ACT Government | Canberra Health Services

Canberra Health Services

Consultation Paper

Acute Medical Unit and Bed Realignment

Division of Medicine

Contents

Contents 2
1. Introduction 3
2. Purpose 4
3. Current model 5
4. Rationale for change 7
5. Future model 7
   5.1. Scope of the future model 7
   5.2. Physical design/structure 11
   5.3. Benefits of the future model 12
   5.4. Implementation of the future model 13
   5.5. Related change processes 14
   5.6. Implications for not undertaking change 14
6. Consultation methodology 14
7. References 16

1. Introduction

Canberra Health Services (CHS) is focussed on the delivery of high quality, effective, person-centred care. It provides acute, sub-acute, primary and community-based health services to the Australian Capital Territory (ACT) - a catchment of approximately 400,000 people. It also services the surrounding Southern New South Wales region which includes the Bega Valley, Bombala, Cooma-Monaro, Eurobodalla, Goulburn, Mulwaree, Palerang, Queanbeyan, Snowy River, Upper Lachlan Shire and the Yass Valley.

CHS administers a range of publicly funded health facilities, programs and services including but not limited to:

- **The Canberra Hospital:** a modern 600-bed tertiary hospital providing trauma services and most major medical and surgical sub-specialty services.
- **University of Canberra Hospital Specialist Centre for Rehabilitation, Recovery and Research**: a dedicated and purpose-built rehabilitation facility, with 140 inpatient beds, 75-day places and additional outpatient services.
- **Mental Health, Justice Health, Alcohol and Drug Services:** provide a range of health services from prevention and treatment through to recovery and maintenance at a number of locations and in varied environments for people suffering from mental health issues.
- **Dhulwa Secure Mental Health Unit:** a purpose designed and built facility providing clinical programs and treatment options for people suffering from acute mental health issues.
- **Six community health centres:** providing a range of general and specialist health services to people of all ages.
- **Three Walk-in Centres:** which provide free treatment for minor illness and injury.
- A range of **community based** health services including early childhood services, youth and women's health, dental health, mental health and alcohol and drug services.

CHS is a partner in teaching with the Australian National University, the University of Canberra and the Australian Catholic University. On 1 October 2018 ACT Health transitioned into two separate organisations being the ACT Health Directorate (ACTHD) and Canberra Health Services (CHS).

To enable CHS to have a strong focus on operational effectiveness, efficiency and accountability in the health services we provide, CHS will at times propose realignment or modernisations to the way we work.

Introduction - Division of Medicine

The Division of Medicine is one of six clinical divisions of Canberra Health Service (CHS) with responsibility for medical specialty inpatient, outpatient, procedural, community services and the Emergency Department. To meet the CHS vision of 'creating exceptional health care together' and meet the strategic priorities of the organisation, continual review of our services and how and where we provide care are paramount.

Canberra Health Service is constantly refining and improving its approaches to deliver patient activities including 'In the Home' services (hospital, geriatrics, rehabilitation, COVID and so forth), virtual health services, non-admitted models of care as well as admission avoidance or outreach community models – preserving the inpatient bed base for those patients with acute and tertiary care needs; and creating the care level (right place, right time) required for the patient acuity.

At CHS, the Relative Stay Index (RSI) for most medical specialties is above the national average. From evidence, we know patients who have an elongated length of stay (LOS) are more likely to suffer a complication, such as falls, thromboembolism and errors or incidents. In addition, this cohort of patients can decondition quickly when in hospital, further delaying their discharge.

Longer lengths of stay result in higher numbers of patients than can be accommodated in their "home" wards. Patients are then by necessity accommodated in other wards as 'outliers' where care is provided by nurses with a different skill mix and medical teams need to do 'safari' wards rounds. All of which results in delays in providing the right care at the right time, in the right place for patients within the hospital. Furthermore, this leads to delays in transferring Emergency admitted patients into ward beds. This in turn results in overcrowding of the Emergency Department and delays access for community patients requiring acute care.

