Promoting safety in pediatric procedural sedation: results from a survey of Society for Pediatric Sedation institutional members

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Introduction: A primary mission of the Society for Pediatric Sedation (SPS) has been to lead the advancement of safety in pediatric procedural sedation. SPS member institutions include a wide variety of provider backgrounds, team members, and environments of care. To further illuminate past reports that have examined patient outcomes, provider specialties, and training and credentialing, we specifically sought to review SPS institutional member safety practices and details of updated training and credentialing processes.

Methods: Each of the 53 SPS institutional members was invited to participate in a descriptive questionnaire evaluating many aspects of their sedation programs, including detailed questions regarding safety standards and practices and training and credentialing requirements for team members. A total of 52 member programs responded to the survey.

Results: The majority of SPS member institutions have robust patient screening processes, pre-sedation safety and equipment checklists, post-sedation monitoring and discharge requirements, and well-organized emergency response and rescue systems in place. Also, most programs formally track outcome measures and utilize multidisciplinary review of adverse or unexpected events. Nursing staff must have pediatric training and spend >80% of their time providing sedation care at most institutions. In over half of the surveyed programs, all sedation service physicians spend more than 25% of their time providing procedural sedation care. Initial and renewal requirements for moderate and deep sedation practice for nurses, advanced practice providers, and physicians are shown in Tables 1 through 3.

Discussion: SPS member institutions utilize a variety of pre-, intra-, and post-sedation processes to maximize patient safety. Team personnel spend a significant proportion of their work time specifically focused on clinical procedural sedation. Training opportunities and credentialing requirements have become more robust in the past decade, but there is still marked variability between programs and opportunity for additional standardization.

References:

Table 1 Nursing requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Ongoing</th>
<th>Initial</th>
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</thead>
<tbody>
<tr>
<td>Monitored patient care experiences</td>
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<td>Completion of SPS Sedation Provider Course</td>
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<td>Simulation based training/testing</td>
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<td>Written/online testing</td>
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<td>Written/online module completion</td>
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<tr>
<td>Active ACLS</td>
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<td>Active PALS</td>
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<tr>
<td>Previous ICU/OR/PACU/ED experience</td>
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Nursing Requirements

![Bar chart showing nursing requirements](chart.png)
Table 2 Moderate sedation requirements

**Moderate sedation requirements**

- Attestation by supervisor/chair
- Precepted OR airway training
- Monitored patient care...
- Case review of adverse events
- Minimum # of cases/year
- Logs of patient care encounters
- SPS Sedation Provider Course
- Simulation based training/testing
- Written/online testing
- Written/online module...
- PCCM/PEM fellowship
- Active ACLS
- Active PALS

Legend:
- APP RENEWAL
- APP INITIAL
- Physician RENEWAL
- Physician INITIAL

number of programs
At least 4 programs that allow moderate sedation credentialing for APPs do not allow them deep sedation credentialing.