Unannounced Critical Care Inspection

Royal Victoria Hospital
Cardiac Surgical Intensive Care Unit
Year 3 Inspection

2 October 2018

www.rqia.org.uk

Assurance, Challenge and Improvement in Health and Social Care

Contents

1.0 Profile of Service

The RQIA three year improvement programme of unannounced inspections to critical care areas commenced in the Royal Victoria Hospital Cardiac Surgical Intensive Care Unit, Belfast Health and Social Care Trust (BHSCT) on 24 March 2015 November 2014.

The unit provides a regional programme of routine and specialist cardiac surgery procedures for adult patients.

Service Details

Responsible Person: Mr. Martin Dillon	**Position:** Chief Executive of the Belfast 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 and 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 year three unannounced inspection was to assess practice against standards contained within two of the inspection tools. 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 critical care unit'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 and two inspection reports which are available at www.rqia.org.uk.

This inspection team found evidence that the Cardiac Surgical Intensive Care Unit (CSICU) in the Royal Victoria Hospital has continued to improve and implement regionally agreed standards.

The unit was bright, tidy and in good decorative order. Cleaning by support service cleaning staff and nursing staff, was of a high standard. We observed evidence of multi-professional working between the unit staff and the Infection Prevention and Control (IPC) team.

Inspectors noted that although the core clinical space of the unit did not meet current recommended requirements; staff were working within these limitations to deliver safe and effective care. The unit lacks suitable side room provision for the isolation of patients identified with alert organisms.

Staff displayed good knowledge and practical skills on the principles of Aseptic Non Touch Technique (ANTT). Medical staff told us that they had not undertaken ANTT competency assessment however there were imminent plans

to take this forward. We observed that systems and processes were in place to ensure a standardised approach to the insertion and ongoing maintenance of invasive devices.

Improvement is required in the management of blood cultures. The incidence of blood culture contaminants had risen above three per cent. Staff should ensure that blood culture contamination rates are routinely discussed at multidisciplinary meetings and actions clearly evidenced when levels are increased.

Staff reported good support from Microbiology and the IPC team. A ward based pharmacist is not in place. Medical staff reported that a dedicated critical care pharmacist would improve efficiency of medicines management and prescribing.

We observed good practices in the management of enteral feeding however stock rotation of stored feeds needs to improve. Staff were knowledgeable in the management of patients identified with Meticillin-resistant *Staphylococcus aureus (*MRSA).

After reviewing improvement plans with the unit sister, we were satisfied that all necessary actions 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 Belfast Health and Social Care Trust and in particular all staff at the Cardiac Surgical Intensive Care Unit 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 Critical Care Infection Prevention and Control Audit Tool

The table below includes the areas of the 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: Regional Critical Care Infection Prevention and Control Audit Tool Compliance Levels

Areas Inspected	Year 1	Year 3
Local governance systems and processes	85	100
General environment – layout and design	80	80
General Environment – Environmental Cleaning	87	100
Clinical and Care Practice	90	91

The unit was bright, tidy and in good decorative order. Environmental cleanliness was of a high standard. There was a regular programme of de-cluttering and environmental auditing in place. We observed evidence that

terminal cleans are randomly validated by Patient and Client Support Services (PCSS) supervisors.

As no changes have been made to bed space configuration/space within the unit since the initial inspection, the core clinical space and linear distance at the patient bed area remains unchanged. Spacing therefore does not comply with 80 per cent of the minimum dimensions recommended by the DoH and outlined in the audit tool.

The unit continues to have only one side room for the isolation of patients identified with alert organisms. This is not in line with numbers recommended by the DoH and outlined in the audit tool. The single room available is not fit for purpose as it is too small to accommodate patients that may require the use of large items of equipment. During this inspection we observed a patient that had been placed under transmission based precautions being cared for in the communal patient area.

At the initial inspection of the unit in 2015, inspectors were informed that plans are in place for the CSICU to move to the area currently occupied by the RICU within the RVH. An anticipated date for this move remains unconfirmed.

Senior nursing displayed good clinical leadership and knowledge in the management of IPC. We observed evidence of multi-professional working between the unit staff and the IPC team who visit the unit regularly to provide support and advice. We observed a good record of nursing staff attendance at IPC mandatory training.

A rolling audit programme continues to be in place to measure staff compliance with best IPC practices. Audits include: hand hygiene, environmental cleanliness and a range of high impact interventions (HIIs). Audits were independently validated by the trust IPC team, which provides an additional assurance mechanism of staff practice. We observed evidence that staff are routinely kept updated with key IPC unit performance data.