2. Purpose

A review of the hospital footprint and admissions through the Emergency Department into the hospital ward beds was undertaken by Ernst and Young (with Dr Frank Daly) in 2021. This review analysed data relating to patient admissions and made recommendations on how to improve access to inpatient beds. The purpose of this paper is to describe the recommendations resulting from that review that include the implementation of a 24 Acute Medical Unit (AMU) to front load care in the first 48 hours of admission to lower LOS and assist in moving patients from the Emergency Department. A working group was established to develop an AMU model of care and how this could be incorporated with other care models within Medicine. In 2021 a 12 bed AMU model was implemented as a time limited pilot that would assist in informing the design of the larger unit. Since the inception of the AMU pilot, nursing staff from across the medical inpatient wards, particularly Ward 7B, have worked between the AMU and their home ward. Allied Health, Pharmacy and support staff have provided services for the modified AMU pilot model based on availability and requirements within this model.

To achieve the full impact and benefits of an AMU model will require a 24-bed ward as proposed by the Daly Review. This necessitates a review of the current inpatient bed footprint using the EY modelling to determine the most appropriate location for an AMU. This may impact nursing and medical staff across the Division of Medicine and staff from other Divisions that provide in-reach services such as, Allied Health and Pharmacy. Current configurations of subspecialty location of

patients may also have to change based on case mix volume data and matching that to the physical layout of our current footprint. The AMU is envisaged to be a seven-day, 24-hour service with nursing, medical, allied health, and support services integral to the model of care across this timeframe.

The following document outlines and seeks feedback on the commencement of the next phase of implementation of a 24 bed AMU and a proposed realignment of the inpatient bed footprint.

3. Current model

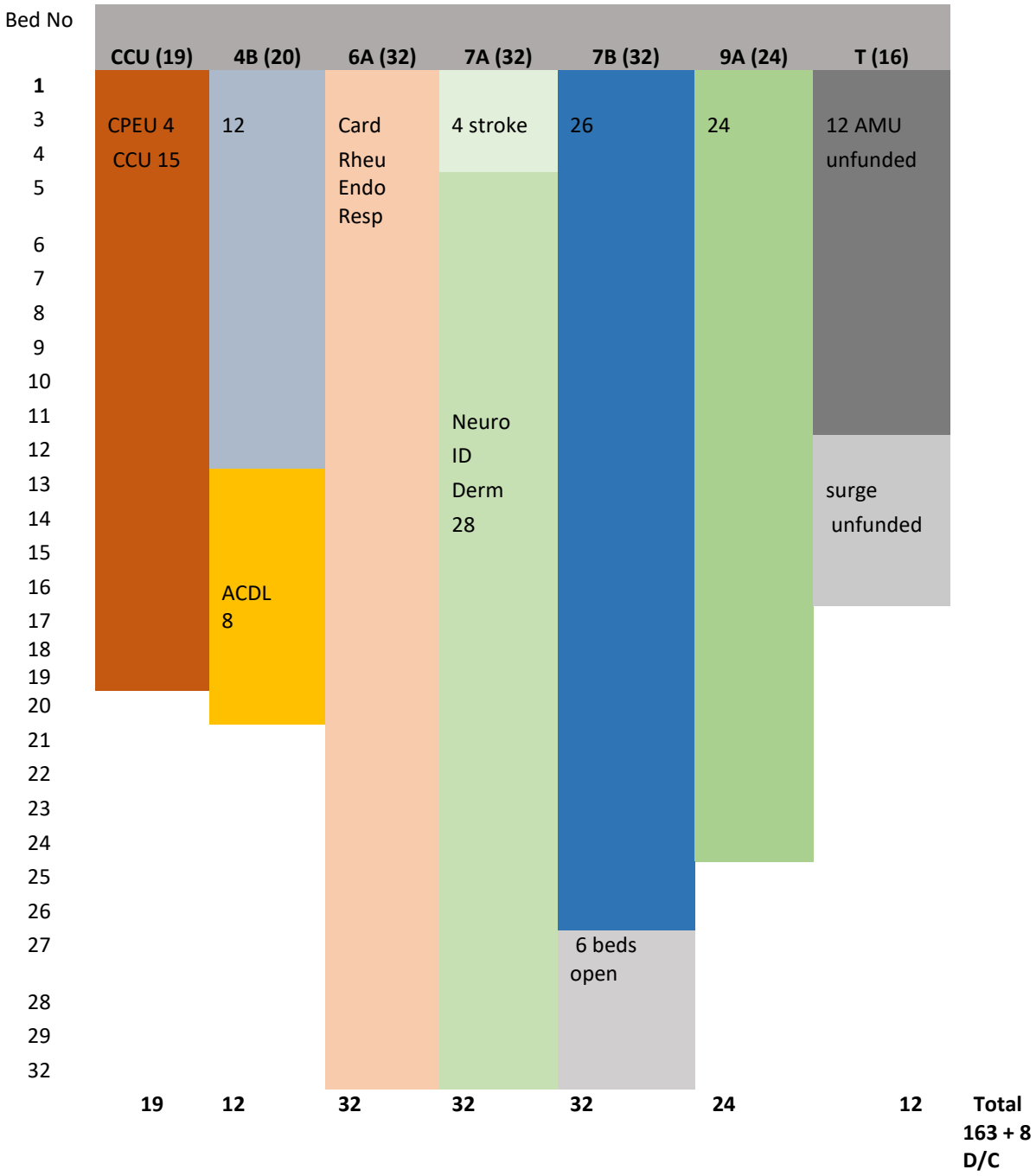
The Division of Medicine provides inpatient services across different subspecialties including:

