

RADIOLOGY: THE NEED FOR EARLY EDUCATION

DISCLOSURES

- None of the authors have any actual or potential conflicts in relation to this presentation.
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NEW YORK MEDICAL COLLEGE

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RADIOLOGY: THE NEED FOR EARLY EDUCATION

Faariah Shakil, BA, Alexandra Jordan, MS, Susan Rachlin, MD, FACR, Daniel Katz

BACKGROUND

- Medical imaging is critical in diagnosis and management in nearly all specialties, but radiology is not formally taught in the preclinical years at many institutions.
- At our institution, there was a dedicated radiology curriculum included in the Gross Anatomy course during the first year led by a board-certified radiologist.
- Due to course restructuring, in 2015, this component was eliminated from the first-year curriculum.

PURPOSE

This study aimed to determine if eliminating the formal radiology preclinical curriculum led to a subsequent decrease in the number of students matching into radiology from our institution.

METHODS

Comparisons were drawn between proportion of radiology matches from our institution and national numbers for the Classes of 2015 to 2021 from the National Resident Matching Program

RESULTS

- In the Class of 2010, the percent of matches into radiology was 14.6% at our institution, compared to a national average of 3.8%; by the 2021 class, our radiology match rate was 5.0% compared to a national average of 4.7%.
- Using OLS regression, there was a significant interaction (interaction = $-.01$, $t(10) = -2.4$, $p = .040$), which signifies that the graduation year had a larger effect on our percentage than the national average.
- At our institution, the percentage falls over time and the national average does not, causing the two to converge. A Johnson-Neyman test confirmed that our results and national average become statistically indistinguishable from the national average for the classes of 2020 and 2021.

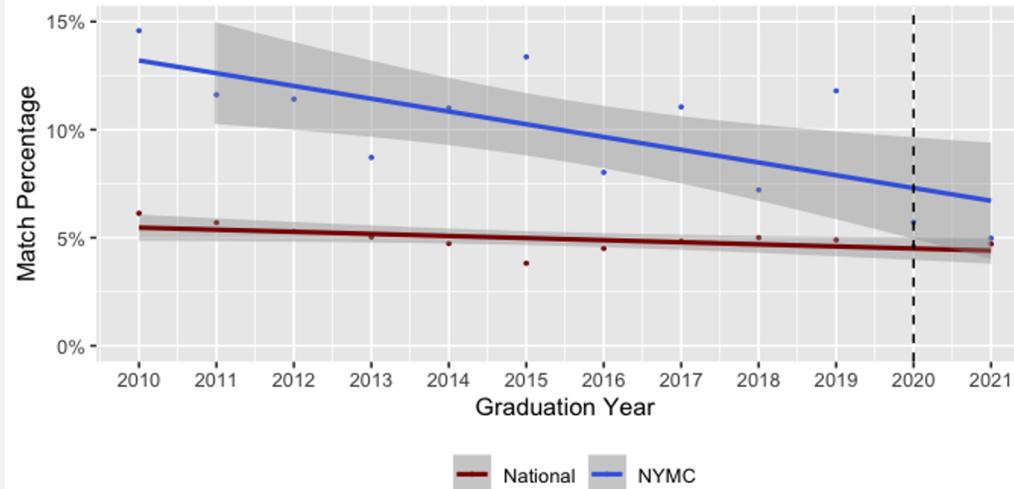
DISCUSSION

- Our results show that there was a decline in the number of radiology matches as the exposure to radiology decreased in the preclinical years.
- Studies have shown that early exposure to radiology improves students' impression of the field and increases student interest in radiology.
- This increase in interest has also been noted with early exposure to other specialties.
- Because imaging is integral to nearly all specialties, inclusion of formal radiology curriculum early in medical education would be beneficial for all students.
- Integrating radiology into preclinical education would also allow for early career exploration in the field, possibly increasing the number of applications into radiology.

CONCLUSIONS

The downward trend in radiology matches during this timeframe strongly suggests that early education plays a significant role in fourth year medical students selecting a career in radiology, reinforcing the importance of preclinical radiology education and exposure.

National Diagnostic Radiology Match Rate



Error Bounds are 95% CI
Interaction = $-.005$, $t(20) = -2.59$, $p = .017$
Johnson-Neyman Region of Significance = [2010, 2020]

PURPOSE

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- At our institution, there was a dedicated radiology curriculum included in the Gross Anatomy course during the first year led by a board-certified radiologist.
- Due to course restructuring, this component was eliminated from the first-year curriculum.
- This study aimed to determine if eliminating the formal radiology preclinical curriculum led to a subsequent decrease in the number of students matching into radiology from our institution.

