Quality Assurance

Audience: All personnel in the Sleep Disorder Center.

Purpose: Quality assurance, quality improvement, and performance assessments are linked activities that assure quality and identify areas of process management that may be improved. The components of these processes include but not limited to the following activities:

Quality Assurance – These are indicators that typically are directed toward outcome measures of the quality of the patient care rendered in the facility.

- Patient death or injury
- Patient complaint
- Terminations of procedure or refusal of interventions such as CPAP
- Assessments of satisfaction
- Patient satisfaction

Quality Control – These are indicators that pertain directly to the quality and effectiveness of technical procedures used by the sleep disorders center.

- Adherence to published standards of operation
- Inter-scorer reliability assessments
- Timelines
- Adherence with policies and documentation
- Identify suboptimal or missing processes

Quality Improvement – These indicators pertain assess the processes employed in the general operation of the center. They specifically address process management, efficiency, and administrative processes.

- Identification of new processes to incorporate
- Increasing efficiency of processes
- Development of policies
- Develop improvements or corrections to the issues identified in QA or QC processes

Performance Assessment – This section or type of assessments includes documentation of output or the performance of required activities. These may be components of one of the three areas above or may be considered separately.

- Reporting of productivity
Definitions

- Scoring Personnel – Any of the technical personnel whose primary or secondary activities involve documented scoring or the recognition of sleep, sleep stage, respiratory events, arousals or limb movements as part of their routine activities within the center.

Policy:

Quality-assurance-and-improvement activities will be performed during every quarter and reported to the staff and institution as appropriate. This will be done under the direction of the board-certified sleep specialist of the sleep disorder center. Other appropriate individuals may be included in the development and reporting of the QA activities depending on the organizational structure of the center. Mandatory QA activities will include inter-scorer reliability assessments. In addition to inter-scorer reliability, a minimum of three other QA indicators will be assessed on a quarterly basis. QA activities will be reported quarterly. Those activities pertinent to the technical staff will be presented at one of the monthly staff meetings.

Procedure:

Assessment of QA:
The Medical Director and Program Manager will meet at least quarterly and review the QA information. At that time, areas of excellence and inadequacy will be identified in the most recent QA information. For problem areas or processes a mechanism for improvement will be developed and implemented. This should include a timeline and the expectations of the plan.

Selection of QA Functions:
After reviewing the findings from the ongoing QA processes, the Medical Director and the Program Manager will develop the QA assessments to be performed until the next meeting. Inter-scorer reliability assessments will be performed quarterly. In addition, at least three other QA activities will be done every quarter.

Reporting of QA Functions:
A report of the QA activities will be maintained in both of the Sleep Disorder Centers. Appropriate reports will be maintained in the Centers and will be sent to the appropriate administrative person. The Program Manager will be responsible for organizing and maintaining the reports.

