COLLEGE OF PHYSICIANS AND SURGEONS OF BRITISH COLUMBIA

DIAGNOSTIC ACCREDITATION PROGRAM

T 604-733-7758
TF 1-800-461-3008
F 604-733-3503

300–669 Howe Street
Vancouver BC V6C 0B4
Canada

cpsbc.ca

ACCREDITATION STANDARDS REVISION RECORD

Neurodiagnostics Version 1.3

Glossary

Revised	The content has been changed (standard or criteria; guidance or intent; or reference).
New	New content has been created.
Deleted	The content of the standards or criteria have been removed.
Moved	The criteria or descriptor text has been moved or relocated from another location.

Human resources

No.	Version 1.2		Version 1.3 revision	
NHR2.1.2	**M**	Technical staff providing neurodiagnostic services are certified with the Canadian Association of Electroneurodiagnostic Technologists (CAET); or	**M**	**Revised** There is a process for technologists that are eligible for certification to become certified in a defined period.
NHR2.1.3	**M**	Technical staff providing neurodiagnostic services are certified with the Association of Electromyography of Canada (AETC);	**M**	**Revised** Technical staff providing EEG services are graduates of an accredited training program for neurodiagnostics.
NHR2.1.4	**M**	Technical staff providing neurodiagnostic services are graduates of an accredited training school for neurodiagnostics and are eligible to undergo examination of the Canadian Board of Registered Technologists (CBRET) or the American Board of Registered Electrodiagnostic Technologists (ABRET).	**M**	**Revised** Technologists providing EEG services are certified by or are eligible to write the certification examination from Canadian Board of Registered Technologists (CBRET) or the American Board of Registered Electrodiagnostic Technologists (ABRET).

No.	Version 1.2	Version 1.3 revision
NHR2.1.5		**M** **New** Technologists providing EMG/NCS services are certified by or are eligible to write the certification examination from the Board of Registration of Electromyography Technologists of Canada (BRETC), or the American Board of Electrodiagnostic Medicine (ABEM), or the American Association of Electrodiagnostic Technologists (AAET).
NHR2.1.6		**M** **New** Technical staff providing EMG/NCS services are graduates of an accredited training school for neurodiagnostics and/or are enrolled in a technical training program by a physician qualified to perform EMG/NCS services based on the Provincial Privileging Dictionary.
NHR2.1.7		**M** **New** Technologists providing EP services are certified by or are eligible to write the EP examination from American Board of Registered Electrodiagnostic Technologists (ABRET). *Guidance: Technical staff certified in NCS with the Board of Registration of Electromyography Technologists of Canada (BRETC), or the American Board of Electrodiagnostic Medicine (ABEM), or the American Association of Electrodiagnostic Technologists (AAET) or EEG registration with the Canadian Board of Registered Technologists (CBRET) or the American Board of Registered Electrodiangostic Technologists (ABRET) are eligible to perform EP.*

Patient and client focus

No.	Version 1.2	Version 1.3 revision
NPC3.2.1	Patients are provided with information about their procedures so that they can participate in making informed decisions.	**M** **Changed to mandatory requirement**

Quality improvement

No.	Version 1.2	Version 1.3 revision
NQI3.3.1	**M** Internal audits of clinical processes and procedures are performed. *Guidance: At a minimum, high-risk clinical processes are audited every six months.*	**M** **Revised** At a minimum, an audit of report turnaround times is conducted.
NQI3.3.2	**M** Findings from internal audits of clinical processes are reviewed and analyzed.	**M** **Revised** At minimum, an audit of patient wait times is conducted.
NQI3.3.3	**M** Processes are changed as necessary to reduce risks.	**M** **Revised** Findings from internal audits of clinical processes are reviewed and processes are changed as necessary to reduce risks.

