Maimonides Health

Doctor of Osteopathic (DO) Representation in Urology: Trends and Insights Across **AUA Regions**

Atieh D. Ashkezari¹, OMS-3, M.S- Charles Wood¹, OMS-2, Jacob Khurgin, DO²

1. New York Institute of Technology College of Osteopathic Medicine

2. Maimonedes Medical Center, Division of Urology



Introduction:

Doctor of Osteopathic (DO) medical graduates comprise 18-20% of residents across all specialties in the United States. DO students face unique barriers to entering Urology: limited rotation opportunities, persistent osteopathic training misconceptions, relative lack of DO mentorship and faculty representation. AUA News and others have recently underscored these issues, with underrepresentation noted to be pronounced in certain regions, potentially related to proximity of osteopathic medical schools, presence of DO mentorship, and other factors..²⁻⁵

Objectives:

- Quantify the proportion of DO residents in Urology across eight AUA regions to identify disparities and areas for improvement.
- Compare regional DO representation in Urology to the national average (~18–20%) to highlight deviations from other specialties.
- Assess factors influencing regional differences, such as DO faculty presence, to inform targeted inclusivity efforts.
- Highlight policy and advocacy opportunities to support DO student recruitment and match success in Urology.

Materials and Methods:

Data Collection

A comprehensive list of U.S. urology residency programs was obtained from the American Urological Association (AUA) website. Resident rosters (PGY-1 to PGY-5/6) and faculty credentials (MD vs. DO) were collected from program websites and affiliated Graduate Medical Education (GME) pages. Programs were categorized by AUA regions (e.g., Mid-Atlantic, North Central). 3

Variables Extracted

Residents: Total number of residents (MD, DO, IMGs) and number of DO residents per program.

Faculty: Total full-time faculty and those with a DO credential.

Data Analysis

Regional Summaries:

Total residents and DO residents were summed for each AUA region.

Total faculty and DO faculty were recorded for programs with available data.

Percentage Calculations:

Total DO Residents x 100 DO Resident Percentage =-Total Residents - Total DO Faculty × 100 DO Faculty Percentage = -

Materials and Methods:

Statistical Analysis:

Chi-square tests were conducted to assess differences in DO representation across regions:

Residents: $\chi 2=41.89$, p<0.0001

Faculty: $\chi 2=33.09$, p<0.0001

Correlation analysis showed a strong positive association between DO faculty and DO residents (r = **0.82**), indicating a relationship between faculty presence and resident recruitment.

National Comparison:

DO proportions were compared to the national average (~18–20% of all specialties).

Descriptive comparisons were made between resident and faculty datasets to highlight mentorship gaps.

Inclusion/Exclusion Criteria

Programs with missing or indeterminate data were excluded. Programs reporting total residents or faculty without specifying DO numbers were omitted for consistency.

Ethical Considerations

Data were obtained from publicly accessible sources, and no identifiable information was collected; therefore, IRB approval was not required.

Discussion:

Underrepresentation Confirmed

DO students remain significantly underrepresented in Urology, with only ~6% of residents being DOs compared to the national average of 18–20% across all specialties. A chi-square test showed significant regional disparities ($\chi^2 = 41.89$, p < 0.0001), indicating these differences are not due to chance.

Regional Variation

DO representation varies by region, with the Mid-Atlantic showing the highest proportion (13.66%) and New England the lowest (1.40%). Factors such as proximity to osteopathic schools, institutional culture, and faculty presence may influence recruitment.

Faculty Patterns and Correlation

DO faculty representation is also low, ranging from 1.03% to 6.56%. Programs with DO faculty are more likely to enroll DO residents, highlighting the role of mentorship and leadership. A chi-square test confirmed significant faculty distribution differences (χ^2 = 33.09, p < 0.0001), and correlation analysis (r = 0.82) suggests a strong link between faculty presence and resident enrollment.

Barriers to DO Representation

Challenges such as limited rotations, misconceptions about osteopathic training, and lack of mentorship contribute to low DO match rates, particularly in certain regions.

Social Media & Awareness

Inspired by the success of **#UroSoMe**, we propose **#DOsoUro** to raise awareness, promote mentorship, and foster advocacy efforts to support DO trainees in Urology.

Conclusion:

Our analysis demonstrates that **DO representation in Urology residencies (~6%)** lags substantially behind the national average (~18–20%) for all specialties, underscoring significant barriers facing osteopathic students. Marked regional disparities—particularly between the Mid-Atlantic and New England—suggest that local institutional culture and access to **DO mentors** affect recruitment and retention. Similarly, **DO faculty remain underrepresented**, yet programs with at least one DO faculty member more frequently enroll DO residents, highlighting the importance of visible osteopathic leadership.

