THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO

Independent Health Facilities

Sleep Medicine – Facility & Patient Record Review – Assessors' Checklist

INSTRUCTIONS: **Please complete (✓) the attached checklist during the assessment. Ensure that all the questions have been answered. Please do not leave any questions blank. A space has been provided at the bottom of each section for your comments.**

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Facility Name/No:_____ Date:_____

Staff in the Facility	Meets	Meets with Recommendations	Does not Meet	N/A
PHYSICIANS				
1. Do the physicians providing services meet the expectations as outlined in the parameters and standards? ➢ Physicians practicing sleep medicine on or before October 1, 1996				
➢ Physicians practicing sleep medicine after October 1, 1996				
➢ Physicians starting the practice of sleep medicine after September 1, 2008.				
➢ Physicians practicing in the area of pediatric sleep medicine prior to January 1,2010.				
2. For physicians who began performing pediatric studies after January 1, 2010, is there evidence that they have obtained the additional training requirements as outlined in the parameters and standards?				
3. Do physicians obtain a minimum of 25 hours CPD per year directly relevant to the practice of sleep medicine? ➢ Are these activities documented?				
TECHNOLOGISTS				
4. Has a Technical Director been appointed by the facility?				
5. Is the Technical Director registered by the Board of Registered Technologists (BRPT) and hold current certification in BCLS and First Aid?				
6. Does the Technical Director fulfill the role and responsibilities as outlined on pg 15 of the parameters and standards?				
7. Does the technical staff employed at the facility meet the qualifications as outlined on pg 15 of the parameters and standards?				
➢ For technologists performing pediatric studies is there evidence that they have received training (minimum of 3 months) with primary responsibility for the set up data collection and scoring of at least 20 pediatric studies with an experienced technologist?				
8. Are the technologists who provide direct patient care currently certified in cardiopulmonary resuscitation (BCLS)?				
9. Do technologists obtain and document at least 25 hours of CME per year directly relevant to the practice of sleep medicine				
10. For Level 1 studies, does the facility/Technical Director ensure a maximum patient/technologist ratio of 3:1?				

Staff in the Facility	Meets	Meets with Recommendations	Does not Meet	N/A
11. Do the Collecting Technologists ensure the following duties and responsibilities are met: ➢ Gather, analyze and integrate patient information?				
➢ Explain pre-testing, testing and post-testing procedures to the patient?				
➢ Prepare and calibrate equipment required for testing to determine proper functioning and make adjustments if necessary?				
➢ Apply electrodes and sensors according to accepted published standards?				
➢ Perform appropriate physiologic calibrations to ensure proper signals and make adjustments if necessary?				
➢ Follow procedure protocols to ensure collection of appropriate data?				
➢ Follow "lights out" procedures to establish and document baseline values?				
➢ Perform polysomnographic data acquisition while monitoring study-tracing quality to ensure signals are artifact free and make adjustments, if necessary?				
➢ Provide regular and thorough documentation of physiological activities that occur during the night?				
➢ Provide a summary of the night's observations to include all physiological and polysomnographic events as well as therapeutic intervention as indicated by the physician or facility policies and procedures?				
➢ Follow "lights on" procedures to verify integrity of collected data and complete the data collection process?				
12. Do Scoring Technologists ensure the following responsibilities are met: ➢ Score sleep/wake stages by applying professionally accepted guidelines?				
➢ Score clinical events according to facility specific protocols as well as providing a documented summary of their findings for the interpreting physician?				
➢ Generate accurate reports by tabulating sleep/wake disorder and clinical event data?				