MATERIALS & METHODS

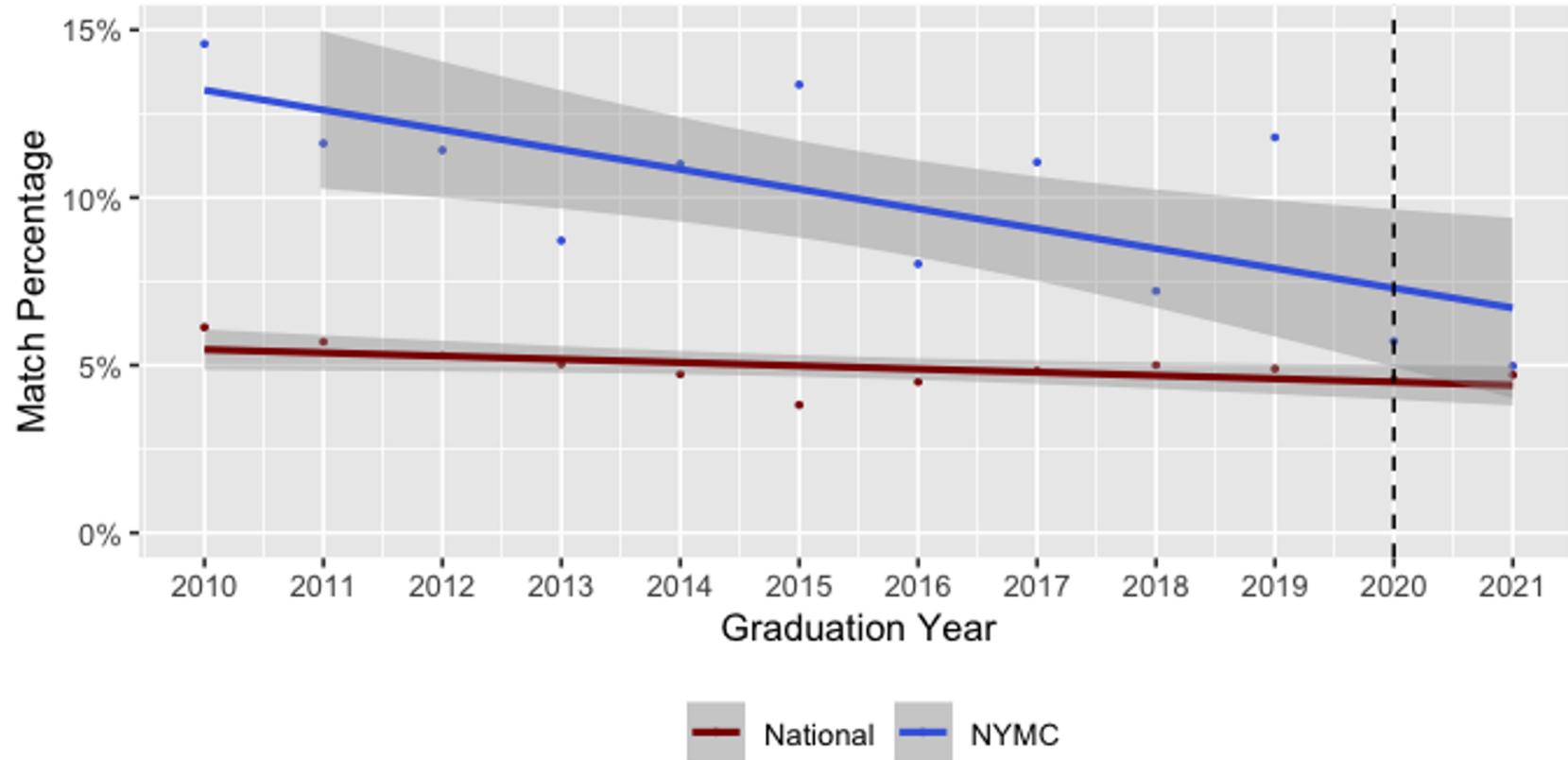
- In 2015, there was a cessation of all formal radiology instruction so that the Class of 2019 did not receive a dedicated radiology education during the preclinical years.
- Comparisons were drawn between the proportion of radiology matches from our institution and national numbers for the Classes of 2015 to 2021 from the National Resident Matching Program.

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