The Regulation and Quality Improvement Authority

Inspection Report

22 March 2023

Western Health and Social Care Trust

Type of service: Adult Critical Care Unit, Altnagelvin Hospital
Address: Glenshane Road, Londonderry, BT47 6SB
Telephone number: 02871345171

Information on legislation and standards underpinning inspections can be found on our website https://www.rqia.org.uk/

1.0 Service information

Organisation: Western Health and Social Care Trust	**Responsible Person:** Neil Guckian (Chief Executive)
Person in charge at the time of inspection: Rosie Reid (Ward Manager)	**Number of commissioned beds:**10 Number of beds occupied on the day of inspection:7
Brief description of the accommodation/how the service operates: The unit provides critical care to patients with life threatening illness, following major, complex surgery and following serious accidents.	

2.0 Inspection summary

An announced inspection of the Critical Care Unit (CCU) at Altnagelvin Hospital took place on 22 March 2023, by care inspectors, and concluded with feedback to the Ward Manager, Assistant Director, and Service Manager.

The inspection focused on 4 key themes: local governance systems; environment and infection prevention control (IPC); aseptic non-touch technique (ANTT) practice; and procedures for obtaining blood cultures.

Background to the Augmented Care Inspection Programme

The Chief Medical Officer endorsed the use of the Regional Infection Prevention and Control Audit Tools for Augmented Care Settings by all health and social care (HSC) Trusts in Northern Ireland in the relevant clinical areas. In 2013 an improvement programme of unannounced inspections to augmented care areas commenced on 28 May 2013 and continued until 2018/19. Within the programme there was an expectation that compliance levels would improve year on year until all HSC Trust areas had achieved a compliance rate of 95%. A compliance level of 95% is now the expected standard.

Following this improvement programme the future approach to assurance of infection prevention and control practices within CCUs moved from compliance dominant to a collaboration-based model in assuring good practice.

This approach required HSC Trusts to undertake regular self-assessment of the care delivered in their augmented care settings with the agreed overall compliance target scores of 95%.

The Critical Care Network Northern Ireland (CCaNNI) works with HSC Trusts to provide a platform for regional sharing of good practice and learning.

RQIA have worked collaboratively with CCaNNI and agreed the protocol for the return of twice yearly submission of HSC Trust self – assessments and updated action plans from CCaNNI to RQIA. Inspection visits to CCUs and intensive care units are undertaken by RQIA to independently validate their self-assessment returns and randomly sample aspects of the Regional Infection Prevention and Control Audit Tools for Augmented Care Settings. RQIA reserves the right to visit and independently assess/inspect any CCU at any stage should a particular circumstance require this.

The purpose of this inspection was to validate the findings and actions taken by the Trust following their self-assessment using the three regionally agreed inspection tools for augmented care areas (Regional Infection Prevention and Control Audit Tool for Augmented Care Settings in Northern Ireland, (HSS MD 5/2013), Regional Infection Prevention and Control Clinical Practices Audit Tool for Augmented Care Areas and the DHSSPS Regional Healthcare Hygiene and Cleanliness Audit Tool). Table 1 sets out agreed regional compliance targets and table 2 sets out the Trust's self – assessment compliance levels.

Table 1: Regional Level of Compliance

Compliant	95% or above
Partial Compliance	86-94%
Minimal Compliance	85% or below

Table 2: Self – Assessment Level of Compliance September 2022

Inspection Tools	**Self- assessment**
Regional Augmented Care Infection Prevention and Control Audit Tool	**91%**
Regional Infection Prevention and Control Clinical Practices Audit Tool	**98.8%**
Regional Healthcare Hygiene and Cleanliness Standards and Audit Tool	**98%**

Summary

Environmental cleaning was found to be of a high standard in the unit and staff demonstrated good knowledge of correct cleaning techniques.

Staffing within the unit is under continuous review, and the Trust are currently engaging with the DoH regarding ongoing recruitment for middle grade medical staff to fill current vacancies.

There was a culture of quality improvement evident through the ongoing work in respect of blood culture management, however, there was no robust system in place to audit compliance with medical staff practices in the management of taking of blood cultures.

Three new areas for improvement (AFI) were identified and one AFI from the previous inspection to the unit has been stated for a second time.

3.0 How we inspect

RQIA's inspections form part of our ongoing assessment of the quality of services. To do this, we review the information we hold about the service, examine a variety of relevant records, speak with visitors, staff and management and observe staff practices throughout the inspection.

The information obtained is then considered before a determination is made on whether the service is operating in accordance with the relevant legislation and quality standards.