Comments:

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Quality Advisor	Meets	Meets with Recommendations	Does not Meet	N/A
1. Is there a designated Quality Advisor (QA)?				
2. Is there a written agreement in place that acknowledges their role in connection with Quality Assurance and the duties and responsibilities as outlined on pg 12/13 of the parameters and standards?				
3. Does the QA personally attend the facility at least twice each year, or more frequently, where in the opinion of the QA it is necessary based on the volume and types of services provided in the facility?				
4. Does the QA document all visits to the facility made in connection with the QA's role?				
5. Does the QA ensure that a qualified physician is available for consultation during the facility's hours of operation?				
6. Does the QA seek advice from other health professionals where in the opinion of the QA it is necessary to ensure that all aspects of services provided in the facility are provided in accordance with generally accepted professional standards and provide such advice to the licensee?				
7. Does the QA chair the Quality Advisory Committee (QAC) meetings?				
8. Does the QA ensure that the QAC meets as described on pg 12 of the parameters and standards?				
9. Does the QA ensure that regular agenda items such as review of cases, policies and procedures, quality control matters on equipment, incidents, medical and technical staffing issues are discussed?				
10. Are all QAC meetings documented?				
11. Does the QA obtain copies of assessment reports from the licensee; ensure that they are reviewed, and discussed with the QAC?				
➢Is there documented evidence that such a review has taken place?				
12. Has the Quality Advisor fulfilled his duties and responsibilities as outlined with respect to advising the licensee on the facilities' quality management program?				

Comments:

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Policies and Procedures	Meets	Meets with Recommendations	Does not Meet	N/A
1. Is there a policy and procedure manual for sleep studies available within the facility?				
FACILITY 2. Written policies and procedures are in place for the following: ➢ Overview of the lab				
➢ Scope and limitations of services				
➢ Map location of the lab				
➢ Floor plan				
➢ Organizational structure				
➢ General office policies and procedures				
➢ Patient booking system and clinic patient flow				
➢ New patient process including accepted referral sources; procedure to triage/process referrals and book appointments; standard procedure for consultation, office visits, diagnostic and treatment services and follow-up				
FACILITY STAFF ➢ Job descriptions including BCLS & CME activities				
➢ Delegated Acts				
➢ Training of new staff hires				
FACILITY CONTACTS ➢ Staff				
➢ Building hydro and security				
➢ Emergencies – Fire, Police, Hospitals				
➢ Vendors				
RECORDS AND COMMUNICATION/REPORTING & PRIVACY PRINCIPLES ➢ Policies and procedures for record structure, maintenance, storage and destruction				
➢ Confidentiality policies				
➢ Consent and Privacy Policies and Procedures				
➢ Reporting policies and procedures				
➢ Report/chart procedures and standards				
➢ Mandatory reporting to Ministry (see Appendix VIII)				

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Policies and Procedures	Meets	Meets with Recommendations	Does not Meet	N/A
➢ Standard forms including but not limited to: • Requisitions				
• Flow sheets				
• Handouts and prescriptions				
• Logs				
• Incident/accident/complaint forms				
DIAGNOSTIC AND THERAPEUTIC SERVICES (Adult & Pediatric) ➢ Scope and limitations of services				
➢ Patient preparation				
➢ Methods of performing each test				
➢ Normal values for tests				
➢ Scoring manual (see Appendix IV)				
QUALITY MANAGEMENT ➢ Refer to Chapter 6 of the parameters and standards to ensure all elements are outlined				
EQUIPMENT MAINTENANCE (Adult & Pediatric) ➢ Equipment list				
➢ Routine maintenance, validation and calibration of equipment (logs to be maintained separately for these procedures)				
INFECTION CONTROL AND PROCEDURES ➢ Routine practices for infection control as per PIDAC Guidelines				
EMERGENCY PROCEDURES AND SAFETY POLICIES ➢ Fire and evacuation plan				
➢ General safety and prevention of adverse effects including administration of supplemental gases				
➢ Specific first aid measures and emergency procedures • Cardiac arrest/respiratory arrest				
• Chest pain				
• Shortness of breath				
• Seizures				
• Acute non chest pain				
• Other medical emergencies				
• Other adverse health effects or non-medical emergencies				
• How to arrange for transfer of patient to a hospital				

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Policies and Procedures	Meets	Meets with Recommendations	Does not Meet	N/A
➢ Safety equipment list and medication control				
➢ Policies for staff and patient security • General security policies and procedures				
• Inappropriate patient behaviour				
• Sexual harassment of patients and of staff				
➢ Current Workplace Hazardous Materials Information System (WHMIS) and Material Safety Data Sheets (MSDS) – may be kept in a separate manual/file				
INCIDENT/COMPLAINT PROCEDURES ➢ General policies on dealing with and documenting incidents and complaints including follow-up				
2. Are the policies and procedures reviewed at least annually, revised as necessary and dated to indicate time of last revision?				
3. Is there evidence that staff know the facility's policies and procedures and that they are being implemented by staff?				

