Clinical Prioritisation Criteria

Neurology CPC v1.4

Summary

This document contains the draft Clinical Prioritisation Criteria (CPC) for Neurology. It is a consultation document only. This is a drafting document and should be read in conjunction with the consultation overview.

The final format will be as indicated on the CPC website https://cpc.health.qld.gov.au/ and embedded into your local HealthPathways site or HHS site i.e. 'Refer your patient' website https://metrosouth.health.qld.gov.au/referrals or www.health.qld.gov.au/metronorth/refer.

For more information about the CPC development process and purpose, please see the accompanying CPC Consultation Overview.

Table of contents

Neurology inclusion for outpatient services

The following conditions are proposed to be considered under the Neurology CPC.

Please note this is not an exhaustive list of all conditions for outpatient services and does not exclude consideration for referral unless specifically stipulated in the CPC exclusions section.

- Stroke/TIA
- Headache/migraine
- Seizures/epilepsy
- Progressive loss of neurological function, including multiple sclerosis (MS) and motor neurone disease (MND)
- Movement disorders, including Parkinson's disease (PD)
- Peripheral neuropathy

Neurology paediatric conditions

The following paediatric conditions are to be considered under the Neurology CPC. Alternatively, please consider if it is necessary to develop a separate paediatric CPC for Neurology.

- Currently in draft with Paediatric Neurology

Neurology exclusions for outpatient services

Not all services are appropriate to be seen in the Queensland public health system. Exceptions can always be made where clinically indicated. It is proposed that the following are not routinely provided in a public Neurology service

The following are not routinely provided in a public Neurology service.

- Mild or tension headache. Refer to healthpathways or local guidelines.
- Untreated headache/migraine. See specific Migraine CPC)
- Dementia without prior assessment by physician or geriatrician
- Syncope (consider cardiology)
- Fibromyalgia/chronic fatigue syndrome
- Lyme disease
- Head injury include post-concussion injury (consider neurosurgery)
- Back and neck pain, see specific Back and Neck pain CPC
- Chronic unexplained pain/ pain syndrome
- Structural neurological problems (AVM, space occupying lesions) see neurosurgery
- Referral for rehabilitation.

Referral and outpatient criteria

Stroke/transient ischaemic attack (TIA)

Referral to emergency

If any of the following are present or suspected, refer the patient to the emergency department (via ambulance if necessary) or seek emergent medical advice if in a remote region.

- Acute stroke/TIA

Minimum referral criteria

Category 1 (appointment within 30 calendar days)	• Refer directly to emergency if clinically indicated: – Patient with acute neurological symptoms of a stroke; multiple/crescendo TIA • Stroke/TIA known or suspected with last change in symptoms less than 2 weeks prior to referral
Category 2 (appointment within 90 calendar days)	• Stroke/TIA known or suspected with last change in symptoms more than 2 weeks prior to referral
Category 3 (appointment within 365 calendar days)	• Chronic ischaemic lesion identified on imaging not previously addressed

1. Reason for request, indicate on the referral

- To establish a diagnosis
- For treatment or intervention not otherwise accessible to the patient
- For advice regarding management
- To engage in an ongoing shared care approach between primary and secondary care
- Reassurance for GP/second opinion
- Reassurance for the patient/family
- For other reason (e.g. rapidly accelerating disease progression)

2. Essential referral information, Referral will be returned without this

- Neuroimaging results
- Medication list
- Relevant previous medical history

3. Additional referral information, Useful for processing the referral

- ELFT, FBC, fasting lipids and glucose results
- ABCD^2 stroke risk score
- ECG results
- Doppler ultrasound carotid vessels
- Echocardiogram
- Holter monitor results
- Discharge summary (if the patient is being referred for second opinion)

4. Request

General referral information/Standard information (Appendix 2, Consultation overview)

Notes

- Please note that where appropriate and where available, the referral may be streamed to an associated public allied health and/or nursing service. Access to some specific services may include initial assessment and management by associated public allied health and/or nursing, which may either facilitate or negate the need to see the public medical specialist.
- A change in patient circumstance (such as condition deteriorating or becoming pregnant) may affect the urgency categorisation and should be communicated as soon as possible.

- Please indicate in the referral if the patient is unable to access mandatory tests or investigations as they incur a cost or are unavailable locally.