Mandatory Assessments:
Inter-scorer reliability assessments, safety issues and other items identified by the QA team will be tracked by the Program Manager and reported at least twice a year during staff meetings. Any patient safety issues (including patients sent home or to the emergency room due to illness) are to be documented in writing and reported to the Medical Director immediately following the occurrence.
<table>
<thead>
<tr>
<th>QA Functions to Report -- Mandatory</th>
<th>Comments</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Reports</td>
<td>The major QA functions that involve sleep center and patient-care activities will be reported to the staff.</td>
<td>Quarterly</td>
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<tr>
<td>Inter-Scorer Reliability</td>
<td>This will be completed prior to the reporting period and discussed along with appropriate training issues.</td>
<td>Quarterly</td>
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<tr>
<td>Sleep Disorder Center Financials and Administration</td>
<td>This will be reported to the board-certified sleep specialist, medical director, and program manager. Assessments of any needed changes will be developed accordingly and especially in the light of any changes in reporting requirements or managed-care issues.</td>
<td>Monthly</td>
</tr>
<tr>
<td>Performance and Utilization Measures</td>
<td>These will be reported to the board-certified sleep specialist, medical director, and program manager for a detailed review. Major changes in performance, either planned or unplanned, need to be addressed.</td>
<td>Quarterly</td>
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<thead>
<tr>
<th>Implicit QA Functions</th>
<th>Comments</th>
<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td>Daily Review of Sleep Studies</td>
<td>Sleep physicians and other individuals who review the records report problems or inaccuracies to the medical director and program manager.</td>
<td>As Indicated</td>
</tr>
<tr>
<td>Pre-study Chart Review</td>
<td>Approval and documentation of review of information on direct referrals is performed by the medical director or a designated sleep staff physician prior to the study.</td>
<td>Weekly</td>
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<tr>
<td>QA Functions to Perform for Episodic or Yearly Review</td>
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<td>-------------------------------------------------------</td>
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<tr>
<td><strong>Function</strong></td>
<td><strong>Comments</strong></td>
<td><strong>Frequency</strong></td>
</tr>
<tr>
<td>Global Review of Policies and Procedures</td>
<td>The medical director and the board-certified sleep specialist review all policies specific to the center’s operations, including the safety policy. Then they sign and date the review sheet indicating agreement with policies. Policies should be improved at this time or updated to reflect changes in operations.</td>
<td>Annually</td>
</tr>
<tr>
<td>Policy Development and Revision</td>
<td>Policies should be developed to reflect current practices and to address changes in operations. Revisions must occur as needed.</td>
<td>As Needed</td>
</tr>
<tr>
<td>Patient and Referral Sources</td>
<td>Typically done by the billing section. Information should be reported routinely to address changes in payor mix and referral sources.</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Utilization of Daytime Studies</td>
<td>Frequency and type of daytime studies performed.</td>
<td>Quarterly</td>
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</tbody>
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<thead>
<tr>
<th>Administrative QA Functions To Track</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Function</strong></td>
<td><strong>Comments</strong></td>
</tr>
<tr>
<td>Sleep Center Performance Measures</td>
<td>This includes the numbers and types of studies performed, length of time from order to performance of the study, the time to complete scoring, and the time from study performance to mailing of the report.</td>
</tr>
<tr>
<td>Bed-Nights Inactive</td>
<td>A bed that is not used at night constitutes one inactive bed-night. Causes may be technical, administrative, and patient-generated.</td>
</tr>
<tr>
<td>Safety Issues</td>
<td>Address any problems involving patient safety, security, or threats to the facility. This includes those patients sent home or to the emergency room due to illness.</td>
</tr>
<tr>
<td>Technologist hours</td>
<td>Total technologist hours with breakdowns by month, overtime, absences, PRN work, and sick/vacation time.</td>
</tr>
</tbody>
</table>
QA Areas for Periodic Assessments

- **Communications, Education, and Information Management**
  - Written communications on the chart
  - Documentation of verbal communications
  - Shift reports and check out
  - Training/orientation for new techs
  - CME
  - Discharge procedure
  - Physician feedback on overall performance

- **Administration and Utilization**
  - Human resource management
  - Technologist knowledge regarding policies

- **Technical Aspects of Procedures**
  - MSLT
  - PSG
  - Actigraphy
  - MWT
  - ALS/ Neuromuscular/ Non-invasive ventilation

- **Safety and Computer Issues**
  - Safety documentation
  - Mechanical evaluations and correction
  - Computer problems
  - Infection control and cleaning

- **Outside and Clinic Interactions**
  - Home-care companies
  - Patient follow-up
  - Vendor interactions
  - Physician evaluations prior to the study
  - History and physical information
  - Sleep clinic operations

- **Interpretations**
  - Turn-around and scheduling
  - Axis A diagnoses
  - Clarity

- **Patient and Staff Satisfaction Indices**
  - Staff satisfaction
  - Patient satisfaction
  - Physician satisfaction
  - Referring physician satisfaction

- **Scoring and Setups**
  - Respiratory events
  - Arousals and PLMs
  - PSG setups
  - Patient orientation and training
  - Equipment and bio-calibrations
For each indicator, the following will be developed in writing:

- Indicator
- Frequency
- Thresholds
- Data Source
- Description

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Inter-Scorer Reliability</th>
<th>Patient Satisfaction (Facility)</th>
<th>Patient Satisfaction (Technician)</th>
<th>Time from when referral received until scored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Quarterly</td>
<td>Monthly</td>
<td>Monthly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Thresholds</td>
<td>&gt;85%</td>
<td>&gt;4.5 on a 5 point Likert scale</td>
<td>&gt;4.5 on a 5 point Likert scale</td>
<td>&lt;3 Months</td>
</tr>
<tr>
<td>Data Source</td>
<td>AASM Inter-scorer Reliability</td>
<td>Patient Satisfaction Survey</td>
<td>Patient Satisfaction Survey</td>
<td>GRASS and Epic</td>
</tr>
</tbody>
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Shahzad Jokhio, M.D.
Medical Director