

Measures of Efficiency and Timeliness in high-performance pediatric sedation programs: initial results from a survey of Society for Pediatric Sedation (SPS) institutional members

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Introduction: Current literature review reveals little information on the quality domains of efficiency and timeliness in the operation of pediatric sedation systems. A few published studies have described sedation efficiency around a given procedure or sedative regimen¹⁻³ but no comprehensive analysis of general measures of sedation service efficiency has been published.

Methods: Each of the 53 SPS institutional members was invited to complete a descriptive questionnaire summarizing a variety of quality metrics. A total of 52 member programs responded to the survey. Measures of sedation efficiency addressed in the survey included: staff utilization, cancellation rates, no-show rates, and rates of scheduling of unnecessary sedation (“did without”). Measures of timeliness addressed included waiting time for appointment, on-time start percentage, and length of stay.

Results: Forty-four of 52 institutions provided information about physician and advanced practice provider (APP) staffing. Fourteen programs include APPs as part of their sedation service. Figure 1 demonstrates average number of sedation provider FTEs versus monthly patient volume. Thirty-seven of the 52 respondents reported tracking total patient volume by unit of time, although only 9 programs track provider time used over time available. Nursing utilization by time units or other measure was tracked by 21 programs. Twenty-six programs tracked average wait time for a sedation appointment, with 38% reporting a >2 week average waiting time, 42% reporting 2 days-2 weeks, and 21% reporting <2 days. “No-show” rates were tracked by 26 programs, with 48% reporting rates of <5%, 35% reporting 5-15%, and 17% reporting rates of >15%. Overall cancellation rates were tracked by 17 programs, with 16 tracking cancellation for NPO violation, 14 for illness, and 3 each for scheduling error or insurance issues. Of those tracking for NPO violation, 70% cancelled <5% and 30% cancelled >5% of their patients for this reason. “Did without” rates were tracked by 19 programs; 41% reported <5% and 58% reported >5% of their scheduled patients did not require sedation. On-time starts and length of stay were tracked by 24 and 18 programs, respectively. About 30% of the respondents reported setting service goals for efficiency and timeliness.

Discussion: Sedation services vary considerably in the use of efficiency and timeliness metrics. Standardization in the tracking of these metrics could identify best practices and allow better comparison among sedation programs.

Average Provider FTE by Patient Volume

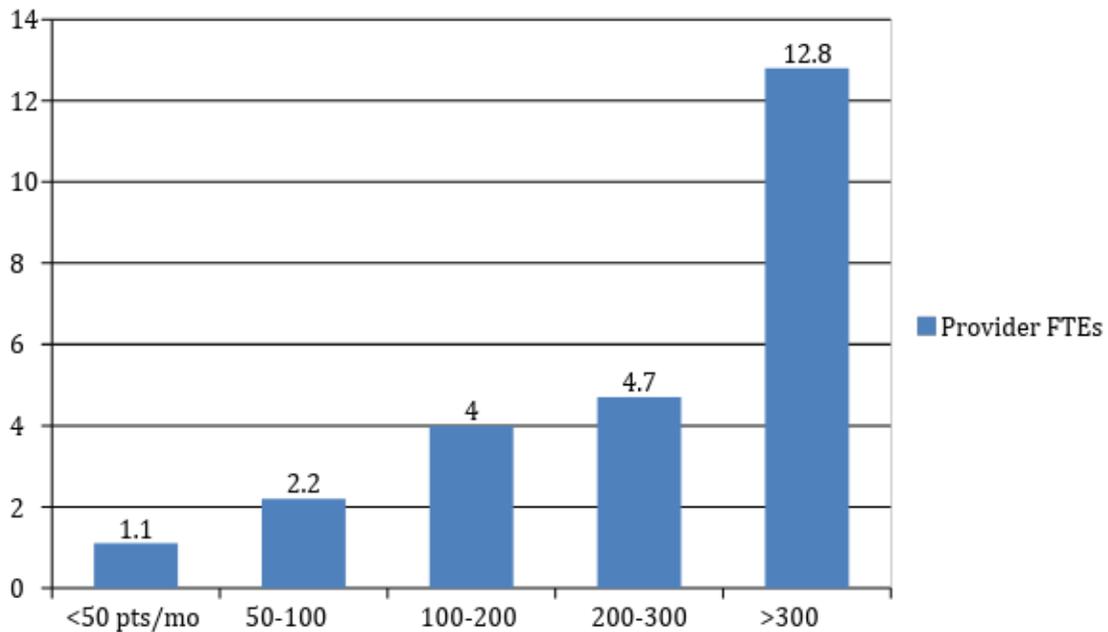


Figure 1

References:

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