

A5 Acute neurological, cognitive or affective presentations

This module covers primary disorders of brain/brain function – organic or psychiatric in nature.

Assessment of these competencies via Mini-CEX, CbD (formative or summative) or ACAT-EM and a reflective log. In addition, key aspects of communication and professionalism can be captured through PS and MSF

Potential presentations in which these competencies could be assessed include the following:

- Sudden onset weakness, slurring of speech, confusion or change in conscious level
- Acute onset dizziness and vertigo
- 'First Fit' or status epilepticus
- Isolated head injury
- Meningitis/encephalitis
- Acute onset unilateral weakness or loss of sensation
- Severe headache with red flag signs or symptoms
- Acute presentation in patient with multiple sclerosis
- Psychiatric (inc. neuropsychiatric)/affective (such as agitation, severe acute anxiety, mania, hallucinations or psychotic symptoms)
- Delirium/dementia (cognitive dysfunction) and mental state examination

Core competencies to achieve (for all patients), are EPA level 3 (Indirect active-partial supervision by senior clinician, no prompting or help provided, direct line of vision or supervisor immediately available).

Knowledge/ Skill/ Behaviour	Detail of competency
Knowledge- Organic conditions	Recalls the common epileptic syndromes, causes and treatments for seizures; including relevant indications for investigations for a 'first fit'
	Recognises status epilepticus in the spectrum of seizure disorder and the priorities for immediate medical care
	Is able to describe the basic neuro-anatomy of the brain, relevant central neurological/sensory functions and how these may be affected by disease or injury
	Is able to describe the neuro-anatomy and physiology relevant to balance, coordination and movement; differentiate the different types of vertigo and ataxia and their causes
	Can outline the neuro-anatomy and physiology of the components of the motor system, including differentiation of upper and lower motor neurone conditions

Knowledge/ Skill/ Behaviour	Detail of competency
	<p>Outlines the neuro-anatomy and physiology of sensation (especially pain) and the causes of abnormal sensation and likely site of lesion</p> <p>Outlines common causes and treatment of primary headache disorders and be able to differentiate between these and secondary headache</p> <p>Outlines common and life-threatening causes of acute new secondary headache, including 'red flag' signs and symptoms and indications for urgent neuro-imaging</p> <p>Outlines the classification of stroke and its link to prognosis</p> <p>Is able to describe the signs and symptoms of infections affecting central or peripheral neurological function, including but not limited to meningitis, encephalitis, spinal abscess</p> <p>Knows the anatomy of the scalp, skull and brain, the pathophysiology of head injury (primary and secondary brain injury)</p> <p>Outlines the definitions of traumatic brain injury and identify features that may require radiological imaging and/or further intervention or specialist follow-up</p>
Knowledge- Psychiatric	<p>Defines and characterizes the common types of psychiatric conditions and manner these may present in an emergency, and potential side effects of the major groups of psychomotor medications</p> <p>Describes the indications, contraindications and side effects of drugs used in acute psychosis including, but not limited to: haloperidol, benzodiazepines, clozapine</p> <p>Lists the common and serious causes for acute confusion/delirium and is able to differentiate between delirium and dementia</p> <p>Recognises the factors that can exacerbate acute confusion/delirium (e.g. a change in social environment or acute infection) and can list the pre-existing factors that may pre-dispose to acute confusion/delirium</p> <p>Is able to describe the factors that predict aggressive behaviour: personal history, alcohol and substance abuse, delirium</p> <p>Is able to describe the legal framework for authorizing interventions in the management of the disturbed or violent patient</p> <p>Is able to outline potential physical health and socioeconomic impacts of chronic mental illness</p>
Skills- History	<p>Where required, is able to take a full psychiatric history, obtaining the required information regarding:</p> <ul style="list-style-type: none"> • presenting complaint • past psychiatric history • family history • work history

