NEUROLOGY and STROKE

NALHN Outpatient Service Information, Triage & Referral Guidelines

Description of Service:

The NALHN Neurology and Stroke Service provides a tertiary service to patients with neurological conditions.

Conditions Seen Include:

- Epilepsy & First Seizure Clinics
- Headache Clinic
- Movement Disorders Clinics
- Multiple Sclerosis & Neuroimmunology Clinics
- Nerve Conduction and Electromyography Clinic
- Neuromuscular Clinics
- Stroke Clinic
- TIA Rapid Assessment Clinic

Exclusions:

- Patients **under 18 years** old (alternative: paediatric neurologist at the Women's and Children's Hospital)
- Patients **already being assessed**/treated for the same condition at another South Australian public hospital (alternative: current treating neurologist or private neurologist)
- Patients who are seeking assessment as part of an **active Work Cover** claim (alternative: private neurologist)
- Elderly patients requiring assessment/treatment of **multiple complex medical problems** (alternative: Geriatric Medicine)
- Patients requiring assessment/treatment of **sleep disorders**, including narcolepsy (alternative: Respiratory/Sleep Medicine)
- Patients requiring assessment/treatment for **back or neck pain** *without* focal neurological deficits and/or normal imaging (alternative: Spinal Clinic or Pain Management Unit)
- Patients requiring assessment/treatment for **complex/longstanding pain disorders** (alternative: Chronic Pain Unit)
- Patients requiring assessment/treatment for **non-specific symptoms**—such as feeling lightheaded, tingling or poor concentration—which may not necessarily be neurological in origin (alternative: additional evaluation in primary care setting then general physician if work up in primary care setting does not clarify things.

Referral Criteria:

- Please include copies of all reports and results
- Patients are seen based on the urgency, as judged from the referral, so referring doctors are urged to give a full and detailed referral to ensure that this is equitably managed.

NALHN prefers all referrals to be named to a clinician providing the service (see list below)

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template

Government of South Australia
SA Health

NEUROLOGY and STROKE

NALHN Outpatient Service Information, Triage & Referral Guidelines

Consultants

Consultant	Specialty
Dr Janakan Ravindran, Head of Unit	Neuroimmunology (MS) & Neuromuscular
Dr Deborah Field	Neuroimmunology (MS) & Neuromuscular
Dr Andrew Moey	Stroke & Headache & Botox clinic
Dr Graham Norton	Epilepsy & 1st Seizure Clinic
Dr Wilson Vallat	Movement Disorders

Clinical Practice Nurses

Sally Castle - TIA Nurse
Ruth Withey - Parkinson's Nurse
Vanessa Maxwell - MS Nurse

For More Information or to Make a Referral

Location: LMH OPD Area 2 – 2nd Floor Consulting Suites
Referral Fax Number: 8182 9355
Phone Number: via LMH Switchboard 81829000

Or

Location: MH OPD Area 2&3 – Ground Floor MH
Referral Fax Number: 8161 2591
Phone Number: via MH Switchboard 8161 2000

For more information about NALHN Outpatient services - www.sahealth.sa.gov.au/NALHNoutpatients

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template

Government of South Australia
SA Health

NEUROLOGY and STROKE

NALHN Outpatient Service Information, Triage & Referral Guidelines

EPILESPY , FIRST SEIZURE & EEG CLINICS

- Strongly suspected new onset seizure disorder where the event is witnessed and/or there are features highly suggestive of seizure which does not meet any of the exclusion criteria below
- Patients with known epilepsy requiring ongoing shared management of refractory epilepsy
- Patients with known epilepsy for consideration of epilepsy surgery or vagal nerve stimulator insertion
- Patients with known epilepsy in the setting of planned or current pregnancy
- Patients requiring video EEG monitoring for diagnostic uncertainty or seizure classification
- Patients with previous seizure requiring specialist assessment for the purposes of obtaining a **commercial** drivers' licence (Note: private drivers' licences usually do not require specialist assessment. See Assessing Fitness to Drive guidelines for more information)
- Patients with known epilepsy wishing to withdraw anticonvulsant medication
- Patients with recent hospital admission for new onset seizures where specific epilepsy outpatient follow-up is required for ongoing diagnostic and/or management issues.
- **If referring to the clinic with suspected seizure – also send a referral for an EEG to be undertaken at the Neurology Dept. LMH**

