ACT Government | Canberra Health Services

Canberra Health Services

Consultation Paper

Acute Medical Unit (AMU)

Division of Medicine

Contents

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 is proposing a realignment of functions.

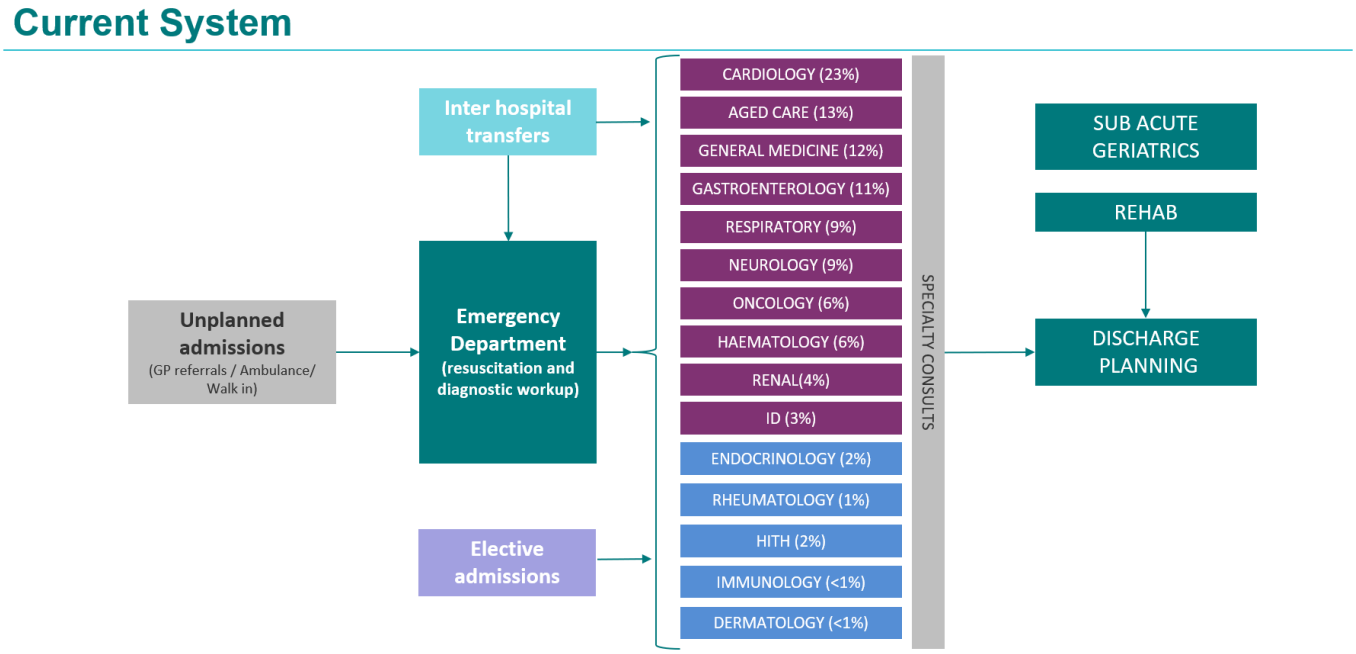
The current organisational chart and the recent Annual Report and the ACT Government Budget Papers provide more detail about CHS.

2. Purpose

The purpose of this paper is to describe the concepts of the Acute Medical Unit (AMU) and the associated design implications for the Division of Medicine and other affected areas of CHS.

The AMU will streamline both patient care and patient flow within the Division of Medicine, and throughout CHS.

3. Current model



Ward 7B

Ward 7B is a 26 funded bed ward under the governance of the Division of Medicine. General medical is a unit that provides care for patients with undifferentiated medical conditions. The unit is managed by consultants and nursing staff with an interest in general medicine, geriatric medicine, infectious diseases, cardiology, respiratory medicine and gastroenterology.

Current Staffing

Medical staffing

- JMOs -
- Registrars -
- Staff Specialists -

Nursing Staff

- CNC
- Clinical Care Coordinator
- CDN
- RN2's, RN 1's, EN's and AINs

Allied Health Staff

- Pharmacist

With support from other Allied Health staff when requested.

