Department of Emergency Medicine

Emergency Medicine Resident On Shift Clinical Teaching Efficacy as Measured by Student Evaluation and Self-Reflection Using a Previously Validated Metric

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Background

- **ED as a rich, unique, challenging educational environment**

- **Estimated that 33% of student education comes from residents**

- **A formal teaching Milestone was dropped from early drafts**
  - **Current ACGME EM project mentions teaching in 6 Milestones**

Objectives

The purpose of this study is to assess students' perceptions of and senior residents' self-assessments of EM resident's clinical teaching ability while on shift in the ED.

Methods

- **IRB approved prospective study supported by a research grant**

- **PGY 1-4 dually approved EM residency**
  - **At a regional medical campus**

- **Previously validated metric of EM attending teaching efficacy**
  - *Steiner et al, AEM 2000*

Methods

- **Students anonymously evaluate the teaching received**

- **PGY 3/4 self-assessed their teaching**

- **Demographics included prior knowledge & training in clinical teaching models**

- **Data gathered in New Innovations™**
  - **Analyzed using descriptive statistics**

Results: Initial 12 Months

- **Enrolled 74 students avg. age 27.9**
  - **52.7% female**
- **From 25 Medical and 6 PA schools**
  - **48 (64.9%) were MS, all 4th years**
- **Prior knowledge of teaching models by students was limited**
  - **86.5% had no prior knowledge of either model (SNAPPS or 1 Minute Preceptor)**

Results

- **Enrolled 42 residents, avg. age 32.0**
  - **26.2% female**
- **Prior knowledge noted by 38.1%**
- **Prior training was most commonly 1-4 hours (31%)**
  - **64.3% having from 1 to >4 hours**
- **517 on-shift teaching assessments**

Figure One: Student Assessment of Resident Teaching Using the ER Scale

	Didactic	Clinical	Approachable	Helpful
Students Overall N (%)				
Outstanding	180 (34.8)	196 (37.9)	275 (53.2)	297 (57.4)
Above Average	144 (27.8)	137 (26.5)	70 (13.5)	53 (10.3)
Average	32 (6.2)	25 (4.8)	13 (2.5)	9 (1.7)
Below Average	1 (0.2)	2 (0.4)	2 (0.4)	1 (0.2)
Unacceptable	0	0	0	0
Not Enough Time	34 (6.6)	34 (6.6)	34 (6.6)	34 (6.6)
Missing	126 (24.4)	123 (23.8)	123 (23.8)	123 (23.8)
Med Students N (%)				
Outstanding	113 (32.3)	126 (36.0)	196 (56.0)	192 (54.8)
Above Average	102 (29.1)	97 (27.7)	41 (11.7)	45 (12.9)
Average	28 (8.0)	22 (6.3)	8 (2.3)	9 (2.6)
Below Average	1 (0.3)	2 (0.6)	2 (0.6)	1 (0.3)
Unacceptable	0	0	0	0
Not Enough Time	19 (5.4)	19 (5.4)	19 (5.4)	19 (5.4)
Missing	87 (24.9)	84 (24.0)	84 (24.0)	84 (24.0)
PA Students N (%)				
Outstanding	67 (40.1)	70 (41.9)	79 (47.3)	105 (62.9)
Above Average	42 (25.2)	40 (24.0)	29 (17.4)	8 (4.8)
Average	4 (2.4)	3 (1.8)	5 (3.0)	0
Below Average	0	0	0	0
Unacceptable	0	0	0	0
Not Enough Time	15 (9.0)	15 (9.0)	15 (9.0)	15 (9.0)
Missing	39 (23.3)	39 (23.3)	39 (23.3)	39 (23.3)

Figure Two: Resident Self-Assessment of Their Teaching Using the ER Scale

	Didactic	Clinical	Approachable	Helpful
Residents Overall N (%)				
Outstanding	25 (4.8)	25 (4.8)	48 (9.3)	24 (4.6)
Above Average	159 (30.8)	181 (35.0)	175 (33.8)	183 (35.4)
Average	147 (28.4)	125 (24.2)	112 (21.7)	126 (24.4)
Below Average	6 (1.2)	5 (1.0)	2 (0.4)	3 (0.6)
Unacceptable	0	0	0	0
Not Enough Time	129 (24.9)	129 (24.9)	129 (24.9)	129 (24.9)
Missing	51 (9.9)	52 (10.1)	51 (9.9)	52 (10.1)
PGY 3 N (%)				
Outstanding	2 (1.0)	4 (2.0)	18 (8.9)	5 (2.5)
Above Average	65 (32.3)	82 (40.8)	88 (43.8)	87 (43.3)
Average	83 (41.3)	65 (32.3)	49 (24.4)	60 (29.8)
Below Average	5 (2.5)	4 (2.0)	0	3 (1.5)
Unacceptable	0	0	0	0
Not Enough Time	34 (16.9)	34 (16.9)	34 (16.9)	34 (16.9)
Missing	12 (6.0)	12 (6.0)	12 (6.0)	12 (6.0)
PGY 4 N (%)				
Outstanding	23 (7.3)	21 (6.6)	30 (9.5)	19 (6.0)
Above Average	94 (29.8)	99 (31.3)	87 (27.5)	96 (30.3)
Average	64 (20.2)	60 (19.0)	63 (20.0)	66 (20.9)
Below Average	1 (0.3)	1 (0.3)	2 (0.6)	0
Unacceptable	0	0	0	0
Not Enough Time	95 (30.1)	95 (30.1)	95 (30.1)	95 (30.1)
Missing	39 (12.3)	40 (12.7)	39 (12.3)	40 (12.7)

Conclusions

Student impressions of teaching were more favorable than resident self-assessment. There may be room for to improve EM resident teaching

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