Comments:

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Facility Equipment and Supplies	Meets	Meets with Recommendations	Does not Meet	N/A
1. Does the physical layout of the facility conform to the appropriate municipal and provincial legislations governing: ➢ Fire safety standards?				
➢ Accessibility standards?				
➢ Building standards?				
➢ Medical gas systems?				
2. Are the patient bedrooms separate from each other?				
3. Is each bedroom quiet, with appropriate control of ambient temperature and light?				
4. Are the washrooms easily accessible to patients?				
5. Does all electromedical equipment adhere to the Canadian Electric Codes for Electromechanical Equipment or its equivalent according to the appropriate risk class?				
6. Does the laboratory equipment permit the technical staff to monitor each patient unobtrusively and allow the patient to communicate with the technical staff in the event that he/she requires assistance?				
7. Is closed circuit TV (infrared or low light) used for continuous audio and visual monitoring and recording each patient?				
8. Are there functional smoke detectors in each bedroom?				
9. Are fire extinguishers available in the facility?				
➢ Is there evidence they are checked annually by a Fire Safety Company?				
10. Is the evacuation plan prepared and practiced annually? Is this activity documented?				
11. Is the following emergency equipment available in the facility: ➢ Ambubag with mask interface (pediatric mask must be available for facilities performing pediatric studies)				
➢ Resuscitation Board				
➢ Airway (Adult) (Pediatric if applicable)				
➢ First Aid Kit				
12. For facility's performing Level 1 Sleep Studies and Multiple Sleep Latency tests, are the required equipment and test components available? (see pgs 10-11)				

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Facility Equipment and Supplies	Meets	Meets with Recommendations	Does not Meet	N/A
Pediatric Patients (Age 4- 12)				
13. Is the structure of the laboratory appropriate for children?				
14. Are study beds equipped with adequate side rails and end guards for patient safety?				
15. Is a sleep chair or other accommodations available for the parent to sleep with the patient?				
16. Is appropriate sized equipment available?(belts, O_2 probes)				
17. Is the appropriate resuscitative equipment available? (O_2 delivery systems, resuscitation drugs, dosages, equipment)				

Comments:

Level 1 Sleep Study – Required Equipment and Test Components

Impedances need to be less than 10,000 ohms but less than 5,000 ohms is preferred.

