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32 Emergency Medicine (EM) Faculty Evaluations Do Not Correlate With Performance on a Standardized EM Examination During a Fourth-year Medical Student EM Rotation

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Background: Emergency Medicine (EM) faculty members routinely evaluate students based on subjective assessment of performance on clinical shifts. These clinical evaluations often play a large role in final rotation grade. The validity of these assessments as a measure of performance is unclear.

Objective: We sought to correlate faculty clinical evaluations with medical student performance on a written, standardized EM exam of clinical knowledge.

Methods: Fourth-year medical students enrolled in a one-month EM rotation at an academic medical center with a three-year EM residency program were evaluated by EM faculty. These evaluations were performed via an online system which applied a 1-5 Likert scale to eight domains: data acquisition, data interpretation, medical knowledge base, professionalism, patient care and communication, initiative/ reliability/dependability, procedural skills, and overall evaluation. At the end of the rotation, students completed the National EM M4 Examination, a standardized exam developed by the Society of Academic Emergency Medicine and Clerkship Directors in Emergency Medicine. Data was collected and analyzed using Microsoft Excel (Redmond, WA) and SPSS 21.0 (Armonk, NY). Means, medians, and standard deviations were calculated and correlations were assessed using a Spearman's rank correlation coefficient.

Results: A total of 39 medical students with 224 discrete faculty evaluations were included. Thirty-three faculty members completed assessments and the median number of evaluations per student was six. The distribution of evaluations is shown in Figure 1. The mean exam score was 78.6%+SD 6.1%. The correlation is shown in Table 1.

Conclusion: Faculty evaluations do not correlate with objective written exam performance. Educators should consider the limitations of subjective and objective assessments of performance. Future studies should focus on the differences and gaps between faculty assessment and objective criterion.

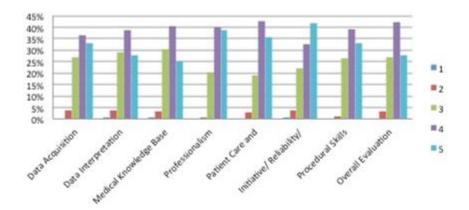


Figure 1. Distribution of Evaluations.

Table 1.

Survey Questions	Median Pre (IQR)	Median Post (IQR)	p-value
I can describe the goals of a provider seeing patients at triage.	1 (1-4)	4 (4-5)	0.0002
I can describe the process of a provider seeing patients at triage.	1 (1-4)	4 (4-5)	0.0002
I am familiar with the literature regarding the use of EM providers at triage.	1 (1-2)	3 (3-5)	0.0001
I feel comfortable providing care at triage.	1 (1-3)	4 (4-5)	0.0001
I am confident in my ability to provide care at triage	1 (1-3)	4 (4-5)	0.0001
I feel prepared to provide care at triage after I graduate from residency	1 (1-4)	4 (4-5)	0.0001
Overall	1 (1-3)	4 (4-5)	<0.0001