5. Other useful information for referring practitioners, not an exhaustive list

- Refer to healthpathways or local guidelines
- Consider driving advice

Clinical resources (links)	Patient resources (links)
	Austroads: ***Assessing Fitness to Drive* 2016** http://www.austroads.com.au/driversvehicles/assessing-fitness-to-drive

Inform the patient

- Ensure they are aware of the request and the reason for being assessed.
- Instruct them to take all relevant radiology films and reports (including the imaging report) to appointments.
- To inform of any change in circumstance (e.g., getting worse or becoming pregnant) as this may affect the request for assessment.

Headache/migraine

Referral to emergency

If any of the following are present or suspected, refer the patient to the emergency department (via ambulance if necessary) or seek emergent medical advice if in a remote region.

- Headache with red-flags:
  - sudden onset/thunderclap headache
  - severe headache with signs of systemic illness (fever, neck stiffness, vomiting, confusion, drowsiness)
  - first severe headache age > 50 years
  - severe headache associated with recent head trauma
  - headaches with papilledema
  - > 50 years with raised CRP/ESR or **if** giant cell arteritis or vasculitis suspected

Minimum referral criteria

Category 1 (appointment within 30 calendar days)	• Abnormal neurological exam with concerning features on neuroimaging (new onset headache)
Category 2 (appointment within 90 calendar days)	• Severe frequent headaches and trial of at least 3 migraine preventers without improvement and/or absent from work or study for more than 4 days per month (List 3 treatments trialled)
Category 3 (appointment within 365 calendar days)	• Chronic/complicated headache/migraine unresponsive to medical management

1. Reason for request, indicate on the referral

- To establish a diagnosis
- For treatment or intervention not otherwise accessible to the patient
- For advice regarding management
- To engage in an ongoing shared care approach between primary and secondary care
- Reassurance for GP/second opinion
- Reassurance for the patient/family
- For other reason (e.g. rapidly accelerating disease progression)

2. Essential referral information, Referral will be returned without this

- Medication history, including non-prescription medications, herbs and supplements
- List all treatments trialed (at least three)

3. Additional referral information, Useful for processing the referral

- ELFT, FBC, ESR, CRP results
- ECG tracing (if available)
- Neuroimaging results (MRI preferable)

4. Request

General referral information/Standard information (Appendix 2, Consultation overview)

Notes

- Please note that where appropriate and where available, the referral may be streamed to an associated public allied health and/or nursing service. Access to some specific services may include initial assessment and management by associated public allied health and/or nursing, which may either facilitate or negate the need to see the public medical specialist.
- A change in patient circumstance (such as condition deteriorating or becoming pregnant) may affect the urgency categorisation and should be communicated as soon as possible.
- Please indicate in the referral if the patient is unable to access mandatory tests or investigations as they incur a cost or are unavailable locally.

5. Other useful information for referring practitioners, not an exhaustive list

- Refer to HealthPathways or local guidelines

Medical management

- Manage migraine – acute pain treatment, dietary advice, hormone management and or preventive medications trial for at least 2-3 months
- Tension/cervicogenic headaches – simple analgesia, massage, physiotherapy review
- Consider ELFT FBC ESR CRP in patients at risk for a systemic cause for headaches
- Consider neuroimaging to exclude intracranial pathology
- Consider medication overuse headache if patient using large amounts of over-the-counter analgesics such as aspirin, opioids, paracetamol and/or caffeine
- Social modifies – impact to ADLs

Clinical resources (links)	Patient resources (links)

Inform the patient

- Ensure they are aware of the request and the reason for being assessed.
- Instruct them to take all relevant radiology films and reports (including the imaging report) to appointments.
- To inform of any change in circumstance (e.g., getting worse or becoming pregnant) as this may affect the request for assessment.

Seizures/epilepsy

Referral to emergency

If any of the following are present or suspected, refer the patient to the emergency department (via ambulance if necessary) or seek emergent medical advice if in a remote region.

