PMB definition guidelines for acute mental health conditions

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Disclaimer:

The benefit definition for acute mental health conditions has been developed for the majority of standard patients. These benefits may not be sufficient for outlier patients. Therefore, regulation 15h and 15I may be applied for patients who are inadequately managed by the stated benefits.

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1. Introduction

1.1. The legislation governing the provision of the prescribed minimum benefits (PMBs) is contained in the regulations enacted under the Medical Schemes Act, 1998 (Act No. 131 of 1998). In respect of some of the diagnosis treatment pairs (DTPs), medical scheme beneficiaries find it difficult to know their entitlements in advance. In addition, medical schemes interpret these benefits differently, resulting in a lack of uniformity of benefit entitlements.

1.2. The benefit definition project is coordinated by the CMS and aims to define the PMB package and to guide the interpretation of the PMB provisions by relevant stakeholders. The guidelines are based on the available evidence of clinical and cost effectiveness, taking into consideration affordability constraints and financial viability of medical schemes in South Africa.

2. Scope and Purpose

2.1. This is a recommendation for the diagnosis, treatment and care of individuals who present with an acute mental health condition or a mental health emergency in any clinically appropriate setting as outlined in the Medical Schemes Act.

2.2. The purpose of this guideline is to improve clarity in respect of funding decisions by medical schemes, taking into considerations evidence-based medicine, affordability and in some instances cost-effectiveness.

3. Defining acute mental health conditions

3.1. In terms of the Medical Schemes Act, emergency medical condition means "*the sudden and, at the time, unexpected onset of a health condition that requires immediate medical or surgical treatment, where failure to provide medical or surgical treatment would result in serious impairment to bodily functions or serious dysfunction of a bodily organ or part, or would place the person's life in serious jeopardy.*"

3.2. In mental health (other than in instances where death is a clear potential outcome) the impending serious impairments which could result from a psychological or mental health issue are far more difficult to predict than in normal organic situations, which does make the establishment of a mental health emergency more difficult.

3.3. A mental health emergency is an acute disturbance of behaviour, thought or mood of a patient which, if untreated, may lead to harm, either to the individual or to others in the environment. The definition of a psychiatric emergency differs from other medical emergencies in that the danger of harm to the society is also taken into account (Sudarsanan, S et al, 2004, 2011). Medical emergencies in psychiatry include

deliriums due to life threatening conditions, neuroleptic malignant syndrome, serotonin syndrome, overdosages of common psychiatric medications and overdosages and withdrawal from addicting substances.

3.4. Mental health triage is a clinical function conducted at the point of entry to health services which aims to assess and categorise the urgency of mental health related problems. It provides an initial assessment of a person with a mental illness (typically over the phone or face-to-face if they present in person) by a mental health clinician to determine the type and urgency of the response required from mental health or referral to other services.

3.5. The Mental Health Care Act No.17 of 2002 makes provision for a compulsory 72-hour assessment period for individuals presenting with psychiatric emergencies. Hence, the three-day initial assessment period is indicated for most/or all these patients.

4. Entry criteria

Once other potential underlying causes are excluded, a diagnosis of a psychiatric condition may be made, and treatment prescribed appropriately. Psychiatric disorders may also need to be delineated from each other, as symptoms do overlap – this may not be possible in the acute and emergency setting as several requirements for particular disorders specify that symptoms must have been present for a particular period of time in terms of DSM 5 classification (American Psychiatric Association, 2013; SASOP, 2013).

Table 1: Entry criteria for mental health emergencies

Entry Criteria
The individual a) poses a significant danger to self or others b) and /or marked psychosocial dysfunction, psychosis c) relatively sudden onset d) exhibits acute onset of psychosis /exhibits severe thought disorganization or exhibits significant clinical deterioration in a chronic behavioural condition rendering the member unmanageable and unable to cooperate in treatment.

5. Mental health conditions that are listed in the PMBs which may qualify as mental health emergencies.

Table 2: Mental health conditions that are listed in the PMBs which may qualify as mental health emergencies.

