

Starting University Clinical Careers Efficiently, Scholarly, and Successfully

Evaluating Students and Trainees Using Competency-Based Assessments

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Definitions

• **Assessment**

- Compilation and presentation of evidence
- Determines the level of learning or skill
- Judgement
- Systematic measure of progress
- Diagnostic, formative, summative

• **Feedback**

- Information provided regarding one's understanding or performance
- Reflection on performance
- Provides direction, alternatives, strategies
- Two-way street and relationship-based

The Basics

- Know the ACGME six core competencies
 - Patient Care
 - Medical Knowledge
 - Professionalism
 - IP and Communication Skills
 - PBL and Improvement
 - Systems-Based Practice
- Know the milestones for your specialty with all the 5 levels

Competency-Based Medical Education

We want to transition from process-based education to outcomes-based education

De-emphasis on time-based training, though time is important
Learner-centered

**It all starts before you
meet the learner!**

Goals and Objectives

- Know goals and objectives for the rotation/experience
 - They guide what you teach
 - They guide what you want to observe
 - They guide your feedback
 - They should inform your assessments

Tools of the Trade

- Know your assessment tool(s) well before you work with the learner

Meet your learner where they are:

How are you doing?

MS/PGY level and program

How long have you been in this rotation?

What are you struggling with?

What are you trying to learn today?

Tell me about recent challenging or interesting or weird cases

Types of Assessments

- Projects and presentations
- Challenges
- Quizzes and tests
- In-service examination
- Assignments
- Portfolios
- Rubrics and checklists
- **Written evaluations**

Written Evaluations

- Who?

- 360 view

Written Evaluations

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- When (timeliness)
- 360 view
- Timeliness is crucial

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Professionalism

Our Challenge



Invited Commentary | Medical Education

Bias in Assessment Needs Urgent Attention—No Rest for the “Wi

Vineet M. Arora, MD, MAPP; Keme Carter, MD; Christine Babcock, MD

While assessment is a core function of medical education, concerns remain about equity in assessment. In this issue of *JAMA Network Open*, a large study highlights th with respect to gender.¹ Mamtani et al¹ completed a multicenter study anal narrative comments from 277 emergency medicine (EM) faculty of 283 EM that women residents were more likely to be assessed by both faculty men performing below level compared with their peers, with a common theme l with procedural skills. Disparities between faculty women and men in the c feedback provided were also found. For example, compared with men, fac likely to give narrative comments (vs no comments) that were also specific, comments). The strengths of this study include a large sample size, multisit examination of narrative evaluations.

+ Related

Gendered Expectations: the Impact of Gender, Evaluation Language, and Clinical Setting on Resident Trainee Assessment of Faculty Performance

Virginia Sheffield, MD¹, Sarah Hartley, MD, MHPE¹, R. Brent Stansfield, PhD², Megan Mack, MD¹, Staci Blackburn, MD¹, Valerie M. Vaughn, MD, MSc^{1,3}, Lauren Heidemann, MD, MHPE¹, Robert Chang, MD¹, and Jennifer Reilly Lukela, MD¹

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BACKGROUND: Gender inequity is pervasive in academic medicine. Factors contributing to these gender disparities must be examined. A significant body of literature indicates men and women are assessed differently in teaching evaluations. However, limited data exist on how faculty gender affects resident evaluation of faculty performance based on the skill being assessed or the clinical practice settings in which the trainee-faculty interaction occurs. **OBJECTIVE:** Evaluate for gender-based differences in the assessment of general internal medicine (GIM) faculty physicians by trainees in inpatient and outpatient settings.

CONCLUSIONS: Male and female GIM faculty performance was assessed differently by trainees. Gender-based differences were impacted by the setting of evaluation, with the greatest difference by gender noted in the inpatient setting.

KEY WORDS: Graduate Medical Education; assessment/evaluation; gender bias; implicit bias; gender norms.

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Association Between Resident Race and Ethnicity and Clinical Performance Assessment Scores in Graduate Medical Education

Robin Klein, MD, MEHP, Nneka N. Ufere, MD, MSCE, Sarah Schaeffer, MD, Katherine A. Julian, MD, Sowmya R. Rao, PhD, Jennifer Koch, MD, Anna Volerman, MD, Erin D. Snyder, MD, Vanessa Thompson, MD, Ishani Ganguli, MD, MPH, Sherri-Ann M. Burnett-Bowie, MD, MPH, and Kerri Palamara, MD

Abstract

Examination percentile rank; and faculty gender, rank, and specialty.

Results

Data included 3,600 evaluations by 605 faculty of 703 residents, including 94 (13.4%) URiM residents. Resident race/ethnicity was associated with competency scores, with lower scores for URiM residents (difference in adjusted standardized scores between URiM and non-URiM residents, mean [standard error]) in medical knowledge (−0.123 [0.05], *P* = .021), systems-based practice (−0.179 [0.05], *P* = .005), practice-based learning and improvement (−0.112 [0.05], *P* = .032), professionalism (−0.116 [0.06], *P* = .036), and interpersonal and communication skills (−0.113 [0.06], *P* = .044). Translating this to a 1 to 5 scale in 0.5 increments, URiM

resident ratings were 0.07 to 0.12 points lower than non-URiM resident ratings in these 5 competencies. The interaction with faculty gender was notable in professionalism (difference between URiM and non-URiM for men faculty −0.199 [0.06] vs women faculty −0.014 [0.07], *P* = .01) with men more than women faculty rating URiM residents lower than non-URiM residents. Using the 1 to 5 scale, men faculty rated URiM residents 0.13 points lower than non-URiM residents in professionalism.