Conditions which are not assessed by Epilepsy/First Seizure Clinics include:

- Seizures occurring in the setting of drug and/or alcohol intoxication or withdrawal
- Acute symptomatic seizures i.e. occurring in the setting of severe systemic illness, severe metabolic disturbance or concussion
- Unconscious collapse where no available collateral history or no features to strongly suggest seizure disorder
- Convulsive syncope
- Assessment primarily for the purposes of private drivers' licence renewal (this can be done using the Assessing Fitness to Drive guidelines by the patient's treating doctor, including their general practitioner)
- Seizures where diagnosis and investigations already complete +/- therapy commenced
- Patients with confirmed diagnosis of functional/psychogenic non-epileptic seizures
- Seizures occurring in the setting of advanced dementia

Information Required	Investigations Required
• Clinical history & Prior management if applicable	• EEG – please refer to LMH Neurology

Suggested GP Management - Referral to Neurology dept. for an EEG

Urgent < 1month	SEMI-URGENT Target <3months	NON-URGENT/ROUTINE
> New onset seizure not yet assessed/treated > Known epilepsy in setting of current pregnancy **Please Note:** ***A Fitness to Drive Certificate is NOT a criteria for an urgent assessment***	> New onset seizures recently admitted to hospital for which specific outpatient follow-up for investigation/treatment is required > Known epilepsy (uncontrolled) for consideration of epilepsy surgery > Known epilepsy (uncontrolled) for ongoing shared care > Known epilepsy in setting of planning pregnancy (not yet pregnant) > Requiring video-EEG for diagnosis and/or classification	> Known epilepsy (well controlled wishing to withdraw medication > Previous seizures requiring specialist assessment for purposes of obtaining a commercial driver's licence

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template

Government of South Australia
SA Health

HEADACHE CLINIC

- Migraine with or without aura which is:
  - requiring acute treatment more than 8 to 10 days per month and note responding to prophylaxis in usual dose range (see eTG Neurology Guidelines on Migraine) OR
  - requiring frequent emergency department or hospital treatment *or* days off work
  - atypical or where the diagnosis is uncertain
  - If referral is for **botulinum toxin therapy** where patient already assessed and meets PBS criteria

- Suspected trigeminal autonomic cephalgia (i.e. cluster headache, paroxysmal hemicrania, etc.)
- Other headaches where specialist input is required for diagnosis and management

- Conditions which are not assessed by Headache Clinic include:
- Patients with typical tension-type/migraine headache who have not trialled at least two prophylactic medications (must be listed in the referral)
- Headaches known to be due to secondary to disease better managed by alternative specialty clinic (e.g. cerebral vasculitis)
- Chronic pain syndromes (consider referral to Chronic Pain Unit)
- Non-specific symptoms which may not be neurological (e.g. feeling lightheaded, poor concentration) (consider referral to General Physician if initial evaluation in primary care does not clarify situation)

NOTES: If receiving a referral for headaches with 'red flag' features consider referral to the Emergency Department

Information Required	Investigations Required
• Clinical history & prior management	• Any scans previously undertaken

Red Flags

consider referral to ED LMH if positive for below

- features of raised ICP – worse in the morning, exacerbated by coughing, sneezing, straining or bending forwards
- associated focal neurological signs/ altered or impaired consciousness
- abrupt onset – thunderclap headache
- new onset progressive headache in pt > 50 yrs age – consider GCA

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template

Government of South Australia
SA Health

NEUROLOGY and STROKE

NALHN Outpatient Service Information, Triage & Referral Guidelines

URGENT Target < 1month	SEMI-URGENT Target <3months	NON-URGENT/ROUTINE
> Headache with possible 'red flag' features which do not warrant ED presentation (discretion of triaging clinician) > Cluster headache/TAC not currently controlled > New onset migraine with atypical/focal neurological features > Suspected idiopathic intracranial hypertension (consider referral to ophthalmology at the time of triage) *Please arrange urgent MRI for all CAT 1 Headaches at the time of triaging*	> Disabling headache/migraine which has failed to respond to two prophylactic medications (must be listed in referral) > Headache/migraine with recurrent ED presentations, hospital admissions or days off work > Cluster headache/TAC currently managed/in remission but needed ongoing assessment/management	> Headaches not meeting above criteria where specialist input is required for diagnosis or management