PMB Code	PMB Description	Treatment Component	ICD10 Code	Comment (if any)
910T	Acute delusional mood, anxiety, personality, perception disorders and organic mental disorder caused by drugs	Hospital-based management up to 3 days	F06.- F07.- F09 F10.0 / F10.8 / F10.9 F11.0 / F11.3 – F11.9 F12.0 / F12.3 – F12.9 F13.0 / F13.3 – F13.9 F14.0 / F14.3 – F14.9 F15.0 / F15.3 - F15.9 F16.0 / F16.3 – F16.9 F17.- F18.0 / F18.3 – F18.9 F19.0 / F19.3 – F19.9 F24	
910T	Alcohol withdrawal delirium; alcohol intoxication delirium	Hospital-based management up to 3 days leading to rehabilitation	F10.3 / F10.4 / F10.5	
910T	Delirium: Amphetamine, Cocaine, or other psychoactive substance	Hospital-based management up to 3 days	F11.4 / F11.5 F12.4 / F12.5	

			F13.4 / F13.5 F14.4 / F14.5 F15.4 / F15.5 F16.4 / F16.5 F17.4 / F17.5 F18.4 / F18.5 F19.4 / F19.5	
901T	Acute stress disorder accompanied by recent significant trauma, including physical or sexual abuse	Hospital admission for psychotherapy / counselling up to 3 days, or up to 12 outpatient psychotherapy / counselling contacts	F43.0 / F43.8 / F43.9 T74.1 / T74.2	Psychiatrist should be aware that a patient-day in hospital is equivalent to four outpatient consultations
903T	Attempted suicide, irrespective of cause	Hospital-based management up to 3 days or up to 6 outpatient contacts	X60.- to X84.-	There is no specified number of suicidal attempts to be covered in any particular year by the medical schemes – schemes must cover each event as a PMB. Also, any complications arising from the suicidal attempt should be covered under separate DTP.
184T	Brief reactive psychosis	Hospital-based management up to 3 weeks/year	F10.5 / F11.5 / F12.5 / F13.5 / F14.5 / F15.5 / F16.5	Patients will likely be discharged on the in-hospital medications, which may be

			F17.5 / F17.7 F18.5 / F18.7 F19.5 / F19.7 F23.- R44.0 / R44.1 / R44.2 / R44.3	continued as outpatient care subject to scheme rules as the DTP is specifically for in-hospital management. The duration of treatment varies and PMB level of care is for hospital based management of up to 3 weeks per year. After six months it is classified as schizophrenia, which is a PMB chronic condition. (SASOP, 2013; APA, 2013)
902T	Major affective disorders, including unipolar and bipolar depression	Hospital-based management up to 3 weeks/year (including inpatient electro-convulsive therapy (on psychiatrist's motivation) and inpatient psychotherapy) or outpatient psychotherapy of up to 15 contacts	F20.4 F25.- F30 1 / F30.2 F31.- F32.- F33.- F53.1 / F53.8 / F53.9	Mania is an emergency and for the management of acute symptoms of mania – please refer to acute mania section in bipolar document
907T	Schizophrenic and paranoid delusional disorders	Hospital-based management up to 3 weeks/year	F20.- F22.- F23.1 / F23.2 / F23.2 F25.-	Aggression is an emergency -Please refer to schizophrenia document

			F28 F29	
908T	Anorexia Nervosa and Bulimia nervosa	Hospital-based management up to 3 weeks/year or outpatient psychotherapy of up to 15 contacts per year	F50.0 F50.1 F50.2 F50.3 F50.4 F50.5 F50.6 F50.7 F50.8 F50.9	- Risk of suicide and self-harm - Complications of bulimia nervosa that may present in an emergency situation may include volume depletion, electrolyte abnormalities, esophagitis, Mallory-Weiss tear, esophageal or gastric rupture, pancreatitis, arrhythmia (Barth, 2019)
909T	Treatable Dementia	Admission for initial diagnosis Up to 1 week per year	F03. 90	Management of acute psychotic symptoms

6. Diagnosis

6.1. Disciplines

6.1.1. According to the Mental Health Care Act No. 17 of 2002, all registered medical practitioners, professional nurses, psychologists, occupational therapists (OTs), and social workers whose training includes mental health are designated Mental Health Care Practitioners.

