



Part B - Health Facility Briefing and Planning

330 - MEDICAL ASSESSMENT UNIT (ADDENDUM TO 340 **INPATIENT ACCOMMODATION UNIT)**

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INTRODUCTION

Preamble

330.1.00 PURPOSE OF GUIDELINE

This is a new Health Planning Unit (HPU) addendum to the Inpatient Accommodation HPU guideline (IPU 340) written for Australasian use in 2011. Its development has been informed by an extensive consultation process. This Health Planning Unit (HPU) has been developed for use by project staff (architects, planners, engineers, project managers and other consultants) and for end users, to facilitate the process of planning and design.

Introduction

330.2.00 GENERAL

This Addendum outlines the specific requirements for the planning and design of a Medical Assessment Unit (MAU). Similar requirements would apply for a Surgical Assessment HPU.

Description of Unit

330.3.00 DESCRIPTION OF HEALTH PLANNING UNIT (HPU)

MAUs are designated units, specifically staffed and equipped to receive medical patients for assessment, care and treatment for a designated period prior to transfer to inpatient wards or discharged home (IMSANZ, 2006).

The designated period varies according to the operational policy of the facility but is generally 24 to 48 hours.

330.3.05 A number of names for this type of unit have been used across jurisdictions in Australia and New Zealand. These include:

- acute assessment unit (AAU);
- acute medical and planning assessment unit (AMAPU);
- acute medical ward (AMW) or unit(AMU);
- admission planning unit (APU);
- emergency extended care unit (EECU);
- medical assessment and coordination unit (MACU);
- medical assessment planning unit (MAPU); and
- rapid assessment and planning unit (RAPU).

Other names used elsewhere in the world include:

- acute admissions unit;
- clinical decision unit;
- multi-speciality assessment area;
- medical receiving unit; and
- emergency receiving unit.





330.3.10 These units differ from emergency department (ED) short stay observation units (SOU) and emergency medical units (EMU), as they are supervised by ED staff and involve patients whose length of stay is expected to be less than 24 hours. (IMSANZ, 2006).

330.3.15 OBJECTIVES

The objectives of a MAU are to:

- streamline the process of admission for non-critically ill medical patients with complex problems, including patients who have medical illnesses but present with conditions where it is diagnosis is unclear;
- expedite rapid and comprehensive multidisciplinary assessment of acute medical patients;
- facilitate early consultant and/or senior medical registrar review (including that performed by subspecialty services);
- improve access to laboratory, radiology and other clinical investigative services;
- improve access to aged care assessment, community health nurse review and other clinical management resources;
- improve links with general practitioner and community service providers;
- enhance capacity of emergency departments (ED) by the early identification of non-critically ill undifferentiated medical patients (and the assessment, admission and supported discharge processes involved in managing these patients) to MAU:
- maximise optimal bed management by creating alternative care pathways which obviate need for hospitalisation such as hospital in the home, respite care or nursing home services etc;
- reduces the need for outlier patients located in wards separate from home wards, and eliminate inefficiencies from misdistribution of admitted patients;
- standardise care on the basis of agreed care protocols, procedures and guidelines; and
- facilitate clinical and health services research into care of acutely ill patients.

330.3.20 BENEFITS

If these objectives are achieved, the flow-on benefits include:

- for patients:
 - more appropriate and timely care,
 - more rapid assessment,
 - earlier diagnosis and treatment;
 - a reduction in unnecessary admissions and investigations; and
 - a reduced length of stay;
- for staff:
 - a more organised work environment;
 - a significant increase in medical and nursing morale;
 - more effective discharge planning;
 - improved access to investigation and information technology;
 - greater interdisciplinary interaction;
 - increased exposure of junior medical staff to training opportunities in acute medicine; and
 - more suitable shift systems for better rostering;





- for the hospital:
 - significant reduction in admission delay with streamlined admission processes;
 - reduced access block to inpatient beds with flow-on benefits to ED efficiency;
 - improved bed management with buffer bed capacity for acute medical patients at times of excess caseloads;
 - improved risk management as a result of standardised management protocols and clinical handover involving ED staff and medical staff;
 - more effective use of resources with considerable saving in inpatient bed days; and
 - greater retention of staff with enhanced team spirit (IMSANZ 2006).

330.3.25 PATIENT CHARACTERISTICS

The unit deals with admissions only – principally from the emergency department or ED triage, but also by direct referral from primary care providers, ambulatory care clinics and specialist rooms. Generally patients should be assessed as triage category 3 to 5. Other patients may be admitted if it is thought they may be discharged home within, or close to 48 hours after presentation, or if they would benefit from comprehensive medical assessment in the first 24 hours of an anticipated admission to an inpatient unit.

