Remains reviewed in nurse peer review booklet.
11.	It is recommended that an audit of staff competence and adherence to guidance on enteral feeding and on aspirating a patient is carried out.	ICU Manager	This is being undertaken and includes self-assessment and peer review. This will be complete by Sept 2014	ongoing	Remains ongoing. All nursing staff receive training during their induction on enteral feeding and aspiration. This is also included in the peer review booklet which includes audit of staff competence.
12.	It is recommended that adherence to the MRSA policy and care pathway be audited	IPC Team	This is currently being undertaken and commenced in May 2014 as part of a regional MRSA audit and on review of these findings further audit will be scheduled.	ongoing	Each MRSA case is audited by the IPC team on each visit to the unit this will be continued as ongoing practice.

Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool Standard 2: Environment					
13.	It is recommended that staff ensure all surfaces are clean and in a good state of repair. Supplies are stored off the floor and a maintenance programme should be in place to ensure all building repairs are carried out.	ICU Manager	New shelving has now been erected and all supplies are stored above floor level.	Ongoing	Cleaning audit completed monthly and fed back to staff. Results are also displayed on our unit noticeboard. The ward manager completes a monthly audit of the unit to ensure all areas are clean and well maintained. If repairs are highlighted via the audit then these are reported to estates and jobs are logged.
14.	It is recommended that staff ensure that nursing cleaning schedules are completed.	ICU Manager	This is an evolving and improving piece of work. The completion of schedules has much improved. This is audited weekly on Sundays by nurse in charge.	ongoing	All cleaning schedules are audited weekly to ensure completion.

Standard 3: Patient Linen					
15.	See recommendation no. 13	ICU Manager	Liaise with patient experience and raise an awareness of findings reported. Monthly audit by supervisor of all patient experience cleaning will be discussed with ward manager.	ongoing	Actions from these reports are highlighted for Ward manager and completed as needed. Cleaning audit completed monthly and fed back to staff at ward meetings. Results are also displayed on our unit noticeboard.
Standard 4: Waste and Sharps					
16.	It is recommended that staff ensure syringes are disposed of safely, lids on burns boxes are in place and that waste bins are fit for purpose.	ICU Manager	This issue has been dealt with and rectified. Sharps bins are audited weekly by waste link nurse and results reported to Ward Manager.	completed	Sharp and burn bins continue to be audited on a weekly basis and during the overall monthly audit completed by ward manager.
Standard 5: Patient Equipment					
17.	It is recommended that staff should ensure patient equipment is clean, and stored equipment has an assurance process to identify that it has been cleaned.	ICU Manager	See action and audit plan at 14 above also green trigger tape on all cleaned stored equipment.	completed	All patient equipment is cleaned as required after patient use. A green ‘clean’ sticker is placed on the piece of equipment and it is stored correctly in our equipment store.

Standard 6: Hygiene Factors					
Standard 7: Hygiene Practices					
18.	It is recommended that staff follow the trust guidance in relation to the wearing of PPE.	ICU Manager	IPC as part of the IPC improvement plan PPE audits are undertaken as per schedule. The current management approach of continuous monitoring, correction and reporting of omission in practice via the Daily Communication Sheet will also continue.	Completed and ongoing	There are routine audits on PPE throughout the year and locally observed practice is undertaken on each IPC visit to the unit and immediate reporting of any omissions or concerns. And documented to manager as required.
19.	It is recommended that NPSA colour coding posters are displayed for nursing staff.	ICU Manager	Actioned now displayed in sluice.	completed	Remains displayed in the Sluice area of the unit.
20.	It is recommended that staff wear shoes that conform to trust policy.	ICU Manager	Foot wear reviewed. And any holed Clogs have been removed.	completed	Completed. All staff conform to Trust Policy.

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