6.1.2. The table below represents initial consultations for a diagnosis to be established. Depending on identified underlying causes, several disciplines may be involved in the treatment of the patient. Psychiatrist referral may occur immediately, or patient may be managed by a General Practitioner (GP), depending on severity and/ or availability of psychiatrists.

Table 3: Disciplines for the diagnosis of a mental health emergency

Discipline	Frequency of consultations	Comment
General practitioners (GP) or Emergency physician	1	Initial work-up to exclude other organic causes and refer as necessary
Psychiatrist	1	Management of psychiatric complications of other medical conditions to be covered under the primary code
Psychiatric Nurse	1	Recommended

6.1.3. Following the initial diagnostic workup by the above mentioned disciplines, a referral can be made to other relevant mental health practitioners in terms of the Mental Health Care Act.

6.2. Laboratory Investigations including point of care testing for diagnostic work up of mental health emergencies

Differential diagnosis includes the exclusion of underlying medical or neurological disturbances. Some of these tests may not be necessary where the patient has a known pre-existing psychiatric condition. The CMS recommends the judicious use of laboratory investigations and baseline tests that may be done as part of initial work-up of patients in the emergency phase include the following:

Table 4: Laboratory/ point of care investigations for diagnosis of mental health emergencies recommended as PMB level of care

Investigation	Comment
Full blood count	Performed as indicated
Urea and electrolytes including serum creatinine	Performed as indicated
Fasting blood sugar and/ or random blood glucose	Performed as indicated
Thyroid function test	Initial screening with thyroid stimulating hormone (TSH) is recommended. Free T3 and T4 - if there is abnormal TSH result (Biondi et al., 2015; LeFevre, 2015; Schneider et al., 2018).
Liver function test	Performed as indicated
C-reacve protein	CRP should be performed instead of ESR. CRP is superior to ESR and WBC in acute inflammatory conditions (Deodhar, 1989; Van Leuuwen and Rijswijk, 1994).
Blood alcohol	Performed as indicated
HIV	Performed as indicated
Drug levels	Specific drug levels as guided by the history (patient or collateral)/event.
Treponema Pallidum Hemagglutination (TPHA)	Reverse algorithm screening (TPHA followed by Rapid Plasma Reagin (RPR). All attending clinicians should be familiar with the reverse algorithm for screening for syphilis (Nah et al., 2017; Yi et al., 2019).
Toxic drug screen	Performed as indicated
Carboxyhemoglobin (HbCO)	Relevant in suicide attempts.
Lipogram	In selected cases related to metabolic syndrome
Arterial Blood Gas	Performed as indicated
Urine Drug screen	Performed as indicated

Procalcitonin (PCT)	PCT can be performed in place of CRP. Procalcitonin (PCT) is superior to CRP (Leli et al., 2014; Mencacci et al., 2012).
Urine dipstix	To exclude concurrent urinary tract infections (UTIs)
Vitamin B 12	Performed as indicated
Thiamine	Performed as indicated

6.3. Imaging and other tests recommended as PMB level of care for diagnostic work up of mental health emergencies

6.3.1. Patients with new-onset psychiatric symptoms that are atypical or incongruent with other findings; those with delirium, headache, history of recent trauma, or focal neurologic findings (weakness of an extremity) would need CT Brain as part of the initial work-up (SASOP, 2013).

6.3.2. A lumbar puncture is recommended in patients with meningeal signs and/or normal head CT scan findings with symptoms of fever, headache, or delirium.

6.3.3. For patients with low oxygen saturation, fever, productive cough or hemoptysis, a chest x-ray is recommended as PMB level of care.