We observed evidence that mandatory and non-mandatory surveillance programmes for the detection of healthcare associated infections continue to work effectively, to enable treatment and IPC precautions to be initiated as required.

Incidents relating to IPC were appropriately reported and acted on. Staff use the mechanism of root cause analysis (RCA) to investigate incidences of MRSA and *Meticillin*-sensitive *Staphylococcus aureus* (MSSA) blood stream infections and Clostridium *difficile* infections (CDI).

In line with trust policy, elective patients are screened for MRSA at the cardiac surgical pre-admission clinic. If a patient is identified as MRSA positive, decolonisation can be commenced prior to their date of surgery. As per the MRSA policy all emergency patient admissions are screened on admission to the unit. The MRSA screening policy and procedures were known by staff.

Inspectors noted that the trust communication flowchart to guide staff in reporting microbiological and screening results to sending or receiving units has not been embedded in staff knowledge and practice. During the inspection senior nursing staff reported that all unit staff will be immediately updated with this guidance.

The Regional Infection Prevention and Control Clinical Practices Audit Tool

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

Table 2: Clinical Practices Compliance Level

Area inspected	Year 2	Year 3
Aseptic Non Touch Technique (ANTT)	88	93
Invasive Devices	92	92
Taking Blood Cultures	*75	*60
Antimicrobial Prescribing	75	75
Enteral Feeding or tube feeding	85	88
Screening for MRSA colonisation and decolonisation	91	91

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

An ANTT policy was in place and up to date. The policy identifies competency training and assessment as key principles in ensuring adherence to best practice. All staff receive mandatory training by means of online presentation or face to face training sessions. Assessment of staff ANTT practices is carried out annually by the IPC link nurse. Staff displayed good knowledge and practical skills on the principles of ANTT. Personal protective equipment (PPE) including disposable gloves and aprons were worn appropriately. Clinical staff had in the past been ANTT competency assessed. On review of documentation, it was identified that some assessments had not been carried out on a yearly basis following the initial assessment. We were told that a lead surgeon and anaesthetist have been identified to take this area forward.
Staff demonstrated good knowledge in the collection of blood for blood culture processing. Despite some improvement in year two on the overall management of blood cultures within the unit, the standard had dropped. The incidence of blood culture contaminants had risen above three per cent which may suggest that blood cultures were not always being collected with proper attention to

aseptic technique. The implementation of quality improvement initiatives such as ANTT assessment of medical staff; the use of an audit tool to monitor compliance with best practice and the use of blood culture packs would contribute to the standardisation of clinical practice when obtaining blood cultures. We observed evidence that information on the rate of positive blood cultures and incidences of contaminants is shared with medical staff. Action is required to bring this section to a compliant standard.

Overall we were assured that systems and processes were in place to ensure a standardised approach to the insertion and ongoing maintenance of invasive devices. Nursing staff are trained and competency assessed on the insertion and ongoing management of invasive devices including peripheral venous cannulas (PVC) and nasogastric tubes. Nasogastric and central lines were not labelled to prevent wrong route administration, this practice needs to be reviewed and implemented in line with the regional line labelling policy. Advice should be sought from the Trust IPC team to support implementation. We observed that Trust documentation to record when a PVC is inserted is not always completed. Device size and batch number were not routinely recorded.

Antimicrobial/microbiology rounds occur every week day. Staff report that they have good IPC support from Microbiology and the IPC team. A ward based pharmacist is not in place to participate in daily microbiology ward rounds. Medical staff reported that a dedicated critical care pharmacist would improve efficiency of medicines management and prescribing. Compliance against antimicrobial guidance is not routinely audited in line with antimicrobial prescribing guidance/local targets. Electronic/computer aided prescribing tools are not currently available, the addition of which would further support antimicrobial stewardship and highlight interactions with other prescribed drugs. The unit participated in the regional Point Prevalence Survey (PPS) 2017 however, the results had not yet been disseminated to the antimicrobial pharmacist.

Staff receive a yearly competency based assessment associated with the management of enteral nutrition. Compliance with enteral feeding guidance/protocol is audited to ensure a consistent and standardised approach to this procedure. Nursing care records clearly detailed information on: who inserted tube, route of administration, PH and amount of aspirate, time and volume of feed, type of feed. Nasogastric lines were not always labelled to minimise the risk of wrong route administration. As with year two, we observed that a number of stored feeds had passed their expiry date, this suggests that stock rotation does not always happen.