- Status epilepticus/epilepsy with red-flags:
  - first seizure
  - focal deficit post-ictally
  - seizure associated with recent trauma
  - persistent severe headache > 1 hour post-ictally

– seizure with fever

Minimum referral criteria	
Category 1 (appointment within 30 calendar days)	• New diagnosis of epilepsy (confirmed or highly likely) • First epileptic seizure (as convulsive syncope is a common mimic, may be seen by general medicine prior to neurology, depending on local pathways) • Frequent seizure activity without current anticonvulsants use • Pregnancy in a patient with known epilepsy
Category 2 (appointment within 90 calendar days)	• Poorly controlled epilepsy (e.g. increased frequency of seizures, change in seizure activity) in patient with good adherence to medical treatment. (This may be categorised as Cat 1 depending on severity)
Category 3 (appointment within 365 calendar days)	• Chronic epilepsy without concerning features • Epilepsy advice and management plan including driving recommendations and decreasing anti-epileptic medication

1. Reason for request, indicate on the referral

- To establish a diagnosis
- For treatment or intervention not otherwise accessible to the patient
- For advice regarding management
- To engage in an ongoing shared care approach between primary and secondary care
- Reassurance for GP/second opinion
- Reassurance for the patient/family
- For other reason (e.g. rapidly accelerating disease progression)

2. Essential referral information, Referral will be returned without this

- ELFT FBC
- History of seizures
- Medication history, including non-prescription medications, herbs and supplements
- Management history of epilepsy (including previous medication, dosage, efficacy)

3. Additional referral information, Useful for processing the referral

- EEG results
- Neuroimaging results
- Drug level results (if available)
- Family history
- Drug and alcohol history
- Sleep studies
- HIV syphilis

4. Request

General referral information/Standard information (Appendix 2, Consultation overview)

Notes

- Please note that where appropriate and where available, the referral may be streamed to an associated public allied health and/or nursing service. Access to some specific services may include initial assessment and management by associated public allied health and/or nursing, which may either facilitate or negate the need to see the public medical specialist.
- A change in patient circumstance (such as condition deteriorating or becoming pregnant) may affect the urgency categorisation and should be communicated as soon as possible.
- Please indicate in the referral if the patient is unable to access mandatory tests or investigations as they incur a cost or are unavailable locally.

5. Other useful information for referring practitioners, not an exhaustive list

- Refer to HealthPathways or local guidelines

- Ensure compliance, consider drug levels
- Optimise current drug therapy/consider increasing dose if already on medication
- Exclude drug interactions e.g. concurrent cytochrome inducers, binding agents
- Reconsider diagnosis if no response to medication
- Treat any inter-current infections and co-morbidities
- Address any lifestyle issues e.g. adequate sleep, stress, alcohol, recreational drugs

Clinical resources (links)	Patient resources (links)

Inform the patient

- Ensure they are aware of the request and the reason for being assessed.
- Instruct them to take all relevant radiology films and reports (including the imaging report) to appointments.
- To inform of any change in circumstance (e.g., getting worse or becoming pregnant) as this may affect the request for assessment.

Progressive loss of neurological function

Referral to emergency

If any of the following are present or suspected, refer the patient to the emergency department (via ambulance if necessary) or seek emergent medical advice if in a remote region.

- Acute onset severe:
  - ataxia
  - vertigo
  - visual loss
- Acute severe exacerbation of known MS

Minimum referral criteria

Category 1 (appointment within 30 calendar days)	• Rapidly progressive neurological or visual field deficit including weakness, ataxia or cranial nerve deficits (e.g. MS, MND, myasthenia gravis, myositis)
Category 2 (appointment within 90 calendar days)	• Progressive neurological or visual field deficit including weakness, ataxia or cranial nerve deficits (e.g. MS, MND, myasthenia gravis, myositis)
Category 3 (appointment within 365 calendar days)	• Chronic or slowly deteriorating neurodegenerative illness

1. Reason for request, indicate on the referral

- To establish a diagnosis
- For treatment or intervention not otherwise accessible to the patient
- For advice regarding management
- To engage in an ongoing shared care approach between primary and secondary care
- Reassurance for GP/second opinion
- Reassurance for the patient/family
- For other reason (e.g. rapidly accelerating disease progression)

2. Essential referral information, Referral will be returned without this

- Detailed history of presenting complaint and timeline of symptoms and deterioration

3. Additional referral information, Useful for processing the referral

- ELFT, FBC results

- Lumbar puncture results (if available)
- Nerve conduction studies
- History of consultation with other specialist/allied health or discharge summary
- MRI brain and spinal cord results

4. Request

General referral information/Standard information (Appendix 2, Consultation overview)

Notes

- Please note that where appropriate and where available, the referral may be streamed to an associated public allied health and/or nursing service. Access to some specific services may include initial assessment and management by associated public allied health and/or nursing, which may either facilitate or negate the need to see the public medical specialist.
- A change in patient circumstance (such as condition deteriorating or becoming pregnant) may affect the urgency categorisation and should be communicated as soon as possible.
- Please indicate in the referral if the patient is unable to access mandatory tests or investigations as they incur a cost or are unavailable locally.

