

Medical Assessment and Planning Units Health Service and Clinical Innovation Division

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Applicable To:

All Queensland Health employees and all organisations and individuals acting as its agents

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1. Purpose

This Guideline provides recommendations regarding best practice for Medical Assessment and Planning Units¹.

2. Scope

This Guideline provides information for all Queensland Health employees (permanent, temporary and casual) and all organisations and individuals acting as its agents (including Visiting Medical Officers and other partners, contractors, consultants and volunteers).

3. Related documents

Policy and Standard/s:

- Internal Medicine Society of Australia and New Zealand - Standards for Medical Assessment and Planning Units in Public and Private Hospitals

Procedures, Guidelines, Protocols

- Statewide General Medicine Clinical Network - Medical Assessment and Planning Units Reference Paper 2011-12
- Optional Variants - Medical Assessment and Planning Units, Statewide General Medicine Clinical Network
- Suggested Key Performance Indicators - Medical Assessment and Planning Units, Statewide General Medicine Clinical Network
- Queensland Health Patient Flow Strategy 2010 Summary

¹Medical Assessment and Planning Units include MAPUs, MAP Units, AMUs, EMUs, AAUs, AMAP Units, EAMUs, MACUs, RAMUs, APUs



- Clinical Services Capability Framework for Public and Licensed Private Health Facilities

4. Guideline for Medical Assessment and Planning Units (MAP Units)

4.1 Core Principles

- *Targeting of acute medical patients*
 - Complex patients, who are often older, have multiple co-morbidities, functional decline, cognitive impairment and/or psychosocial issues and who benefit from early senior clinician input, multidisciplinary assessment and management.
 - Patients with severe illness who benefit from early senior clinician input.
 - Patients with single issue problems where assessment, early senior clinician input, management and discharge can be expedited.
- *Timely and safe access to inpatient care*
 - All MAP Units should provide a seven (7) day a week, 24 hour service.
 - MAP Units should provide time-limited inpatient care (generally 24-72 hours).
 - MAP Units should have bed capacity equal to at least 80% of the average daily medical admission, multiplied by a factor equal to the number of days patients are allowed to stay in the MAP Unit.
 - Early identification of patients in the Emergency Department (ED) should occur, with processes in place to facilitate transfer of patients to the MAP Unit.
 - MAP Units should be co-located with or within close proximity to the ED.
 - Close working arrangements with ED and other specialty teams should be developed to ensure patients are streamed efficiently and appropriately.
 - A close working relationship with hospitalisation substitution services such as 'Hospital in the Home' should be developed given the important role these services play in decanting patients from a MAP Unit.
 - Changes to treating medical teams during a patient's stay should be minimised and avoided if possible, and there should be highly effective handovers between teams and team members where this is required.
- *Care provided by a multidisciplinary team*
 - The medical team should be led by a consultant physician with generalist and acute medicine competencies and skills.
 - The nursing team should include nurses skilled in acute care medicine and patient centred models of care.
 - The Allied Health team should be skilled in generalist and/or acute medicine skills and should include health professionals in physiotherapy, occupational therapy, social work, speech pathology, dietetics and pharmacy.
 - There should be access to podiatry, psychology, alcohol and drug, and appropriate psychiatry services as well as close links with other specialty services in the hospital. These patients should be prioritised by the respective service.
- *Early comprehensive assessment and establishment of a management plan*
 - Patients should undergo early comprehensive multidisciplinary assessment addressing medical, functional, cognitive, and psychosocial issues where appropriate.



- Patients should be reviewed by, or have their case discussed with, a consultant physician within 12 hours of admission to a MAP Unit.
- Assessment should be followed by the prompt establishment of a management plan.
- Access to diagnostics for MAP Unit patients should be prioritised.
- Access to subspecialty medical and surgical consultations should be prioritised.
- Processes should be in place to facilitate communication between members of the multidisciplinary team.
- *Early and effective discharge planning*
 - There should be early identification of a comprehensive discharge plan including an expected date of discharge.
 - Patients identified as requiring an admission longer than the MAP Unit timeframe should be transferred with comprehensive handover to an inpatient unit once their initial assessment and establishment of the management plan has been completed.
 - Admission and discharge information should be provided and communicated promptly to the patient, carers, families, general practitioners and other community health providers, including sub acute facilities, as appropriate.
 - Patients should be discharged from the MAP Unit as soon as it is safe and logistically feasible to do so.
 - Links with Medicare Locals and community services should be established to facilitate discharge, and processes should be in place to achieve this.
 - For appropriate patients, clearly defined protocols for transfer to inpatient units including other specialty services in the hospital should be established.
 - All MAP Units should implement standardised evidence based care pathways and protocols where possible and appropriate to optimise care across the continuum.
- *Governance*
 - MAP Units should be governed by a designated consultant physician or nominated Clinical Director of MAP Unit in association with a designated nursing director/manager and senior allied health clinicians.
 - The designated consultant physician or nominated Clinical Director of MAP Unit, in association with a designated nursing director/manager and senior allied health clinicians, should have single point accountability and clearly articulated duties.
 - MAP Units should be supported by a leadership team comprising medical, senior nursing and senior allied health clinicians.

