

# USMLE Step 2 CK Scores and Radiology Residency Applications: Does it Affect Diversity in Selection of Trainees?



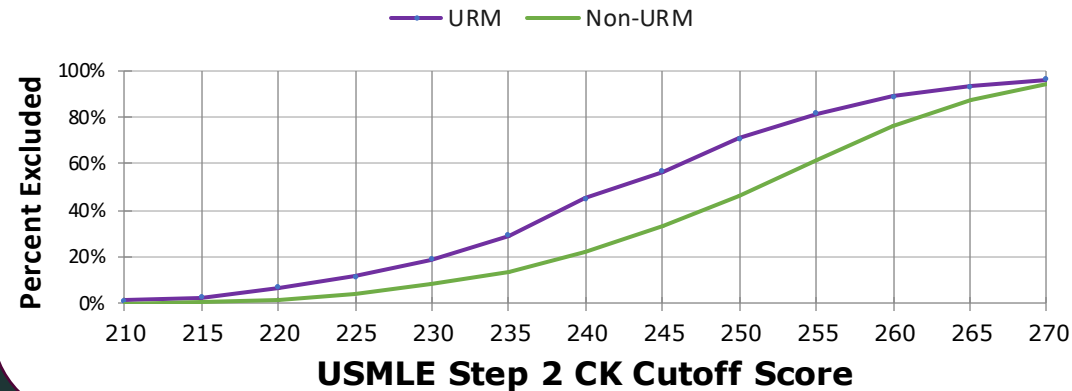
Usha K. Trivedi, MD<sup>1</sup>; Pierre D. Maldjian, MD<sup>2</sup>

<sup>1</sup> Northwell Mather Hospital Transitional Year Residency Program; <sup>2</sup> Rutgers New Jersey Medical School, Department of Radiology

## Purpose

- Many radiology residency programs seek to increase diversity of trainees, as women and racial minorities are **highly underrepresented**.
- Applying to radiology residency is becoming **increasingly competitive**.
- With USMLE Step 1 now pass/fail, how will programs **screen** the growing applicant pool? Programs are likely to rely on **USMLE Step 2 CK scores** to evaluate their applicants.
- This study examines how reliance on USMLE Step 2 CK scores and use of **cut-off scores** affect selection of female and underrepresented minority (URM) candidates.

## Effect of USMLE Cutoff Scores on Selection of URM vs Non-URM Candidates



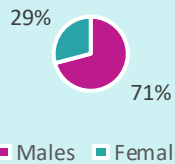
## Results

	n	Mean USMLE Step 2 CK Score	Standard deviation	p value
Total (N)	1017	248	13.9	
Males	721	248	15.9	0.22
Females	296	249	15.9	
URMs	164	241	15.9	<0.0001
Non-URMs	853	249	15.9	

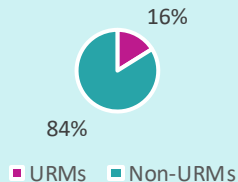
## Methods

- Applications to one radiology program from U.S. MD seniors for 2021-2023 match cycles were reviewed.
- Based on self-identification on applications, subjects were categorized by race and gender.
- Step 2 USMLE CK scores were compared for male vs. female and URM vs. non-URM subjects.
- Disparate effects of cut-off scores were examined.
- Study was approved by IRB.

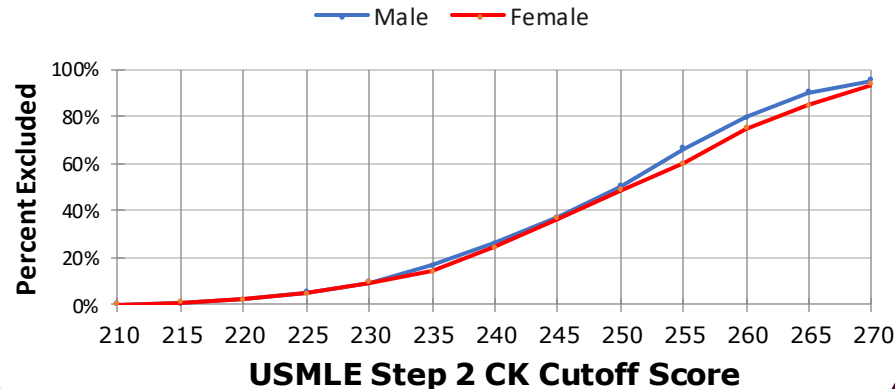
Percentage of Male and Female Candidates



Percentage of URM and non-URM Candidates



## Effect of USMLE Cutoff Scores on Selection of Male vs Female Candidates



- **No significant difference** in mean scores between **male and female** candidates (p = 0.21). No disparate effects of cut-off scores.
- **8 point difference** in mean scores between URM and non-URM candidates (95% CI [5.2, 10.6], p < .0001).
- Cut-off scores showed **disparate effect** on URM candidates. A cut-off score of 250 (average score for 2022 matched applicants) excludes **71%** of URM while excluding only **46%** of non-URM candidates.

## Conclusion

- Reliance on USMLE Step 2 CK scores to screen applications for radiology residency can **disadvantage URM candidates**.
- Female candidates are not adversely affected.