Equipment and supplies

No.	Version 1.2	Version 1.3 revision
NES1.2.7		**M** **New** Preventative maintenance is conducted in accordance to the manufacturers' recommendations.
NES1.3.12	Grounding and current leakage of all instruments connected directly to the patient are periodically tested.	**M** **Changed to mandatory requirement**
NES2.1.3	Results from the safety testing are used to establish baseline values and operational performance for the equipment.	**Deleted**

Global neurodiagnostics

No.	Version 1.2		Version 1.3 revision	
GN1.3.10	**M**	Requests contain accurate and appropriate information that includes the date the request is received.	**M**	**Revised** Requests contain accurate and appropriate information that includes the date of the request.
GN2.1.2		Patient instructions are available in a variety of languages considering the population served.		**Revised** Patient instructions for testing are available in a variety of languages considering the population served.
GN3.1.1	**M**	Procedures are reviewed every 1-3 years by qualified individual(s).	**M**	**Revised** Procedures are reviewed every one to three years by qualified individual(s). *Intent: There is a record of when the last review was conducted.*
GN4.1.7	**M**	• facility name		**Deleted**
GN5.1		Reports are comprehensive and include appropriate patient and relevant clinical information.		**Revised** Reports are comprehensive and include appropriate patient and relevant clinical information. *Guidance: A report may be a combination of the facility generated final report and the patient data sheet.*
GN5.1.4	**M**	• gender		**Deleted**
GN5.1.6	**M**	• test performed	**M**	**Revised** • test(s) performed
GN5.1.7	**M**	• the individual performing the test		**Changed to non-mandatory requirement**
GN5.1.15			**M**	**New** There is a mechanism in place to ensure the individual performing the test can be identified.

Electroencephalography (EEG)

No.	Version 1.2	Version 1.3 revision	
EEG1.0			**New** EEG monitoring and recording is conducted in a manner that ensures the collection of accurate data.
EEG1.1			**New** EEG testing is standardized and recorded in a manner that ensures accurate results for interpretation.
EEG1.1.1		**M**	**New** The technologists prepare and maintain the recording equipment.
EEG1.1.2		**M**	**New** Patient demographics are recorded.
EEG1.1.3		**M**	**New** Significant relevant history and clinical findings specific to the procedures are recorded.
EEG1.1.4		**M**	**New** The event type(s) are recorded and characterized.
EEG1.1.5		**M**	**New** The patient's mental, behavioural, consciousness and neuro-assessment baseline states are recorded.
EEG1.1.6			**New** Results of prior diagnostic procedures are reviewed and documented, if available.
EEG1.1.7		**M**	**New** The technologist identifies and eliminates or reduces artifact contamination of the recording of EEG and video.
EEG1.1.8		**M**	**New** The technologist is present for the majority of the duration of routine recording.

No.	Version 1.2	Version 1.3 revision	
EEG1.1.9		**M**	**New** EEG raw data must be interpreted by a qualified individual.
EEG1.1.10			**New** The technologist notifies the physician and/or nursing staff of significant patient events or inter-ictal abnormalities.
EEG1.2			**New** Electrodes are selected and put into operation according to standardized procedures.
EEG1.2.1		**M**	**New** The head is measured and electrodes are accurately placed according to the International 10-20 Electrode Placement System.
EEG1.2.2		**M**	**New** If electrodes are repositioned due to an anomaly (e.g. skull deformity or defect), the location change is documented. *Guidance: Routinely, the contralateral electrode is placed symmetrically.*
EEG1.2.3		**M**	**New** Appropriate skin preparation is performed without breaking the skin. *Guidance: Abrasive gel can be used for lowering impedances.*
EEG1.2.4		**M**	**New** Surface cup/disc electrodes are used for routine EEGs.
EEG1.2.5		**M**	**New** All cephalic electrodes used on a patient are of the same material.

No.	Version 1.2	Version 1.3 revision	
EEG1.2.5		**M**	**New** The tape or pencil are discarded or cleaned after use. *Intent: Single-use equipment is used on patients with known communicable diseases.*
EEG1.2.6		**M**	**New** Abrasive gel and cotton-tipped applicators used for skin preparation are discarded after each patient use.
EEG1.2.7		**M**	**New** Electrode impedance is measured and documented prior to and as needed throughout the EEG recording and routinely measures between 1–5 KOhms. *Guidance: Attempts should be made to have measured impedances below 5 KOhms. In circumstances where this cannot be achieved the reason is documented.*
EEG2.0			**Moved** Routine EEGs are monitored and recorded in a standardized manner.
EEG2.1			**Moved** Routine adult EEGs are recorded in a standardized manner to ensure accurate results for interpretation.
EEG2.1.1		**M**	**Moved** The head is measured and electrodes are accurately placed according to the International 10-20 Electrode Placement System.
EEG2.1.2		**M**	**Moved** In an alert state, artifact-free cerebral activity is attempted to be recorded with the eyes closed. *Guidance: Passive eye closure may be obtained by gently holding the patient's eyelids closed and/or placing a wet cloth over the eyes.*