Conclusions

Resident race/ethnicity was associated with assessment scores to the disadvantage of URiM residents. This may reflect bias in faculty assessment, effects of a noninclusive learning environment, or structural inequities in assessment.

PERSPECTIVES

Check for updates

While You Don't See Color, I See Bias: Identifying Barriers in Access to Graduate Medical Education Training

JGIM



REVIEWS

Gender Bias in Resident Assessment in Graduate Medical Education: Review of the Literature

Robin Klein, MD MEHP¹, Katherine A. Julian, MD², Erin D. Snyder, MD³, Jennifer Koch, MD⁴, Nneka N. Ufere, MD⁵, Anna Volerman, MD^{6,7}, Ann E. Vandenberg, PhD, MPH¹, Sarah Schaeffer, MD, MPH⁸, and Kerri Palamara, (GEM) workgroup

Research Report

line and Geriatrics, Emory University School of Medicine, Atlanta, GA, USA; ²Division of :isco, San Francisco, CA, USA; ³Department of Medicine, Division of General Internal cine, Birmingham, AL, USA; ⁴Department of Medicine, University of Louisville, Louisville, ogy, Massachusetts General Hospital, Boston, MA, USA; ⁶Department of Medicine, liatrics, University of Chicago, Chicago, IL, USA; ⁸Department of Medicine, Division of r Francisco, CA, USA; ⁹Department of Medicine, Massachusetts General Hospital,

Original Investigation

May 2017

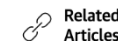
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Comparison of Male vs Female Resident Milestone Evaluations by Faculty During Emergency Medicine Residency Training