5. Other useful information for referring practitioners, not an exhaustive list

- Refer to HealthPathways or local guidelines

Clinical resources (links)	Patient resources (links)

Inform the patient

- Ensure they are aware of the request and the reason for being assessed.
- Instruct them to take all relevant radiology films and reports (including the imaging report) to appointments.
- To inform of any change in circumstance (e.g., getting worse or becoming pregnant) as this may affect the request for assessment.

Movement disorders

Referral to emergency

If any of the following are present or suspected, refer the patient to the emergency department (via ambulance if necessary) or seek emergent medical advice if in a remote region.

- Ocular

Minimum referral criteria

Category 1 (appointment within 30 calendar days)	• Severe symptoms or abrupt onset/deterioration of movement disorder
Category 2 (appointment within 90 calendar days)	• Known or suspected: – Parkinson disease – Tics and Tourette Syndrome – Cerebellar related ataxia – Dystonia – Myoclonus – Huntington's disease – Tardive dyskinesia
Category 3 (appointment within 365 calendar days)	• Non-progressive movement disorder i.e. essential tremor

1. Reason for request, indicate on the referral

- To establish a diagnosis
- For treatment or intervention not otherwise accessible to the patient
- For advice regarding management
- To engage in an ongoing shared care approach between primary and secondary care
- Reassurance for GP/second opinion
- Reassurance for the patient/family
- For other reason (e.g. rapidly accelerating disease progression)

2. Essential referral information, Referral will be returned without this

- General referral information
- TSH results for tremors

3. Additional referral information, Useful for processing the referral

- Detailed history of abnormal movements
- Accurate neurological exam results
- ELFTs (if available)
- Any investigations done to exclude alternative diagnoses e.g. nerve conduction study, EEG, CT Brain and MRI Brain

4. Request

General referral information/Standard information (Appendix 2, Consultation overview)

Notes

- Please note that where appropriate and where available, the referral may be streamed to an associated public allied health and/or nursing service. Access to some specific services may include initial assessment and management by associated public allied health and/or nursing, which may either facilitate or negate the need to see the public medical specialist.
- A change in patient circumstance (such as condition deteriorating or becoming pregnant) may affect the urgency categorisation and should be communicated as soon as possible.
- Please indicate in the referral if the patient is unable to access mandatory tests or investigations as they incur a cost or are unavailable locally.

5. Other useful information for referring practitioners, not an exhaustive list

- Refer to HealthPathways or local guidelines
- Movement disorders are predominantly a clinical diagnosis therefore a detailed history of the abnormal movements and an accurate neurological examination are vital
- Consider chronic disease management plan to access allied health
- Consider allied health (physiotherapy, occupational therapy, speech therapy) management
  - to assess functional capacity if disability increasing
  - speech pathology for assessment of swallowing and/or communication difficulties
  - occupational therapist and physiotherapist for patients with mobility/ADL changes

Clinical resources (links)	Patient resources (links)

Inform the patient

- Ensure they are aware of the request and the reason for being assessed.
- Instruct them to take all relevant radiology films and reports (including the imaging report) to appointments.
- To inform of any change in circumstance (e.g., getting worse or becoming pregnant) as this may affect the request for assessment.

Peripheral neuropathy

Referral to emergency

If any of the following are present or suspected, refer the patient to the emergency department (via ambulance if necessary) or seek emergent medical advice if in a remote region.