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template

Government of South Australia
SA Health

MOVEMENT DISORDER CLINICS

Appropriate referrals include patients with:

- Tremor
- Involuntary movements suggestive of chorea, tics, myoclonus or dystonia
- Ataxia of uncertain cause
- Spasticity of undetermined cause
- Suspected or confirmed Parkinson's disease
- Suspected or confirmed atypical parkinsonism
- Gait disorders of uncertain aetiology
- Suspected or confirmed Huntington's disease
- Management of dystonia and blepharospasm with Botox

Patients which may not be appropriate:

- Patients of advanced age (>80 years) and/or have significant co-morbidities (e.g. dementia): consider General Medical or Geriatric Clinics
- Patients with established cause for symptoms (e.g. post-stroke spasticity): consider alternatives (e.g. rehabilitation)

Information Required	Investigations Required
• Clinical history, prior management including medical therapy	•

URGENT Target < 1month	SEMI-URGENT Target <3months	NON-URGENT/ROUTINE

Triaging of suspected or diagnosed movement disorders to the subspecialty clinic is dependent on the rapidity of progression and/or degree of associated disability and is at the discretion of the triaging clinician.

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template

NEUROLOGY and STROKE

NALHN Outpatient Service Information, Triage & Referral Guidelines

MULTIPLE SCLEROSIS & NEUROIMMUNOLOGY CLINICS

Appropriate referrals include patients with:

- Suspected or confirmed multiple sclerosis – including relapsing-remitting, secondary progressive & primary progressive forms
- Suspected or confirmed neuromyelitis optica spectrum disorders (NMOSD)
- Optic neuritis with suspicion for multiple sclerosis
- Suspected or confirmed myasthenia gravis or Lambert-Eaton myasthenic syndrome (LEMS)
- Suspected or confirmed neurosarcoidosis
- Suspected or confirmed cerebral vasculitis
- Suspected or confirmed autoimmune encephalitis

Where the request is for symptom management please consider if the problem may be more appropriately referred to a Rehabilitation Clinic.

Conditions which are **not** assessed by Multiple Sclerosis/Neuroimmunology Clinics include:

- Non-specific changes seen on an MRI Brain without any clinical symptoms to suggest a demyelinating disorder – if additional advice regarding the scan results is required, please discuss the case with the reporting radiologist in the first instance.

Information Required	Investigations Required
• Clinical history & prior investigations	• NA

Red Flags

URGENT Target < 1month	SEMI-URGENT Target <3months	NON-URGENT/ROUTINE
> *Please consider whether new onset conditions need hospital admission* > Any of the above conditions which are new onset that do not require hospital admission	> Any of the above who have already been assessed and a relatively stable but require ongoing specialist follow up	> Any referral for **second opinion** needs to be triaged by the consultant responsible for the clinic > Chronic longstanding stable neuroimmune disorder (e.g. secondary progressive MS) for ongoing car

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template

Government of South Australia

SA Health

NERVE CONDUCTION AND ELECTROMYOGRAHY CLINIC

- Diagnosis/evaluation of carpal tunnel syndrome and other compressive neuropathies
- Diagnosis/evaluation of peripheral neuropathy
- Diagnosis/evaluation of myopathy
- Diagnosis/evaluation of neuromuscular junction disorders
- Diagnosis/evaluation of suspected amyotrophic lateral sclerosis
- Diagnosis/evaluation of suspected radiculopathy
- Diagnosis/evaluation of suspected brachial plexus disorders

Information Required	Investigations Required
• Clinical history & examination, prior investigations	• NA

Red Flags

- if rapidly progressive symptoms consider referral to ED LMH

This is a guideline only. The clinical scenario may change the appropriate triage category significantly.

