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CX2/2012

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To: -

- AMU/AMAU/MAU Lead Physician / Manager
- Clinical Director
- Hospital CEO/Manager
- HIPE Coding Coordinator
- Specialty Costing Officer
- Financial Controller
- Health Research and Information Division, ESRI
- Information Unit, DoHC

Guidelines on Acute Medical Assessment Units

Dear CEO / Manager / Director/Coordinator:

1. Introduction

In 2006 a circular CX5-2006 was distributed to hospitals participating in the National Casemix Programme (NCP) which outlined, from a Casemix perspective, certain criteria which needed to be met before a medical assessment unit (MAU) could be registered for coding on the Hospital InPatient Enquiry (HIPE) system (see appendix I) . In 2010 a further briefing document entitled, "Inclusion of a medical assessment (MAU) in Casemix", was developed which further defined the criteria to be met for the coding of MAU activity on the HIPE system (see appendix II). The content of this document was developed in conjunction with experts in the field of acute medicine and as such was deemed to be the most appropriate direction at the time the circular was issued.

The advent of the Clinical Programmes as part of the Quality and Clinical Care Directorate (QCCD) led to the implementation of several initiatives designed to examine and improve the way Healthcare is provided in Ireland. As part of this initiative the Acute Medicine Programme (AMP) has worked to develop a framework for the delivery of acute medical services which seeks to substantially improve patient care. Part of the work of this Programme was the development of guidelines and definitions for the set up and operation of Acute Medical Units (AMU), Acute Medical Assessment Units (AMAU) and Medical Assessment Units (MAU).

The purpose of this circular, **jointly distributed by the AMP and the NCP**, is to disseminate the new guidelines relating to AMU/AMAU/MAU from the AMP and to clarify the position in relation the registration of these units for coding on HIPE and costing of the activity taking place in these units for Casemix purposes.

The guidelines as set out in Casemix circular CX5-2006 and the briefing document "Inclusion of a medical assessment (MAU) in Casemix" are superseded by those outlined in this circular.

2. Description of Unit Types (Taken from Report of the National Acute Medicine Programme 2010, http://www.hse.ie/eng/services/Publications/services/Hospitals/AMP.html)

2.1 Description of an acute medical unit (AMU)

An acute medical unit (AMU) is a facility whose primary function is the immediate and early specialist assessment and management of adult patients (i.e. aged 16 and older) with a wide range of medical conditions who present to a model 4 (tertiary) hospital. Its aim is to provide a dedicated location for the rapid assessment, diagnosis and commencement of appropriate treatment and the determination, by a senior medical doctor, of whether an admission is necessary. Patients will be referred directly from primary care and a proportion will be onward referrals from other sources including the emergency department (ED), out-patient department and other care settings, co-ordinated by the case manager. Patients presenting to hospital without GP referral will be seen in the first instance in the ED – not the AMU. Physicians, supported by a multidisciplinary team, will carry out patient assessment and treatment. A decision regarding discharge/admission will be made within 6 hours of patient arrival and will be facilitated by dedicated same day diagnostic imaging, laboratory and other services. In the event of discharge, the relevant GP will be informed (on the same day) of the decision together with all relevant clinical details and care plans.

It is envisaged that AMUs will operate on a 24/7 basis. The AMU should ideally be co-located with the ED. Every AMU should have a designated lead consultant physician, clinical nurse manager and therapy lead.

A short stay unit will be associated with the assessment unit of the AMU. The short stay unit will only admit patients for a short period for acute treatment and/or observation where the estimated length of stay is less than 48 hours. Patients who require admission for longer than 48 hours must move from this unit to a dedicated in-patient ward.

An AMU is not a replacement for a traditional out-patient department (OPD) and should not be available to bypass traditional OPD services or investigations. It is not considered an appropriate location for the assessment of patients with sub-acute presentations or for the management of patients with newly diagnosed chronic diseases. It is not a day ward (i.e. a designated unit for planned and scheduled procedures/investigations/treatments possibly under local, regional or general anaesthesia, over a period of several hours and less than 23 hours). AMUs are not intended to replace EDs in any hospital and it is intended that AMUs will work in parallel with EDs. There will also be close links and interdependencies with critical care, medical specialist care, surgery and other specialties. Care pathways and protocols developed through the Quality and Clinical Care Directorate (QCCD) national clinical programmes will direct the care of appropriate patients in AMUs.