4.2 Executive Support

- 4.2.1 Departments of Medicine and/or Divisions of Medicine and Medical Services in liaison with Executive Management should actively explore the establishment of a designated MAP Unit in their facility. Where daily overnight admissions to the hospital exceed eight (8) patients, then it is possible that there will be value in establishing a MAP Unit.
- 4.2.2 Executive Management has a responsibility to ensure the provision of a specifically designated and resourced location within the facility for the purpose of a MAP Unit.



- 4.2.3 Executive Management have a responsibility to provide adequate and dedicated resources to a MAP Unit to ensure that the medical assessment and management of patients reliably occurs within time guidelines, without adversely affecting the care of patients within standard inpatient wards. This includes the provision of adequate numbers of senior medical, nursing and allied health staff, administrative support and patient support officers.
- 4.2.4 Departments of Medicine and/or Divisions of Medicine at hospitals providing a MAP Unit have a responsibility to ensure the availability of a group of physicians willing to take part in an acute admitting roster.

4.3 Service Organisation

It is highly recommended that MAP Units:

- 4.3.1 Be under the care and jurisdiction of General Medicine / Internal Medicine Departments.
- 4.3.2 Be governed by a designated consultant physician or a nominated Clinical Director of MAP Unit with generalist and acute medicine competencies and skills that cover the broad scope of acute internal medicine and longitudinal medical care; who has single point accountability and clearly articulated duties.
- 4.3.3 Be supported by a leadership team comprising medical, senior nursing and senior allied health clinicians.
- 4.3.4 Be co-located with, or located within close proximity to, the Emergency Department (ED) to maximise the interdependent functional relationship between these services.
- 4.3.5 Be located within close proximity, and have prioritised access, to diagnostic services (pathology, radiology, subspecialty diagnostic services and procedures eg endoscopy, cardiac investigations), pharmacy services, and where possible procedural areas.
- 4.3.6 Establish clear robust links and communication protocols with other key departments and specialty services (e.g. cardiology, gastroenterology, gerontology / aged care); alternative admission programs and hospitalisation substitution services; community and support services; so that patients in a MAP Unit are given a high priority to be assessed by these services.
- 4.3.7 Work closely with Medicare Locals and General Practitioners to optimise information exchange and to establish policy, guidelines and protocols.
- 4.3.8 Maintain continuity of care (as much as possible) in the form of a single general physician team for the entire hospital stay, but where that is not possible, comprehensive handovers should be provided.
- 4.3.9 Ensure efficient, effective and comprehensive clinical handovers at change of shift, at transfer from MAP Unit to other wards, and at discharge to the community.
- 4.3.10 Have dedicated infrastructure: equipment (oximeters, ECG machines, bedside spirometry, etc), procedural and meeting rooms, electronic journey boards, clinical workstations, reception areas and access to discharge/transit lounges.



4.3.11 Host or have priority access to stress testing facilities.

4.3.12 Facilitate teaching and research in the care of acutely ill medical patients.

4.4 Access to MAP Units

4.4.1 All MAP Units should have documented admission, decant and discharge criteria and processes.

4.4.2 Individual facilities can develop local admission and/or exclusion criteria for the MAP Unit that align with their model of care and recommendations in the MAP Unit Guideline.

4.4.3 Patients admitted to the MAP Unit will be those requiring admission of up to 24 or 72 hours (depending on the MAP Unit model) for rapid and comprehensive multidisciplinary assessment and care planning.

4.4.4 Patients likely to exceed the 48 or 72 hour admission time frame should be transferred to either General Medicine or the appropriate Subspecialty Service after a comprehensive multidisciplinary management plan has been put in place.

4.4.5 Those patients who require urgent specialty care (e.g. intensive care, coronary care, renal unit, stroke unit, oncology unit, mental health) should be transferred to the relevant unit or facility as soon as practically possible and, where appropriate, after consultant physician review.

4.4.6 Patients with acute confusion or high risk of delirium should be considered for early transfer to likely home ward as soon as possible after consultant physician review.

4.4.7 The designated consultant physician leader or nominated Clinical Director of the MAP Unit and the ED Director shall share responsibility for establishing close links between the clinical services.

4.4.8 It is recommended that the MAP Unit team consider negotiating an arrangement to review potential medical inpatients in the ED, to facilitate rapid identification and transfer of MAP Unit eligible patients.

