Title: Association between Race/Ethnicity/Gender and Evaluations of Resident Performance

Objective: To discover themes underlying the Underrepresented in Medicine (URM) resident experience and investigate any differences in resident performance evaluations based on URM status and gender.

Study Design: Grounded theory tenets and retrospective cross-sectional study

Materials and Methods: Qualitative data was gathered in the form of focus groups involving current URM residents in the Brigham and Women's Hospital/Massachusetts General Hospital Integrated OB/GYN Residency Program. Quantitative data was gathered in the form of online summative performance evaluations for individual residents by faculty from academic years 2009-2010 through 2014-2015. Evaluations for individual competencies assessed were defined as above, below and at the mean. Qualitative concerns regarding resident performance were defined as yes or no. Chi-squared and Fisher exact tests were used to compare the proportion of URM and non-URM residents scoring below the mean for all competencies. A p-value of <0.05 was considered statistically significant.

Results:

Focus Groups: Seventy-five percent of URM residents (nine individuals) participated in one of two focus groups. Four major themes emerged from the narrative – discrimination, contrast in diversity in the residency vs. faculty, pressure to conform, and differing expectations. Overt acts of racism were rare.

Resident Evaluations: A total of 66 residents were evaluated during the study period; 56 were female (82%) and 19 were URM (34%). Of URM residents, 12 were black (63% of URM residents, 18% of total residents). A total of 197 summative evaluations were generated, comprised of two different types of forms – historical (2009-2012) and current (2012-present) – reflecting a change in the method of evaluation over time. When both types of evaluation forms were combined, a statistically significantly larger proportion of URM residents scored below the mean for the medical knowledge competency as compared to non-URM residents (56.6% vs. 40.9% respectively, p =0.041). There was no significant difference between the two groups for other competencies. A sub-analysis of results of the current evaluation forms revealed a significantly larger proportion of URM residents scoring below the mean for the following competencies: patient care (66.7% vs. 30.4%, p =0.003), medical knowledge (77.1% vs. 35.3%, p <0.001), practice based learning (71.4% vs. 40%, p =0.002), systems based practice (65.7% vs. 40%, p =0.01), communication (60% vs. 37.7%, p =0.025) and transitions of care (71.4% vs. 44.7%, p= 0.008). No differences were observed in the professionalism and teaching competencies. Overall, evaluating faculty expressed concerns about a larger proportion of URM vs. non-URM residents (48.6% vs. 10.6%, p <0.001). No differences were observed in evaluation data when stratified by gender.

Conclusions: Themes emerging from URM focus group data mirror those expressed in the literature [1]. In the current evaluation system, URM residents appear to do more poorly on summative evaluations in nearly all competencies compared with their non-URM counterparts. Unconscious bias may play a role in these observed differences.

References:

1. Liebschutz JM, Darko GO, Finley EP, Cawse JM, Bharel M, Orlander JD. In the minority: black physicians in residency and their experiences. *Journal of the National Medical Association*. 2006;98(9):1441-1448.