A care bundle was available to guide all staff on the correct management of patients in relation to screening, isolation and decolonisation for MRSA. There were no patients in the unit known or suspected to have MRSA at the time of the inspection. Adherence to the policy is reinforced during IPC visits to the unit. Screening for MRSA is carried out in pre-assessment prior to transferring to the CSICU.

Overall, hand hygiene practices within the unit adhered to best practice guidance; staff were advised to continue to be vigilant, monitoring staff adherence in line with trust policy. The inspection team observed staff within the Cardiac Surgical Intensive Care unit were committed to driving forward improvement in the delivery of care.

Quality Improvement Initiatives

Unit staff developed a quality improvement initiative entitled 'Rope Bridge'. The overall aim of this initiative was to facilitate fast track extubation and reduce the risk for patients from ventilator associated pneumonia (VAP) and other critical care associated pathologies. This in turn will promote earlier discharge from the critical care unit back to the ward setting.

Staff reported that a business case has been put forward to introduce a simulation training package called 'Insitu Sim'. This package facilitates the training of staff in real work clinical situations, allowing staff to come up with solutions and practice skills but using the controlled method of simulation. It also reduces staff time spent away from the clinical area; however still ensures training is accessible, relevant and contemporaneous.

As a result of feedback from patient experience surveys, a noise sensitive traffic light system has been installed in the unit. The aim of this initiative is to make all staff aware of their own contribution in reducing noise, particularly at night, thus aiding a restful sleep for patients. The unit also provide patients with eye masks and ear plugs to aid sleep.

Staff reported an increase in patients requiring surgery for Adult Congenital Heart Disease (ACHD) related pathologies. As a result, a core team of staff with further training in this area has been formed and linked with the ACHD network. Unit staff aim to develop a rolling programme of ACHD training for all nursing staff to develop their expertise.

A new diabetic protocol is being developed by medical, nursing and endocrine staff to provide clear guidelines for the prescribing and administration of insulin to Type I and Type II diabetic patients in the context of cardiac surgery.

Pharmacy staff discussed quality improvement initiatives proposed for CSICU including the implementation of an antimicrobial stewardship group and the development of an eLearning package for medical staff. These initiatives would further support staff in CSICU by promoting greater communication and coordination in the delivery of consistent approaches to antimicrobial stewardship.

The inspection team observed that staff within the Cardiac Surgical Intensive Care Unit 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

Mr T Hughes	Inspector, Healthcare Team
Mrs S O'Connor	Senior Inspector, Healthcare Team
Mrs E Gilmour	Inspector, Healthcare Team

Trust Representatives Attending local Feedback Session

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

Ms J Lavery	Ward Sister
Mr D Marner	Deputy Charge Nurse
Ms L Whitford	Clinical Educator
Dr F Flynn	Consultant Anaesthetist
Dr G McNeilly	Consultant Anaesthetist
Ms M Quinn	Clinical Co-ordinator
Ms J McKeown	Senior Infection Prevention & Control Nurse
Ms J Boyle	Infection Prevention & Control Nurse
Ms B Porter	Patient Client Support Services
Ms C Kearns	Patient Client Support Services
Mr S Trainor	Patient Client Support Services

Apologies:

Ms B Creaney	Director of Nursing and User Experience

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.				
Regional Critical Care Infection Prevention and Control Audit Tool				
No additional actions for improvement.				

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

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.

Year 2 (2015/16)

Regional Infection Prevention and Control Clinical Practices Audit Tool

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
Regional Infection Prevention and Control Clinical Practices Audit Tool					
1	It is recommended that all Trust policies/guidelines are reviewed and updated as required to ensure continued accuracy of guidance for staff.	IPCN/ Corporate Nursing	The S&G committee are working with Directorate staff to highlight the review of polices. Reports have been circulated which are discussed at a number of meetings throughout the Trust. Directorate staff/authors are reviewing and updating policies which then follow the agreed Trust approval process. ANTT Policy will be approved at next Drugs and Therapeutics Committee. The Trust Blood Culture Policy is	On-going	ANTT Policy updated, next review May 2021 Blood Culture Policy updated, next review May 2023

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
			under review at present and will be updated.		
2	It is recommended that ANTT training and competency assessments should continue. Medical staff should carry out competency assessment on medical staff.	CSICU Sisters/ Clinical Director Surgery/Lead Anaesthetics	Training and competency assessments will occur for all new nursing and medical staff and yearly thereafter. Medical and Anaesthetic leads will be identified to carry out competency assessment on surgical and anaesthetic staff. This will be monitored via Critical Care Operational Group.	Ongoing March 2016 December 2018	IPC link team undertake nursing assessments annually. Lead Surgeon will be responsible for all trainee and consultant surgeon competency assessment. Lead Anaesthetist will be responsible for all trainee and consultant anaesthetic medical staff training.

