Title: How are faculty members evaluated for educational excellence? A national survey of P&T committee members

Submission Type: Research Highlights in Medical Education

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Purpose: Academic promotion and tenure (P&T) is typically driven by evidence of excellence in scholarship, service, and education. In contrast to scholarship and service, educational excellence can be more challenging to demonstrate. A 1997 study of the criteria used to promote clinician educators highlighted the wide variety of methods used to assess performance (1). Since that publication, more specific domains of excellence in education have been delineated by the Group on Educational Affairs (GEA) (2) and the Academic Pediatric Association (APA) (3). In addition, the GEA previously developed a toolbox to provide uniform criteria for measuring the impact of education for P&T decisions (4) (5). The purpose of the current study was to explore whether P&T committees have incorporated the domains of excellence into their process, and if so, to determine how excellence is assessed in each of the respective domains.

Approach/Methods: A survey was constructed to understand the application of the domains of excellence (i.e., teaching activities, learner assessment, curriculum development, advising/mentoring, educational leadership, professional development, and educational scholarship) to the assessment of educators. The survey was organized into three sections. The first consisted of demographic questions which gathered information about the responder (i.e., role) and the structure of P&T at the institution. The second consisted of a matrix set of questions which asked whether each domain of excellence was required and if required, how it was assessed. The third section focused on asking about the utilization of the educator portfolio (EP) in the P&T process. Request for participation was distributed by email in three attempts to the Group on Faculty Affairs. Descriptive statistics and chi-squared analysis were conducted to examine associations between variables.

Results/Outcomes: Respondents from 55 unique institutions (RR = 40%) completed the survey, with participation across GEA regions. Of the domains of excellence, only teaching activities were required by the majority (91%) of P&T committees. Curriculum development and mentoring/mentoring were only required by 20% and 40% of respondents, respectively. Respondents indicated that each domain was more commonly assessed using a holistic approach rather than a specific quantitative criteria or other method. Sixty-two percent recommended or required an EP. The presence of a teaching academy was not associated with any significant differences in requirements for submission of an EP.

Discussion: The domains of excellence endorsed by the GEA and APA were not required by most P&T committees. Educator Portfolios were less commonly required than previously reported (1). The holistic approach used by most committees may introduce substantial subjectivity to the promotion process.
Significance: In 2010, the AAMC appointed a task force to improve the objectivity of evaluating faculty for educational excellence (3). Despite these recommendations, P&T committees continue to rely on subjective methods for determine candidate’s qualification for promotion based on educational accomplishments. These results suggest an ongoing need for enhancement of competencies of P&T committees to objectively assess educator activities across various domains. Without such efforts, educators at academic institutions will continue to face undue hardships in their academic promotions and career prospects.
Title: Outcomes from a Qualitative Matched Case-Control Study of Faculty Development

Submission Type: Research Highlights in Medical Education

Submitting Author: Deborah Simpson, PhD

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Purpose: Faculty Development (FD) is an established expectation for clinical teachers. Because FD requires significant investment of resources, effective evaluation is a priority. In a 2016 systematic review of 111 FD studies, Steinert et.al. reported gaps in study designs and outcomes, recommending qualitative and mixed methods studies to assess participants’ career changes and how new skills are sustained in the workplace. To address this gap we designed a qualitative FD study of graduates from a large, Midwestern medical school. Because of the longitudinal nature of our FD program (8-10 graduates per year from 2013-2016) and the likelihood that career advancement would be expected during the intervening time span, we used a matched-controls approach despite the limited guidance about this design specific to FD.

Approach/Methods: Simpson & Marcdante’s model for clinical educator career development, derived from national medical education leaders, was used to frame ‘career and workplace impact’ interview study questions. Key elements of the model include the fit between individual faculty interests/purpose and workplace needs, owning responsibility for career growth, and connecting with an academic community. Using this model to format interview questions, study team members designed then pre-tested the interview instrument with non-study eligible clinical educators, then made small changes to enhance clarity. A randomly selected sample of 10 subjects from 33 physician-graduates were matched with a selected control group of 10 faculty (matching criteria were years in academic medicine, medical specialty and gender). All subjects were randomly assigned to the researchers who conducted semi-structured interviews. Using a “field note” method, subject responses were entered into a spreadsheet during and immediately after the interview. Analysis was completed using a constant comparative method and memoing with categories formed and refined until investigators reached consensus.

Results/Outcomes: All controls reported several informal and brief FD experiences. There were strong similarities between our program graduates and controls in several areas: 1) perceived value of education roles; 2) recognition, active collaboration and alignment with organizational priorities; and 3) perception of career success associated with training highly qualified and competent physicians. Main differences were that FD graduates: 1) reported education as a career focus; 2) described a richness of educational concepts; 3) experienced career growth due to group projects aimed at local needs; 4) established an academic colleague network; 5) emphasized academic scholarship; and 6) collaborated across departments and specialties within organization and nationally.

Discussion: Outcomes revealed that study questions elicited similarities in career pathways and success markers for FD graduates and matched controls. Role and organizational alignments and career success were tied to learner training and competence. FD graduates’ distinguishing results confirmed anticipated emphasis on academic values and skills, and establishing/sustaining cross-specialty collaborations with the broader academic community.
Significance: Study findings and “lessons learned” regarding study design inform others seeking to tackle the challenging question, “What difference does long-term FD make on program graduates’ careers?”
Title: Predictors of Faculty Appointment among Underrepresented Racial/Ethnic Minorities in Medicine: A National Study

Submission Type: Research Highlights in Medical Education

Submitting Author: Donna Jeffe, PhD

Submitting Author Institution: Washington University School of Medicine

Purpose: Increasing the diversity of academic-medicine faculty is a national priority. (1,2) Research experience has been shown to be positively associated with faculty appointment. (3-5) However, studies to date that examined relationships between research-related variables and faculty appointment considered all underrepresented racial/ethnic minority (URM) groups together as a single group. (3-5) We conducted a national study testing our hypothesis that factors associated with faculty appointment might vary among different URM groups.

