



THE AMERICAN ORTHOPAEDIC ASSOCIATION

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Resident Assessment Tools

AOA Educational Process, Outcomes and Assessments Committee

Tool# 1

Professionalism and Communications 360 Degree Tool

Professionalism and communication skills are very important for orthopaedic surgeons but it is challenging to identify ways to objectively assess these competencies in orthopaedic residents. It is even more difficult to provide formative and summative feedback. One common tool has been a 360 or partial 360 which obtains input from various health care professionals with whom residents interact.

The committee has assessed an existing Professionalism and Communication Skills tool and modified it for use in orthopaedic surgery. We feel that we have enough data to endorse this tool for general use. The following will describe the development process, available data and recommended techniques to implement the tool. The tool itself and the scoring rubric are attached.

Tool Origin and Modification

- a. The questions and original tool were obtained from the ACGME with permission from Susan Swing, PhD, Vice President, Department of Research and Education.
- b. The twenty question tool with a five point scale was used by committee members in their training programs and the resulting data was reviewed. The major goal of this evaluation was to assess the question performance with a goal to shorten the tool. We compared all twenty items from 394 evaluations and assessed a rank order of committee member opinion of the questions.
- c. The tool was modified to a 12-question form with six questions each for professionalism and communications skills. All committee members felt this was an appropriate length.
- d. Based on the data it was apparent that the main value of this tool was to identify residents who were outliers. To better accomplish this objective we modified the five point scale to a four point scale by adopting a scoring rubric used by the ABOS.

Committee Experience

- a. The modified tool was used by committee members in their programs. The goal was to demonstrate that this shorter tool performed similar to or better than the longer tool. We sought to identify score averages and spread within and between programs. Most importantly, we wanted to see if the tool would identify residents who were outliers in relation to their peers and obtain external validation that identified residents had poor professionalism and or communication skills.



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- b. The tool was used in 5 residency training programs and in total administered to 82 residents for a total of 432 evaluations. Raters were nurses, physician's assistants (PAs), administrative personnel, faculty, PDs, Chairs and peers.
- c. The shorter form and revised scoring scale received favorable comments and there were no concerns expressed.
- d. Resident were considered outliers when they:
 - i. Scored more than 1 SD below their program average
 - ii. They received any scores of 1 or 2 from more than one evaluator
 - iii. They averaged less than 3.0
- e. There were 82 residents assessed. Two residents in different programs met all three of these criteria. Two additional residents met criteria # 2 only. Their program director and other personnel and faculty members independently identified all four of these residents as most likely to have poor professionalism and communication providing external validation of the tool.

Recommended Use of the Tool

- a. All personnel with whom a resident interacts including nurses, PAs, administrators, faculty and peers can assess residents using this form. We do not think this is an ideal form to administer to patients.
- b. We suggest at least four evaluations per resident. The number of completed evaluation forms per resident that is necessary for a good thorough assessment is unknown.
- c. The frequency of feedback to residents should be up to the PD. We suggest semi-annually.
- d. The frequency of utilizing individual assessors is uncertain; one program that utilizes the tool electronically has a large enough group of evaluators that each individual is asked to do a form on three residents every three months.
- e. The form does identify outliers.
- f. We do not think the form discriminates between residents with good professionalism and communication skills; i.e., a score of 3.5 vs 3.75 is a meaningless difference; these are both satisfactory scores.
- g. The three metrics we used are all satisfactory metrics to identify residents at risk in these two important areas.
 - i. Scores more than 1 SD below their program average.
 - ii. Scores of 1 or 2 from more than one evaluator.
 - iii. Average of less than 3.0.
- h. The form can be administered in written form or can be incorporated into internet based Resident Management Systems.