Patients not eligible for admission include those who, as a result of clinical indication or ED admitting policy may be admitted directly to a critical care or another specific inpatient unit, or are likely to require an inpatient stay of more than 36 hours.

Patients managed within the MAU need a further period of intensive assessment or investigation and observation, but not necessarily admission to an inpatient unit or highly specialised area. The ranges of conditions include those that:

- require repeated diagnostic assessment (laboratory, radiology and other clinical investigative services);
- treatments not routinely provided in an ED;
- patients with complex or undifferentiated conditions who may require lengthy evaluation, serial review or investigation, or where the need for intervention is unclear:
- rapid and comprehensive multidisciplinary assessment (for example, acute medical patients, chronic disease management, aged care, community health and other clinical management resources);
- prolonged observation for conditions expected to resolve within 12 to 24 hours;
- those likely to respond to a brief course of therapy, which then can be modified so that treatment can be continued at home or another community setting; and
- those needing early specialist review by a consultant and/or senior medical registrar, including that performed by subspecialty services.





PLANNING

Operational Models

330.4.00 MODELS OF CARE:

MAUs have been developed as part of a strategy to address demand pressures and improve access to EDs. The model of care for a MAU should also be based on a clear description of:

- patient criteria;
- admission and discharge processes;
- procedures for the management of clinical conditions;
- skill and resourcing requirements to ensure quality care for patients, including support required from inpatient specialties and diagnostics, and from social services and community health services; and
- specific criteria and time limits for referrals, review and departures.

They should avoid:

- the potential to increase 'intra-hospital transfers' that can increase length of stay, duplication, and reduce continuity of care; and
- inappropriate admissions due to bed pressures elsewhere in a health service.

Operational Policies

330.5.00 ADMISSIONS AND DISCHARGE

Admissions policies will be determined by the level of service offered by the facility as well as the availability of support services. Policies should be developed which detail the admission and discharge criteria of patients, and aim to manage patient flow and minimise access and exit block. These should be consistently applied, focusing on the designated patient conditions and limiting the period for observation and treatment. There should also be protocols for retrieving patients, and for transferring patients to other specialised units for more comprehensive patient care when necessary.

Typically, MAUs aim to discharge patients, either home or to other wards, no later than 48 hours after admission.

330.5.05 CLINICAL MANAGEMENT

Management responsibility generally lies with general or specialist inpatient units and focuses on multidisciplinary early assessment and decision making, and on proactive planning and intervention. These units concentrate on patient assessment and planning activities that streamline care processes, reduce the risk of prolonged hospital stay or readmission, and facilitate early discharge.

330.5.10 STAFFING

A MAU is characterised by frequent clinical and/or specialist reviews to deliver care and ascertain readiness for departure. Staffing levels should reflect the intensive nature of service delivery. In particular, there should be sufficient numbers of experienced staff with skills in rapid assessment and decision-making to determine a patient's need for admission or discharge. The presence of senior clinicians is important to support rapid decision making, accountability for unit processes, and regular review of patients. Regular (at least once daily) consultant or senior medical





staff led ward rounds should be carried out (Department of Human Services 2009).

A MAU should be staffed as follows:

- the unit should be under the overall direction of a designated Medical Director;
- dedicated medical MAU staff forming a medical acute assessment team (MAAT);
- a multi-skilled, highly qualified nursing workforce to support the clinical management of these patients;
- dedicated allied health staff which may include occupational therapists;
 physiotherapists; social workers and access to a pharmacist, speech pathologist,
 dietetics services and other allied health staff as required; and
- clerical and support staff.

Planning Models

330.6.00 LOCATION

The MAU should be located within a distinct area to maintain focus on intensive planning and intervention, and beds quarantined for unit patients only.

330.6.05 CONFIGURATION / LAYOUT

The size and configuration of a MAU is dependent upon local policies, guidelines and conditions.

Generally, facilities should be aligned with an inpatient unit, rather than an extension of the ED, as patients may be in MAU for two days. There should be processes to refer and admit from the ED as required. The level of complexity of the unit requires high nursing care, and function as a close observation unit. All beds should be capable of some degree of flexible monitoring capacity. At risk or unstable patients should be managed in a high dependency (HDU) or intensive care unit (ICU), and not MAU.