No.	Version 1.2	Version 1.3 revision
EEG2.1.3		**M** **Moved** Hyperventilation is attempted for all patients that are able to comprehend the instructions, unless contraindicated. A technical comment on the quality of patient effort or the reason(s) for contraindication is documented.
EEG2.1.4		**Moved** In cases of irregularities the test is prolonged or repeated as per laboratory protocol.
EEG2.1.5		**Moved** Where practical intermittent photic stimulation is performed on a conscious patient, unless contraindicated. *Guidance: This may not be practical in a portable inpatient setting. If PS is not performed, the reason should be documented.*
EEG2.1.6		**M** **Moved** Sleep is encouraged and recorded, when possible. *Guidance: If sleep cannot be achieved then a dedicated sleep deprived EEG should be performed with the patient.*
EEG2.1.7		**M** **Moved** Annotations are made documenting the patient's state, eyelid, head and limb movements, and all other movements.
EEG2.1.8		**M** **Moved** ECG is monitored in all cases.
EEG2.1.9		**M** **New** Twenty minutes of artifact-free recordings is obtained with additional time for evocative maneuvers as indicated. *Guidance: Recording time may be extended in order to capture spells in questions or better characterize abnormal EEG patterns.*

No.	Version 1.2		Version 1.3 revision
EEG2.1.10			**New** EOG is recorded, where practical. *Guidance: Simultaneous video recording with EEG is recommended.*
EEG2.1.11			**New** EMG electrode application is considered to better characterize abnormal movement.
EEG2.2.2	Clinical information is collected to include gestational age, relevant birth and developmental information.	**M**	**Revised** Clinical information is collected to include gestational age and birth information (under three months corrected age), or gestational age, birth and developmental information (under two years). **Changed to mandatory requirement**
EEG2.2.4	Unless contraindicated, hyperventilation is attempted for all patients able to comprehend the instruction.	**M**	Revised Hyperventilation is attempted for all patients able to comprehend the instruction, unless contraindicated. **Changed to mandatory requirement**
EEG2.2.6	Intermittent photic stimulation is performed, unless contraindicated.	**M**	**Changed to mandatory requirement**
EEG2.2.7	Sleep is encouraged and recorded, when possible.	**M**	**Changed to mandatory requirement**
EEG2.2.9		**M**	**New** ECG and EOG is monitored when clinically or electrographically indicated.
EEG2.4.1	The technologist prepares and maintains the recording equipment.		**Deleted**
EEG2.4.3	Patient education is provided including expectations and guidelines while in the recording unit (e.g. limitation of movement, use of event signal devices, continuous audio/video recording and some loss of privacy).		**Deleted**
EEG2.4.4	Patient demographics are recorded.		**Deleted**