Moving forward, targeted advocacy to bolster DO faculty presence, enhance mentorship opportunities, and expand rotation options is critical to creating an equitable environment. Social media initiatives, such as #DOsoUro, hold promise for increasing awareness, fostering networking, and ultimately bridging the gap in DO recruitment across Urology training programs. By implementing these strategies, we can work toward a more diverse, inclusive, and representative Urology workforce.

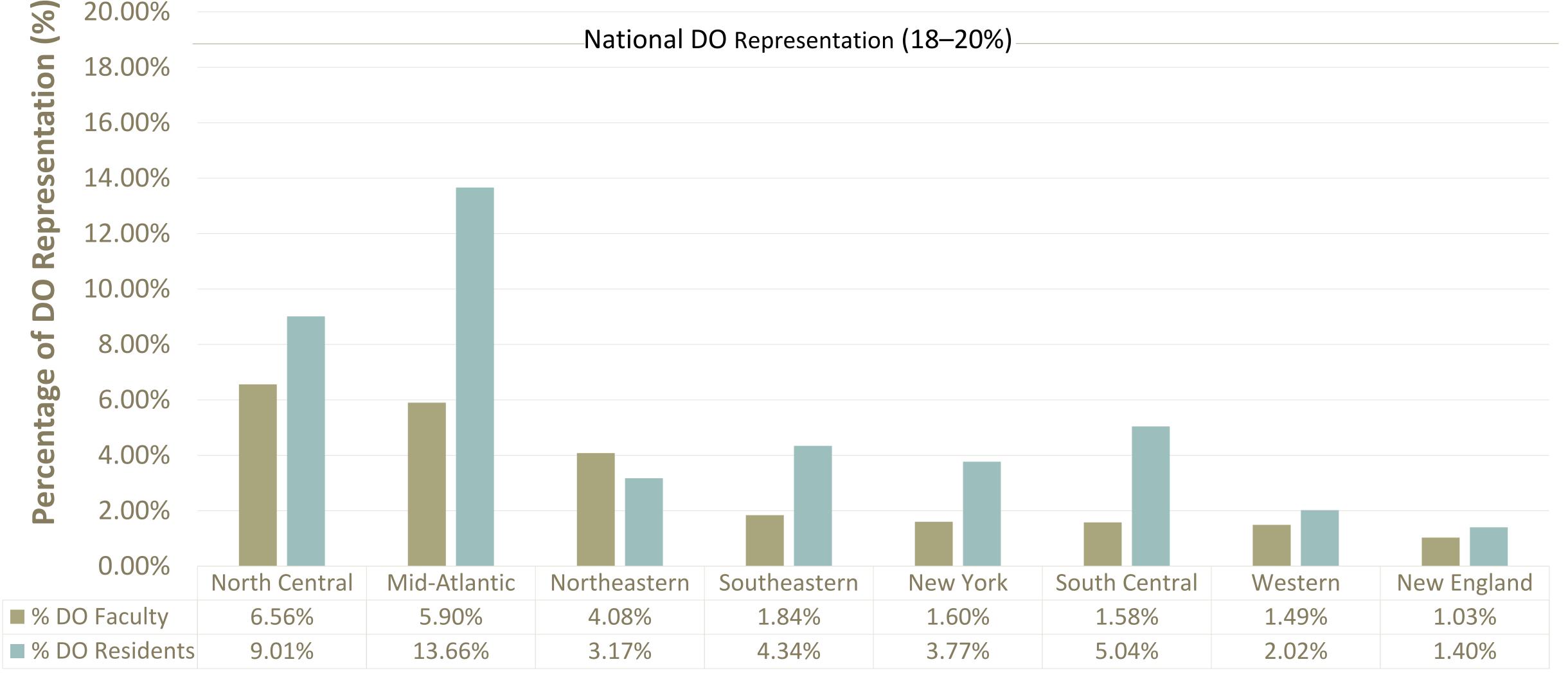
References:

- 1. American Osteopathic Association. (2024). 2024 Osteopathic Medical Profession Report. Retrieved January 18, 2025, from AOA Report
- 2. Diversity from snowball to avalanche: The challenges faced by osteopathic medical students in urology. (2023, April). AUA News. Retrieved January 18, 2025, from AUA News
- 3. American Urological Association. (n.d.). Accredited listing of U.S. urology residency programs. Retrieved January 2025, from AUA
- 4. Irani S, Zebib L, Simons ECG, et al. Analyzing the Current State and Visibility of Diversity, Equity, and Inclusion Initiatives at Urology Residency Programs. Urology. 2024;188:24-29. doi:10.1016/j.urology.2024.03.013.
- 5. Kamran SC, Winkfield KM, Reede JY, Vapiwala N. Intersectional Analysis of U.S. Medical Faculty Diversity over Four Decades. The New England Journal of Medicine. 2022;386(14):1363-1371. doi:10.1056/NEJMsr2114909.

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Comparison of DO Representation Among Residents and Faculty by AUA Region



AUA Region

■ % DO Faculty

% DO Residents