4.4.9 Patients identified as potential general medicine inpatients who meet the criteria for admission to MAP Unit, should be admitted from the ED as soon as possible and safe to do so.

4.4.10 It is highly recommended that the designated consultant physician leader / Clinical Director of MAP Unit or Medical Registrar on take for new admissions, and senior nurse on duty, approve all admissions to the MAP Unit.

4.4.11 MAP Units should have bed capacity equal to at least 80% of the average daily medical admission, multiplied by a factor equal to the number of days patients are allowed to stay in the MAP Unit

4.4.12 MAP Unit patients should not be patients admitted as a result of overloading of other units (overflow from ED or diagnostic units; e.g. day surgery, day procedures units, patients outlied from other services). MAP Units should not accept elective admissions or transferred inpatients for any reason.



4.5 Admission to MAP Units

It is highly recommended that all patients admitted to a MAP Unit:

- 4.5.1 Be reviewed by or have their case discussed with a consultant physician within 12 hours of admission. It is recommended that rapid access from triage models of care be in place.
- 4.5.2 Be reviewed by a senior nursing staff on admission.
- 4.5.3 Be reviewed by appropriate allied health staff within 24 hours of admission for assessment and referral to appropriate services.
- 4.5.4 Be reviewed by a pharmacist and have medication reconciliation completed within 24 hours of admission.
- 4.5.5 Have a comprehensive multidisciplinary risk assessment performed within 24 hours of admission.
- 4.5.6 Where appropriate, have an Acute Resuscitation Plan documented.
- 4.5.7 Have a full multidisciplinary evaluation and discharge plan developed within 24 hours, irrespective of the day of admission.
- 4.5.8 Be reviewed daily by the medical team with consultant review or oversight and as often as clinically indicated.

MAP Units should:

- 4.5.9 Implement standardised evidence based care protocols where possible and appropriate.
- 4.5.10 Establish protocols that guarantee transmission of clinical information on admission and discharge between primary care practitioners and hospital staff, including management plans of frequent attenders and patients with chronic disease, aimed at minimising risk of future hospitalisation.
- 4.5.11 Implement daily (seven (7) day a week) multidisciplinary team meetings, inclusive of the consultant and medical staff on duty, the Nurse Unit Manager/senior nurse and allied health staff to facilitate multidisciplinary care planning and management.
- 4.5.12 Where such a position exists, have the designated Clinical Director of a MAP Unit attend as many multidisciplinary team meetings as possible to assist in ensuring consistencies in the model of care and patient flow.
- 4.5.13 Establish an Expected Date of Discharge at the daily multidisciplinary meeting and within 24 hours of admission.

4.6 Urgent Transfer of Critically Ill Patients

Any patient that deteriorates and requires acute emergency intervention while admitted to the MAP Unit should be transferred to the most clinically appropriate area of for ongoing treatment. It is highly recommended that there be clear protocols in place with appropriate critical care units for the transfer of patients requiring escalation of care.

4.7 Discharge from MAP Units

- 4.7.1 It is highly recommended that all patients discharged from the MAP Unit to the community have an electronic discharge summary, medication reconciliation, and community support services organised as appropriate. In cases where early review by a general practitioner (GP) is anticipated and further changes to management may be required and are of a complex nature, direct contact with that GP is preferred.
- 4.7.2 If the patient is to be transferred to a subspecialty service, then comprehensive handover to inpatient teams should be undertaken.
- 4.7.3 Comprehensive handover should be provided to any service which constitutes an alternative to admission – i.e. Hospital in the Home/Hospital in the Nursing Home.
- 4.7.4 It is highly recommended that patients who could be discharged home but warrant early hospital outpatient review for investigations / procedures or subspecialty opinion be identified and placed on a high priority waiting list. Where appropriate an Advanced Health Directive should be advised to be performed in consultation with usual health carers/GP.
- 4.7.5 It is recommended that hospitals establish rapid access clinics (“Hot Clinics or Hot Spots”) for those services which attract the majority of referrals from a MAP Unit. These patients should also have priority access to day treatment units.
- 4.7.6 It is recommended that patients who could be discharged but require frequent review be seen at daily rapid access clinics run by MAP Unit staff or General Medicine.
- 4.7.7 An individualised management plan should be developed for patients who frequently re-attend at an ED and require admission.

4.8 Measurement and Monitoring

It is highly recommended that all MAP Units collect data on a common set of key clinical indicators on an ongoing basis and/or by spot audit to measure performance and benchmark with other services.

4.9 Administration

- 4.9.1 All patients admitted to a MAP Unit should be admitted as an inpatient on the Hospital Based Clinical Information System (HBCIS).
- 4.9.2 It is highly recommended that Health care facilities providing a dedicated medical assessment and planning service use ‘MAP Unit’ as the standardised naming convention in HBCIS and in all correspondence beyond the respective facility.