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
3	It is recommended that ANTT audits are increased with action plans developed and implemented where low compliance is identified.	CSICU Sisters/IPCN IPCN	Where compliance is low, audits will be increased to weekly with action plans until compliance returns to 100%. IPCN will undertake ongoing independent 6 monthly audits.	Ongoing April 2016	IPCN works closely with CSICU staff and audits undertaken as required.
4	It is recommended that staff competence in the insertion and management of invasive devices, continues to be developed.	CSICU Sisters	Nursing staff will continue to develop staff competency in the insertion and management of invasive devices. The initial focus will be on peripheral venous cannulation and nasogastric tube insertion. **Peripheral venous cannulation.** A core nursing team has been identified to lead on peripheral venous cannulation. Interested staff will attend Trust training. Team leader has had refresher training and will act as assessor. **Nasogastric tube insertion.**	Ongoing March 2016 June 2016 Ongoing June 2016	Nurse Band 6 leads in place for overseeing device training / competency.

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
			The Enteral Nutrition Link Team will lead on this. They will identify training needs across CSICU and facilitate practice based learning as required.	Ongoing	
5	It is recommended that all relevant information is recorded in relation to the insertion and ongoing management of invasive devices. Invasive device observation charts should be commenced on insertion of the device.	Clinical Lead Anaesthetics	Current observation charts will be reviewed to ensure ease of recording. Full compliance of all PVC insertions in theatre and CSICU will be achieved. This will be monitored via Critical Care Operational Group meetings.	April 2016 1-2 monthly	Information is recorded on PVC device charts Monitored by nurse in charge as part of daily checks.
6	It is recommended that all relevant information on the collection of blood cultures is consistently recorded.	Clinical Lead Anaesthetics / CSICU Sisters	Staff will explore the option of using blood culture stickers used in other Critical care Units across the Trust. Blood cultures recorded when taken in patient's medical records Blood culture recording will be	April 2016 Ongoing from	

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
			audited as part of Happy Audits due to commence Audit results will be monitored via monthly Critical Care Operational Group. Blood culture contamination rates are reported on a quarterly basis to the Augmented Care Group which is a sub-group of the Water Safety Group. A member of the senior nursing team in CSICU attends this group.	January 2019	Last rate reported for CSICU was for Q3 2018 Jul-Sept, meeting held Dec 2018, rate 1.23%, this is below the target rate of 3%.
7	The rate of positive blood cultures and the incidence of false positive results within the unit should be routinely discussed. Action plans should be developed and actioned where an increase is identified.	Clinical Lead Anaesthetics /Microbiology/IPCN	Monthly incidence reports circulated by IPCN Reports will be discussed at Critical Care Operational Group meetings. IPCN will attend Critical Care Operational Group meetings Action plans will be developed on patient by patient bases.	On-going	Quarterly reports circulated via Augmented care group IPCN attendance at CCOG

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
8	It is recommended that a system should be developed to routinely monitor compliance with best practice when collecting blood cultures.	Clinical Lead Anaesthetics / IPCN	Clinical Lead Anaesthetics and IPCN will work together to develop a system for monitoring compliance with best practice when collecting blood cultures.	May 2016	Consultant Anaesthetist / CSICU Infection control link nurse working on audit tool and data collection. Aim to implement by April 2019
9	It is recommended that pharmacy cover within the unit is reviewed in line with critical care core standards. Electronic prescribing tools should be introduced for use within the unit.	Service Manager/ pharmacy service manager Clinical Lead Anaesthetics/ Service Managers	A business case will be agreed to seek funding to support daily pharmacy support in CSICU. Staff will explore options for use of an electronic prescribing tool in preparation for move to new accommodation.	July 2016 December 2016	Business case prepared and funding sources being explored. Date for move to new accommodation still to be agreed.
10	It is recommended that antimicrobial usage within the unit should be routinely audited in line with current antimicrobial prescribing guidance. This	Pharmacy/ Microbiology Team	The Antimicrobial pharmacist will work with the microbiology team to devise audit and agree frequency of audit.	June 2016 Ongoing	Awaiting funding source for dedicated pharmacist.