No.	Version 1.2		Version 1.3 revision
EEG2.4.5	Significant relevant medical history and clinical findings specific to the procedure are recorded.		**Deleted**
EEG2.4.6	The event types (e.g. seizure), duration and frequency are recorded and characterized.		**Deleted**
EEG2.4.7	The patient's mental, behavioural, consciousness and neuro-assessment baseline states are recorded		**Deleted**
EEG2.4.8	Any medications and/or drug levels are recorded.		**Revised** Any medications and/or drug levels are recorded (e.g. any anti-seizure, sedative and/or psychotropic medications are recorded, including the doses and timing of IV infusions and boluses).
EEG2.4.9	Results of relevant prior diagnostic procedures (e.g. MRI) are reviewed and documented if available.		**Deleted**
EEG2.4.10	The technologist obtains a baseline recording on the CVEEG equipment from all electrodes.	**M**	**Revised** The technologist is initially present and obtains a baseline recording on the CVEEG equipment from all electrodes. **Changed to mandatory requirement**
EEG2.4.11	The technologist identifies and eliminates or reduces artifact contamination of the recording of EEG and video. This includes recognizing artifacts related to networking and loss of connectivity	**M**	**Moved** Bedside testing is performed on patients during and after a seizure by a qualified individual with knowledge in seizure activity.
EEG2.4.12	Bedside testing is performed on patients during and after a seizure by a technologist with knowledge in seizure activity.		**Revised** Feedback from the patient is documented on what they are feeling at the onset of an event.
EEG2.4.13	Language function is assessed by having the patient read standardized phrases or identify pictures during ictal and post-ictal states and comparison is then made to baseline.		**Revised** Language function is assessed during ictal or post-ictal states and is compared to the baseline. *Guidance: Language assessment can be evaluated by having the patient name objects, read standardized phrases or identify pictures).*

No.	Version 1.2		Version 1.3 revision	
EEG2.4.15		Tests of memory and cognitive function are performed		**Revised** Tests of memory and cognitive function are performed during and after a seizure event (e.g. repeat a word while amidst an event than later repeat the same word, orientation to time and place).
EEG2.4.16	**M**	The raw data (e.g. EEG and video recordings) is retained until the interpreting physician has authorized its deletion and/or archival.		**Moved** Strength testing or other focused testing is performed while ictal and post-ictal (e.g. vision or somatosensory function).
EEG2.4.17		The technologist notifies the physician and nursing staff of significant patient events. EEG 1.0, or inter-ictal abnormalities	**M**	**Moved** The raw data (e.g. EEG and video recordings) must be interpreted by a qualified physician and is retained until the interpreting physician has authorized its deletion or archival.
EEG2.4.21		Scores clinical events as “Typical” or “Atypical” and selects these for physician review and interpretation.		**Revised** Clinical and electrographic events are documented for physician review and interpretation.
EEG2.4.22		Selected portions, such as important interictal samples and patient events are archived.		**Revised** Specific patient events or inter-ictal samples are archived and available for review.
EEG2.5.1		The technologist is responsible to prepare and maintain the recording equipment.		**Deleted**
EEG2.5.2		The patient is educated on the procedure including the take-home diary, event button, computer and any safety precautions.	**M**	**Changed to mandatory requirement**
EEG2.5.3		Upon the patient’s return and after recording, the patient diary and verbal history are correlated with the acquired data (e.g. identifies events detected and those signaled by the patient).	**M**	**Changed to mandatory requirement**
EEG2.5.4	**M**	Data (events and transfers events) is captured for review and interpretation.		**Deleted**

No.	Version 1.2		Version 1.3 revision	
EEG2.5.5			**M**	**New** The technologist obtains a sample baseline recording with eye opening and closing.
EEG2.6.1		The nursing staff provides information on the patient's condition and any limitation to the recording procedure, contraindications (e.g. stimulation may aggravate certain clinical conditions) and infection control precautions.		**Revised** The technologists obtain information on patient's condition prior to testing.
EEG2.6.6	**M**	Special attention is given to the condition of the patient and to changes, either spontaneous or following stimulation, and these are documented.		**Revised** Special attention is given to the condition of the patient and to changes, either spontaneous or following stimulation, and these are documented. A nurse or family member may inform the EEG laboratory of changes should there not be a technologist at bedside.
EEG2.6.8		Extraneous artifacts are identified and eliminated whenever possible (e.g. IVAC, blanket warmers, etc.).		**Deleted**
EEG3.1		Hyperventilation techniques are used unless contraindicated.		**Revised** Hyperventilation activation techniques are standardized.
EEG3.1.1	**M**	Hyperventilation is performed for a minimum of three minutes and is documented.	**M**	**Revised** Hyperventilation is performed for a minimum of three minutes and is documented, unless contraindicated.
EEG3.2		Photic Stimulation techniques are used unless contraindicated.		**Revised** Photic stimulation activation techniques are standardized.
EEG3.2.1		Photo stimulation is performed when clinically indicated.	**M**	**Revised** Photic stimulation is performed, unless contraindicated. When contraindicated it is documented.
EEG3.2.5	**M**	In the presence of a photoparoxysmal response photic stimulation may be repeated as per protocol.		**Changed to non-mandatory requirement**