•

Minimum referral criteria

Category 1 (appointment within 30 calendar days)	• Rapidly progressive neuropathy • Severe neuropathy • Significant impact to function (e.g falls risk) • Recent onset painful neuropathy
Category 2 (appointment within 90 calendar days)	• No category 2 criteria
Category 3 (appointment within 365 calendar days)	• Suspected or diagnosed peripheral neuropathy without severe complications • Mild to moderate neuropathy likely due to known and treated underlying cause (e.g. diabetic neuropathy)

1. Reason for request, indicate on the referral

- To establish a diagnosis
- For treatment or intervention not otherwise accessible to the patient
- For advice regarding management
- To engage in an ongoing shared care approach between primary and secondary care
- Reassurance for GP/second opinion
- Reassurance for the patient/family
- For other reason (e.g. rapidly accelerating disease progression)

2. Essential referral information, Referral will be returned without this

- ELFT, FBC, fasting BSL, ESR, CRP, TFT, B12 folate results
- ANA/anti-dsDNA results
- Serum Protein Electrophoresis (SPEP) results
- Thiamine results
- Syphilis, Hep B; Hep C; HIV results

3. Additional referral information, Useful for processing the referral

- Nerve conduction study
- Drug and alcohol history

4. Request

General referral information/Standard information (Appendix 2, Consultation overview)

Notes

- Please note that where appropriate and where available, the referral may be streamed to an associated public allied health and/or nursing service. Access to some specific services may include initial assessment and management by associated public allied health and/or nursing, which may either facilitate or negate the need to see the public medical specialist.
- A change in patient circumstance (such as condition deteriorating or becoming pregnant) may affect the urgency categorisation and should be communicated as soon as possible.
- Please indicate in the referral if the patient is unable to access mandatory tests or investigations as they incur a cost or are unavailable locally.

5. Other useful information for referring practitioners, not an exhaustive list

- Refer to HealthPathways or local guidelines

- If painful neuropathy, consider pain relief e.g. amitriptyline or pregabalin
- Optimise management of:
  - diabetes
  - thyroid disease
  - excessive alcohol intake
- Consider allied health management

Clinical resources (links)	Patient resources (links)

Inform the patient

- Ensure they are aware of the request and the reason for being assessed.
- Instruct them to take all relevant radiology films and reports (including the imaging report) to appointments.
- To inform of any change in circumstance (e.g., getting worse or becoming pregnant) as this may affect the request for assessment.

Other referrals to emergency not covered within these conditions

Referral to emergency

If any of the following are present or suspected, refer the patient to the emergency department (via ambulance if necessary) or seek emergent medical advice if in a remote region.

- Bilateral limb weakness with or without bladder and/or bowel dysfunction
- Acute rapidly progressive weakness (Guillain-Barre Syndrome, myelopathy)
- Altered level of consciousness
- Delirium/sudden onset confusion with or without fever

Intervention criteria

Out-of-scope for Neurology interventions

Not all services are funded in the Queensland public health system. Exceptions can always be made where clinically indicated. It is proposed that the following are not routinely provided in a public Neurology service:

-

Urgency category for intervention

Intervention	Minimum criteria	Urgency
• EEG		
• Nerve conduction studies	Suspicion of neuropathic process	
• Video-EEG monitoring for patients with possible epilepsy	Poorly controlled epilepsy with multiple seizures per month Work-up for possible epilepsy surgery Diagnostic video-EEG – epileptic vs. non-epileptic seizures	

Version control

Version	Date	Author	Nature of amendment
V0.1-v0.4	April/May 2015	Stefan Blum, Nicole Mitchell and Kelly Reeves	CAG consultation
V0.5	03/09/2015	Stefan Blum, Nicole Mitchell and Kelly Reeves	Out for stage 1 consultation
V0.6-v0.8		Stefan Blum, Nicole Mitchell and Kelly Reeves	Amendments following stage 1 consultation and desktop audit
0.9	21/04/2016	Nicole Mitchell/Kelly Reeves	Transfer into 'phase 2' consultation template and editorial review
V1.0	27/05/2016	Stefan Blum and Nicole Mitchell	Final endorsed CPC
V1.1	20/1/2017	CPC Team (Liz Travers) & Neurology CAG	Amendments following CAG consultation and feedback received from 6 months Published document
V1.2	29/6/2018	CPC Team (Liz Travers)	New template, amendments from publishing CPC for 2-year review of CPC
V1.3	27/7/2018	Neurology CAG	Amendments post CPC review CAG meeting
V1.4	28/8/2018	CPC Team (Liz Travers)	Re-branding and readiness for Broader consultation