NHS Ayrshire & Arran



Meeting: Ayrshire and Arran NHS Board

Meeting date: Tuesday 26 March 2024

Title: Interim Changes to NHS Ayrshire & Arran Critical Care

Services

Responsible Director: Claire Burden, Chief Executive

Report Author: Cameron Sharkey, Divisional General Manager – Surgical

Services

1. Purpose

This is presented to the Board for:

Discussion

This paper relates to:

Emerging issue

This aligns to the following NHSScotland quality ambition(s):

- Safe
- Effective

2. Report summary

2.1 Situation

In March 2023, members of the NHS Ayrshire & Arran (NHSAA) Board were advised by the Medical Director of the interim decision to centralise all Level 3 Intensive Care (ICU) beds at University Hospital Crosshouse (UHC). This would involve the transfer of three Level 3 beds from University Hospital Ayr (UHA) to UHC. Critical care services would be maintained at UHA through the delivery of Level 2 care. Any patients on the UHA site who required ICU care would be transferred to UHC.

These interim changes are required to maintain the safety and sustainability of critical care services within NHSAA.

A nine to twelve month indicative timescale to realise this change was identified at that time. The planned changes came into effect from Monday 11th March 2024. The purpose of this paper is to provide assurance to the Board of the pertinent detail of these changes.

2.2 Background

2.2a Critical Care Services

Critical Care units look after the sickest patients in our health system. They are defined in the Guidelines for the Provision of Intensive Care Services (GPICS) as, 'specially staffed and equipped area of a hospital dedicated to the care of patients with life-threatening conditions. They encompass areas that provide Level 2 (high dependency) and/or Level 3 (intensive) care as defined by the Intensive Care Society.' Definition of the levels of adult critical care is provided at Appendix 1.

Care in critical care units should be delivered by a multi-disciplinary team of doctors, nurses and Allied Health Professionals (AHPs). GPICS standards state that 'care must be led by a consultant in Intensive Care Medicine'.

2.2b Critical Care in NHSAA

Prior to the interim changes, NHSAA provided level 3 (ICU) care on its two acute sites: UHA and UHC. On each site the ICU beds sat within a wider combined (ICU and High Dependency Unit (HDU)) critical care area. There were three level 3 and four level 2 beds at UHA and nine level 3 and six level 2 beds at UHC.

In both hospitals there are other Level 2 beds located elsewhere on the site which are not under the care of Critical Care Services. These are eight medical HDU beds at UHC and four medial high care (MHC) beds at UHA.

The pre- and post-interim change bed provision is detailed in *Table 1* below.

The changes sees all level 3 care consolidated at UHC (a total of 12 level 3 beds for NHSAA) whilst a new eight bedded level 2 critical care unit is formed at UHA. This new UHA critical care unit encompasses the four HDU beds previously co-located with ICU and four MHC beds which have historically been located in the Combined Assessment Unit.

Table 1: Critical Care Bed Provision in NHSAA

	Pre- interim change	Post- interim change
University Hospital Ayr	3 Level 3 (ICU) beds	8 Level 2 beds
	4 Level 2 (HDU) beds	
University Hospital Crosshouse	9 Level 3 (ICU) beds	12 Level 3 beds
	6 Level 2 (HDU) beds	6 Level 2 beds

2.2c Drivers for Change

The primary driver for this change has been the inability to guarantee the sustainability of Critical Care services in NHSAA due to challenges with the medical staffing of the ICU at UHA.

There are currently four consultant anaesthetist vacancies at UHA from an establishment of 15. Recruitment efforts to fill these posts have been made on three separate occasions over the 24 months prior to the decision to make the interim change, with no success. The Board has relied on 'rota gaps' being filled through additional hours worked by a proportion of the remaining 11 consultant anaesthetists. This is unsustainable.

GPICS states that patient care in ICUs 'must be led by a consultant in Intensive Care Medicine (ICM)'. This standard cannot be met at UHA where care in ICU is led by consultant anaesthetists.

There have been significant changes to the specialty of ICM over the last decade such that it is now a standalone specialty rather than a sub-specialty of anaesthesia. Doctors trained in ICM must undertake higher specialty training. Consultants who have committed to this training are more likely to seek employment in larger critical care facilities that meet modern standards.

Whilst there is a national shortage of ICM consultants, the particular difficulties of recruiting ICM consultants and consultant anaesthetists to UHA are in relation to

- a) the size of the ICU which is the smallest in Scotland and therefore not attractive to consultants in ICM:
- b) the requirement for all consultant anaesthetists to perform ICM as part of their core duties irrespective of whether they have undergone higher specialist training (or equivalent). This is not the case in other hospitals in Scotland (including UHC) where 'split-rotas' have been introduced to separate those consultants with an interest and training in ICM from those purely focused on anaesthesia. The current situation at UHA is not attractive to consultants in ICM nor consultant anaesthetists.