No.		Version 1.2	Version 1.3 revision
EEG3.3		Sleep activation techniques are used unless contraindicated. *Guidance: Sleep activation may occur via spontaneous sleep, sleep deprivation or sedation.*	**Revised** Sleep activation techniques are standardized. *Guidance: Sleep activation may occur via spontaneous sleep, sleep deprivation or sedation.*
EEG3.3.1		The opportunity for sleep is enhanced by periods of non-stimulating recording.	**Revised** Sleep is encouraged and recorded, when possible. *Guidance: Sleep activation may occur via spontaneous sleep, sleep deprivation or sedation. The opportunity for sleep is enhanced by periods of non-stimulated recording.*
EEG3.3.3		Sleep is encouraged and recorded, when possible.	**Revised** If sedation is administered, the agent and dose is documented along with the indication for its' use.
EEG3.3.4			**New** The patient is not awakened until a minimum of 10 minutes of sleep is obtained.
EEG3.4		Response testing techniques are established.	**Revised** Response activation techniques are standardized.
EEG3.4.4	**M**	For stuporous patients, auditory, visual and tactile stimuli are applied.	**Deleted**
EEG4.1		Recording preparation/techniques are comprehensive and provide all the necessary information.	**Revised** Recording preparation/techniques are comprehensive and provide all the necessary information. *Intent: Technologist recordings are captured either in the data report sheet or within the recording software.*
EEG4.1.5		Data recorded includes time of last nourishment.	**Moved** Data recorded includes indication for testing.
EEG4.1.11		Annotation of recording changes are made directly on the recording, at time of occurrence (e.g. technical, clinical and medications administered during procedure).	**Moved** Data recorded includes body temperature. *Guidance: In cases where a patient is on a cooling protocol the body temperature may affect the test results.*

No.	Version 1.2		Version 1.3 revision	
EEG4.1.15		Data recorded includes body temperature. *Guidance: in cases were patients are on a cooling protocol body temperature may affect the test results.*		**Moved** Annotation of recording changes are made directly on the recording, at time of occurrence (e.g. technical, clinical and medications administered during procedure).
EEG4.2.1	**M**	The EEG recording contains a minimum of 20 minutes, not including activation procedures.	**M**	**Revised** The EEG recording contains a minimum of 20 minutes, not including activation procedures. *Guidance: Activation procedures refer to hyperventilation, photic stimulation and sleep activation. The duration of the activation procedures, including two minutes of post hyperventilation, should be in addition to the minimum 20 minutes of recording. Any EEG recording performed less than the specified time is documented with an explanation for early termination.*
EEG4.3.2	**M**	Any changes are documented by the technologist on the EEG at the time of occurrence.	**M**	**Revised** Any changes in the patient's level of consciousness are documented by the technologist on the EEG at the time of occurrence.
EEG4.4.2	**M**	Electrooculogram (EOG) monitoring is performed during routine adult EEGs. *Guidance: During pediatric testing EOG is monitored when clinically or electrographically indicated.*	**M**	**Revised** Electrooculogram (EOG) monitoring is performed during routine adult EEGs.
EEG4.5.2	**M**	Longitudinal-bipolar, transverse-bipolar and referential montages are recorded.	**M**	**Revised** The technologist records the study alternating between three or more different montages. *Intent: The interpreting physician has access to many montages for study review with the use of digital EEG technology (e.g. longitudinal-bipolar, transverse-bipolar and referential montages).*
EEG4.5.3	**M**	If contamination of reference occurs, another reference is chosen and the change is clearly noted on the recording.	**M**	**Revised** If contamination of the reference occurs, another reference is selected and the change is documented.