This includes those Units using the following and similar terminologies: Medical Assessment and Planning Unit (MAP Unit), Acute Medical Unit (AMU), Acute Assessment Unit (AAU), Acute Medical Assessment and Planning Units (AMAP Unit), Early Assessment Medical Unit (EMU), Emergency Assessment Medical Unit (EAMU), Medical Assessment and Co-ordination Unit (MACU), Rapid Assessment Medical Unit (RAMU) and Admission and Planning Unit (APU).



- 4.9.3 It is recommended that MAP Unit occupancy rates be maintained below 85% and average length of stay shall be less than 72 hours.
- 4.9.4 No one set of staffing guidelines or benchmarks exist for MAP Units. However, Allied Health clinicians are referred to the following document for guidance: <http://qheps.health.qld.gov.au/ahwac/docs/Reports/staffing-general-med.pdf>

5. Definition of Terms

Definitions of key terms are provided below.

Term	Definition / Explanation / Details	Source
Acute	Having a short and relatively severe course	Australian Institute of Health and Welfare
Alternative to admission	An identified safe option to admitting an acute patient to a general medical unit: eg-Hospital in the Home, Chronic Disease or Rehabilitation Programs, fast track clinics	MAP Unit Working Group
Consultant Leader / Medical Director	The formally appointed clinical director of a MAPU who is responsible for overseeing, directing and implementing all operations of the unit	MAP Unit Working Group
Episode of care	The period of admitted patient care between a formal or statistical admission and a formal or statistical separation, characterised by only one care type	Australian Institute of Health and Welfare
General Medicine	The branch of medicine that deals with the diagnosis and (nonsurgical) treatment of diseases of the internal organs (especially in adults). Used interchangeably with Internal Medicine.	Free dictionary
General physicians	General physicians are specialty physicians with expertise in the diagnosis and management of complex, chronic and multisystem disorders in adult patients. They undertake a comprehensive assessment of a patient's problems and needs, both biomedical and psychosocial, and provide and co-ordinate patient care with the assistance of multidisciplinary teams to optimise health outcomes.	Royal Australian College of Physicians
Inpatient	A patient who undergoes a hospital's formal admission process to receive treatment and/or care. This treatment and/or care is provided over a period of time and can occur in hospital and/or in the person's home (for hospital-in-the-home patients).	Australian Institute of Health and Welfare
Internal Medicine	The branch of medicine concerned with the study of the physiology and pathology of the internal organs and with the medical diagnosis and treatment of diseases and disorders of these organs. The term "Internal Medicine" comes from Germany, 1800s and was adopted by the USA in early 20th century. Used interchangeably with general medicine.	Royal Australian College of Physicians
Length of Stay (LOS)	The period of admitted patient care between a formal or statistical admission and a formal or statistical separation, characterised by only one care type	Australian Institute of Health and Welfare
Medical Assessment and Planning Unit (MAP Unit)	A specifically designated, resourced and separately staffed unit, within or in close proximity to the	Queensland Health Patient Flow Unit & MAP Unit Working

	Emergency Department that provides rapid physician assessment, early referral and intervention from allied health services, priority investigations, and a multidisciplinary approach to discharge planning. The unit accepts patients presenting with an acute medical illness from ED.	Group (WG)
Multidisciplinary	Many disciplines - including medicine, nursing, physiotherapy, speech therapy, occupational therapy, dietetics, social work, psychology, podiatry etc	MAP Unit Working Group
On take	A period within which a discrete medical unit or team is responsible for admitting patients from the Emergency Department	MAP Unit Working Group
Performance indicator	A statistic or other unit of information that reflects, directly or indirectly, the extent to which an expected outcome is achieved or the quality of processes leading to that outcome.	Australian Institute of Health and Welfare
Separation	Separation is the process by which an admitted patient completes an episode of care, for example leaving the hospital by being discharged, by dying, by being transferred to another hospital for further care, or by beginning a new episode of care which results in a significant change in status (Australian Institute of Health and Welfare 1996a). Generally, a separation is synonymous with discharge (National Health Ministers 1996).	Australian Institute of Health and Welfare
Unplanned readmission	A patient discharged home from the MAPU who subsequently represents within 7 days seeking treatment for the same presenting condition	MAP Unit Working Group

6. References and Suggested Reading

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7. Consultation (optional)

Key stakeholders (position and business area) who reviewed this version are:

- Medical Assessment and Planning Unit Working Group (Statewide General Medicine Clinical Network and Statewide Emergency Department Network)
- Statewide General Medicine Clinical Network
- Statewide Emergency Department Network
- Chief Executive Officers, Hospital and Health Services
- Executive Director, Clinical Access and Redesign Unit

8. Guideline Revision and Approval History

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V1.0			A/Deputy Director General, Health Service and Clinical Innovation Division