- Cardiology
- Dermatology (Division of Cancer and Ambulatory Services but inpatient beds are on Division of Medicine wards)
- Endocrinology
- General Medicine
- Gastroenterology
- Infectious Diseases
- Neurology
- Renal
- Respiratory
- Rheumatology (Division of Cancer and Ambulatory Services but inpatient beds are on Division of Medicine wards)

The Division of Medicine has a budgeted inpatient overnight bed base (excluding HITH) of 145 beds. Patients are admitted to inpatient Medicine beds in several ways, such as electively for treatment or a procedure, but predominantly following presentations to the Emergency Department (ED). Patients may spend long periods in the ED having multiple medical team reviews, as well as scans and tests before they are admitted under a subspecialty team and then to a ward bed. Allied Health staff are not part of the patient care team until patients are transferred to the inpatient ward.

Due to the longer lengths of stay for inpatients of internal medical units compared to other jurisdictions, combined with long periods of time some patients spend in ED, patients may be admitted to outlier (not home) wards, which makes it challenging to improve LOS as teams review patients (rounding) on many different wards across the hospital. In addition, often surge beds are open to accommodate patients, which requires additional bed and staffing resources. This impacts on staff satisfaction and is an extra cost to the organisation. Unfortunately, having surge beds open does not create the care level (right place, right time) required for the patient acuity.

Current Division of Medicine bed footprint:



4. Rationale for change

The current model above is not meeting the needs of patients and is stretching staff resources to operationalise surge beds. It is also not sustainable from a human resource or financial perspective. Furthermore, in such an environment staff can become unsatisfied with the care they are providing. To build a sustainable system that can provide timely care to patients, in the appropriate environment and within resources requires different models of care to be considered. From the EY review, evidence showed that efficiencies and improvements to patient care can be achieved through a 24 bed AMU. They reviewed the Hospital bed footprint and bed numbers for subspecialties in home wards, which helped inform the number of beds required for an AMU and create predictable workflows and improved patient flow.

The 24 bed AMU alone, however, is not the only solution to improving patient flow and access to beds, so the Division of Medicine, in line with CHS priorities, has commenced other initiatives to support improved patient flow and to decrease long length of stay and RSI. These include:

- Increasing pre-10am and pre-midday discharges
- Ensuring a focus on patient flow by everyone, 24hrs a day
- Using criteria led discharge as the main discharge tool where appropriate
- Confirming day of discharge on admission or within 48hrs
- Confirming all discharge plans are in place the day before discharge
- Ensuring clinical teams are not taken off the floor in the mornings (eg for meetings, teaching etc) to allow them to focus on patient rounding, discharges and care coordination
- Improving HITH transfers/utilisation earlier in the patients journey if possible
- Benchmarking DRG groups with peers and using care pathways or guidelines
- 7-day ward rounding early in the day (pre-10am) and which has MDT attendance
- Using peer LOS for the DRG group as the expected day of discharge to assist in synchronising care
- Ensuring a 'waiting for what' task list is developed to reduce any delays and escalate where delays need more assistance to enact positive outcomes
- Review >7, >14 and >21days LLOS patients and problem-solving delays to care and discharge.
- Establishing daily (7 days) ward admission averages and discharge targets
- Ensuring ED/AMU/ICU to inpatient bed allocation and transfer is <30mins
- Implementing an approval process for the opening and closing of surge beds
- Adopt the best practice principles of UTAS/NSWH training resource

5. Future model (AMU)

5.1. Scope of the future model

- The AMU functions as a service unit to the Sub-Specialty Teams within the Divisions of Medicine, Cancer and Ambulatory Services and Rehabilitation and Aged Care for the earliest phase of a patient's admission. Sub-specialty teams are required to have early in-reach into the AMU to provide expertise, early pull of relevant patients out of the AMU to their

downstream specialty teams and wards, Hospital in the Home (HITH) or to assist with discharge planning and subsequent outpatient follow up.