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
	should include full engagement with the clinical staff within the unit.		Antimicrobial usage within CSICU will then be audited by a dedicated pharmacist in line with current antimicrobial prescribing guidance.	January 2019 February 2019 then monthly	Microbiologist attends ward round Monday – Friday and advises clinicians on antimicrobial management. Antimicrobial Stewardship training commenced January 2019. Mini antimicrobial stewardship group to be identified Happy audit results will be shared with Clinical Lead in CSICU and discussed at monthly Critical Care

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
					Operational Group meetings from February 2019
11	It is recommended that the Drugs and Therapeutics Committee expedite the use of the new medicine Kardex. All medications should be signed for as prescribed.	CSICU Sisters/ Clinical Lead Anaesthetics	Clinical Lead Anaesthetics will present proposed medicine Kardex to Drugs and Therapeutics Committee.	April 2016	Drug Kardex updated and further updates as deemed necessary by clinical teams.
12	It is recommended that a system to monitor compliance with best practice for enteral feeding is developed.	CSICU Sisters	The Enteral Nutrition Link Team in CSICU will maintain a self-assessment competency record for staff inserting NG tubes. This includes self-reflection and action planning. Peer assessment of insertion of NG tubes will take place at staff supervision sessions and other available opportunities. The Enteral Nutrition Link Team will agree an audit process for each of the above. NG tube positioning	Ongoing Ongoing May 2016 April 2016	Band 6 leading on link team. Monthly documentation audits in place

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
			documentation will be audited weekly for one month, then monthly.		
13	It is recommended that adherence to the management of alert organisms (CDI and MRSA) is audited, to include the completion of the relevant care pathway.	IPCN/CSICU Sisters	Last MRSA bacteraemia reported was January 2009; last CDI reported was September 2013. Adherence to the management of alert organisms (CDI and MRSA) will be audited as necessary to include the completion of the relevant care pathway.	As required	No further MRSA. Last CDI September 2018. Weekly IPCN visits and audits as required. During visits by IPCN all aspects of patients with alert organism management are reviewed including completion of relevant care pathways. Where issues are identified these are escalated to the Sister in charge

Improvement Plan – Year 2 (2015/16)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
					to be addressed. There are audit tools available to review management of MRSA and c.difficile

Year 1 (2014/15)

Regional Critical Care Infection Prevention and Control Audit Tool
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 2018**
Regional Critical Care Infection Prevention and Control Audit Tool					
1.	It is recommended that all staff disciplines within the unit are active participants in IPC initiatives.	CSICU CSICU Link Nurse	This issue has been raised at the Critical Care Operational Group (CCOG) Meeting on March 31st 2015 and via the CSICU link nurse meetings. It was agreed at this meeting that the anaesthetists would identify a clinical champion for infection control. Multidisciplinary members will be identified to join the group and will be invited to link team meetings four monthly.	August 2015	Two Anaesthetic Clinical Champions in place and responsible for; yearly ANTT training of medical staff Antimicrobial stewardship / Happi audits and reporting results to CCOG

Improvement Plan – Year 1 (2014/15)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
2.	It is recommended that the unit IPC lead has adequate and protected time to undertake the responsibilities involved within the role.	CSICU	6 hours per month protected time has been allocated to the CSICU IPC Lead. It has been agreed that this time will be prioritised and will be reassessed in 6 months.	May 2015 October 2015	Time allocated for CSICU IPC Band 6 lead
3.	It is recommended that infection prevention and control staffing levels are reviewed to facilitate daily visits to the unit.	IPC	Current staffing levels will not permit daily CSICU visits; however weekly visits will take place and these visits increase when there is an issue i.e. increased incidence of infection. The IPCN will undertake 6 monthly audits to include ANTT, PPE, hand hygiene and more frequently as issues arise.	On-going	Presence of IPCN in CSICU as and when required offers guidance and support. Routine weekly visits and when incidents of infection occur Baseline RQIA IPC audit score 96% 22/11/18. This audit was carried out as part of Trust wide Primary focus group