6.3.4. If CT scan is inconclusive, an MRI may be motivated for. MRI is not routine for all patients.

6.3.5. For patients with vision or gait changes, numbness, burning, or tingling sensations suggestive of autoimmune systemic disorders, the testing of autoimmune disorders is PMB level of care. There are several autoantibodies and immunologic studies for diagnosis of autoimmune disorders. Rheumatoid factor (RF) and anti-cyclic citrullinated peptide antibody (CCP) among others can be used to screen for the presence of autoimmune systemic disorders (Castro and Gourley, 2010; Kapsogeorgou and Tzioufas, 2016).

Table 5: Imaging radiology and other tests recommended as PMB level of care for diagnostic work up of mental health emergencies

Imaging	Frequency	Comment
Head CT	1	In selected cases
Lumbar Puncture	1	Guided by the clinical findings
Chest X-Ray	1	Guided by clinical findings

X-rays - Trauma series	1	When indicated (history of trauma) or when clinically indicated.
Brain MRI	On motivation	CT brain is adequate If CT brain is inconclusive then MRI
Testing for other clinically indicated autoimmune systemic disorders: · Anti-nuclear factor (ANF) · Anti-nuclear antibodies	1	As clinically indicated for: Systemic lupus erythematosus Demyelinating disorders
ECG with QTc calculation	1	Risk of cardiac arrest and Torsade de Pointes

7. Pharmacological and non-pharmacological interventions per DTP

The CMS will not be prescriptive on the actual medicines to be used in the emergency setting, unless there is only one recommended medicine in a given drug class. A drug class will be recommended and treating providers are requested to initiate treatment that will be covered by the scheme should maintenance be necessary.

7.1. Management of acute delusional mood, anxiety, personality, perception disorders and organic mental disorder caused by drugs

Table 6: Applicable PMB code, description and treatment component

PMB Code	PMB Description	Treatment Component
910T	Acute delusional mood, anxiety, personality, perception disorders and organic mental disorder caused by drugs	Hospital-based management up to 3 days

Table 7: Pharmacological and non-pharmacological management

DTP component	Pharmacological management	Non-pharmacological management
<u>Mood Disorder</u> Discontinue all psychoactive substances that could cause or aggravate mood disorder	Depression - Antidepressants Mania / psychosis - Mood stabilisers - Anti-psychotics	Electro convulsive therapy (on motivation) Psychotherapy Social therapy
<u>Anxiety disorder:</u> Discontinue all psychoactive substances that could cause anxiety	Benzodiazepines Antidepressants	
<u>Perception Disorder:</u>	Anti-psychotics	

Social therapy forms part of the biopsychosocial approach (Lofchy, Boyles and Delwo (2014); Velgare, 2006) and, in an emergency, the therapist can be the first point of contact. Electro-convulsive therapy is generally classified as a procedure, and the anaesthesia used in the process is not therapeutic, hence it has been classified as non-pharmacological therapy.

7.2. Management of symptoms of disorientation, impaired consciousness and ataxia due to substance abuse and other specified causes

The current Medical Schemes Act has three 910T DTP descriptions, as shown in the table below.

Table 8: Applicable PMB code, description and treatment component

PMB Code	PMB description	Treatment component
910T	Acute delusional mood, anxiety, personality, perception disorders and organic mental disorder caused by drugs	Hospital-based management up to 3 days
	Delirium: Amphetamine, Cocaine, or other psychoactive substance	Hospital-based management up to 3 days

	Alcohol withdrawal delirium; alcohol intoxication delirium	Hospital-based management up to 3 days leading to rehabilitation

The presenting symptoms for the DTPs above are based on the etiological factors and the management thereof is detailed in table 9 below.