- A key feature of the AMU MoC is the frontloading of initial MDT assessments to ensure patients are established on the right trajectory from the beginning of their admission. Examples include:
    - Early medication reconciliation
    - Early assessment and prioritisation of subsequent allied health input by allied health clinical leads
    - Early commencement of comprehensive care pathways
    - Appropriately detailed medical admission that includes patient's goals for admission, GoC documentation and commencement of discharge planning
    - Early commencement of standardised care pathways for common conditions and establishment of targets for criteria led discharges
    - Timely phlebotomy access with early morning phlebotomy rounds
    - Timely access to radiology (equity of ED access, 7 days per week)
- The early pull from ED is anticipated to facilitate subsequent smoother downstream unit transfers, minimise outlier patients across the Divisions (Medicine/Aged Care/CAS). Concurrently it reduces the known morbidity and mortality associated with ED LOS > 4 hours. It is also a pathway to refer into HITH and community services earlier in a patient's admission.
- AMU will have dedicated medical, nursing, allied health, including pharmacy, seven days per week. Pharmacy and allied health will also provide services into the evening. Ideally these services will be available the late evening seven days per week.
- The ratio of nursing staff will be higher than inpatient wards due to patient acuity, turnover and intensity of further "workup" of patients required. Morning and evening nursing ratios will be 1:3 and overnight will be 1:4.

Admission Criteria

Any admission to the AMU must meet the following criteria:

- Adults (> 16 years) who require hospital admission under a medical inpatient team

Exclusion Criteria

- Admissions for MHJHADS, Division of Surgery, and Division of Women's Youth and Children
- Patients requiring care in a specialty ward (Stroke unit/Coronary Care Unit/ HDU/ ICU/ Renal Dialysis Unit/ Dementia specific clinical area (e.g. patients admitted with BPSD))
- Requiring specific infection control requirements e.g. febrile neutropenic patients, requiring positive or negative pressure rooms

AMU Admission Process

The following diagrams illustrate the flow processes for AMU admissions from ED assessments and ED patient expects.

Figure 1: AMU Admissions from ED Assessment

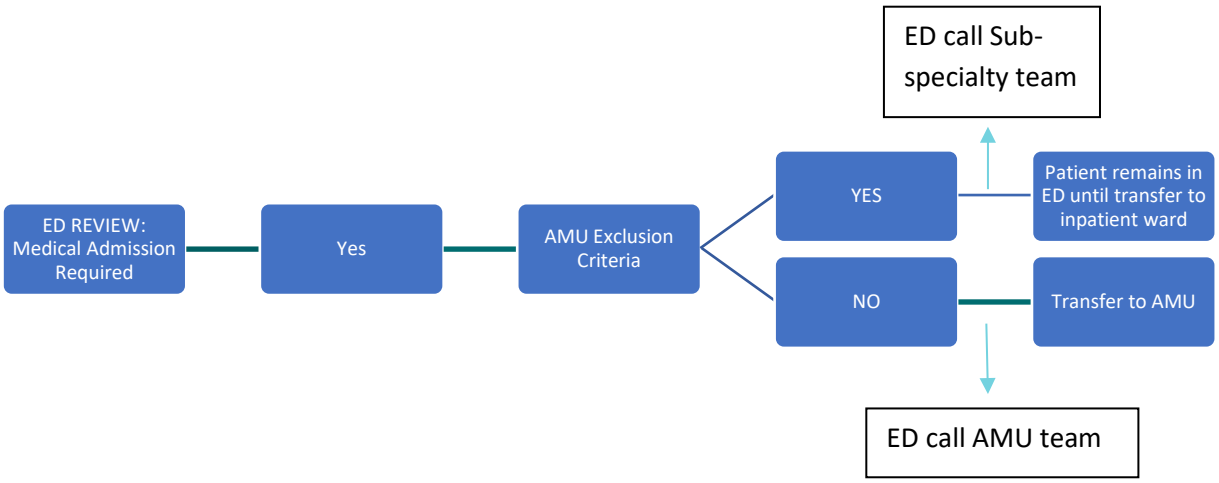


Figure 2: Expected Admissions transiting via the Emergency Department: Mon-Fri 0800 – 1630):