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	<ul style="list-style-type: none"> • sexual/marital history • substance misuse • forensic history • social circumstances <p>Elucidates a clear timeline and history of neurological symptoms e.g. change to bladder control, recent or past relevant medical history, history of treatment, medications, alcohol/drug misuse</p> <p>Obtains a corroborating history from witnesses where possible, especially with head injury and fits</p> <p>Is able to recognise symptoms that may indicate raised intracranial pressure ('red flag' features) and corroborates with examination</p>
Skills - Examination	<p>Is able to undertake an appropriate and focussed neurological examination, including cranial nerve examination, assessment of level of consciousness, assessment of power, tone, sensation and reflexes, to support development of a differential diagnosis</p> <p>Can differentiate epileptic seizure from non-epileptic (pseudo)-seizures</p> <p>Is able to elicit signs of raised intracranial pressure</p> <p>Is able to establish the level of a lesion causing changes to motor or sensory function</p> <p>Is able to elicit specific signs of conditions such as temporal arteritis, meningism, myasthenia gravis, Parkinson's</p> <p>Is able to conduct a mental state examination including:</p> <ul style="list-style-type: none"> • appearance and behaviour (including clothing) • speech: quality and content • mood and affect • thought abnormalities; insight/rationalisation • hallucinations/delusions • cognitive function e.g. using the mini mental test score <p>Undertakes a physical examination that looks for physical causes of psychiatric symptoms and delirium such as head injury, sepsis, substance withdrawal, thyroid disease, intoxication, and hypoglycaemia</p>
Skills- investigation and treatment	<p>Remembers to maintain a systematic approach to assessment (ABCDE) as first principle</p> <p>Is able to select appropriate investigations for a suspected traumatic, pharmaceutical or other organic cause of behavioural disturbance; interpret and act on results of investigations: e.g. ECG, blood laboratory tests inc. glucose, brain imaging (CT and MRI)</p> <p>Safely sedates patient when appropriate, including monitoring requirements and reassessment as required</p>

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	<p>If required, is able to initiate treatment for patient dependant on differential diagnosis e.g. acute anxiety, acute agitation, signs/ symptoms of drug/ alcohol withdrawal</p> <p>Is able to identify and initiate radiological investigations for suspected stroke and acute severe headache including indications for urgent head CT and stroke thrombolysis or neurosurgical /neuro-radiological intervention</p> <p>Knows the indications for LP and how to interpret basic CSF analysis: cell count, protein, bilirubin, gram stain and glucose</p>
<p>Skills- Clinical decision making, judgement</p> <p><i>(in addition to CC1)</i></p>	<p>Following initiation of immediate resuscitative treatment, expedites the care of patients requiring more specialist immediate treatment e.g. stroke thrombolysis, anaesthesia for status epilepticus</p> <p>Knows when it may be appropriate to safely discharge patients presenting with a 'first fit'</p> <p>Knows when it may be appropriate to safely discharge patients presenting with headache</p>
<p>Behaviour- Communication & professionalism</p> <p><i>(in addition to CC7 & CC8)</i></p>	<p>Shows compassion and patience in the assessment and management of those with mental health conditions</p> <p>Demonstrates safety awareness of the situation and environment to avoid risk from violent behaviour against themselves or other staff</p> <p>Is able to safely evade physical assault using appropriate de-escalation and/or escape techniques</p> <p>Is able to use safe and proportional restraint methods (e.g. sedation and/or physical) to manage a violent/aggressive patient who is without capacity and at risk of causing/suffering harm</p> <p>Can provide explanations and plan for future care for those with non-serious headaches</p>
<p>Paediatric competencies</p>	<p>Is able to differentiate between febrile convulsion and epilepsy and be able to investigate and treat accordingly</p> <p>Is able to reassure parents/ family after child presents with febrile convulsion</p> <p>Is able to identify children with head injury which may result from non-accidental injury</p> <p>Is able to recognise children/young patients presenting with anxiety-related disorders, signs of post-traumatic stress disorder and other forms of distress and can share relevant information or escalate appropriately; ensure safeguarding and support measures are put in place or signposted</p>

Additional optional competencies- EPA 1 to 2

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Skills- Investigation and treatment	Is able to perform a diagnostic lumbar puncture Initiates measures to reduce intracranial pressure, such as intubation/hyperventilation, sedation and paralysis, use of hypertonic saline/mannitol, cooling measures, posture