Approach/Methods: With IRB approval, we analyzed de-identified, individual-level data for U.S. Liaison Committee on Medical Education-accredited medical-school graduates nationally in 1998-2004, with follow-up data through February 2014. We examined a set of demographic, academic and research-related factors in association with full-time, academic-medicine faculty appointment. We used stratified, multivariable logistic regression models for each of three URM racial/ethnic groups (Black, Hispanic, and Native American/Alaska Native [NA/AN]) to identify independent predictors of faculty appointment among each of these three groups of medical-school graduates. We report adjusted odds ratios (AORs) and 95\% confidence intervals (CIs) significant at p<.05.

Results/Outcomes: Of 104,117 US medical-school graduates in 1998-2004, 14,562 URM graduates (14.0\%) were eligible for inclusion in our analysis. Of these 14,562 graduates, 5448 of 7234 (75\%) Black, 5249 of 6621 (79\%) Hispanic, and 546 of 707 (77\%) NA/AN graduates with complete data were included in the regression analyses. For all three URM groups, older matriculants were less likely to receive faculty appointments (Black: AOR=0.95, 95\% CI=0.93-0.98; Hispanic: AOR=0.94, 95\% CI=0.92-0.97; NA/AN:AOR=0.93, 95\% CI=0.87-0.99), whereas graduates with higher (i.e., per each decile increase in) United States Medical Licensing Examination Step 1 scores (Black: AOR=1.10, 95\% CI=1.07-1.13; Hispanic: AOR=1.10, 95\% CI=1.08-1.13; NA/AN:AOR=1.12, 95\% CI=1.03-1.22) and who participated in 1 year of research during residency (Black: AOR=2.01, 95\% CI=1.66-2.44; Hispanic: AOR=1.86, 95\% CI=1.54-2.26; NA/AN: AOR=2.08, 95\% CI=1.02-4.26) were more likely to receive faculty appointments. Women were more likely than men to receive faculty appointments only among Black (AOR=1.164, 95\% CI=1.005-1.349) and Hispanic (AOR=1.26, 95\% CI=1.09-1.45) graduates. Only among Black graduates were research-intensive medical-school attendees more likely to receive faculty appointments (AOR=1.48, 95\% CI=1.28-1.71). Only among Hispanic graduates were participants in college laboratory research apprenticeships (AOR=1.21, 95\% CI=1.05-1.38) and medical-school research electives (AOR=1.178, 95\% CI=1.005-1.381) more likely to receive faculty appointments. Only among NA/AN graduates were authors of a paper submitted for publication during medical school more likely to receive faculty appointments (AOR=1.770, 95\% CI=1.003-3.124).
Discussion: Across all three URM groups examined, older matriculants were less likely, whereas graduates with higher Step I scores and ≥1 year of research during residency were more likely to have received faculty appointment. However, findings for gender and for other research-related activities differed across the three URM groups of graduates. Other unmeasured variables, e.g., students’ perceptions of medical-school climate,(6) could be associated with faculty appointment, and since our study was observational, causality cannot be inferred.

Significance: Interventions to promote greater physician-workforce diversity may differentially impact individuals from different URM groups who might consider academic-medicine careers. Findings suggest the need for tailored interventions for students from different URM groups.
Title: Consensus Reaching in Committee Decisions for Faculty Advancement, Promotion and Tenure: Does Diversity Matter?

Submission Type: Research Highlights in Medical Education

Submitting Author: Ilana Mittman, PhD, MS

Submitting Author Institution: Johns Hopkins Medicine

Purpose: There are considerable gender and racial disparities in academic promotions regardless of academic qualifications, suggesting bias. The investigators studied the academic promotions process by simulating the work of Advancement, Promotion and Tenure (APT) committees and applying a mathematical model to assess the impact of diversity on consensus reaching.

Approach/Methods: The study targeted academic faculty during an annual Association of American Medical Colleges (AAMC) meeting. Participants evaluated the academic dossier of a male Assistant Professor with a focus on community engagement during four simulations. All dossiers were identical, with the singular exception of the candidate’s race (white vs. black). Committee composition varied with respect to racial diversity. Participants scored the candidate before and after the simulations. The DeGroot Model was used to compare individual scoring to group convergence.

Results/Outcomes: While there was no statistically significant difference in the candidate’s overall scores between the groups, the least diverse groups rated the candidate the lowest (p = 0.08). Moreover, criteria deliberated more heavily showed significant score changes. Lastly, significant ambiguity about the review process was evident, increasing opportunity for bias.

Discussion: While there was not enough statistical power to measure intragroup differences, the model shows promise in illuminating how individual perceptions, committee composition and group dynamics sway consensus reaching. The model can be used to evaluate bias not only in academic promotions but also in admissions, hiring and grant review. This will allow improved methods and processes for equitable academic performance reviews, enhancing the career trajectory and retention of minority scholars.

Significance: The DeGroot Model is a powerful model to measure group deliberations, and it may be applied not only to the work of promotion committees but also to grant review sections, faculty search committees, editorial review boards, and other groups assessing academic performance. Diversity in the medical professions is not simply an issue of numbers, but it is also about meaningful equity and inclusion—realizing the maximum potential for career development of faculty and a bias-neutral process for academic evaluation, advancement, and promotion of all scientists.