Table 9: Pharmacological management based on etiological factors

Cause	Management
Alcohol intoxication	Supportive care Thiamine, IV, 100 mg in 1 L dextrose 5%.
Opioid intoxication	Supportive management aimed at maintaining cardiorespiratory function. Naloxone IV/ SC
Cannabinoid intoxication	Supportive care Antipsychotic Benzodiazepine
Sedative-Hypnotic Poisoning	Supportive care
Benzodiazepine intoxication	Management is supportive, and ventilation may be required. Flumazenil should be used with caution as an antidote
Lithium Intoxication	Supportive care Correct hypokalemia actively: · Potassium chloride, IV, titrated with level and symptoms For seizures: · Diazepam IV For severe lithium poisoning · Hemodialysis
Cocaine intoxication	Benzodiazepines Antipsychotics Promethazine

Amphetamines	Supportive management Benzodiazepines Antipsychotics Promethazine
<u>Withdrawals</u>	
Alcohol withdrawal	All patients treated for substance withdrawal should be referred to Social Services for rehabilitation and aftercare. This is subject to scheme rules and available protocols. Alcohol detoxification may be managed on an outpatient basis in most patients. Thiamine Diazepam
Opioid Withdrawal	Substitution treatment if clinical signs of withdrawal are present. • Methadone, oral, 5–10 mg. Symptomatic management as indicated
Cannabinoid withdrawal	Assess for other accompanying psychiatric disorders e.g. mood or psychosis. Benzodiazepines Supportive care
Sedative/hypnotic withdrawal: Benzodiazepines	Replace short-acting benzodiazepine with an equivalent diazepam (long acting benzodiazepine) dose.
Cocaine and other stimulant withdrawal	No substitute medication available for detoxification. For severe anxiety, irritability and insomnia: Benzodiazepines, short-term
Delirium	Supportive management For agitated and acutely disturbed patient: • Haloperidol, IM AND/OR Benzodiazepine repeat as necessary, to achieve containment, e.g.: Consider referring appropriate patients to a rehabilitation programme after recovery from delirium tremens.

7.3. Management of acute stress disorder accompanied by recent significant trauma, including physical or sexual abuse

Table 10: PMB code, description and treatment component

PMB Code	PMB description	Treatment component
901T	Acute stress disorder accompanied by recent significant trauma, including physical or sexual abuse	Hospital admission for psychotherapy / counselling up to 3 days, or up to 12 outpatient psychotherapy / counselling contacts

This DTP includes in and out of hospital management. Table 11 below gives the recommended pharmacological and non-pharmacological management. A psychiatrist may refer to other allied professionals depending on the patient's needs. In such cases, a letter of motivation should be submitted by the treating provider.

Table 11: Pharmacological and non-pharmacological management of DTP 901T

Pharmacological	Non-pharmacological
- Benzodiazepines and non-benzodiazepine sedative/ hypnotics - Antipsychotics - Symptomatic management	Trauma focused cognitive behavioural therapy Psychotherapy provided by psychiatrist, a social worker or psychologist. The psychiatrist will refer to the most appropriate. The act makes provision only for psychotherapy. Other allied health professionals may be funded subject to scheme rules when there is a clinical indication or support is needed post intervention, as they do not form part of the minimum standard of care that is required.

7.4. Management of brief reactive psychosis and attempted suicide irrespective of cause

For brief reactive psychosis, cover will be granted for the initial in-hospital care of three weeks/year as specified for DTP code 184T. It is exceedingly rare to have multiple occurrences within a year due to the evolving nature of the conditions. Brief reactive psychosis begins and resolves within one month while schizophreniform (one to six months) and schizophrenic disorders (after six months) (Fosar-Poli et al., 2016). Out of hospital cover for brief reactive psychosis will be subject to scheme rules.

Table 12: PMB code, description and treatment component

PMB Code	PMB description	Treatment component	Non-pharmacological management	Pharmacological Management
184T	Brief reactive psychosis	Hospital-based management up to 3 weeks/year	For in-hospital management, please refer to PMB benefit definition for schizophrenia	Antipsychotics Benzodiazepines
903T[2]	Attempted suicide, irrespective of cause	Hospital-based management up to 3 days or up to 6 outpatient contacts	Psychotherapy On referral: other allied health professionals per clinical indication Social therapy: for post-intervention support	

[2] 903T: Treatment for injuries and complications from an attempted suicide and all relevant disciplines necessary to manage injuries and complications forms part of the PMB entitlement for this DTP.

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