- **Electroencephalogram (EEG) –** The recommended derivations are F4-M1, C4-M1, O2 –M1 . The back up derivations are: F3-M2, C3-M2, O1-M2.
- **Electrooculogram (EOG) –** E1-M2 (E1 is placed 1 cm below the left outer canthus); E2-M2 (E2 is placed 1 cm above the right outer canthus**)**
- **Electromyogram –(EMG) –** Two or three electrodes are placed to record EMG: one midline 1 cm above the inferior edge of the mandible and one 2 cm below the inferior edge of the mandible and 2 cm to the right of the midline and/or 2 cm below the centre of the inferior edge of the mandible and 2 cm to the left of the midline. The standard chin EMG derivation consists of either of the electrodes below the mandible referred to the electrode above the mandible. The other inferior electrode is a backup electrode to allow for continued display of EMG activity if one of the primary electrodes malfunctions.
- **Limb Movement EMG:** Surface electrodes are placed longitudinally and symmetrically around the middle of the anterior tibialis muscle at least 2 to 3 cm apart or 1/3 of the length of the muscle, whichever is shorter. Both legs are monitored for the presence of the leg movements. Separate channels for each leg are strongly preferred. Sensitivity limits of -100 and 100 uV (upper/lower) are preferred. Use of 60 Hz (notch) filters should be avoided.
- **Respiratory Diagnostics:** The sensor for detection of blood oxygen is pulse oximetry with a maximum acceptable signal averaging time of 3 seconds. The sensor to detect absence of airflow for identification of apneas is an oronasal thermal sensor. The sensor for detection of airflow for identification of a hypopnea is a nasal air pressure transducer, with or without square root transformation of the signal. The sensor for detection of respiratory effort can be piezoelectric belts, esophageal manometry, or calibrated or uncalibrated inductance plethysmography.
- **Respiratory Therapeutic:** The sensor for detection of blood oxygen saturation is pulse oximetry with a maximum acceptable signal averaging time of 3 seconds. To detect airflow include the digital flow signal integrated from the PAP unit. Include the digital mask leak reading (with or without intentional leak accounted for) from the PAP unit. For BPAP studies in particular, include the digital pressure reading and the tidal volume where available. The sensor for detection of respiratory effort can be Piezoelectric belts, esophageal manometry, or calibrated or uncalibrated inductance plethysmography**.** ***(Note: Alternative sensors or signals must be used when the signal from the recommended sensor is not reliable. Alternative signals or sensors include: nasal pressure transducer to detect absence of airflow for identification of an apnea when the oronasal thermal sensor (thermistor) signal is unreliable. Uncalibrated or calibrated inductance plethysmography or an oronasal thermal sensor to score hypopneas when the nasal pressure device is not functioning.***
- **Electrocardiogram (ECG) –a single modified electrocardiograph Lead II using torso electrode placement.** *Note: Additional leads may be placed if clinically indicated by physician)*
- **Ancillary Equipment: Arterial Oxygen Saturation – oximeter, external oximeter for validation; body position sensor; infared/low light audio/visual capability with ability to record.** *Note: Each bed must have an audio visual system of sufficient quality to accurately identify and assess snoring while continuously monitoring patients.*
- **Optional Equipment: Transcutaneous or end tidal carbon dioxide, snoring sensors/microphones (independent of the room microphone for patient communication)**

Level 2 Sleep Study Required Equipment and Test Components

- **Cardiopulmonary assessment as for Level 1 sleep study but without EEG, EOG and submental EMG for sleep staging and without measurement of limb movements.**

MSLT/MWT Required Equipment and Test Components

- **Electroencephalogram (EEG) –** the recommended derivations are: F4-M1; C4-M1; O2-M1. The back-up derivations are: F3-M2; C3-M2; O1-M2
- **Electrooculogram (EOG) –** E1-M2 (E1 is placed 1 cm below the left outer canthus); E2-M2 (E2 is placed 1 cm above the right out canthus). Additional EOG leads are recommended: FP1-M2; FP2-M1.
- **Electromyogram (EMG) –** two or three electrodes are placed to record EMG: One midline 1 cm above the inferior edge of the mandible and one 2 cm below the centre of the inferior edge of the mandible and 2 cm to the right of the midline, and/or 2 cm below the centre of the inferior edge of the mandible and 2 cm to the left of the midline. The standard chin EMG derivation consists of either of the electrodes below the mandible referred to the electrode above the mandible. The other inferior electrode is a backup electrode to allow for continued display of EMG activity if 1 of the primary electrodes malfunctions.
- **Electrocardiogram (ECG) –** A single modified electrograph Lead II using torso electrode placement. *Note: Additional leads may be placed if clinically indicated by physician.*
- **Audio Visual –** Monitoring of all patients for recording events of interest or special studies (ancillary equipment). Each bed must have an audio visual system of sufficient quality to accurately identify and assess snoring while continuously monitoring patients.

Other Procedures – *Depending on the clinical situation, additional procedures may be utilized, reported and interpreted in patients with:*