No.	Version 1.2		Version 1.3 revision	
EEG4.7.4	**M**	The 60 Hz notch filter is off.	**M**	**Revised** The 60 Hz notch filter is turned off. In the event that the notch filter is turned on, it is documented. *Guidance: All attempts should have been made to eliminate artifact prior to turning the filter on.*

Electromyography (EMG) and nerve conduction studies (NCS)

No.	Version 1.2		Version 1.3 revision	
EMG1.1.1		Preliminary history is obtained by the physician prior to patient testing.	**M**	**Changed to mandatory requirement**
EMG1.1.2	**M**	Physical examination is performed.	**M**	**Revised** The examination includes a physical neuromuscular assessment of the patient. *Guidance: Electrodiagnostic studies serves as an extension of the clinical exam; therefore, a direct neurological examination is performed as part of the studies in order to identify clinical issues and develop a working diagnosis.*
EMG1.1.3			**M**	**New** Any factors that may affect the test are assessed and documented. *Guidance: At a minimum, the following factors are assessed edema, patient cooperation, ability to tolerate stimulus, accessibility to access site, etc.*
EMG1.1.4			**M**	**New** Skin temperature is recorded. *Intent: Skin temperature is warm prior to testing.*
EMG2.1		NCS recording preparation/techniques are comprehensive and provide all the necessary information.		**Revised** NCS recording preparation/techniques are comprehensive and provide all the necessary information for interpretation.

No.	Version 1.2		Version 1.3 revision	
EMG2.1.1	**M**	EMG technologists or physicians perform nerve conduction studies with an electromyographer readily available for consultation.	**M**	**Revised** EMG technologists perform nerve conduction studies with a qualified physician readily available for consultation.
EMG2.1.2		Studies include comparison with unaffected nerve or muscle, where indicated.		**Revised** Abnormal studies include a comparison with the unaffected nerve or muscle (e.g. contralateral side).
EMG2.1.3		The ground electrode is applied first and placed in a position between the recording and stimulating electrodes.		**Revised** The ground electrode is placed in a position between the recording and stimulating electrodes.
EMG2.1.4	**M**	Appropriate skin preparation is performed.	**M**	**Revised** Appropriate skin preparation is performed. *Intent: Appropriate skin preparation removes dirt and oil from the site where electrodes are applied.*
EMG2.1.5	**M**	Electrode application is anatomically correct for the motor and sensory nerve being studied.	**M**	**Revised** Recording electrodes and stimulator application is anatomically correct for the motor and sensory nerve being studied.
EMG2.1.6		Distances used to derive velocities and latencies are documented.	**M**	**Changed to mandatory requirement**
EMG2.1.7		When calculating nerve conduction velocities, proximal stimulation sites are ≥ 10 cm apart, if possible.		**Deleted**
EMG2.1.9		Techniques to minimize artifacts are employed, when required.		**Revised** When attempts at eliminating artifact (physiological or non-physiological) have failed, it is documented. *Intent: Techniques to minimize artifacts are employed (e.g. minimize electrical interference, appropriate skin preparation).*

No.	Version 1.2		Version 1.3 revision	
EMG2.1.10			**M**	**New** Patients with cardiac-assisted devices should be evaluated prior to examination. *Guidance: Electrodiagnostic studies are avoided on patients with external pacing wires, intravascular guidewires, or other catheter guidewires in place.*
EMG2.1.11			**M**	**New** The limb ipsilateral to the device should be avoided, where possible (e.g. in patients with central catheters without guidewires present, an implantable pacemaker or implantable automatic cardioverter-defibrillator). *Guidance: If the limb ipsilateral to the device cannot be avoided, stimulation should not be performed less than six inches from the implanted device, stimulus pulse duration should be 0.2 ms or less, and stimulation rates should be no greater than 1 Hz, so that the stimulation in not misinterpreted by the cardiac device as a cardiac rhythm.*
EMG2.1.12			**M**	**New** Stimulation to the brachial plexus is not recommended to patients with implanted cardiac pacemakers.
EMG2.2.2	**M**	Single-use gloves are worn when performing EMG needle procedures.	**M**	**Revised** Gloves are worn when performing EMG needle procedures.
EMG2.2.3	**M**	Single-use disposable needles are used for all non-single-fiber EMGs.	**M**	**Revised** Single-use disposable needles are used for all non-single-fiber EMGs and disposed of properly.
EMG2.2.4	**M**	Appropriate skin preparation is performed.	**M**	**Revised** Appropriate skin preparation is performed prior to the insertion of EMG needles.