URGENT Target < 1month	SEMI-URGENT Target <3months	NON-URGENT/ROUTINE
> Suspected Guillain-Barre syndrome (consider need for admission) > Any rapidly progressive and/or disabling neuropathy where vasculitis/autoimmune cause considered > Suspected amyotrophic lateral sclerosis > Suspected new onset disabling myopathy > Suspected new onset neuromuscular junction disorder > Acute/subacute brachial plexus disorders	> Suspected carpal tunnel syndrome > Suspected ulnar neuropathy > Chronic neuropathy with degree of disability > Suspected radiculopathy	> Non-specific sensory symptoms > Chronic neuropathy with no or minimal disability

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template

NEUROMUSCULAR CLINICS

Appropriate referrals include patients with:

- Suspected acquired primary muscle diseases (e.g. myopathy, myositis)
- Suspected late-onset hereditary nerve and muscle diseases
- Disabling, progressive or 'red flag' peripheral neuropathy (subacute, motor predominant, non-length-dependent, associated systemic symptoms, or associated autonomic dysfunction)
- Confirmed acquired or hereditary muscle disorder with ongoing surveillance/medical management issues
- Confirmed acquired or hereditary neuropathy requiring treatment and/or ongoing surveillance/medical management

Conditions which are **not** assessed by Neuromuscular and Peripheral Neuropathy Clinics include:

- Myopathy in setting of other severe systemic illness known to cause myopathy (e.g. severe hypothyroidism)
- Confirmed hereditary or acquired muscle disorder with no ongoing medical management/surveillance issues (consider referral to rehabilitation services)
- Confirmed hereditary peripheral neuropathy with no ongoing medical management/surveillance issues (e.g. genetically confirmed Charcot-Marie-Tooth disease) (consider referral to rehabilitation specialist)
- Peripheral neuropathy not fulfilling the above criteria (consider referral to General Neurology Clinic, if specialist input required)

Information Required	Investigations Required
• Clinical history, examination and any prior relevant investigations	• NA

Red Flags

- rapidly progressive symptoms – refer to ED at LMH

URGENT Target < 1month	SEMI-URGENT Target <3months	NON-URGENT/ROUTINE
> Subacute and/or significantly disabling suspected new onset muscle disease > Subacute and/or significantly disabling suspected new onset peripheral neuropathy > Subacute and/or significantly disabling suspected new onset neuromuscular junction disease	> New onset muscle, neuromuscular junction or nerve disease not meeting Cat 1 criteria > Suspected late-onset hereditary nerve or muscle disease where there is a degree of disability > Confirmed acquired or hereditary muscle, neuromuscular junction or nerve disease with onogin medical management/surveillance issues	> Suspected late-onset hereditary nerve or muscle disease where there is **no** significant current disability > Non-specific, non-disabling symptoms for assessment regarding possible underlying muscle or nerve disorder

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template

STROKE CLINIC

Appropriate referrals include patients with:

- Patients requiring ongoing management for prior stroke or stroke-related complications
- Patients requiring ongoing management for venous sinus thrombosis
- Patients requiring ongoing management for carotid artery dissection
- Patients requiring ongoing management for cerebral amyloid angiopathy

Conditions which are not assessed by Stroke Clinics include:

- Patients with a remote history of stroke without recent neurological symptoms
- Patients with recent stroke without specific ongoing diagnostic or management issue
- Patients where the primary purpose of the review is to assess fitness to drive (consider referral to Driving Fitness Assessment Clinic through Rehabilitation Medicine)

Information Required	Investigations Required
• Prior history including details of prior management	• NA

Red Flags

- acute stroke symptoms and signs – call SAAS ASAP

URGENT Target < 1month	SEMI-URGENT Target <3months	NON-URGENT/ROUTINE
> New onset focal neurological symptoms > 4 weeks prior to referral attributable to likely stroke	> NA	> NA

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template

TIA RAPID ASSESSMENT CLINIC

Appropriate referrals include patients with:

1. Patients with acute onset of possible transient ischaemic attack symptoms within the last 4 weeks

Conditions which are not assessed by TIA Rapid Access Clinics include:

1. Patients with persisting symptoms (send patient to the Emergency Department)
2. Patients with symptom onset greater than 4 weeks prior (redirect to **Stroke Clinic**)

Information Required	Investigations Required
• History and prior investigations	•

Red Flags

- ongoing focal neurological signs – refer ED LMH

URGENT Target < 1month	SEMI-URGENT Target <3months	NON-URGENT/ROUTINE
Triaging for this service is performed by the TIA Clinic. All forwarded to the clinic as Cat 1 Appoint Immediately.	NA	NA

Acknowledgement: Content for this document was primarily sourced through the SALHN Specialty Outpatient Guidelines 2014/15

Version	Date from	Date to	Amendment
1.0	July 2015	July 2016	Original
2.0	May 2016		New Template
3.0	May 2019		Amended, New template