

Mission Statement

Public confidence in receiving safe, competent, and ethical diagnostic and therapeutic care from regulated professionals.

Competency Checklist Electroneurophysiology procedures

The procedures, as identified, should accurately reflect the experiences of the applicant. Those items achieved at a level of 'competence' indicate that the applicant has demonstrated, through independent actions, the orderly progression of tasks required to achieve accurate diagnostic data within a reasonable standard of time, for a variety of patient cases. Those identified as N/A may require orientation within the Alberta clinical setting.

To complete the checklist:

- 1. indicate the date when the procedure was last performed.
- 2. indicate ☑ whether competence was demonstrated or whether the particular procedure was not applicable to the area of clinical practice.
- 3. obtain supervisor validation for the checklist entries.

Procedure/Study	Date last performed (mm/dd/yyyy)	Competent	N/A	Supervisor Validation
Standard Recordings				
Screen for contraindications, including hyperventilation and photic stimulation.				
Measure and mark head using International 10/20 Electrode Placement System on neonate.				
Measure and mark head using International 10/20 Electrode Placement System on child.				
Measure and mark head using International 10/20 Electrode Placement System on adult.				
Utilize alternate, standardized measurement and placement systems as required				
Identify and mark site for system reference and ground electrode placement				
Identify sites for placement of electrooculogram (EOG) electrodes				
Identify sites for placement of electrocardiogram (ECG) electrodes				
Maintain electrical safety for patient				
Apply electrodes using conductive paste				
Apply electrodes using collodion				
Verify electrode impedances are between 100 and 5000 ohms during recording				
Utilize bipolar and referential montages for optimal recording				

Choose digital sampling rate for optimal recording Utilize sensitivity, filter and time base setting for optimal recording Obtains a minimum 20-minute recording, not including activation procedures Perform eye opening/closing protocol Perform hyperventilation protocol Perform photic stimulation protocol Perform spontaneous sleep protocol Perform sleep deprived protocol. Adapt recording procedures for neonatal and pediatric patients Adapt recording procedures for ECS recording Perform reactivity tests (i.e., auditory, visual, somatosensory, and painful stimulation) for patients with impaired levels of consciousness Identify and monitor physiological and non-physiological artefacts, correct as appropriate Customization & Adaptation of Recordings Create and modify montages for optimal recording Adapt procedures based on patient physical, physiological and psychological presentation Adapt procedures for continuous or long-term monitoring Interpretation & Analysis - General Prepare technical analysis with description and localization of waveforms Interpretation and Analysis: Recognize Critical Abnormate EEG with events occurring during procedure Identify electrocerebral silence Interpretation and Analysis: Adapt Analysis Affected Identify the effects of medication on the EEG			
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Interpretation and Analysis: Adapt Analysis Affected			
	by Medications		
Annotate medications in recording documents			
Interpretation and Analysis: Adapt Analysis Affected	by Clinical Condition	ns	
Autoimmune disorder			
Cerebral structural abnormality			
Cerebral vascular disease/injury			
Dementia Dementia			
Drug toxicity			
Edema			
Encephalopathy			
Epilepsy syndrome			
Head injury			
Involuntary movement			
Level of consciousness		 	
Metabolic disorder		│ 	
Migraine			
Psychogenic non-epileptic event		+	

Procedure/Study	Date last performed (mm/dd/yyyy)	Competent	N/A	Supervisor Validation
Psychosis	, , , , , , , , ,			
Seizure disorder				
Skull and/or facial asymmetry, deformity, or			П	
anomaly				
Space occupying lesion				
Post Study Procedures – Electrode Removal				
Disinfect non-disposable surface electrodes,			П	
supplies and equipment				
Dispose used electrodes per clinical site policy				
Post Study Procedures – Processing Data	T			
Archive and store digital records				
Equipment Operation				
Verify standard filter and sensitivity settings for				
control operation				
Ensure quality control for leakage current is				
performed				
Applicant Name:	D	ate:		
Supervisor Name:				
Supervisor Signature:				
Supervisor Contact Info:				
Email: :	Pł	hone Number:		

February 2024