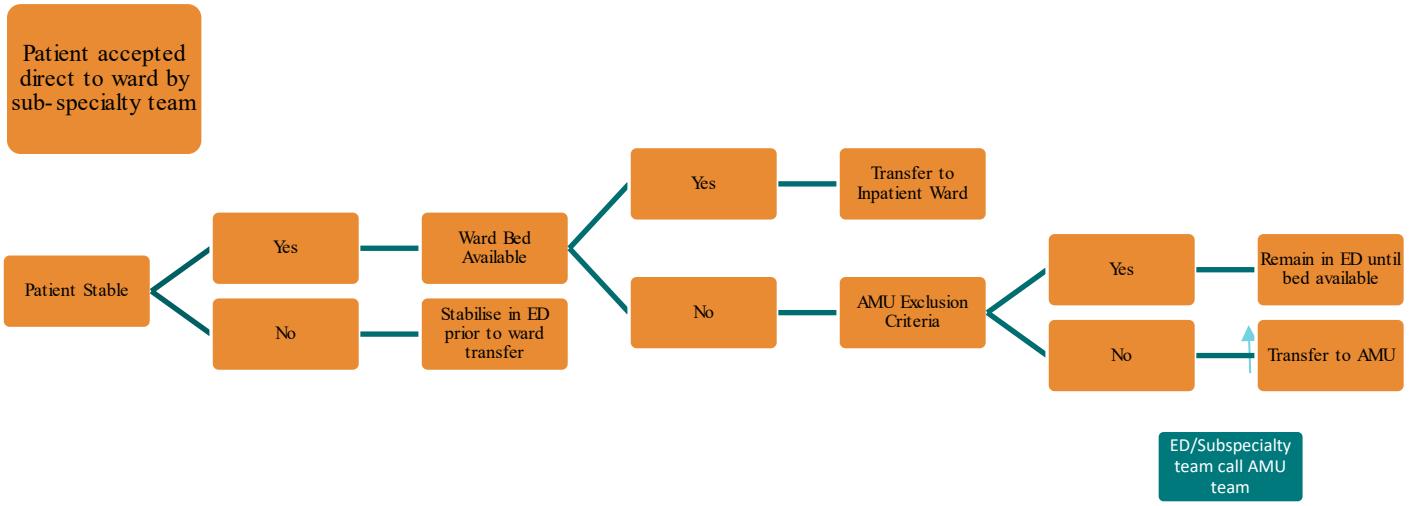
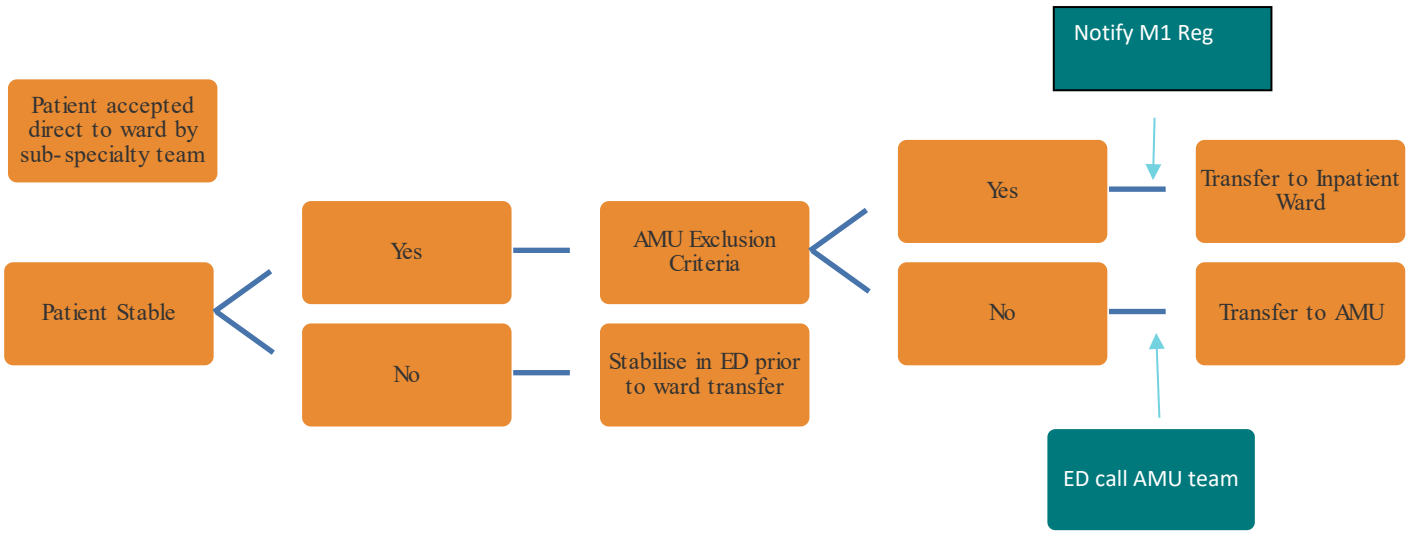