No.	Version 1.2		Version 1.3 revision	
EMG2.2.5	**M**	Patients with cardiac assisted devices should be evaluated prior to examination. *Guidance: Electrodiagnostic studies are avoided on patients with external pacing wires, intravascular guidewires, or other catheter guidewires in place.*		**Deleted**
EMG2.2.6	**M**	The limb ipsilateral to the device should be avoided, where possible (e.g. in patients with central catheters - without guidewires present, an implantable pacemaker or implantable automatic cardioverter-defibrillator). *Guidance: If the limb ipsilateral to the device cannot be avoided, stimulation should not be performed less than 6 inches from the implanted device, stimulus pulse duration should be 0.2 ms or less, and stimulation rates should be no greater than 1 Hz, so that the stimulation in not misinterpreted by the cardiac device as a cardiac rhythm.*		**Deleted**
EMG2.2.7	**M**	Stimulation to the brachial plexus is not recommended to patients with implanted cardiac pacemakers.		**Deleted**
EMG2.2.9	**M**	There is an evaluation of voluntary motor unit potentials to investigate morphology including recruitment, interference, and firing rate as well as amplitude, duration, stability and estimated percent polyphasic potentials.	**M**	**Revised** There is an evaluation of voluntary motor unit potentials to investigate morphology including recruitment, interference, and firing rate as well as amplitude, duration and stability.
EMG3.1.3		The following items may be recorded electronically or on a face sheet or a separate technologist data sheet: allergies and sensitivities.		**Deleted**
EMG3.1.4		The following items may be recorded electronically or on a face sheet or a separate technologist data sheet: current medications.		**Deleted**
EMG3.1.9		The following items may be recorded electronically or on a face sheet or a separate technologist data sheet: stimulation procedures performed and relevant details.		**Revised** The following items may be recorded electronically or on a face sheet or a separate technologist data sheet: stimulation intensity for each stimulation site.

No.	Version 1.2		Version 1.3 revision	
EMG3.1.10	**M**	The following items may be recorded electronically or on a face sheet or a separate technologist data sheet: cardiac assisted devices (e.g. implanted pacemaker, cardioveter-defribillator, external pacing wires, intravascular guidewire or other catheter guidewires).		**Deleted**
EMG3.2		Sensitivities are appropriate for the recording.		**Deleted**
EMG3.2.1		Adjustments are made in order to record a wide range of voltage signals.		**Deleted**
EMG3.3		Filter Settings are used appropriately.		**Revised** Machine and filter settings are used appropriately to ensure accurate results for interpretation.
EMG3.3.1		The 60 Hz notch filter is turned off.	**M**	**Revised** The 60 Hz notch filter is turned off. In the event that the notch filter is turned on, it is documented. *Guidance: All attempts should have been made to eliminate artifact prior to turning the filter on.*
EMG3.3.2	**M**	When attempts at eliminating artifact (physiological or non-physiological) have failed it is documented.		**Deleted**
EMG3.4.1	**M**	The normative data is readily available.	**M**	**Revised** A list of normative data values used is readily available.
EMG3.4.3	**M**	Normative values are available with consistent filter settings, sweep speeds, sensitivities, distances and electrode separations, utilizing appropriate sampling of age, gender and height.	**M**	**Revised** Normative values are available with consistent filter settings, sweep speeds, sensitivities, distances and electrode separations.
EMG3.4.4	**M**	Non-published/facility specific normative data requires: a minimum of 20 subjects.	**M**	**Revised** The criteria used to establish non-published normative data are defined. *Guidance: At a minimum the following factors are assessed: published date, sample size, testing methods (e.g. filter settings, temperature control, filter settings, distances and electrode placement).*

No.	Version 1.2		Version 1.3 revision
EMG3.4.5	**M**	Non-published/facility specific normative data requires: an age range spanning the patient population to be studied.	**Deleted**
EMG3.4.6	**M**	Non-published/facility specific normative data requires: the stimulus, recording and all other conditions to be the same as those referenced in the published normative data.	**Deleted**
EMG3.4.7		A group of normal subjects at an age equivalent to the youngest subjects (e.g. neonates) will be tested and evaluated.	**Deleted**
EMG3.4.8		A second group at an age near the middle of the age range of the children tested is evaluated.	**Deleted**