2.2 Description of an acute medical assessment unit (AMAU)

An acute medical assessment unit (AMAU) will operate as an AMU (described above) with the following exceptions:

- It will be located in a model 3 (general) hospital.
- The hours of operation may vary from 12 to 24 hours, 7 days per week, depending on service need.
- It may not have associated short stay medical beds.

An AMAU will see GP referred patients with the entire spectrum of acute medical conditions, some of whom may require urgent medical care. As with AMUs patients presenting to hospital without GP referral will be seen in the first instance in ED – not the AMAU. It will have assessment beds in a defined area, ideally co-located with the ED. Admissions from the AMAU will be to in-patient beds including specialist units (e.g. CCU, ICU, HDU, acute

stroke unit). Patients who require category 3 or 3S ICU support will have guaranteed transfer to a model 4 hospital.

A decision regarding discharge/admission should be made within 6 hours and will be facilitated by dedicated radiology, laboratory and other services, including nursing, therapy professionals and medical social workers. In the event of discharge, the relevant GP will be informed (on the same day) of the decision together with all relevant clinical details and care plans. Every AMAU should have a designated lead consultant physician, clinical nurse manager and therapy lead.

2.3 Description of a Medical Assessment Unit (MAU)

A medical assessment unit (MAU) in a model 2 (local) hospital will manage GP referred, differentiated medical patients who have a low risk of requiring full resuscitation. Only patients referred by a GP will be seen. This unit will have assessment beds in a defined area and serve a clinical decision support function. Admissions will be to in-patient beds in a model 2 hospital. Patients who deteriorate unexpectedly will have guaranteed transfer to a model 3 or model 4 hospital.

GPs will refer low-risk medical patients (i.e. unlikely to require high intensity cardiopulmonary and/or neurological support) for assessment in the MAU during daytime hours. Patients with a significant risk of clinical deterioration should be referred to the associated model 3 or 4 hospital. However, patients should not be transferred if a 'Do Not Resuscitate' order is made and/or if patients make an informed decision to remain in the model 2 hospital.

A decision regarding discharge/admission should be made within 6 hours and will be facilitated by dedicated radiology, laboratory and other services, including nursing, therapy professionals and medical social workers. In the event of discharge, the relevant GP will be informed (on the same day) of the decision together with all relevant clinical details and care plans. Every MAU should have a designated lead consultant physician, who will be jointly appointed to the model 2 and associated model 3 or 4 hospital, a designated clinical nurse manager and assigned therapy resource. MAUs may be operational from 8am to 8pm, 7 days per week.

3. Counting and Coding of AMU/AMAU/MAU Activity

All attendances at AMU/AMAU/MAUs from the 1st June 2012, including those admitted and discharged on the same day, should be entered on to the Patient Administration System as an AMU admission and coded on the HIPE system. This is essential as all admissions to AMU/AMAU/MAUs need to be counted and are the basis of the Acute Medicine Performance Metrics. It is essential that the speciality of the admitting Consultant and the type of admission is captured on the Patient Administration System initially. The AMP use both the Patient Administration System uncoded data and the HIPE coded data to measure performance. It is essential that each hospital upload both sets of data to the ESRI monthly.

Up to now only a number of AMU/AMAU/MAUs were registered, and it was only these units from which data was counted on the HIPE system. In future all attendances at all AMU/AMAU/MAUs, both existing and newly opening, should be counted. The AMP is monitoring the acuity of patients attending AMU/AMAU/MAUs. Following a period of time when each AMU/AMAU/MAUs is considered by the Programme to have bedded in properly and be functioning according to the model of care, the AMP will formally agree that the admissions recorded from that unit on HIPE can be included in the Casemix calculation for that hospital. The decision on how this activity will be treated in the Casemix process will be made by the NCP in consultation with the AMP.

As the current model of operation for AMU/AMAU/MAUs states that "Patients presenting to hospital without GP referral will be seen in the first instance in the ED" there is a possibility for capturing the patient encounter as both an ED attendance and an MAU admission. **In order to avoid double counting, if a patient is admitted through ED and is forwarded on to the AMU/AMAU/MAU after initial assessment/triage then this patient encounter should be recorded as an MAU admission only. In such cases, if a record has been created on the ED system then this should be removed.**

As with any other inpatient or day case hospital ward, coding of activity taking place in an AMU/AMAU/MAU should be carried out in line with existing coding guidelines. However attention should be paid to the following items in order to ensure consistency in the recording of this activity.