The consequence of no action being taken would be a continued inability to recruit to these crucial posts. The potential result of a further reduction in consultant anaesthetist numbers at UHA would result in an unplanned collapse of the ICU service at UHA and this would have a significant destabilising effect on the delivery of all Critical Care services across NHSAA as well as other essential services such as acute medical and surgical receiving.

The decision is interim in nature insofar as it is the best feasible solution available to us at this time to ensure service sustainability. Risk assessments will continue to be made in accordance with service governance and this interim model will be reviewed annually to confirm that it remains the best feasible option for NHS Ayrshire & Arran.

2.3 Assessment

2.3.1 Quality/patient care

2.3.1a NHSAA Critical Care Services Model of Care

The new interim model of Critical Care services can be described as follows:

New admissions to ICU at UHA ceased in the week of 11th March. By the end of that week any patients who had been admitted prior to 11th March and who were still requiring level 3 care were transferred to UHC.

Any patient who presents to UHA and who requires level 3 care or who becomes critically ill whilst an inpatient will be transferred to UHC to receive this care. The transfers are facilitated by the Scottish Ambulance Service with the patient cared for during the transfer by appropriately skilled nursing and medical staff.

The new level 2 Critical Care Unit at UHA operates on a shared care model with daytime, weekday cover provided by an onsite consultant in Intensive Care Medicine

(ICM) from the newly formed NHSAA team. This team is formed of existing consultants from the UHC ICM team and those UHA anaesthetic consultants who have opted to retain ICM as part of their practice. Out of hours (including at weekends) care will be the responsibility of the patient's parent specialty. Out of hours support for specific procedures, interventions and for deteriorating patients will be provided by the resident anaesthetic middle grade doctor and the on call consultant anaesthetist for UHA if required

The Critical Care Unit at UHC has expanded to accommodate the transfer of beds from UHA. There is 24/7 access to a consultant in ICM for the patients in this unit, irrespective of where in Ayrshire & Arran they reside. Patients from the UHA catchment area who have received level 3 care at UHC will be transferred back to UHA at the point the clinical team are confident they no longer have a requirement for this level of care. This will allow this patient group to continue their care closer to home.

Based on historic data, we would expect a maximum of 140 critical care transfers per year from UHA to UHC, or less than three per week.

2.3.1b Impact on Patients Using Other Services

There are no planned changes to pre-hospital patient flow, to Emergency Department services or to acute medical receiving at UHA.

UHA will maintain 24/7 consultant anaesthetic cover and a 24/7 emergency theatre.

Emergency general surgical patients who present to UHA and who have the prospect of requiring level 3 care post-operatively will be considered on a patient by patient basis. The clinical team will decide whether the patient would be better served having their operation at UHA and then transferring to UHC, should they require level 3 care, or whether they should be transferred to UHC to have their operation there.

Emergency urological surgery patients who present to UHA and who have the prospect of requiring level 3 care will have their surgery carried out at UHA and then be transferred to UHC if required.

The patient movements for emergency general and urological surgery patients are included in the total number of transfers detailed at 2.3.1a above.

A total of around 25 urological and general surgery patients per year, who are undergoing an elective procedure with a potential need for ICU care post-operatively, will now have their procedure undertaken at UHC rather than UHA.

2.3.2 Workforce

It is acknowledged that these interim changes have brought with them significant uncertainty and anxiety for many of the staff involved. We thank them for their support and the support of partnership and trades union colleagues in delivering the essential service change.

2.3.2a Nursing Workforce

An interim process, following the principles of organisational change, has been concluded with affected staff (namely UHA ICU/HDU nursing staff) in partnership

with trade union colleagues. All staff have expressed a preference for UHA or UHC and these preferences have been accommodated.

UHA Medical High Care staff have followed a parallel process with the option of remaining in CAU or transferring to the new Critical Care Unit at UHA.

Following transfer of people and resource the Critical Care Unit at UHC will have a nursing establishment of 85.24 whole time equivalent (wte) with a complement of 71.66 wte in post. At UHA these numbers are 30.7 wte establishment with a complement of 24.49 wte in post.

Recruitment plans have been developed for both sites which include the use of newly qualified nurses and international recruitment. Agency staff have been block booked for the weeks immediately following the move in order to ensure both units are as well supported as possible during this period of inevitable disruption.

2.3.2b Medical Workforce

Members of the medical workforce who are subject to changes to their current working patterns have had this managed through the normal job planning process.

Consultant anaesthetist staffing at UHA remains a significant risk and there are ongoing attempts to recruit now that the new model of care has been defined and delivered.

ICM consultant staffing is in an improved and improving position.