This report reflects how they were performing at the time of our inspection, highlighting both good practice and any areas for improvement. It is the responsibility of the Trust to ensure compliance with legislation, standards and best practice and to address any deficits identified during our inspections.

4.0 What people told us about the service

Inspectors spoke with a range of staff including the Ward Manager, Service Manager, Infection Prevention and Control Team (IPCT), staff nurses, medical staff, and the Principal Critical Care Technologist.

There was no opportunity to speak with patients or relatives during the inspection. Staff and patients were invited to complete a questionnaire but none were returned post inspection.

5.0 The inspection

5.1 What has this service done to meet any areas for improvement identified at or since last inspection?

The last inspection to the CCU at Altnagelvin Hospital was undertaken on 27 September 2018. This formed part of the improvement programme of unannounced inspections to augmented care areas which commenced in 2013. Three areas for improvement (AFI) were made.

As with CCUs in all HSC Trusts, Altnagelvin CCU transitioned from a compliance model to a collaboration based approach in assuring best practice by submitting twice yearly self-assessments of the care delivered within the unit. This continued assurance indicated the unit was maintaining good practice and the expected level of compliance.

Areas for improvement from the last inspection on 27 September 2018.		
Action required to ensure compliance with The Quality Standards for Health and Social Care DHSSPSNI (March 2006)		**Validation of compliance**
Area for Improvement 1 **Ref:** Standard 4 Criteria 4.3 (J) **Stated:** First time	It is recommended that the Trust put measures in place to mitigate against any risk identified related to the lack of middle grade medical staff dedicated to ICU and HDU during the evening and at night.	**Met**
	Action taken as confirmed during the inspection: The Trust has mitigations in place to ensure there is sufficient middle grade medical cover. It was confirmed the Trust are currently engaging with the DoH regarding ongoing recruitment.	
Area for Improvement 2 **Ref:** Standard 4 Criteria 4.3 (l) **Stated:** First time	It is recommended that the Trust should provide update training for all relevant staff involved in the collection of blood cultures.	**Met**
	Action taken as confirmed during the inspection: A process is in place for medical staff training, which is part of an ongoing quality improvement project for the management and collection of blood cultures.	
Area for Improvement 3 **Ref:** Standard 5.3 Criteria 5.3.3 (C, G) **Stated:** First time	The Trust should initiate a system to routinely monitor compliance with best practice when collecting blood cultures.	**Not met**
	Action taken as confirmed during the inspection: There was no system in place to monitor compliance with best practice when collecting blood cultures. There is no evidence of competency assessment or auditing of practices. This AFI has not been met and has been stated for a second time.	

5.2 Inspection findings

5.2.1 Local Governance systems and processes

The use of agency nursing staff was reviewed and discussed with the Service Manager and Ward Manager. There has been an increase in the use of agency staff due to the COVID-19 pandemic and staff absenteeism has also impacted on the requirement to use agency staff to maintain staffing levels. Whilst the use of agency staff remains a requirement, reliance has since decreased and staffing levels remain under continuous review by the Service Manager and the Ward Manager.

During the previous inspection an AFI was made regarding the lack of middle grade medical staff during the evening and night, and this risk was added to the Trust risk register at that time. During this inspection it was noted mitigations were in place to ensure adequate medical cover within the unit, with current medical staff covering gaps in the rota, and it was confirmed the Trust are currently engaging with the DoH regarding ongoing recruitment.

Mandatory training across a number of areas is not up to date due to pressures associated with the COVID-19 pandemic, however, structures are in place to support staff to address the current training deficits.

5.2.2 Environmental Safety and Infection Prevention and Control (IPC)

The Department of Health set minimum dimensions in terms of a safe space between patient beds to uphold IPC practices and this permits space for the use of equipment and staff movement to care for patients safely. Inspectors noted that although the layout and core clinical space within the unit is not compliant with current DoH recommended dimension requirements, as outlined within the 'Regional Infection Prevention and Control Audit Tool for Augmented Care Settings in Northern Ireland', staff were working within these limitations to deliver safe and effective care. It was noted plans remain in place for a new unit on the current hospital site which will be purpose built in line with DoH guidance, however, the start date for building works has not yet been determined.

Overall the unit was in good decorative order with environmental cleanliness maintained to a high standard. Storage facilities were found to be well organised and equipment was stored appropriately.