Type of Admission – The cases being treated in an AMU/AMAU/MAU are generally emergency in nature and therefore should be recorded as emergency admissions/emergency readmissions on HIPE. This is the case whether the patient arrives at the ED without a GP letter or whether they have been referred directly by a GP. In limited cases, a patient who has been treated in an AMU/AMAU/MAU may be requested to return to the unit for a follow-up assessment. In such cases the type of admission for the follow-up visit should be recorded as being an elective readmission.

Mode of Emergency Admission – Under the AMP model for the operation of an AMU/AMAU/MAU, the unit should ideally be co-located with ED and in the case of patients arriving with a GP referral letter, the patient will be initially assessed in the ED prior to being sent to the AMU/AMAU/MAU. In order to correctly distinguish between admissions through AMU/AMAU/MAU and those through ED, all admissions which have been referred to the AMU/AMAU/MAU regardless of whether they were initially assessed in the ED should have the mode of emergency admission recorded as either 2 MAU – Admitted as Inpatient or 5 MAU – Day Only. It should be noted that all patients referred to an AMU/AMAU/MAU are regarded as being admissions to the hospital. Mode of emergency admission 5 should only be used in cases where the patient is admitted to and discharged from the AMU/AMAU/MAU on the same day.

Admission Ward – All patients being treated in an AMU/AMAU/MAU should have the admission ward recorded as the AMU/AMAU/MAU ward name**.**

4. Audit of AMU/AMAU/MAU

Audit of the activity taking place in AMU/AMAU/MAU will be undertaken by the AMP and the NCP. It is envisaged that the audits carried out will be complementary and there will be ongoing communication and information sharing between the two programmes in relation to the operation of these units

4.1 Acute Medicine Programme Audits

The AMP will carry out audits in 3 domains – structural, procedural and outcome.

Structural audit
An annual structural audit will be carried out by each unit, via questionnaire, and returned to the AMP. This audit will explore whether or not the unit has the recommended structures in place. Priority sites have had a diagnostic visit carried out by the AMP team, and recommendations for the unit made.

Procedural audit
A monthly procedural audit will be carried out by each lead AMU/AMAU physician at unit level. This audit will help the unit lead, clinical director and nurse managers to manage the unit according to the operational procedures set out by the programme. If necessary, the programme leads will request the clinical director, nursing management and unit lead to discuss the findings of the procedural audits with them. Mortality and morbidity meetings should be developed, with clearly defined roles, responsibilities and actions. These meetings should be multidisciplinary and include representatives from critical care, emergency medicine, nursing services, other relevant hospital specialties and services together with GP representatives and a representative of community services.

Outcome audit
A suite of outcome indicators in the domains of quality, access and cost have been developed for the programme. These indicators are being monitored for each hospital by the National AMP from HIPE data and uncoded Patient Administration System data. The Performance of each unit is being reported to the SDU. The results will be fed back to local hospitals. The audit cycle is repeated and the multidisciplinary team in the AMU/AMAU/MAU, in conjunction with the AMU/AMAU/MAU liaison committee will identify the actions, responsibilities and target dates for continuous improvement initiatives. Ongoing engagement with the AMP and the SDU is taking place in priority sites.

4.2 National Casemix Programme Audits

All activity taking place in AMU/AMAU/MAU units should be entered on to the Patient Administration System and coded on the HIPE system. This data will be examined to check that these units are operating according to the AMP guidelines and that the patient cohorts appear to be consistent with the units in operation. Patients will be grouped to a Diagnostic Related Group (DRG). The NCP will be concerned to check that these patients are grouping to appropriate DRGs and that these DRGs are being funded at an appropriate rate, following agreement between the AMP and the NCP after each unit's acceptance into the Casemix funding.

In addition to activity based audits, financial audits will also be carried out to ensure that costs are being correctly allocated to these units in the Casemix Costing Returns. Where cost allocations are seen to be out of line with other similar units, a full explanation will be sought from the hospital in question and amendments to the costing return will be made where necessary.