4. Rationale for change

Emergency Department (ED) crowding has been increasingly prevalent, and CHS has continued to experience a rise in admissions, coupled with a pressure on the available inpatient beds. Growing admission rates are influenced by the increasing numbers of emergency presentations of patients with multiple chronic diseases and psychosocial difficulties, raised expectations of care and lower thresholds for admission. When presenting to hospital via the ED, these patients may not be triaged as high urgency; their wait for assessment, diagnosis and treatment can cause delayed care for patients and therefore contribute to ED overcrowding.

Further, the current inpatient model sees a system with limited care pathways for common conditions, undefined phases of care, and limitations to the appropriate staff mix for each phase of care, within a bed base that is not aligned with inpatient activity.

These shortfalls have the following negative impacts on our patients:

- delays to treatment
- increased length of stay in the ED
- increased length of stay on the ward
- limitations to being able to provide patient centred, coordinated care.

Currently patients receive the bulk of their diagnostic workup within the ED and are then admitted to a speciality unit in line with the 'Current system' diagram below. Patients can often see long lengths of stay within the ED whilst awaiting appropriate diagnostics and subsequent review by ED clinicians and Specialty admitting teams (sometimes from multiple areas).

5. Future model

The AMU will provide a centralised place for those patients with conditions amenable to <48hr stay and patients with multi-morbidity or undifferentiated conditions needing intensive work-up.

The AMU is specifically designed to improve the coordination and quality of care for patients, increase efficiency in inpatient management and ultimately, assist with improving patient flow across the hospital. The difference between an AMU and a traditional inpatient unit is that the AMU features a dedicated interdisciplinary team led by consultant physicians for an extended period of time including after traditional hours of business. The team consists of medical, nursing, allied health, and administration staffing. A Unit Director and a Clinical Nurse Consultant have been engaged to lead the team.

5.1. Step One: Mini-AMU

The mini-AMU will commence operations within the old Emergency Medicine Unit which is currently vacant. The service would run from 6 December 2021 to 5 February 2022.

The mini-AMU, within the Emergency Department footprint, will operate at 12 beds with a median length of stay of 12 hours. The AMU bed base will be quarantined for AMU eligible patients only. Patients transferred to the AMU are either admitted under the booked sub-specialty bed card (for whom the sub-specialty team remains primarily responsible for), or alternatively under the AMU bed card until the patient is transferred to a sub-specialty team. The unit would be open 24 hours per day and seven days per week.

Treatment plans, pharmacy review, allied health assessments and rapid access to diagnostic testing will all form part of the timely care of the patients, in advance of transferring to the appropriate medical ward, being transferred home if medically stable, or admitted to the supporting HITH service for continuation of care.

A weekly MDT oversight meeting will be established with representation from all craft groups to ensure governance arrangements are robust, with clinical outcomes and patient and staff feedback discussed and actioned.

The Mini-AMU will provide a platform where learnings can be incorporated into the full AMU model moving forward.

A full staffing complement is in place for commencement on Monday 6 December 2022 including medical coverage, full nursing roster, allied health and administration support.

The nursing model will have a 1 nurse to patient ratio on a morning and evening shift and a 1 nurse to 4 patient ratio during the night shift. They will be supported by a CNC and a Clinical Care Coordinator (RN 3.1). It is anticipated that patients will move rapidly in and out of the unit during the day and evening and less so overnight. Furthermore, even though these patients will be stable, there will be further work up to be attended in the mini AMU.

Nursing staff to staff the unit will come from the current 7B General Medical Unit and staff that were recruited for the Winter Ward. All staff from 7B General Medical Unit have been asked if they would like to participate in the pilot. Only staff that would like to work in the unit will be rostered to open the unit.

To date staff that have agreed to work in the unit have been shown through the space that is to be used and a communication platform has been set up for these staff as a communication tool and sharing information and plans about the unit. An orientation manual has been developed that all staff will be given prior to their first shift on the unit. A formal orientation will be provided to the staff on the opening morning before the unit is open to patients. Patients will be introduced later in the morning once staff are fully orientated. Patients to the unit will be phased in as not to overwhelm the staff.

Feedback will be sought from all staff throughout the pilot to tweak and adapt changes to better suit patient flow, staff and patient safety.