Overall equipment in use was observed to be clean, with trigger tape to indicate when the piece of equipment was last cleaned and ready for use. COVID-19 guidance was displayed for staff and visitors and there was good availability of personal protective equipment (PPE). A patient information screen was situated at the entrance to the unit and provided IPC guidance for visitors. Changing facilities are available to staff working in the CCU.

There was access to alcohol hand gel, hand washing sinks and PPE at the point of care and throughout the unit. Handwashing posters were displayed to guide staff and visitors, and patient's visitors were observed to carry out effective hand hygiene on entry to the unit.

It was noted that staff did not always comply with appropriate hand hygiene practices, and one incident was noted when a staff member did not wear appropriate PPE required to carry out the task they were completing. This was brought to the attention of the Ward Manager during the inspection and an area for improvement will be made in relation to staffs' adherence to appropriate hand hygiene practices.

Domestic services staff demonstrated good knowledge of correct cleaning techniques and the appropriate storage of cleaning equipment.

Staff were observed to follow Trust policy for the management of linen and were aware of the correct procedures for segregation of clean and soiled linen. Sharps boxes were assembled correctly, dated and signed.

Staff reported ongoing good access and support from the IPCT and staff demonstrated good knowledge regarding IPC practices, although it was noted that only 39% of staff had completed up to date IPC training. On discussion with the Ward Manager it was confirmed this deficit has been identified as an area of priority and processes are in place to support staff with the completion of mandatory training.

A microbiologist attends a weekly review of all patients in the unit and the microbiology team are accessible outside of this for advice and support via telephone.

Information on a range of key performance indicators, including hand hygiene, were displayed on the information board. An audit schedule is in place with a high level of compliance noted across auditing results, and there was evidence of validation audits completed by the IPCT. Environmental cleaning schedules were completed and environmental audits are carried out with any associated action plans evidenced. Audit results and action plans are shared with staff.

Isolation rooms are available to minimise the risk of transmission of infection, and the decision for isolation is made in accordance with recommendations from the IPCT and the clinician responsible for the patients' care.

It was noted there is no dedicated decontamination room for cleaning equipment, therefore this is completed at the bed space. It was confirmed an area has been identified within the unit for a decontamination room which will be progressed upon funding approval.

The current ventilation system within the unit requires upgrading and air filtering machines are in use throughout the unit to mitigate against any associated risks. Mechanisms are in place for the maintenance and cleaning of this equipment by the estates team when required. There is a Ventilation Safety Group which meets quarterly to discuss and monitor the ventilation upgrade works.

Throughout the unit there was a lack of compliance with appropriate waste disposal streams. Bins labelled for recycling were noted at patient bedsides with contaminated waste bags in place. Some waste bags were overfull and no waste management posters were displayed.

Three AFI's will be made in relation to staffs' compliance with appropriate hand hygiene practices, staffs' compliance with staff mandatory IPC training and waste management.

5.2.3 Aseptic Non-Touch Technique (ANTT)

ANTT is a standardised practice used to prevent infections in healthcare settings and support staff to practice safely.

Nursing staff displayed good knowledge regarding the principles of ANTT and were able to demonstrate when ANTT procedures should be applied. There was good nursing staff compliance for ANTT training, however, it was noted there were no staff trained as ANTT assessors within the unit. This was discussed with the Ward Manager and consideration should be given to train a cohort of core staff. This will strengthen oversight and assurances for ANTT practices, and this could be extended to cover assessment for medical staff where necessary.

Auditing of ANTT practices is carried out in relation to a range of interventions, including administration of intravenous antibiotics and wound dressings.

5.2.4 Taking Blood Cultures

A blood culture is a microbiological culture of blood taken to detect infections that are spreading through the bloodstream. Medical staff are responsible for obtaining blood cultures within the unit. No observations of practice were witnessed during the inspection.

Staff demonstrated good knowledge of the clinical indications for taking blood cultures and demonstrated good awareness of the correct technique for taking blood cultures.

Blood contamination may occur during the process of collecting blood for culture while preparing the site or insertion of the needle. The hospital laboratory monitors and collects data in relation to blood contamination rates which are shared with the IPCT. Throughout 2022, it was noted that blood contamination rates were consistently above the recommended levels of 3%. This raised concern that blood cultures samples were not always being obtained with proper attention to ANTT practices.

Minutes of multidisciplinary meetings evidenced that the incidences of contaminants, and requirement for medical competency assessment had been discussed with evidence of associated action plans regarding how to improve this area of practice.

