

## Using the QSAT to Generate Multi-Source Feedback on an In-Situ Pediatric Simulation Case

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# Using the QSAT to Generate Multi-Source Feedback on an In-Situ Pediatric Simulation Case

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## INTRODUCTION

Multi-source Feedback (MSF) is a suggested evaluation method by ACGME. The Queen's Simulation Assessment Tool (QSAT) has been validated for resident performances in a simulation (sim) setting. Our prior work has demonstrated observer agreement using the QSAT for MSF with an adult case in the sim lab. The objective was to determine, using the QSAT, the degree of agreement of MSF on a single pediatric (peds) simulation case conducted in-situ in the ED.

## METHODS

This IRB approved study was conducted at a dually approved, four year EM residency which trains 13 residents a year. A peds sim case was developed with specific anchors on the QSAT, which uses a 1-5 scale in each of five categories. Data was gathered from six sim participants. The resident leading the case self-evaluated. MSF was from each of a junior resident peer, a fixed peds ED RN, a random ED RN, and two faculty (one fixed, the other from a dyad). Reported are the mean scores and standard deviation for each.

## ACKNOWLEDGMENT

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## RESULTS

Twenty-four (10 female) residents were enrolled as the case leader; 13 were PGY-4, 10 were PGY-3, and one was PGY-2. Fourteen peer evaluators were PGY-1, and 10 were PGY-2. The RN evaluators (90.9% female) averaged 7.12 years of experience. Faculty experience was 13 (fixed; male) and an average of eight (dyad; one male, one female) years. Table 1 demonstrates that the residents evaluated themselves more critically than they were evaluated by any of the other groups except the fixed attending. Peer evaluators consistently reported the highest scores. RNs and the faculty dyad had similar scores.

## CONCLUSION

Similar to prior work in the sim lab, residents rated themselves lower and peers higher on the QSAT than most other sources of MSF. Unlike that cohort, variation in agreement between faculty sources of MSF using the QSAT was found. Our findings may have been impacted by the location of the sim in-situ in the ED, the impact of a peds sim, or both. The variation found in this small single-site cohort may make use of MSF difficult.

Table 1. Average QSAT Scores by Rater

QSAT Variable	Self (n=24)	Fixed Attending (n=24)	Dyad Attendings (n=24)	Resident Peer (n=24)	ED Nurse (n=22 <sup>b</sup> )	Peds ED Nurse (n=23 <sup>c</sup> )
<b>Primary Assessment</b> mean±SD	4.21±0.66	4.25±0.68	4.75±0.44	4.88±0.34	4.55±0.67	4.87±0.34
<b>Diagnostic Actions</b> mean±SD	4.04±0.62	3.88±0.74	4.25±0.68	4.42±0.58	4.36±0.85	4.35±0.71
<b>Therapeutic Actions</b> mean±SD	4.21±0.78	3.96±0.75	4.38±0.82	4.83±0.48	4.23±0.75	4.57±0.59
<b>Communication</b> mean±SD	4.25±0.74	4.17±0.87	4.58±0.58	4.75±0.44	4.45±0.67	4.57±0.59
<b>Overall Assessment</b> mean±SD	4.09±0.60 <sup>a</sup>	4.25±0.61	4.17±0.48	4.83±0.38	4.50±0.60	4.48±0.51
<b>QSAT Total</b> mean±SD	20.70±2.90 <sup>a</sup>	20.50±2.64	22.13±1.70	23.71±1.78	22.09±2.67	22.83±1.95

QSAT=Queen's Simulation Assessment Tool; PICU=Pediatric Intensive Care Unit; SD=standard deviation.

<sup>a</sup>One self-rater did not answer Overall Assessment question, QSAT total unable to be calculated for simulation, n=23.

<sup>b</sup>Two simulations are missing data for nurse raters.

<sup>c</sup>One simulation is missing data for PICU nurse rater.