Improvement Plan – Year 1 (2014/15)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
					work
4.	It is recommended that IPC should be a standing item on the agenda of all unit and staff meetings. All clinical staff should be routinely updated on relevant IPC performance data.	CSICU Clinical Director Cardiothoracic Surgery / Clinical Lead Cardiothoracic Anaesthetics	IPC is included in all nursing staff meetings. IPC issues will now be included in the CCOG meetings. Clinical Leads to identify the forum for discussing and disseminating IPC issues among the wider medical teams. Information on IPC is cascaded to members of the team via the communication book, (which is available to all disciplines) newsletter (which will be emailed to all disciplines) and by email. A record of minutes of all nursing meetings is available to staff. There is an IPC site on the Trust hub for staff to reference. This will be brought to the attention of all disciplines.	On-going June 2015 Include all staff (not just nursing) from next issue June 2015	IPC included in agendas of nursing and CCOG meetings. IPC will now be included in monthly M&M meetings Information cascaded via daily safety briefings in CSICU

Improvement Plan – Year 1 (2014/15)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
5.	It is recommended that all staff attend mandatory IPC training.	CSICU	Nursing Sisters, Clinical Director Surgery & Clinical Lead Anaesthetist, to action and ensure all staff in their teams receive training. The use of E-learning, when implemented will help facilitate this training. A further work station will be identified for CSICU staff to facilitate e-learning.	On-going	Training ongoing for all staff groups Clinical Leads to further address medical staff training requirement Sufficient work stations available to facilitate training IPC manadatory training is undertaken via e-learning. Unit compliance level is 88% (Jan 2019) Additional IPC training is provided on request. Additional IPC

Improvement Plan – Year 1 (2014/15)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
					training is offered throughout the Trust, see attached flyer of rolling updates as an example. IPC Newsletter Programme of training on the unit run by IPC nurses PPPs shared with senior staff for presentation on Supervision days on IPC related to other issues e.g IPC & Last Offices
6.	It is recommended that visitors/ relatives are provided with IPC guidance specific to the CSICU.	CSICU	A patient information leaflet is being devised and will be updated as necessary following any new IPC guidance.	September 2015	A range of information booklets are available in CSICU
7.	It is recommended that the Trust continues with plans to relocate the CSICU within the hospital.	Cardio-Thoracic Management	This will follow the opening of the new building and relocation of RICU to same.	To be confirmed	RICU move planned for January 2019. Date of CSICU

Improvement Plan – Year 1 (2014/15)					
Reference number	**Actions for Improvement**	**Responsible Person**	**Action/ Required**	**Date for completion/ timescale**	**Updated by Trust 2018**
					move yet to be agreed.
8.	It is recommended that terminal cleans are signed off by Patient & Client Support Services staff or the nurse in charge, and randomly validated by Patient and Client Support Services supervisors.	PCCS	Discussions on-going between Nursing and PCCS as to how this will be implemented and recorded following terminal clean of vacated 'infected' bed space.	May 2015	Recorded as part of daily checks.
9.	It is recommended that staff ensure that if patient screening results are positive, the sending or receiving unit is informed of the results in a timely manner. Once approved, the communication flowchart for multi-resistant organisms should be introduced within the CSICU.	CSICU	General communication flowchart has been finalised and will be implemented by clinical team. Screening for MRSA takes place at pre-operative assessment and screening in CSICU is only carried out on emergency admissions.	May 2015	December 2018 Flow chart approved and in In place MRSA and CPO screening is part of CSICU patient management

The Regional Healthcare Hygiene Cleanliness Standards and Audit Tool Standard 2: Environment					
10.	It is recommended that staff ensure all surfaces including furniture, fixtures and fittings are clean and in a good state of repair. Adhesive tape and labels should not be used on surfaces.	CSICU PCCS	Nursing staff will highlight furniture, fixtures and fittings that need repair and arrange same. PCCS staff to follow daily work cleaning schedule. All staff will be informed via team meetings/staff bulletin that adhesive tape and labels should not be used on surfaces.	On-going June 2015	Adhesive tape not in use. Highlighted on PCCS daily ward checks and environmental weekly audits
11.	It is recommended that nursing cleaning schedules should detail all available equipment and outline staff responsibilities. The schedules should be audited by senior staff.	CSICU	A cleaning schedule following the Trust recommendations has been updated and will be audited monthly by a member of the IPCT Link Team.	May 2015	December 2018 Completed
12.	It is recommended that fridge temperature documentation includes recommended temperature ranges and any necessary actions required when temperatures deviate.	CSICU	The current fridge temperature document will be updated to include; the recommended temperature range, and provide guidance on action required, if temperature falls outside this range.	June 2015	Checks occur daily