5.2. Step Two: Full AMU Model

It is anticipated the full AMU, located on Ward 7B (to be confirmed), will commence from 6 February 2022, pending successful completion of the pilot and approval of the on-going business case. It will operate 24 inpatient beds, 24 hour per day. The AMU bed base will be quarantined for AMU eligible patients only.

A typical patient suitable for management in the AMU is an adult (over 16 years) with an acute undifferentiated presentation who may:

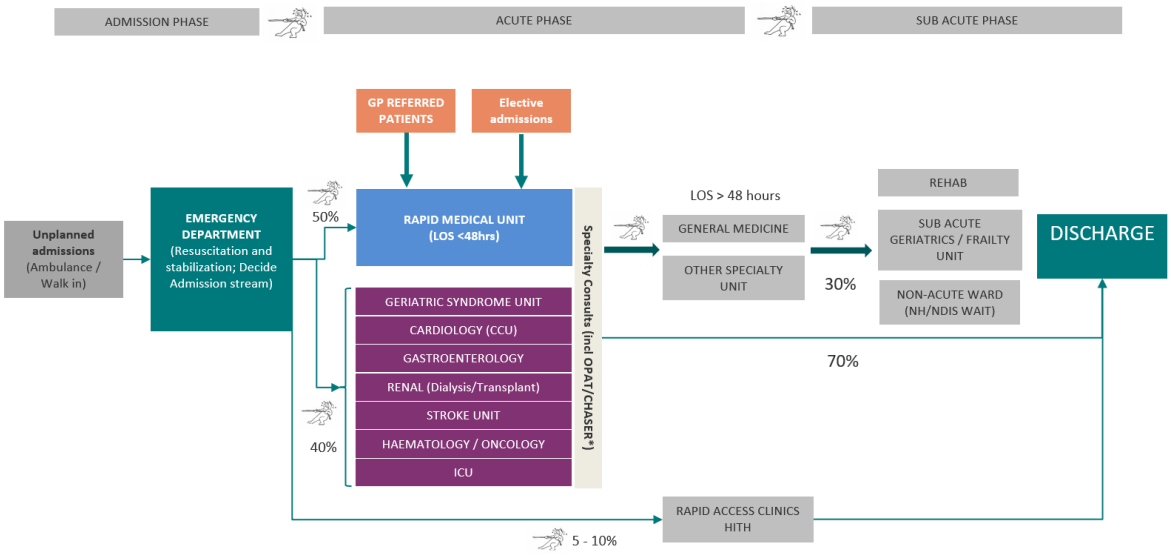
- have a history of chronic and/or complex condition(s); and/or
- have an exacerbation caused by an issue in their social environment, e.g., carer absent, overcrowding within the home; and/or
- be on a pathway for acute assessment e.g., chronic back pain, cellulitis, pyelonephritis.

These patients are not critically ill but have complicated conditions that take time to assess and require a range of clinical expertise to diagnose and treat.

The five key principles of the AMU model of care are:

1. People are provided with access to acute care (Right Care, Right Time, Right Place, and Right Clinician)
2. People are provided with access to acute assessment, faster diagnosis, and earlier treatment within 48 hours
3. People who require further inpatient care are provided with an ongoing clinical management plan based on their initial acute assessment, faster diagnosis, and earlier treatment
4. AMUs ensure that patients are provided with safe and effective care
5. AMUs provide more joined-up, coordinated care within the hospital and cross the hospital- community interface.

Conceptualising a New Model



Patient Flow within the AMU (Full model)

Within first 2hrs of Patient Arrival

- Clarification of Goals of Care
- Clinical assessments to be completed by nursing and medical staff
- Commencement of clinical management plan
- Order and initiate diagnostic services
- Identify patients usual GP

Within first 4hrs of Patient Arrival

- All Assessments completed
- Social work, Physiotherapy and Occupational therapy services will complete an AH screening
- Assessment for 100% of patients admitted to the AMU
- Clinical management plans completed and communicated to patient / family / carer, including
- Estimated date and time of discharge

Within first 24hrs of Patient Arrival

- A structured interdisciplinary team round, ideally at the patient's bedside. This round will facilitate timely access to commence transfer of care planning (e.g. discharge letter, pharmacy, equipment, transport)
- Review required community services and initiate assessment referral
- Referral to outpatient clinics to be organised
- Patients likely to require ongoing admission should have a referral made to the subspecialty consultant on call for the day.