It was good to note a QI project has been undertaken in response to the identified contaminant rates. A self- assessment pro-forma has been implemented to address the ongoing raised blood contamination rates and medical staff are expected to complete this when taking blood cultures. This completed pro-forma is audited by the Ward Manager however, compliance with the completion of the pro-forma was noted to have been low across a number of months.

A blood culture trolley has been introduced and a prepared blood culture pack is now available to assist with the procedure. It was discussed that this change in practice should be reflected in local policies for staff reference where required.

A new guidance document on obtaining blood cultures has been developed for staff and the IPC team provide associated training to medical staff, with support from a nominated IPC staff member.

Whilst there was evidence that auditing of blood culture sampling had been previously discussed during the January 2023 multidisciplinary meeting following a rise in contaminant rates, this has not yet been introduced. The requirement to introduce auditing and competency assessment of taking of blood cultures was discussed during the inspection and should be addressed through collective ownership across the nursing and medical team.

Previous AFI's made following the previous inspection on 27 September 2018 recommended that the Trust should provide updated training for all relevant staff involved in the collection of blood cultures, and the Trust should initiate a system to routinely monitor compliance with best practice. It was confirmed that a training programme has been put in place, however, there was no robust system in place to provide competency assessment and auditing of medical staff practices in relation to taking blood cultures. Therefore, an AFI will be restated for a second time in relation to the initiation of a system to routinely monitor compliance with best practice when collecting blood cultures.

6.0 Quality Improvement Plan/Areas for Improvement

Areas for improvement have been identified where action is required to ensure compliance with The Quality Standards for Health and Social Care DHSSPSNI (March 2006).

	Standards
Total number of Areas for Improvement	4

Three new AFI's have been made and one AFI has been stated for a second time.

Areas for improvement and details of the Quality Improvement Plan were discussed with the Ward Manager as part of the inspection process. The timescales for completion commence from the date of inspection.

Quality Improvement Plan

Action required to ensure compliance with The Quality Standards for Health and Social Care DHSSPSNI (March 2006)	
Area for improvement 1 **Ref:** Standard 5 Criteria 5.3.1 (f, h) **Stated:** Second time **To be completed by:** 14 June 2023	The Trust should initiate a system to routinely monitor compliance with best practice when collecting blood cultures. Ref: 5.2.4
	Response by registered person detailing the actions taken: The Blood Culture Quality Improvement Group includes representation of both medical and nursing teams. This group have discussed the action plan to ensure that a system is in place to routinely monitor compliance with best practice when collecting blood culture. Currently compliance with undertaking blood cultures is a component of the QUB Clinical Assistantship programme. This is also supported by the ANTT E- Learning module facilitated on the HSC Learning site and additional ANTT training facilitated by the IPC team. Regional work led by the Regional IPC Lead Forum is ongoing regarding a review of the assistantship programme with the development of video clips to support ANTT practice . The Blood Culture Quality group will assess current processes already in place in conjunction with Medical and Dental Education to embed into existing programmes and in light of regional work to strengthen current arrangements.
Area for improvement 2 **Ref:** Standard 5 Criteria 5.3.1 (f) **Stated:** First time **To be completed by:** 19 April 2023	The Trust should ensure that all staff, inclusive of visiting staff comply with hand hygiene policy in accordance to the World Health Organisation (WHO) Five Moments of Care. Ref: 5.2.2
	Response by registered person detailing the actions taken: Hand Hygiene Audits are ongoing and any issues on non-compliance are addressed immediately with staff members involved, including those from visiting teams.
Area for improvement 3 **Ref:** Standard 5	The Trust should ensure that all staff follow Trust policy for correct management and disposal of waste.

Criteria 5.3.1(f) **Stated:** First time **To be completed by:** 19 April 2023	**Response by registered person detailing the actions taken:** ICU Sisters have liaised with Senior Environment Officer (WHSCT) in relation to Waste Management in ICU. We have compiled a Safety Update "Waste Management" shared with all staff in June 2023. Our waste disposal bins have been updated and replaced accordingly to ensure correct segregation of Recyclable Waste, Offensive Waste and Clinical Waste. Ref: 5.2.2
Area for improvement 4 **Ref:** Standard 5 Criteria 5.3.3 (c) **Stated:** First time **To be completed by:** 1 June 2023 Year	The Trust should ensure that all staff meet their required mandatory training requirements for IPC.
	Response by registered person detailing the actions taken: At the time of RQIA inspection, the accurate records of staff training showed 66% staff had completed Infection Prevention and Control Training. This was addressed as a matter of urgency and by end of June 2023, 100% had completed Infection Prevention and Control Training. Ref: 5.2.2

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