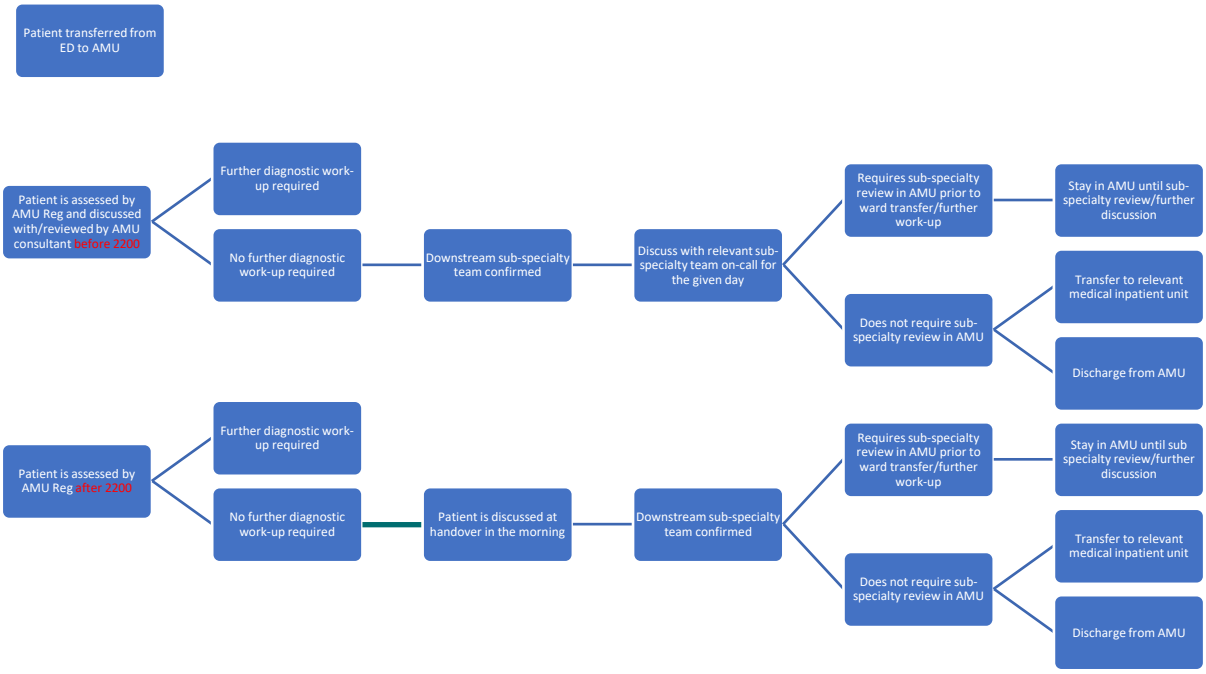
Figure 3: Expected Admissions transiting via the Emergency Department: After hours and Weekends