In particular the data from these units will be assessed under the following general headings:

- Volume of activity
- Repeat attendances
- Type of activity (diagnoses, procedures and DRG assignment)
- Admission Type (elective/non-elective)
- % sameday activity
- Length of stay
- Direct costs of unit
- Accuracy of indirect costs such as diagnostic tests, paramedical referrals

Where a unit appears not to be operating in accordance with the AMP guidelines or where the unit appears to be operating differently from other similar units, this information will be passed on to the AMP for further review and action if necessary. The AMP will be carrying out ongoing monitoring of units and visiting units as appropriate to ensure that they are adhering to the programme guidelines for acuity of patients, and recording of data.

From a costing perspective, these units should each be set up with a separate cost centre on the hospital's general ledger to which all of the unit's direct costs should be allocated. Costs in respect of diagnostic tests or paramedical interventions should be tracked to these patients to enable a comparison of the costs or these patients against the funding received. Detailed instruction for those involved in the Casemix Specialty Costing study will be in this year Specialty Costing manual.

The NCP reserves the right to fund these units as it deems appropriate based on the activity and cost profile determined under the above headings.

5. Establishment and Operation of AMU/AMAU/MAU

Any questions relating to the establishment or operation of an AMU/AMAU/MAU should be directed to the Acute Medicine Programme Manager, Anne Marie Keown (amkeown@mater.ie).

6. Registration of AMU/AMAU/MAU for HIPE Coding Purposes

As with any hospital unit or ward all AMU/AMAU/MAUs will need to be registered with the NCP before coding of the unit's activity on HIPE can commence. Units should be registered prior to 01 June 2012 so that activity from that point forward can be captured. A request for registration of a unit can be directed to Casemix@hse.ie.

7. Key Points

- Set-up and operation of AMU/AMAU/MAUs must be carried out in accordance with the guidelines as issued by the Acute Medicine Programme.

- For more complete information on the set up and operation of AMU/AMAU/MAU please refer to the Report of the National Acute Medicine Programme 2010 (http://www.hse.ie/eng/services/Publications/services/Hospitals/AMP.html)

- All queries relating to the operation of these units should be directed to the Acute Medicine Programme Manager Anne Marie Keown (amkeown@mater.ie).

- All units need to be registered with the NCP (casemix@hse.ie) prior to commencement of coding on HIPE. Units should be registered prior to 01 June 2012 so that activity from that point forward can be captured.

- All discharges in AMU/AMAU/MAUs taking place on or after 01 June 2012 should be recorded on HIPE. A decision on whether these cases will be included in the Casemix funding calculation for a particular hospital will be made jointly by the AMP and the NCP, following a suitable period for establishment, and monitoring by both offices.

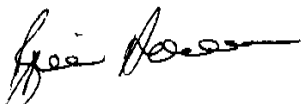
- In general the cases treated in AMU/AMAU/MAUs should be recorded as emergency admissions /readmissions and the mode of emergency admission should either be 2 MAU – Admitted as Inpatient or 5 MAU – Day Only. It should be noted that all patients referred to an AMU/AMAU/MAU are regarded as being admissions to the hospital.

- To avoid double counting, cases which are assessed/triaged in ED prior to referral to AMU/AMAU/MAU should be recorded as AMU/AMAU/MAU admissions only. These cases should not appear on the ED system.

- An AMU/AMAU/MAU is not a replacement for a traditional out-patient department (OPD) and should not be available to bypass traditional OPD services or investigations. It is not considered an appropriate location for the assessment of patients with sub-acute presentations or for the management of patients with newly diagnosed chronic diseases. It is not a day ward (i.e. a designated unit for planned and scheduled procedures/investigations/treatments possibly under local, regional or general anaesthesia, over a period of several hours and less than 23 hours). AMUs are not intended to replace EDs in any hospital and it is intended that AMU/AMAU/MAUs will work in parallel with EDs.

Yours Sincerely,

Dr. Orlaith O Reilly
Director of Public Health



Brian Donovan
Head of National Casemix Programme

Appendix I

CX5-2006 Inclusion of Medical Assessment Units in HIPE & Casemix

CX No 5 / 2006

May, 2006

To: -

The C.E.O. / Manager / Administrator
CC: The Specialty Costing Officer & HIPE/Casemix Co-ordinator

Inclusion of Medical Assessment Units in HIPE & Casemix

Dear CEO / Manager / Administrator:

1. Background:
You are aware of our intention to capture 'every patient encounter' within Casemix. You are also aware of our efforts to "*achieve comprehensive and complete coverage of acute hospital activity… and "..to fully reflect day and inpatient activity"* by the inclusion of "*all patients admitted to and discharged from the MAU on the same day"* (please refer to circulars Cx6/05 & Cx2/06) in this regard.