Standard 3: Patient Linen					
28.	It is recommended that staff ensure that linen is visibly clean.	CSICU	Recommendations from this report, and completed action plan will be shared with all staff in the unit.	On-going	Ongoing and embedded in practice RQIA style audit 22/11/18 scored 95% clean linen,
29.	It is recommended that linen skips are not overfilled and staff investigate alternative options for the storage of used linen bags.	CSICU	Attention has been drawn to this point with posters on linen storage and segregation guidance erected. Options for alternative storage have been previously explored and a suitable area for storage could not be identified. This will be addressed in the preparation for the CSICU move. Linen is removed from the unit at regular intervals throughout the day. Weekly audit by Sister CSICU.	May 2015 May 2016 On-going	Ongoing RQIA style audit 22/11/18 scored 100% used linen
30.	Staff should adhere to best infection prevention and control practices in the management of used linen. Posters on the segregation of linen should be	CSICU All Nursing staff	See points 28 & 29. Posters on Linen storage and segregation guidance erected. Weekly audit by Sister CSICU.	On-going	December 2018 In place

	available for staff to reference.				
Standard 4: Waste and Sharps					
31.	It is recommended that all unit staff follow Trust policies in the management of waste and sharps.	CSICU	The CSICU Sharps Box Audit team (nursing) undertakes weekly audits and will feedback results and recommendations to staff at staff meetings, including CCOG; via the communication book, newsletter and notice board.	Ongoing	December 2018 In place RQIA style audit 22/11/18 scored 100% waste 97% sharps
Standard 5: Patient Equipment					
32.	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.	CSICU All Nursing staff	This recommendation is currently being cascaded to all staff. Nursing staff now complete an equipment record for each patient. Equipment will be repaired/ replaced as necessary. The wooden trolley in the Labs room will be replaced. New trigger tape will be ordered and will be attached to all pieces of equipment when cleaned. CSICU Sisters and Cardiac	On-going June 2015 May 2015 On-going On-going	Ongoing RQIA style audit 22/11/18 scored 95% patient equipment Removed

			Technicians will audit weekly.		
Standard 6: Hygiene Factors					
33.	It is recommended that the unit cleaning staff ensure that all domestic cleaning equipment is clean and stored securely. All chemicals should be stored in line with COSHH guidance.	PCCS	All PCCS staff to attend Health and Safety training. PCCS staff have been reminded of good working practices involving cleaning equipment. Weekly Observational checks by Domestic Supervisor signed off by Nursing	December 2015	All in place and ongoing
34.	It is recommended that the number of clinical hand wash basins is reviewed in line with national guidance.	ICPN CSICU	Hand washing basins in CSICU do not meet national guidance of one per bed space; however this recommendation will be fully considered when preparations for re-locating take place. Hand sanitizers are available at all bed spaces for staff and visitor use. One wash had basin in CSICU and one in HDU is used as a safe water source for patients; this is not used for hand hygiene.	On-going	No additional wash hand basins installed. 4 wash hand basins in CSICU have been replaced in 2018 as recommended by IPC team. Full sluice upgrade in 2018

Standard 7: Hygiene Practices					
35.	It is recommended that all staff adhere to the Trust dress code and hand hygiene policies.	CSICU Clinical Director Surgery/Lead Anaesthetist	This will be brought to the attention of all multidisciplinary leads to share with their teams and ensure their staff are reminded of both the dress code and hand hygiene policies. Staff on CSICU will be approached as necessary to ensure policies are adhered to.	On-going	Dress code policy updated and shared with teams RQIA style audit 22/11/18 scored 90% in staff uniform 100% in hand hygiene
36.	It is recommended that patients are offered the opportunity for hand hygiene before and after meals.	CSICU	Individual hand wipes are now available for patients before and after meals.	On-going	In use and ongoing
37.	It is recommended that care plans/care pathways are completed for patients identified with alert organisms.	IPCT	A care plan will be agreed and implemented.	December 2015	Care plans in use as required
38.	It is recommended the Trust review security arrangements within the unit to prevent issues of unauthorised access.	Estates CSICU	Estates Officer and CSICU will review security in line with recommendation and action as necessary.	June 2015	Completed

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