- **Suspected Sleep Apnea –** Respiratory effort may be monitored with an esophageal pressure monitor.
- **Unambiguous obstructive sleep apnea –** treatment may be instituted with positive airway pressure on the same night as the diagnostic study. This may not eliminate the need for a second facility night for CPAP/Bi-Level positive pressure titration. Supplemental oxygen may be titrated as needed, if significant hypoxia persists.
- **Suspected Hypoventilation Syndromes (e.**g. chronic respiratory failure, neuromuscular disorders) – Transcutaneous CO2 or another reliable measure of ventilation should be monitored when treatment is undertaken with positive pressure mechanical ventilation. The use of mechanical ventilation during sleep and/or wakefulness requires additional training in mechanical ventilation (i.e. in respirology). The respiratory effort by intercostal EMG recordings may be assessed.
- **Suspected nocturnal gastro-esophageal reflux –** Esophageal pH or impedance may be monitored with an esophageal pH electrode.
- **Suspected male erectile dysfunction –** Nocturnal penile tumescence may be monitored through the night.
- **Suspected seizure disorder –** A larger number of bilateral EEG leads is required (seizure montages) including bipolar derivations assuring coverage of frontal and temporal regions: Fp1-F2-T3-T5-O1; Fp1-F3-C3-P3-O1; Fp1-Fz-Cz-Pz-O2; Fp2-F4-C4-P4-O2; Fp2-F8-T4-T6-O2 *Note: The AASM Manual for Scoring of Sleep and Associated Events 2007 – Rules, Terminology and Technical Specifications is the standard for sleep disorder facilities. Scoring must be performed by well-trained technologists (preferably RPSGT).*

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Requesting and Reporting Mechanisms	Meets	Meets with Recommendations	Does not Meet	N/A
1. Are all referrals triaged for appropriateness of testing by a sleep clinician?				
2. Do the referrals contain the following: ➢ Signature of the physician or surgeon?				
➢ Demographic data including any medical conditions and medications?				
➢ Clinical information relevant to the referral?				
➢ Options for "Study Only", "Consultation", or "Both"?				
3. Do the computer based records conform to the Components of Medical Records Required by Law. Ontario Regulation 114/94 Section 20 made under the Medicine Act, 1991?				
4. Are copies of the reports and written requests kept for the appropriate length of time as prescribed by Regulation 57/92 under the IHFA?				
5. Does the facility maintain the following log books: ➢ Patient log – patient's name, dates of referral, referring physician, date of study, recording technologist, scoring technologist and reporting date?				
➢ Incident Log- all adverse health effects occurring during testing, action taken and outcome?				
➢ Maintenance Log – all maintenance, repair, and calibration procedures performed, results obtained and where appropriate, corrective action taken?				
6. Is the visual scoring of the polygraph-generated reports based on the materials presented in *The AASM Manual for the Scoring of Sleep and Associated Events – Rules, Terminology and Technical Specifications?*				
7. Is the facility compliant with: ➢ The new AASM rules for EEG, EOG, EMG and respiratory signals, including using both thermal and nasal pressure sensors to record respiratory events?				
➢ Having modified the reporting software to reflect the parameters to be reported and the new sleep stage terminology?				
➢ Scoring stages and events according to the new rules?				
8. Is the final report sent out to the referring physician within 4 weeks of conducting the study?				

Comments:

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Quality Management Program	Meets	Meets with Recommendations	Does not Meet	N/A
1. Has a Quality Advisory Committee been established and comprised of other health professionals who provide health services in or in connection with the IHF?				
2. Does the Quality Advisory Committee meet: ➢ at least twice a year for facilities with more than six full-time staff including the Quality Advisor **or**				
➢ annually if staff compliment is less than six?				
3. Do regular agenda items include: review of cases; policies and procedures; QC matters on equipment; incidents and staffing issues?				
➢ Are all QA Committees meetings documented?				
4. Does the facility's quality management program include the following components: ➢ Annual review of quality management goals and objectives?				
➢ Systematic ongoing review of the facility policy and procedures manual?				
➢ Review of WHMIS/MSDS data on anything introduced to the facility since the previous meeting to ensure appropriate policies and procedures are in place?				
➢ Review of safety data on any equipment to ensure that all equipment in the facility meets safety standards?				
➢ Review of any incident or accident report and document any actions to prevent similar incidents or accidents providing a report to the Quality Advisor for review and sign-off?				
➢ Review of calibration and validation of testing equipment and review any corrective actions that were required and the outcome of those actions?				
➢ Review of the types of procedures conducted at the facility each year for anomalous or unusual patterns?				
➢ Supervise and document an annual review of a random selection of at least 1% of patient records, or 10 records whichever is greater to ensure that any tests conducted were appropriate to the problems presented by the patient?				
➢ Supervise and document a program checking inter-scorer reliability checks of all scoring technologists including a sample of at least 2hrs of scoring for all parameters from a minimum of 10 records annually?				
➢ Supervise and document a program checking interpretation of records by every physician interpreting studies at the centre, with the Quality Advisor selecting a minimum of 10 randomly selected records to be reviewed annually by a sleep medicine physician from another facility?				
➢ For the 3 bullet points noted above, are all these reports generated, reviewed by the Quality Advisor and discussed with the relevant individuals/committees noting any appropriate action and follow-up has been undertaken?				