Evoked potentials (EP)

No.	Version 1.2		Version 1.3 revision	
EP2.1.1	**M**	The head is measured and electrodes are accurately placed according as per laboratory protocol.	**M**	**Revised** The head is measured and electrodes are accurately placed according to the International 10-20 Electrode Placement System.
EP2.1.2	**M**	If electrodes are repositioned due to an anomaly (e.g. skull deformity or defect), the contralateral electrode is placed symmetrically and the location is documented.	**M**	**Revised** If electrodes are repositioned due to an anomaly (e.g. skull deformity or defect), the location change is documented. *Guidance: Routinely, the contralateral electrode is placed symmetrically.*
EP2.1.3	**M**	Appropriate skin preparation is performed.	**M**	**Revised** Appropriate skin preparation is performed without breaking the skin. *Guidance: Abrasive gel is used for lowering impedances.*
EP2.1.4	**M**	Abrasive gel is used for lowering impedances without breaking the skin.		**Deleted**

No.	Version 1.2		Version 1.3 revision	
EP2.1.6	**M**	All electrodes used on a patient are of the same material.	**M**	**Revised** All cephalic electrodes used on a patient are of the same material.
EP2.1.7	**M**	If a patient has a head wound, the tape and pencil are discarded.	**M**	**Revised** The tape or pencil are discarded or cleaned after use. *Intent: Single-use equipment is used on patients with known communicable diseases.*
EP2.2.1	**M**	Electrode placement is as per Queen's Square or 10/20.	**M**	**Moved** The patient's visual acuity is evaluated prior to the procedure and when indicated, the patient wears corrective lenses.
EP2.2.6		The stimulus is viewed monocularly.	**M**	**Changed to mandatory requirement**
EP2.2.7	**M**	The patient's visual acuity is evaluated prior to the procedure and when indicated, the patient wears corrective lenses.	**M**	**Moved** Electrode placement is as per Queen's Square or 10/20.
EP2.2.9		The VEP are recorded from the right, mid and left occipital regions relative to the mid-frontal region.		**Deleted**
EP2.3.6	**M**	Responses are recorded between an electrode at the vertex or mid-frontal region and one at the earlobe or mastoid of the ear being stimulated.	**M**	**Revised** The response(s) are recorded between an electrode at the vertex or mid-frontal region and one at the earlobe or mastoid of the ear being stimulated.
EP2.3.10		At a minimum, of 1000 trials are usually averaged and at least two or more responses are recorded and superimposed to demonstrate replicability or lack of replicability of their components.		**Revised** At a minimum, 1,000 trials are usually averaged and at least two or more responses are recorded and superimposed to demonstrate replicability or lack of replicability of their components.
EP2.4.13			**M**	**New** When attempts at eliminating artifact (physiological or non-physiological) have failed it is documented.
EP3.1.1		The normative data is readily available.		**Revised** A list of normative data values used is readily available.

No.	Version 1.2		Version 1.3 revision	
EP3.1.4	**M**	Non-published/facility specific normative data requires: a minimum of 20 subjects.	**M**	**Revised** The criteria used to establish non-published normative data are defined. *Guidance: At a minimum the following factors are assessed: published date, sample size, testing methods (e.g. filter settings, temperature control, filter settings, distances and electrode placement).*
EP3.1.5	**M**	Non-published/facility specific normative data requires: an age range spanning the patient population to be studied.	**M**	**Moved** Medications are documented (e.g. sedation).
EP3.1.6	**M**	Non-published/facility specific normative data requires: the stimulus, recording and all other conditions to be the same as those referenced in the published normative data.	**M**	**Moved** When attempts at eliminating artifact (physiological or non-physiological) have failed it is documented.
EP3.1.7		A group of normal subjects at an age equivalent to the youngest subjects (e.g. neonates) is tested and evaluated.		**Deleted**
EP3.1.8		A second group at an age near the middle of the age range of the children tested is evaluated.		**Deleted**