Arjun Dayal, BS¹; Daniel M. O'Connor, BA²; Usama Qadri, BA¹; et al

» Author Affiliations | Article Information

JAMA Intern Med. 2017;177(5):651-657. doi:10.1001/jamainternmed.2016.9616



Our Challenge

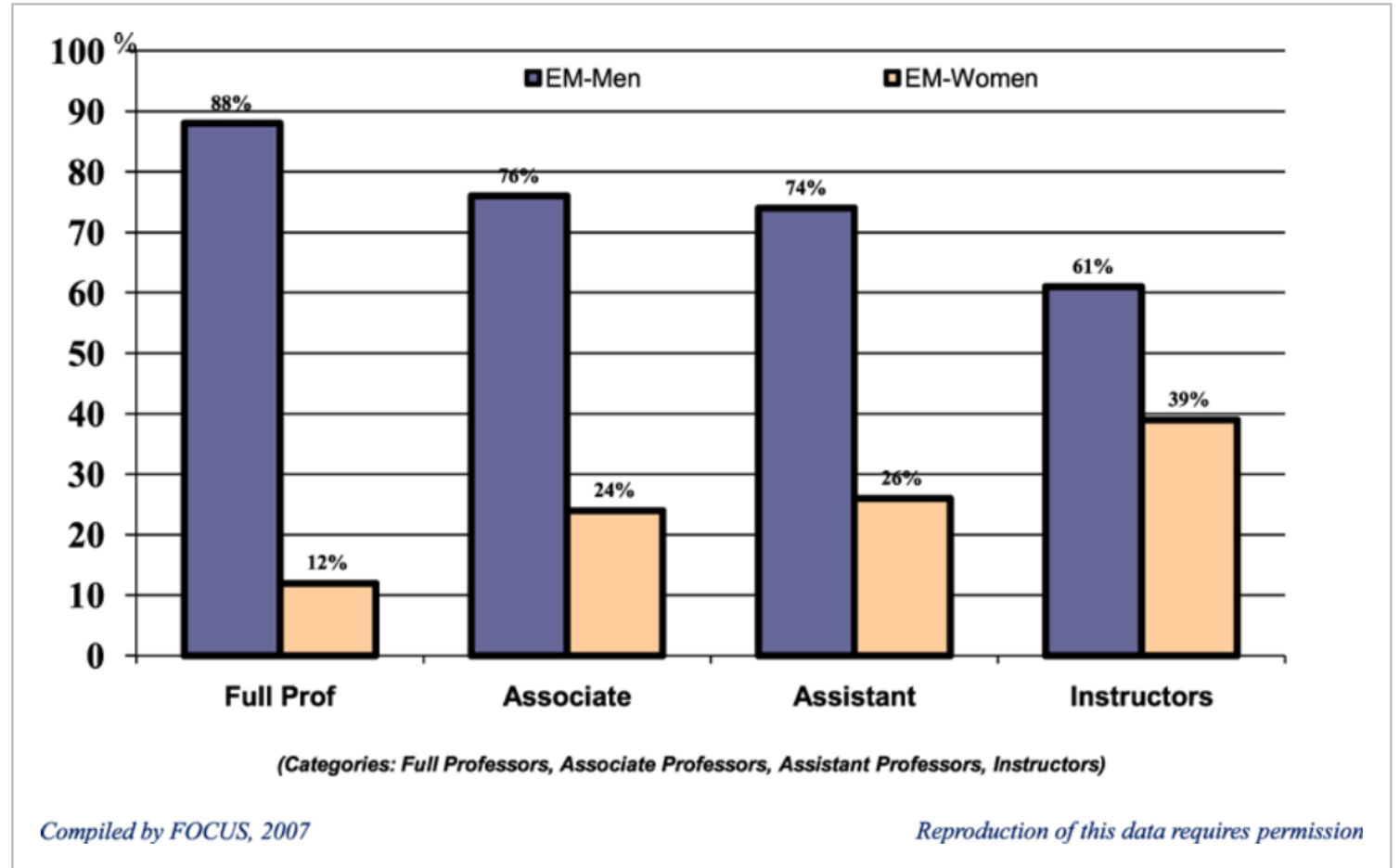


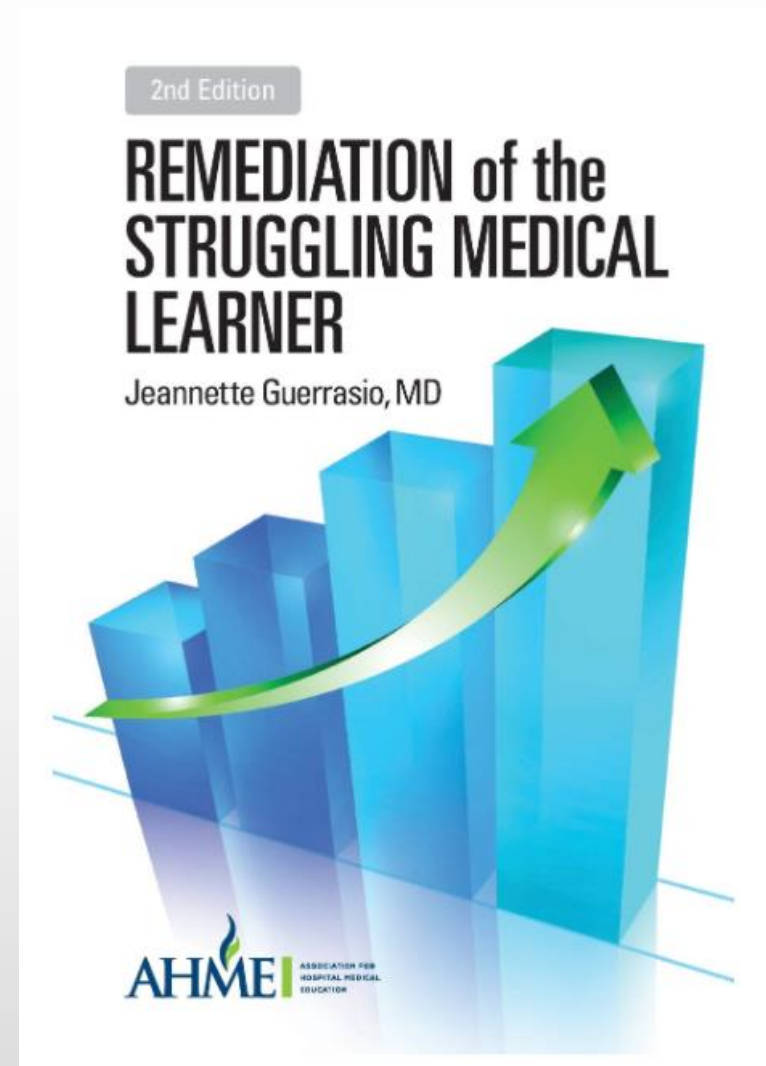
Figure 1

[Open in figure viewer](#) | [↓ PowerPoint](#)

Gender distribution within each rank. EM AAMC national data 2006. (Data derived from <http://www.aamc.org/members/wim/statistics/stats06/table03.pdf>¹³.)

Pitfalls and the Struggling Learner

- Examples
 - Apathetic
 - Passive-aggressive
 - Poor medical knowledge
 - Procedural/skill struggles
 - Substance abuse
 - Your own struggles



Additional Information and Resources

1. <https://www.acgme.org/Portals/0/MilestonesGuidebook.pdf>
2. <https://www.acgme.org/What-We-Do/Accreditation/Milestones/Milestones-by-Specialty>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6497184/>
4. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6825441/pdf/cureus-0011-00000005728.pdf>
5. Remediation of the Struggling Medical Learner 2nd edition:
Jeannette Guerrasio

Competency-Based Assessments

Summary of Key Points



Know your CC and milestones

Prepare yourself

Meet your learners where they are

Be timely, thorough and constructive

Starting University Clinical Careers Efficiently, Scholarly, and Successfully Questions?



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