Within first 48hrs of Patient Arrival

- Confirm and execute all clinical management plans
- Enable transition out of AMU (e.g., discharge home or to alternative inpatient unit)

Discharge Process

The full AMU will provide two streams of care:

Stream One is for patients who go home directly from the AMU. These patients have previously typically stayed in hospital for 3-5days and can now be provided with acute assessments, faster diagnosis and earlier treatments and sent home safely within 48 hours, with community care if needed. This patient group should account for approximately 50% of patients who are admitted to the AMU to ensure there is adequate patient flow in the AMU.

Stream Two is for patients who are transferred to a specialty ward from the AMU. In the AMU, these patients are provided with acute assessment, faster diagnosis and commencement of treatment within the AMU. They are then referred to an inpatient team and transferred to an in-patient ward after approximately 24-48hrs with a documented plan of care to be followed and sent home safely within 5-7days. This patient group should account for no more than 50% of patients who are admitted to the AMU to ensure there is adequate patient flow through the AMU.

5.3. Benefits of the future model

The AMU model of care has the potential to significantly reform patient flow and patient care within CHS. Similar models in other jurisdictions have demonstrated evidence of:

- a significant reduction in inpatient mortality (between 0.6%-5.6%)
- a significant reduction in the length of stay (LOS) (between 1.5 and 2.5 days)
- a significant reduction in waiting times for patient transfer from EDs to medical beds (up to 30%)
- no increase in 30-day readmission rates following unit commencement
- improvements in patient and staff satisfaction with care.

It is also proposed that the AMU Model of Care can deliver additional benefits such as:

- improved population health outcomes through a more coordinated management of comorbidities
- an improved patient experience through a dedicated interdisciplinary and more integrated approach to providing patient care
- health system efficiencies and lower costs through:

  – a reduction in undifferentiated, complex, non-critical medical patients presenting to the ED by providing direct referral to the AMU

  – an improvement in CHS' ability to manage acute demand and the flow of patients

  – a reduced level of intensive investigations prior to decision-making

  – reduced number of patient outliers on inpatient wards

  – a reduction in readmissions due to improved coordination and early activation of community care for those patients discharged home

- Reduction in ED LOS and LOS for this subset of admitted patients.
- Reduction in Relative Stay Index
- Reduction in variability of practice

Staff benefits include:

- Involvement in improvements to clinical outcomes and coordinated patient centred care.
- Working in a new model of care and establishing ways of practice
- Opportunities to upskill
- Working in a successful harmonious team environment
- Knowledge sharing

5.4. Implementation of the future model

There will be a phased approach to the implementation of the AMU.

Phase 1, the mini-AMU is planned to commence on 6 December 2021. At the commencement of phase 1 the following initiatives are planned for implementation.

1. Care pathways for common medical presentations e.g., cellulitis, urosepsis, COPD, hyponatremia etc
2. Discharge planning teams – incorporation of the Chronic Care Program staff into the General Medicine team

Phase 2 is planned to commence at the start of February 2022.

5.5. Related change processes

The Emergency Department is currently undertaking a review of their service focusing on the development of their operating model. This work will define the work of the ED, and therefore the work that the ED currently undertakes but will no longer undertake. One area that is highlighted for review is the extensive diagnostic workup for patients that are very likely to be admitted. This work-up will be shifted to the inpatient area that the patient is admitted to. In the case of the AMU, the model dictates that the AMU patients will have priority access to diagnostics (just like ED and ICU).

5.6. Implications for not undertaking the change

If the commencement of the AMU is not implemented, the following will continue:

- delays to treatment
- increased length of stay in the ED
- increased length of stay on the ward
- limitations to being able to provide patient centred, coordinated care.

6. Consultation methodology

This proposal provides more detail in relation to the Acute Medical Unit (AMU). There are still details that need to be determined and your feedback, suggestions and questions will assist in further refining the AMU.

Feedback can be provided via email to CHSDOM@act.gov.au.

7. References

Document	Author
Canberra Health Services Strategic Plan	CEO, Canberra Health Services