As stated, we are aware that there are many differing approaches to the concept of MAU. It is not our intention to define MAU's or their work nationally, but to establish if additional day-case activity (and which may be properly defined as such from a HIPE perspective) can be included for HIPE and Casemix purposes, taking cognizance of the Specialty Costing / HIPE / PAS / Management issues surrounding such activity. Please note that any overnight activity is already generally included on HIPE and, as such, is already included in Casemix.

2. Registration of M.A.U.'s & visits nationally:
Following the registration with us of various hospitals nationally of their MAU's, a survey of these units was undertaken and analysis performed. This was followed up by a tour of MAU's in the small number of hospitals nationally (including yours) that could reasonably be considered for inclusion at this time.

3. Definition of Mau's from a HIPE & Casemix perspective nationally:
It has been agreed that, from a HIPE & Casemix perspective only, the criteria for inclusion of units should be that they:-

- Are Consultant led
- Should accept direct referrals from G.P.'s
- Have Priority access to diagnostic facilities and, preferably,
- Close at night (i.e. patients would be admitted to, and discharged from, the MAU on the same day – this is the preferred option of the review team)

Patients admitted to the MAU and subsequently admitted to the hospital should continue to be reported to HIPE in the normal manner.

Only units that meet this criteria are presently being included in the HIPE system.

4. Compliance with national guidelines:
Cases must comply with national HIPE coding guidelines (clarification in this regard, if required, should be sought directly from the ESRI before commencement). It is important that this activity is captured on your PAS system.

While it is accepted that, due to local arrangements, a range of patients may be treated in a MAU (some MAU cases, some referrals from other parts of the hospital), only patients admitted under the guidelines above may be deemed as 'MAU' cases. Double counting of same patient / same visit attendances at A+E and MAU is not appropriate[1].

5. M.A.U. Indicator on HIPE:

Your MAU must be registered with the Department of Health and Children, and the MAU (day only) mode of admission indicator must be activated on your HIPE coding software (any queries in this matter should be addressed to the HIPE Unit of the ESRI).

6. Review of data collected:

As usual with any changes to the HIPE system, the data collected will be reviewed to assess quality and compatibility. The Casemix Technical Group will review whether or not the data is appropriate for inclusion in the Casemix Budget Model.

The Casemix Technical Group are of the view that return/follow-up attendances at the MAU, should not be included in the Casemix Budget Model. Where such cases can be readily identified, they should not be coded. Where they cannot be readily identified and do become coded, then the CTG reserves the right to remove them from the Budget Model.

7. Conclusion:

I would like to take this opportunity, on behalf of all the review team, to thank you and your staff for your co-operation with us before, during and after our visit. We were genuinely impressed with the professionalism of all the staff and their commitment to quality patient care. Please convey our thanks to them in this regard.

Your HCC should now contact the ESRI in order to 'switch-on' the MAU indicator, if they have not already done so.

We do greatly appreciate your cooperation and assistance in this (and other) matters and thank you for your patience.

Yours sincerely

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Claude Grealy
National Casemix Co-ordinator
Casemix Unit

[1] Double counting of any cases on HIPE is not appropriate.

Appendix II

INCLUSION OF A MEDCIAL ASSESSMENT UNIT (MAU) IN CASEMIX

INCLUSION OF AN MEDCIAL ASSESSMENT UNIT (MAU) IN CASEMIX

1. Overview of a Medical Assessment Unit

1.1 A medical assessment unit (MAU)[2] model of care in Casemix focuses on same-day assessment, treatment and discharge of as many acute medical patients as possible.

1.2 A large measure of success of a MAU lies in the rapid clinical assessment, priority investigation and treatment of medical patients by a dedicated team of medical staff with all the necessary investigative and paramedical support in a unit.

1.3 An MAU must be located in a clearly defined area that is does not support Emergency Department and Outpatient services

1.4 Double counting of same patients or same visit attendances at an Emergency Department and an MAU is not appropriate.

1.5 It removes inappropriate attendances of patients in a Emergency Department, helps reduce waiting times and ensures that patients receives the most appropriate treatment

2. Registration Process

2.1 Hospital must inform the National Casemix Programme of their interest in registering their MAU.

2.2 A MAU registration form is returned to the National Casemix Programme with a profile of the current or potential activity of this unit. This profile should include an explanation of the service and the process of referral.