Quality Management Program	Meets	Meets with Recommendations	Does not Meet	N/A
➢ Supervise and document a program of annual performance reviews for all staff that have patient contact including documentation of action taken to correct any significant deficiencies in performance?				
➢ Ensure registration certificates, BCLS certificates are current?				
➢ Review CME activities of the technical and medical staff?				
➢ Supervise discussion of interesting/challenging cases seen at the facility and disseminate any teaching points to staff?				
➢ Regularly review any training or education program at the facility?				
➢ Review results of regular surveys of patients, physician and staff satisfaction, documenting actions to address any suggestions, problems or issues raised.				
5. Based on the information collected above, has the facility established a quality management program appropriate for its volume and type of services provided?				

Comments:

THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO

PATIENT RECORD REVIEW

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

PATIENT IDENTIFICATION NUMBER:_____ EXAMINATION DATE:_____ STUDY TYPE_____

Technical Reports	Meets	Meets with Recommendations	Does not Meet	N/A
1. The sleep study performed on the patient has met the indications as outlined on pages 1-6 of the parameters and standards?				
2. During data collection the following is documented on the patient record: ➢ Patient name and date of birth				
➢ Attending and referring physician				
➢ Date and type of study				
➢ Identification of attending technologist				
➢ Notation of any significant physical or intellectual challenges of the patient				
➢ Patient questionnaires and screening assessments				
➢ Details of any medications or the use of supplemental oxygen if any during the course of the study				
➢ Times the recording began and ended				
➢ Montage used and any significant deviation from lab's standard montage				
➢ Significant staff interventions				
➢ Other observations, where appropriate, including a summary				
For data analysis is the following accurately staged scored or calculated on the patient record:				
➢ Identification of the scoring technologist				
General ➢ Time in bed (total study time) and/or lights off, lights on				
➢ Total sleep time				
➢ Sleep efficiency				
Measures ➢ Number of awakenings				
➢ Wake after sleep onset				
➢ Transient EEG arousals				
Sleep Stage Distribution ➢ Duration and percentage of total sleep time for each sleep stage				
➢ Time to the onset of Non-REM and REM sleep				
Other EEG seen ➢ Sharp and/or epileptiform activity				
➢ Alpha/beta frequency intrusion in sleep cardio-respiratory variables, as appropriate				

Technical Reports	Meets	Meets with Recommendations	Does not Meet	N/A
Other EEG seen cont'd ➢ ECG findings of concern				
Apnea, hypopnea and RERA indices ➢ Type and duration of events				
➢ Relation of events to body position and sleep stage (especially REM sleep)				
➢ Cardiac rate and rhythm, relationship to stage and/or events				
➢ Arterial oxygen saturation				
➢ Results of other parameters measured such as CO2				
Movement Variables ➢ Limb movements during wake				
➢ Periodic and leg movements and other unusual movements				
Other significant events ➢ Bruxism				
➢ Sleep talking				
➢ Rhythmic body movements				
➢ Other significant events				
Following data analysis the PAP therapy studies include notations of: ➢ The same parameters noted above under diagnostic study				
PAP therapy parameters: ➢ Masks fitted, masks used, problems with masks, optimal mask				
➢ Mouth leaks and how they were resolved if significant				
➢ Modality(ies) used: CPAP, BiPAP, APAP, ASV, pressure relief modalities including when any modality was started, adjusted or stopped				
➢ Pressures used, and response to respiratory events, snoring, and arousals to different pressures, including minimum pressure at which apneas, hypopneas, flow limitation and snoring were eliminated, time on each pressure and final pressure.				