2.3.2c Allied Health Professionals (AHP) Workforce

AHP input to the increased critical care bed base at UHC will be facilitated by a transfer of resource from UHA to UHC following an initial period of scoping the requirements under the new model of care.

2.3.3 Financial

2.3.3a Revenue

In response to the key enabling factors identified by the service, Corporate Management Team (CMT) approved investment of £612k in 8 wte medical and advanced practice posts. Roughly half of these costs were already being incurred by the service as cost pressures as a result of changes to critical care service delivery driven by the demands of the pandemic. All but one of these posts have now been recruited to, or are in the process of being recruited to, and funding called down.

2.3.3b Capital

An allocation in the region of £3m is expected to be confirmed in the 2024/25 Capital Plan in order to address the some of the most significant derogations to the critical care estate at UHC. These derogations would require to be addressed irrespective of the interim service change.

2.3.4 Risk assessment/management

Relevant entries on the Operational Risk Register include those relating to consultant anaesthetist staffing at UHA (risk 721) and the critical care estate at UHC (risk 817).

A risk assessment in respect of critical care nurse staffing has been undertaken and will be discussed at the Acute Clinical Governance Steering Group on 13th March.

The established mortality and morbidity review process in Critical Care will be key in assessing the impact on patient outcomes as a result of these changes. The Critical Care Clinical Governance Group is the initial forum for highlighting any issues this process identifies. Escalation is through the Surgical Clinical Governance Group and the Acute Clinical Governance Steering Group.

2.3.5 Equality and diversity, including health inequalities

No impact assessment has been conducted given the interim nature of these changes and the drivers for change related to maintaining safe patient care.

2.3.6 Other impacts

None to note.

2.3.7 Communication, involvement, engagement and consultation

Given the interim nature of this change and the drivers for change relating to maintaining safe patient care, no formal external engagement or consultation has been undertaken.

Internal engagement has been managed under the Organisational Change policy where applicable, through regular stakeholder meetings and communications.

2.3.8 Route to the meeting

This paper has been previously considered by the following groups as part of its development. The groups have either supported the content, or their feedback has informed the development of the content presented in this report.

Corporate Management Team, 27 February 2024

2.4 Recommendation

For discussion. Members are asked to discuss and be assured by the decision making process which implemented the change to critical care services at UHA on an interim basis and that the position will be reviewed annually. Members are asked to confirm support for the interim changes to NHSAA's critical care services.

3. List of appendices

Appendix 1, GPICS Levels of Adult Critical Care

Appendix 1: GPICS Levels of Adult Critical Care (Faculty of Intensive Care MEDICINE/Intensive Care Society (July 2022), GPIC v2.1, Intensive Care Society | GPICS v2.1)

Ward Care	Patients whose needs can be met through normal ward care in an
waid Cale	 Patients whose needs can be met through normal ward care in an acute hospital. Patients who have recently been relocated from a higher level of care, but their needs can be met on an acute ward with additional advice and support from the critical care outreach team. Patients who can be managed on a ward but remain at risk of clinical deterioration.
Level 1 – Enhanced Care	 Patients requiring more detailed observations or interventions, including basic support for a single organ system and those 'stepping down' from higher levels of care. Patients requiring interventions to prevent further deterioration or rehabilitation needs which cannot be met on a normal ward. Patients who require ongoing interventions (other than routine follow-up) from critical care outreach teams to intervene in deterioration or to support escalation of care. Patients needing a greater degree of observation and monitoring that cannot be safely provided on a ward, judged on the basis of clinical circumstances and ward resources
Level 2 – Critical Care	 Patients requiring increased levels of observations or interventions (beyond Level 1), including basic support for two or more organ systems and those 'stepping down' from higher levels of care. Patients requiring interventions to prevent further deterioration or to support ongoing rehabilitation needs, beyond that of Level 1. Patients needing two or more basic organ systems monitoring and support. Patients needing one organ system monitored and supported at an advanced level (other than advanced respiratory support). Patients needing long-term advanced respiratory support. Patients who require Level 1 care for organ support but who require enhanced nursing for other reasons, in particular maintaining patient safety if severely agitated. Patients needing extended post-operative care, outside that which can be provided in enhanced care units: extended postoperative observation is required either because of the nature of the procedure and/or the patient's condition and comorbidities. Patients with major uncorrected physiological abnormalities, whose care needs cannot be met elsewhere. Patients who require nursing and therapies input more frequently than available in Level 1 areas.
Level 3 – Critical Care	 Patients who need advanced respiratory monitoring and support alone. Patients who require monitoring and support for two or more organ systems at an advanced level. Patients with chronic impairment of one or more organ systems sufficient to restrict daily activities (comorbidity), and who require support for an acute reversible failure of another organ system.

- Patients who experience delirium and agitation in addition to requiring Level 2 care.
- Complex patients requiring support for multiple organ failure; this
 may not necessarily include advanced respiratory support