



App vs. Web-Based Resident Evaluations: Can “Swiping Right” Impact Compliance & Quality?

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EXCEPTIONAL CARE. WITHOUT EXCEPTION.

The Problem: Noncompliance & “Straightlining”

When performing resident evaluations where a multiple questions are asked upon on a numerical scale, evaluators may engage in "Straightlining," selecting the same response/ numerical answer for a number of questions without paying attention to the individual answers. This skews the data points, rendering it less useful to learners who would, ideally, be able to use their scores as feedback guiding them toward improvement. Additionally, Time demands and survey fatigue may lead teaching faculty to either A) not complete evaluations or B) complete them hastily and inaccurately.

The Question?

Does compliance with evaluations and straightlining improve when using an app based interface of the evaluation.

Straightlining in Action



Web Interface of New Innovations

1 Patient Care 2: Anesthetic Plan and Conduct

Has not achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Formulates patient care plans that include consideration of underlying clinical conditions, past medical history, and patient, medical, or surgical risk factors	Formulates anesthetic plans for patients undergoing routine procedures that include consideration of underlying clinical conditions, past medical history, patient, anesthetic, and surgical risk factors, and patient choice	Formulates anesthetic plans for patients undergoing common subspecialty procedures that include consideration of medical, anesthetic, and surgical risk factors, and that take into consideration a patient's anesthetic preference	Formulates and tailors anesthetic plans that include consideration of medical, anesthetic, and surgical risk factors and patient preference for patients with complex medical issues undergoing complex procedures with conditional independence	Independently formulates anesthetic plans that include consideration of medical, anesthetic, and surgical risk factors, as well as patient preference, for complex patients and procedures
	Adapts to new settings for delivery of patient care	Conducts routine anesthetics, including management of commonly encountered physiologic alterations associated with anesthetic care, with indirect supervision	Conducts subspecialty anesthetics with indirect supervision, but may require direct supervision for more complex procedures and patients	Conducts complex anesthetics with conditional independence; may supervise others in the management of complex clinical problems	Conducts complex anesthetic management independently
0	0	0	0	0	0

○ N/A

Comment

2 Practiced-based Learning and Improvement 2: Analysis of practice to identify areas in need of improvement

Has not achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Identifies critical incidents or potentially harmful events pertaining to one's patients, and brings them to the attention of the supervisor	Identifies adverse events and near misses, and analyzes personal practice to determine the reason they occurred	Identifies adverse events and near misses related to subspecialty rotations, and modifies personal practice to minimize likelihood of recurrence of adverse events related to sub-specialty anesthesia care	Analyses personal practices to determine potential risk of adverse outcomes and develops strategies to reduce likelihood of recurrence	Uses comparative benchmark data about outcomes and clinical practice patterns within the department, facility, or health system to analyze performance of self and group
		Modifies personal practice to minimize likelihood of recurrence of adverse events related to routine anesthesia care	Prospectively assesses clinical practices and identifies alternative approaches to clinical management to minimize likelihood of adverse events based on currently published data, and comparison of personal practice to peers and supervisors	Compares personal performance and patient outcomes to accepted standards and comparative data, and uses data to improve practice	
		With support from faculty members, compares personal performance and outcomes to those of peers		Uses multi-source (peer, faculty member, nurses, other) feedback to improve practice with faculty member guidance	
0	0	0	0	0	0

○ N/A

Comment

App Interface of New Innovations

Verizon LTE 12:41 PM 59%

Question 1 of 3

Level 1

- Formulates patient care plans that include consideration of underlying clinical conditions, past medical history, and patient, medical, or surgical risk factors
- Adapts to new settings for delivery of patient care

1 1.5

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Verizon LTE 12:41 PM 59%

Question 1 of 3

Level 2

- Formulates anesthetic plans for patients undergoing routine procedures that include consideration of underlying clinical conditions, past medical history, patient, anesthetic, and surgical risk factors, and patient choice
- Conducts routine anesthetics, including management of commonly encountered physiologic alterations associated with anesthetic care, with indirect supervision
- Adapts to new settings for delivery of anesthetic care

1.5 2 2.5

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Methods:

Faculty anesthesiologists are randomized into two groups. In one group, the attendings only complete daily resident evaluations using our web-based form, while the experimental group completes their evaluations through an app-based interface. The study will last 8 months, with all participants crossing over to the alternate interface at the 4 month mark. Participants' completion rates will be followed, and their responses within the surveys analyzed.

Preliminary Results

After the first month of the trial, we see a 21.5% completion rate for the App arm of the study and a 28.7% completion rate for the Web-based arm of the study. Of the completed responses, 17.6% of App responses and 31% of web-based surveys were straightlined. Moreover, 62% of web-based surveys had comments along with responses, but only 23.5% of iPhone surveys had comments along with responses.

The Hope: Can Technology Help?

The convenience of having evaluations accessible by phone may increase compliance with evaluations and completion rate. By compelling the evaluator to view only one possible answer at a time, the user may better consider the narrative within each column and choose the most appropriate answer.

References:

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