Comments:

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Interpreting Physicians' Report	Meets	Meets with Recommendations	Does not Meet	N/A
1. Are sample segments of relevant raw data documented in the patient's file for the purposes of subsequent testing and to enable third party interpretation?				
2. Does the report contain the following elements for a diagnostic study: ➢ Date of study				
➢ Patient name, date of birth, gender, height/weight or BMI				
➢ Why the test was done/physician reason for referral				
➢ Referring physician name and copies to whom				
➢ All current medications including any taken during the night				
➢ Any technical problems or special measurements made above and beyond a standard polysomnogram				
Sleep Architecture: ➢ Sleep latency, sleep efficiency, % of time spent in each of the four sleep stages				
➢ Stage R (REM) distribution and Stage R (REM) latency				
➢ Frequency of arousals				
➢ Presence and approximate severity of alpha intrusion in sleep EEG or other abnormalities in sleep EEG microarchitecture				
➢ Any abnormal EEG findings				
➢ Commentary on the details of the sleep architecture and the overall pattern and in particular comments on where and how the architecture deviates from normal patterns and values. The report shows normal values with ranges and source reference that the facility has adopted.				
Sleep-disordered Breathing: ➢ Presence and approximate length of time spent supine				
➢ Presence and severity of snoring				
➢ Apneas, hypopneas and RERA's (if reported) with referenced definitions and frequencies (see Appendix IV)				
➢ Abnormal breathing patterns or rates				
➢ Oxygen awake, average and nadir saturations				
➢ Association of abnormalities with position or sleep state				
Movement and Behaviors ➢ Presence of limb movements during wake and frequency of periodic limb movements with and without arousal while asleep				
➢ Descriptions of any unusual behaviours in the night by sleep state				
➢ Increased EMG or activities in REM sleep				

INDEPENDENT HEALTH FACILITIES
ASSESSORS PROTOCOL CHECKLIST – SLEEP STUDIES

Interpreting Physician's Report	Meets	Meets with Recommendations	Does not Meet	N/A
Cardiac rate and rhythm abnormalities				
Identification of acquiring and scoring techs				
Summary Statement ➢ A diagnosis should be made if one is supported by the available data				
➢ If appropriate a longer statement should be made about the relevance of abnormal and normal findings and how they pertain to the patient's presenting symptoms/problems				
➢ Any specific questions posted by the referring physician should be addressed.				
Plan ➢ There is a clear statement of actions planned, recommended or suggested.				
➢ Most responsible physician is identified for follow-up care.				
Elements for PAP Therapy Studies ➢ Why test is done, including a brief summary of prior or at least the most recent diagnostic study results				
➢ Data re interfaces, modalities and pressures used, and respiratory event indices at each pressure setting				
➢ Comment on the response of respiratory events and snoring; sleep macrostructure (stage/awakening) and microstructure (microarousals and alpha intrusion) to therapy; appearance and significance of limb movements with therapy.				
➢ An overnight histogram demonstrating the relationship of the various sleep variables including sleep state, respiratory events and oxygenation, position and therapeutic changes during the night and in relationship to PAP pressure changes.				
Summary ➢ A statement including the effect of PAP therapy on respiratory events and on sleep structure, particularly in comparison to the diagnostic study findings if available				
➢ Any other abnormal findings and how they are relevant to the patient's presenting symptoms/problems are addressed				
Plan ➢ A clear statement of actions planned, recommended or suggested				
➢ Prescribed or recommended PAP modality, pressure (pressure range) and interface are documented				
➢ Clear statement on who will follow-up response to therapy				
MSLT Scoring ➢ Does the MSLT technical report include the onset and offset time of each nap, latency from lights out to the first epoch of sleep, amount of each sleep stage, total sleep time, mean latencies of sleep of all naps and the number of sleep onset REM periods?				

➢ Is the absence of sleep on any nap opportunity recorded as a sleep latency of 20 minutes?				
➢ Is this latency included in the overall analysis of mean sleep latency.				
MWT ➢ Does the MWT include the onset and offset of each nap during the 40 minute nap opportunity, the amount of each sleep period and the presence of each sleep stage?				
➢ Does the interpretation refer to the normal reference values used by the laboratory?				
➢ Does the interpretation take into account the clinic context of the individual patient?				

COMMENTS:

COMMENTS/NOTES: