MEDICAL ASSESSMENT UNIT.
The Maitland Hospital

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Hunter New England Health
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DRAFT
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THE MAITLAND HOSPITAL
MEDICAL ASSESSMENT UNIT
BUSINESS RULES

The Need for Change:

A current review of the admission environment in NSW tells us that:

- Hospital admissions are the highest volumes ever recorded putting a continual strain on our health system
- The largest and fastest growing patient groups are challenging to diagnose and treat
- Half of the hospital beds are occupied by people over 65yrs
- Presentations of people over 75 are increasing to over 20% per annum
- Average LOS in NSW is 4 days. For people over 75 it is 9 days
- 77% of Australians over 65 have at least 1 chronic disease
- These patients are often not categorised as critical in ED and so wait for diagnosis and treatment
- These patients typically congest the ED because of extensive assessment before diagnosis

Fact:
In the 16 Hospitals setting up Medical Assessment Units the average person over 75 categorised as a triage 3, 4 or 5 waits 87 minutes in the ED to be seen by a doctor.
Overview

The complex medical patient presenting to the emergency department tends to have co-morbidities with deterioration in one or more of their principal health problems. Junior or new staff often does not know these patients and will undertake intensive investigations to determine the patient’s principal diagnosis and referral to appropriate specialist physician team.

Patients are delayed in emergency awaiting physician review. This delay results in:

- Blockages in emergency
- Delays due to available ward beds
- Longer hospital length of stay
- Increased risk of experiencing adverse events due to longer hospital stay

The establishment of an alternative pathway for this group of patients through a Medical Assessment Unit will provide timely access to senior Physicians and a multidisciplinary team for assessment treatment and decision-making. This decreasing pressure and wait times in emergency.

There is a growth rate in Maitland emergency presentations of approximately 10% and this coupled with an ageing population results in long delays. These aged patients have a length of stay double the state average.

A radical change is needed - otherwise adverse events in ED will escalate.

What is MAU?

The Medical Assessment Unit (MAU) is an 8-bed unit that will provide an efficient admission process for unplanned medical patients. Providing patient; assessment, care, treatment and referral. The designated period will be 48hrs prior to transfer to a medical ward or home with appropriate referrals.

The MAU will provide comprehensive, multidisciplinary patient centered care by dedicated teams of hospital and community based staff.
The MAU will provide specialist physician assessment, review and evaluation of the patient at the beginning of the hospital care pathway with better coordination to discharge.

There are a number of patients who would have traditionally been admitted for greater than 5 days who will now be fully worked up and sent home safely within 48 hrs.

**What isn’t MAU?**

The MAU is not:

An Emergency department Short Stay Unit  
An admission ward  
Surge beds  
A queue for an inpatient bed

The MAU will provide the opportunity to break down traditional working patterns and boundaries and improve processes of care.

**What will MAU do for us?**

Experience from the UK National Health Service and New Zealand show that a reduction in the time patients wait for specialist physician review and multidisciplinary assessment can:

Reduce the length of stay in ED for some patients  
Reduce the level of intensive investigations prior to decision-making.  
Reduce hospital LOS by earlier activation of community based referral system.

Earlier activation of community based care solutions for these patients provides the opportunity for a coordinated approach to services across the acute setting, whether in an in-hospital environment or in the community.
Medical Assessment Unit **Patient Flow** to Admission

Patient presents to Emergency Department and Triage

Medically assessed and stabilised within 2 hours of arrival by ED Medical Officer

Deemed suitable for MAU admission

Yes

MAU Registrar / CNC notified

Admission to MAU after seen by Registrar

No

Medical Registrar on-Call Notified

Allocated MAU Registrar unavailable within time frame

Escalate to Senior Medical Registrar for Resolution
Staffing Roles and Responsibilities

**Medical Director**
The Medical Director will provide direction, clinical leadership and medical services for patients in the MAU. The Medical Director will assist the Senior On-call Physician and Medical Registrar to achieve optimal patient flow through the MAU, including where practicable timely risk stratification of coronary patients.

The Medical Director will provide teaching and supervision of medical staff and will coordinate the quality programme of the MAU. The Medical Director role will be shared during normal hours amongst the available Staff Specialists as per a weekly roster-(5 days.)

**Senior On-Call Physician**
The Senior On-Call Physician will provide a strong leadership presence while in the “on-call” role for MAU on a daily basis. (7 days)

Senior On-Call Physician role:
- Attend ward rounds daily
- Provide medical direction for Medical Registrars/RMOs
- Provide on-going care for patients requiring prolonged stay and ward transfer.
- Achieve optimal patient flow through the unit by timely decisions to discharge or admission to in-patient ward bed.
- Provide teaching and supervision of medical staff.

**The Medical Registrar**
The Medical Registrar will expedite assessment, treatment and discharge for patients within the MAU unit. (7 days)

Medical Registrar Role:
- To carry a specific pager/phone for immediate contact
- To liaise closely with ED staff specialists/ ED medical officer in charge regarding timely MAU admissions.
- To take ownership of patients suitable for MAU in consultation with senior ED clinician on duty, arrange for timely transfer to take place.
- Provide assessment and treatment to MAU patients within 2 hours of admission.
- Provide multidisciplinary team co-ordination of patients care and discharge planning.
- Attend MAU patient flow reviews twice dly 0830hrs and 1530hrs.
Clinical Nurse Consultant
Clinical Nurse Consultant will oversee the assessment and coordination of patient care by maximizing outcomes through the referral to appropriate services.

CNC role:

To carry specific pager/phone for immediate contact
Clinical resource person to the interdisciplinary team
Assessment of pts in ED suitable for MAU
Attend and coordinates patient flow reviews twice daily.
Liaise with patient flow manager of possible transfers, discharges and admissions.

Registered Nurse
The registered nurse (RN) will provide safe, persons-centered effective nursing care for patients with acute medical disorders within the MAU.

RN role:

Instigate treatment and procedures relevant to patient illness.
Attend relevant Allied Health referral forms at time of admission.
Instigate patient care management plan on pt arrival.

Endorsed Enrolled Nurse

The endorsed enrolled nurse (EEN) will provide safe, persons-centered effective nursing care for patients with acute medical disorders within the MAU, under the guidance of the RN and CNC.

EEN role:

Attend relevant Allied Health referral forms at time of admission.
Instigate patient care management plan on pt arrival.

The nursing team will be led by a Clinical Nurse Consultant and be supported by the Medical Nurse Unit Manager.
Allied Health

Allied health staff are key members of the MAU multidisciplinary team, their input will expedite the assessment, treatment, referral and appropriate discharge of patients.

The team will consist of Social workers, Physiotherapists, Occupational therapists, Speech pathologists, Pharmacists and Dieticians interested and experienced in acute medicine will be involved in the MAU.

Referral for Allied Health assessment or intervention will be accepted from nursing, medical and other allied health staff.

Pharmacist

Pharmacy will provide a 5 day dispensing service Monday to Friday from 0800hrs to 1600hrs. Patient scripts for only newly prescribed medications are faxed to pharmacist and ward staff contacted on completion of dispensing.

Outside scripts will be used for patients discharged over the weekend. Medical staff will be responsible for dispensing new medication starter packs to patients when scripts are unable to be dispensed at time of discharge.

Support Staff

Wards persons, Administration Officers, Communications Clerks and catering staff will also need to support the multidisciplinary team of the MAU Unit.
Support Systems.

**Diagnostic Services**

Rapid access to diagnostic services will be in line with Emergency Department protocol. The following will be available:

Same day access to; diagnostics x-ray, ultrasound, CT and pathology services and systems with a priority equal to that of the Emergency Department and Coronary Care Unit.

A process that provides rapid communication of test results to senior decision makers of the MAU.

**Inpatient Wards**

Access to in-patient beds will be the highest priority to ensure patient flow out of the MAU for MAU patients breeching 48hrs

**General Practitioners**

Effective two-way communication process with GPs is vital to ensure that continuity of care is maintained for patients.
Case Management Model.

All patients admitted to MAU will be able to be discharged home or to an inpatient ward within 48 hours. To achieve this, an individual case management plan is required for each patient and should be commenced within 2 hours of arrival.

The plan should be documented and specify the required observations, treatments and interventions and include allied health interventions.

For patients likely to be discharged from MAU, discharge criteria, including nurse initiated discharge criteria should be defined. All patients discharged home from MAU must have a formal medical discharge summary completed.

Implementation of standing orders or guidelines for common conditions will facilitate prompt accurate patient assessment, investigation, diagnosis and treatment. Clear standardized evidence based guidelines will be initiated.

Care management will be facilitated by twice daily multidisciplinary ward rounds conducted 5 days a week at approx 0830hrs and 1530hrs.

The case management plan will be communicated to the patient/carer by the Registrar, CNC, RN, within 4 hours of the patient’s arrival or between 0730 and 1600hrs for carers.

The dedicated multidisciplinary team includes the Medical Director/Staff Specialist, Registrar, Resident, CNC, RN, EN, Allied health and nursing staff.
Medical Assessment Unit Structure

Director of Medical Services - LHC & TMH
General Manager - TMH
Director of Nursing Services - TMH
Divisional Nurse Manager - Medical & Rehab Services

Medical Director
Medical Assessment Unit (MAU)

Senior Specialist On-Call
Medical Assessment Unit (MAU)

Registrars
Medical Assessment Unit (MAU)

Residents
Medical Assessment Unit (MAU)

Nursing Unit Manager
Medical Unit

Clinical Nurse Consultant
Medical Assessment Unit (MAU)

Registered Nurses

Endorsed Enrolled Nurses

Allied Health
Wardspersons

Pharmacy
Administration
Business Process
To expedite assessment, treatment and discharge of patients within the MAU the following will occur

Implementation of standing orders or guidelines will facilitate prompt accurate patient assessment and treatment

An estimated date and time of discharge (EDD) will be applied on admission to enhance care coordination and timely discharge within 48 hours of admission. The following will occur:

Within first 2hrs of patient arrival
Clinical assessments to be completed by nursing and medical staff
Commencement of management plan
Ordering and initiation of diagnostic services

Within the first 4hrs of patient arrival
All assessments completed (including allied health, Monday -Friday 0800hrs-1630hrs and during weekend hours)

Care management plans completed and communicated to patient and family/carers

Estimated date and time of discharge allocated and communicated to multidisciplinary team and patient/family/carers.

Within the first 24hrs of patient arrival
A multidisciplinary team co-ordination of care will be facilitated by the CNC.
Commencement of discharge planning (e.g. discharge letter, pharmacy, equipment, transport)

CNC to review the required community services and initiate assessment referral as required.

Referral to Outpatient clinics to be organized as required.
Confirm and execute all care management plans.

Enable transition out of MAU (discharge home or to appropriate inpatient unit).
MEDICAL ASSESSMENT UNIT PATIENT

SELECTION CRITERIA

Patients suitable for assessment in MAU.

The more complex patient with co-morbidities. These patients can be identified as not being critically ill but needing assessment and treatment.

The following criteria will be applied for patients admitted to the unit or excluded from the unit.

Admission Criteria

Adult medical patients
Haemodynamically stable
Non critical
Expected discharge to be within 48hrs

Exclusion Criteria

Confused patients
Aggressive or disruptive patients
Palliative care.
Require isolation
GCS <12
Require BIPAP or CPAP
Clinically unstable
Those deemed unsuitable by MAU Director or CNC.

Origin of referral
Emergency Department = Staff Specialist in-charge.
Medical Registrar.
ACAT= after consult in ED.
Community Nursing= after consult in ED.
General Practitioner= after consult in ED.
Specialist Referral
**Patient Screening:**

Appropriate patients can be streamed to the MAU following referral by Senior Medical officer in ED. The following selection process may be applied:

**Emergency Department Patients**

Patients triaged categories 2 may be referred to MAU once they are deemed non critical and accepted by the MAU for admission.

Patients triaged categories 3-5 will be referred to the MAU following triage

All clinically unstable patients will be assessed and managed in the ED

Inclusion criteria must be satisfied prior to admission

Patients may be referred by medical staff from within ED after assessment and management has been undertaken

All suitable patients must be discussed with and accepted by the admitting Physician prior to transfer to the MAU

The MAU CNC will be contacted regarding eligible patients for admission after acceptance by the admitting physician.

**Discharge Criteria**

Individual case management plans can be used to ensure patients are discharged home with appropriate services safely or transferred to inpatient ward within 48hrs

Patients will be discharged home or transferred to a ward bed within 48hrs

Patient’s individual case management plans will include: Observations, treatments and interventions required including allied health interventions, nurse initiated discharge criteria, medical team documentation, aged care and other community follow up care.
All patients will be promptly referred to relevant community services; Compacs, GP, PACS, Aged Care Rehab, TACP and Outpatients Clinics as required.

For patients transferred to ward bed within 48hrs the case management plan will include:
Workup required for transfer, ongoing observations, interventions, diagnosis & management decisions, discharge documentation and community referrals.

Patients cannot be discharged without consent of the admitting physician.
Clear documentation to be noted in patients medical record of such discharge instructions.

**Medical Assessment Unit - Bed Management**

The MAU is for non-critical patients who fit the admission criteria. To ensure the 48hr length of stay is adhered to there are business rules that need to be followed:

Adherence to MAU admission criteria and patient screening

Eligible patients must be accepted by Physician, Staff Specialist, Medical Registrar or MAU CNC.

The MAU bed base will be quarantined for MAU eligible patients only. Exceptions will require approval from GM or DON. Criteria for such exceptions may be put in place by GM and DON for use by AHNMs.

Weekly LOS reports to be forwarded to ED.

Access to inpatient beds for MAU patients staying longer than 48hrs

Access to diagnostic services= x-ray, CT, u/s, within reasonable agreed timeframes.

Access to community services= COMPACS, TACP, AGED CARE, PACS.

Access to Ambulatory care clinics

Access to internal and external transport services
Process to monitor demand, performance and escalation.

If a patient is unable to be discharged from MAU within 48 hrs, then arrangements for transfer to inpatient ward must be escalated to the Patient Flow Manager.

50% of Patients need to be discharged from MAU daily to maintain patient flow.

The Patient Flow Manager will be required to assist in the processes to monitor demand and performance to achieve targets.

The Patient Flow Manager in collaboration with the MAU team will monitor breeches in times in order to meet KPIs.

The weekly KPI report will be forwarded to the executive committee and will be used to assist the MAU team in understanding and improving patient care and performance.

MAU Performance Management (KPIs)

LOS in MAU

% out of MAU within 48hours (target 100%)

% discharged from Hospital

% discharged to home from the MAU<48hrs (target 33%)

% MAU patients transferred to inpatient wards

Re-admission rate within 14 days of discharge from MAU

% of admitted MAU target Medical patients with ED LOS <6 hrs (target =98%)

% ED patients with an ED LOS < 6 hrs

% deaths in MAU

% of falls in MAU
## KPI Report Format

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<tr>
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<tr>
<td>Average LOS &lt;48hrs (in Hrs)</td>
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<tr>
<td>% transferred out of MAU within 48 hours (100%)</td>
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<tr>
<td>% discharged to Home from MAU</td>
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<tr>
<td>% discharged to Home from MAU &lt;48hrs</td>
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<td>MAU pts transferred to other ward</td>
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<td>LOS in wards for MAU target Medical Pts (in Hrs)</td>
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<td>LOS in wards for MAU target Medical Pts aged &gt;75 (in Hrs)</td>
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<td>Readmission rate within 28 days of MAU discharge (%)</td>
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<tr>
<td>% of pts admitted MAU target Medical pts with ED LOS &lt;6hrs (98%)</td>
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<td>% ED pts with an ED LOS &lt;6hrs</td>
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