Governance issues

- Patients can only be admitted under the AMU consultant if they are being transferred to the AMU ward. Patients that are not suitable for the AMU ward (i.e. meets exclusion criteria) will remain in the ED until transferred to an alternate ward under the appropriate accepting inpatient team.
- **Patients transferred to the Intensive Care Unit from the AMU, will be under the AMU consultant until an alternative admitting team is allocated.**
- **Specialty teams will be asked to take over care of patients from the AMU medical team as appropriate if a patient's length of stay is likely longer than 48 hours. Provision for dual bed cards (or Primary / Secondary care teams) to allow seamless transition of care from AMU to the Specialty team will also be enabled.**

Figure 4: AMU Assessment and Transfer from AMU to inpatient wards



In the next section, we are proposing a Division of Medicine footprint that will accommodate the median inpatient bed numbers of each specialty team based on the EY modelling.

5.2. Physical design/structure

The EY model shows that the implementation of the AMU model will lead to a reduction of the overall number of inpatients admitted to specialty teams (apart from General Medicine). Furthermore, the pilot AMU has a physical capacity for only 12 beds that are not within the Division of Medicine's budgeted bed base. To incorporate the 24 bed AMU model, a bed realignment of the Division of Medicine home wards is therefore required.

Proposed Division of Medicine bed footprint

Bed No	CCU (19)	4B (20)	6A (32)	7A (32)	7B (32)	9A (24)	T (16)		
1									
2	CARDIAC 19	RENAL 10	AMU 24	STROKE 4	GEN MED 32	GASTRO 19			
3									
4									
5							CHS WINTER WARD (SURGE)		
6									
7									
8									
9									
10									
11		ENDO 2		NEURO 10					
12									
13									
14									
15									
16		ACDL 8							
17									
18									
19									
20				GEN MED & RESP LLOS 12		ID 5			
21									
22									
23									
24									
25			RESP 8	SURGE 6					
26									
27									
28									
29									
30									
31									
32								TOTAL	
	19	12	32	26	32	24		145	plus 8 D/C

5.3. Benefits of the future model

Patients:

- Improved access to services
- Quicker journey through the Emergency Department
- Right ward, first time and most of the time
- Lower length of stay and less deconditioning / untoward variations
- Improved satisfaction

Workforce:

- Improved care pathways and care excellence with a modernised approach
- Improved patient flow and discharge planning
- Reduced outliers so reduced safari ward rounds, freeing up time to care

- Evidence-based approach to bed footprint which can be replicated in 6- or 12-months' time to match case mix
- No loss of FTE, although some staff will be offered a choice in location of work
- Improved satisfaction

Clinical Services:

- Reduced surge beds and therefore reduced additional bed and workforce costs improving efficiency
- Improved resource effectiveness and acute bed utilisation
- Allows improved and positive benchmarking with other jurisdictions thereby making Canberra Health Services a great place to work
- Reduced Hospital Acquired Complications (HACs)

5.4. Implementation of the future model

Patients:

- The case for change for the new Acute Medical Unit has already been approved and supported. This is an expansion and refinement of the pilot model in place.
- Patient flow pathways from the Emergency Department to the AMU and other wards are already in place and will continue with the new inpatient locations.
- Bed down the Acute Medical Unit model of care in the temporary 12 bed pilot model. Patient care plans for the AMU admission and either discharge or transfer after 48hrs are already in place.

Workforce

- Over January we will be working with nursing staff on their preferred ward as their base
- Work with Division of Acute Allied Health with any relevant ward staff allocation and case mix changes so that staff can be matched to specialties as before.
- Work with our Medical and Administration staff on their new ward locations and assess any requirements to their work environment
- There are no proposed reductions to any staff group as a result of this inpatient bed base realignment
- Implement and consolidate learnings from DHR go-live

Logistics:

- Work with our clinical support services (ISS etc) to arrange ward moves and synchronise those in a way which makes sense to minimise patient and workforce disruption.
- Plan to move any specialties with additional staff on duty to ensure patient safety is optimised.
- Brief stakeholders of dates and changes prior and as they occur
- DHR locations and information will be updates as they occur.
- Identify date for move in line with JMO/Registrar rotation and other significant time factors.
- Align logistics and support to enable the relocation of patients to their new area
- Update and adjust DHR
- Continue to monitor the AMU effectiveness, and the length of stay and the RSI data for effect

Proposed Structure implementation timeline with a 4-week consultation period to accommodate public holidays and low-activity periods.