330.6.10 BEDROOM MIX

Determination of the ideal mix of single bed rooms and multi-bed bays is considered to be outside the scope of this guideline, and may be decided by individual jurisdictions on a project by project basis.

330.6.15 CLINICAL SUPPORT

The MAU should have access to an appropriately stocked pharmacy; access to consulting rooms for ambulatory assessment and to support acute follow up clinics; and a procedures room.

330.6.20 EQUIPMENT REQUIREMENTS

Specialised equipment may be required, including cardiac monitoring, as should access to stress testing; occupational therapy and physiotherapy equipment.

Functional Relationships

330.7.00 EXTERNAL

A MAU should be closely related to the ED. Local policies will determine which clinical service will manage the Unit.

The MAU should have same day access to diagnostic services. These may include:

medical imaging;





- pathology;
- endoscopy;
- stress testing;
- cardiology;
- nuclear medicine; and
- neurophysiology.





REFERENCES

References and Further Reading

330.8.00 SERVICE PLANNING

- Booz Allen Hamilton, Key Drivers of Demand in the Emergency Department, NSW Health 2007;
- Capital and Coast District Health Board (NZ), Medical Redesign Medical Assessment and Planning Unit, Capital and Coast District Health Board, 2008;
- Melbourne Health, Models of Care to Optimise Acute Length of Stay: SOU,
 MAPU, EMU, Clinical Epidemiology & Health Service Evaluation Unit, 2004;
- Melbourne Health, Short Stay and Observation Units in Victorian Hospitals,
 Clinical Epidemiology & Health Service Evaluation Unit, 2001;
- NSW Health, Clinical Services Redesign Program, Surgical Acute Rapid Assessment Unit (SARA), NSW Health Department, 2008;
- NSW Health, Clinical Services Redesign Program, Models of Emergency Care, NSW Health Department, 2006;
- SA Department of Human Services, Emergency and Trauma Services Implementation Plan 2001-2011, Department of Human Services 2000; and
- WA Department of Health, Analysis Of Demand And Utilisation Of Metropolitan Emergency Departments In Western Australia, WA Department of Health June 2006.

330.8.05 DESIGN AND TECHNICAL GUIDELINES

- American College of Emergency Physicians, Management of observation units, Annals of Emergency Medicine, June 1995;25:823-830;
- Internal Medicine Society of Australia and New Zealand, Standards for Medical Assessment and Planning Units in Public and Private Hospitals, ISMANZ, 2006;
- NSW Health, Clinical Services Redesign Program, New Models of Emergency Care: Reference Guide Short Stay Units, NSW Health Department, 2006;
- Victorian Government Department of Human Services, Observation Medicine Guidelines, Department of Human Services, 2009; and
- Victorian Government Department of Human Services, Observation medicine self-assessment tool, Department of Human Services, 2009.

330.8.10 GENERAL REFERENCE

- NSW Medical Assessment Unit (MAU) Operational Guidelines, NSW Health;
- NSW Key Performance Indicators, Medical Assessment Unit (MAU);
- Health Performance Improvement Branch & Demand & Performance Evaluation Branch, NSW, May 2009;
- ACT Health, Medical Assessment And Planning Unit (MAPU) Referral Flowchart, ACT Health, 2008;
- Browne G J, A short stay or 23-hour ward in a general and academic children's hospital: Are they effective?, Pediatric Emergency Care 2000, Vol 16 no 4;
- Cooke MW, Higgins J, Kidd P, Use of emergency observation and assessment wards: a systematic literature review, Emergency Medicine Journal, 2003;20:138-142; and
- Devine G, MAPU at RMH An integrated model of care for general medical patients, presentation Royal Melbourne Hospital 2009.
- Goodacre S W, Role of the short stay observation ward in accident and





- emergency departments in the United Kingdom, Journal of Accident and Emergency Medicine 1998;15:26-30.
- Henley J, Medical Assessment Units An Overview, Presentation 2009
- John Hunter Hospital, Medical Assessment and Coordination Unit (MACU) Fact Sheet, Hunter New England Health, 2008
- The Prince Charles Hospital Queensland, Early Assessment Medical Unit (EMU) Information for patients and relatives and Information for General Practitioners, brochures, The Prince Charles Hospital.
- Russell D, Medical Assessment Units: Improving Care & Flow for Medical Patients, Presentation Royal Melbourne Hospital 2009.
- Scott I, Vaughan L, Bell D, Effectiveness of acute medical units in hospitals: a systematic review, International Journal for Quality in Health Care 2009; Volume 21, Number 6.