2.3 On receipt of a completed MAU registration form representatives from the National Casemix Programme will visit the unit to view the facilities. This process involves a meeting with both clinical staff working in the MAU unit and personnel involved in the costing and coding of such activity (Specialty Costing and HIPE staff).

2.4 Following receipt of a National Casemix Programme approval letter, the ESRI will activate the MAU ward (day only) mode of admission indicator on your HIPE coding software.

2.6 As with any changes to the HIPE system, the data collected through this MAU process will be reviewed on a pilot basis by the Casemix Technical Group to assess quality and compatibility for inclusion in the Casemix Budget Model.

3. Key Components of an MAU

[2] The specification of an MAU currently applied within the HIPE system is as follows:
Medical Assessment Units provide a short stay area (non elective/not pre-planned) for assessing medical patients who are triaged as needing further investigation before a decision on admission can be made (Source: Comhairle na nOspideal, Acute Medical Units, Dublin, October 2004).

3.1 A National Casemix Programme MAU must meet the following criteria are:

- Direct Referrals from a General Practitioner
- Priority access to diagnostic and other therapeutic services
- Consultant Led
- Closes at night whereby patients are admitted or discharged on the same day

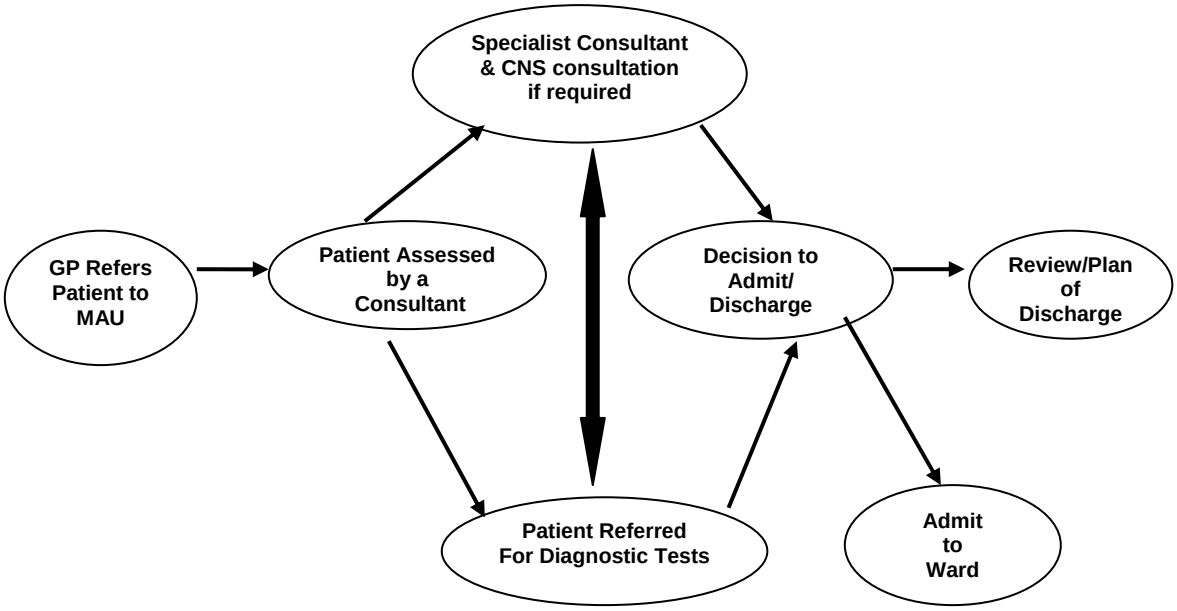
4. Profile of MAU Type Activity

- Neurological complaints e.g. headaches
- Respiratory complaints e.g. shortness of breathe
- Cardiovascular complaints e.g. chest pain
- Haematological complaints
- Gastrointestinal complaints

Exclusion Criteria

- Excludes any patient with an acute Myocardium Infarction, who has collapsed or who requires resuscitation.
- Surgical patients' e.g. acute abdominal pain.

OVERVIEW OF AN MEDICAL ASSESSMENT UNIT CLINICAL PATHWAY



Updated: May, 2010