Steps	Action	Dates
1	Letter and consultation document to be provided to Unions.	19 December 2022
2	Consultation document to be sent to stakeholders	19 December 2022
3	Staff forums with Q&A/FAQ	20, 21, 22 December 2022 4, 5 January 2023 10, 11 January 2023
4	Consultation period ends (4 weeks)	13 January 2023
5	Any provided suggestions from consultations will be reviewed and any changes incorporated into the final paper within one week	20 January 2023

5.5. Related change processes

The other initiatives that have been described earlier in this paper to support improved patient flow and to decrease long length of stay and RSI will run concurrently with these changes.

5.6. Implications for not undertaking change

There is potential for delays in patient care that present through the Emergency Department and receiving care in wards that are not considered their home ward. There will continue to be patients in outlier beds and more pressure to open surge beds due to these processes, which will be unsustainable from a human resource perspective and a financial perspective.

6. Consultation methodology

This proposal provides more detail in relation to the bed realignment and AMU model of care. There are still details that need to be determined and your feedback, suggestions and questions will assist in further refining the bed realignment and the AMU model of care.

Feedback can be provided via email to CHSDOM@act.gov.au due by Friday 13 January 2023

In particular we are seeking responses to the following questions:

1. Do you think the model has merit in relation to improving patient care, improving patient flow, improving ED access and streamlining processes?

2. Are there other elements to the model that needs to be taken into consideration?

3. Do you have any concerns about the proposal so far, if so what are they?

4. Do you have any other feedback you would like to be considered in relation to the 24 bed Acute Medical Unit?

5. Do you have any other feedback you would like to be considered in relation to the overall bed realignment?

There will be five presentations of the proposed change "AMU & Bed Base Information ". The presentations dates and times are as follows:

- Session #1
    - Tuesday 20 December 3:45-4:15pm
    - Microsoft Teams
    - Meeting ID: 469 365 437 535
      Passcode: 45SFMa

- Session #2
    - Wednesday 21 December 2-2:30pm
    - Microsoft Teams
    - Meeting ID: 417 539 246 102
      Passcode: TVgQHz

- Session #3
    - Thursday 22 December 2-2:30pm
    - Microsoft Teams
    - Meeting ID: 448 328 338 426
      Passcode: Dc3kmp

- Session #4
    - Wednesday 4 January 2023 11-11:30am
    - Microsoft Teams
    - Meeting ID: 492 511 812 594
      Passcode: cgd7dR

- Session #5
    - Thursday 5 January 2023 11:30am-12pm
    - Microsoft Teams
    - Meeting ID: 477 541 419 015
      Passcode: YQ7aPn

- Session #6
  - Tuesday 10 January 2023 1-1:30pm
  - Microsoft Teams
  - Meeting ID: 484 869 886 544
    Passcode: uvVFYE

- Session #7
  - Wednesday 11 January 2023 3-3:30pm
  - Microsoft Teams
  - Meeting ID: 452 936 188 901
    Passcode: LLvWJk

For any further information relating to the proposed 24 bed Acute Medical Unit and bed realignment contact either Ashwin.Swaminathan@act.gov.au or Anna.Nakauyaca@act.gov.au) or kellie.noffke@act.gov.au

7. References

Document	**Author**
Canberra Health Services Strategic Plan	*CEO, Canberra Health Services*
Recruitment policy	*People & Culture, Canberra Health Services*
Ernst Young Review	*Frank Daly and Team*
Clinical Variation in Healthcare -	User Guide for the Review of Clinical Variation in Health Care (safetyandquality.gov.au)
Hospital performance and clinical variation	jonathan.karnon (adelaide.edu.au)
Hospital Performance and Length of Stay (Victoria) -	Hospital Performance: Length of Stay | Victorian Auditor-General's Office
ED LOS	Predicting Patient Length of Stay in Australian Emergency Departments Using Data Mining - PMC (nih.gov) & (PDF) Hospital Factors Impact Variation in Emergency Department Length of

	Stay More Than Physician Factors (researchgate.net)
UTAS, eHealth Services Research Group (eHSRG) An Evidence-Based Review and Training Resource on Smooth Patient Flow, October 2012	Dr. Elizabeth Cummings, Dr. Leonie Ellis, Dr Andrew Georgiou, Ms. Emily Keen, Mr. Chris Showell, Associate Professor Paul Turner