



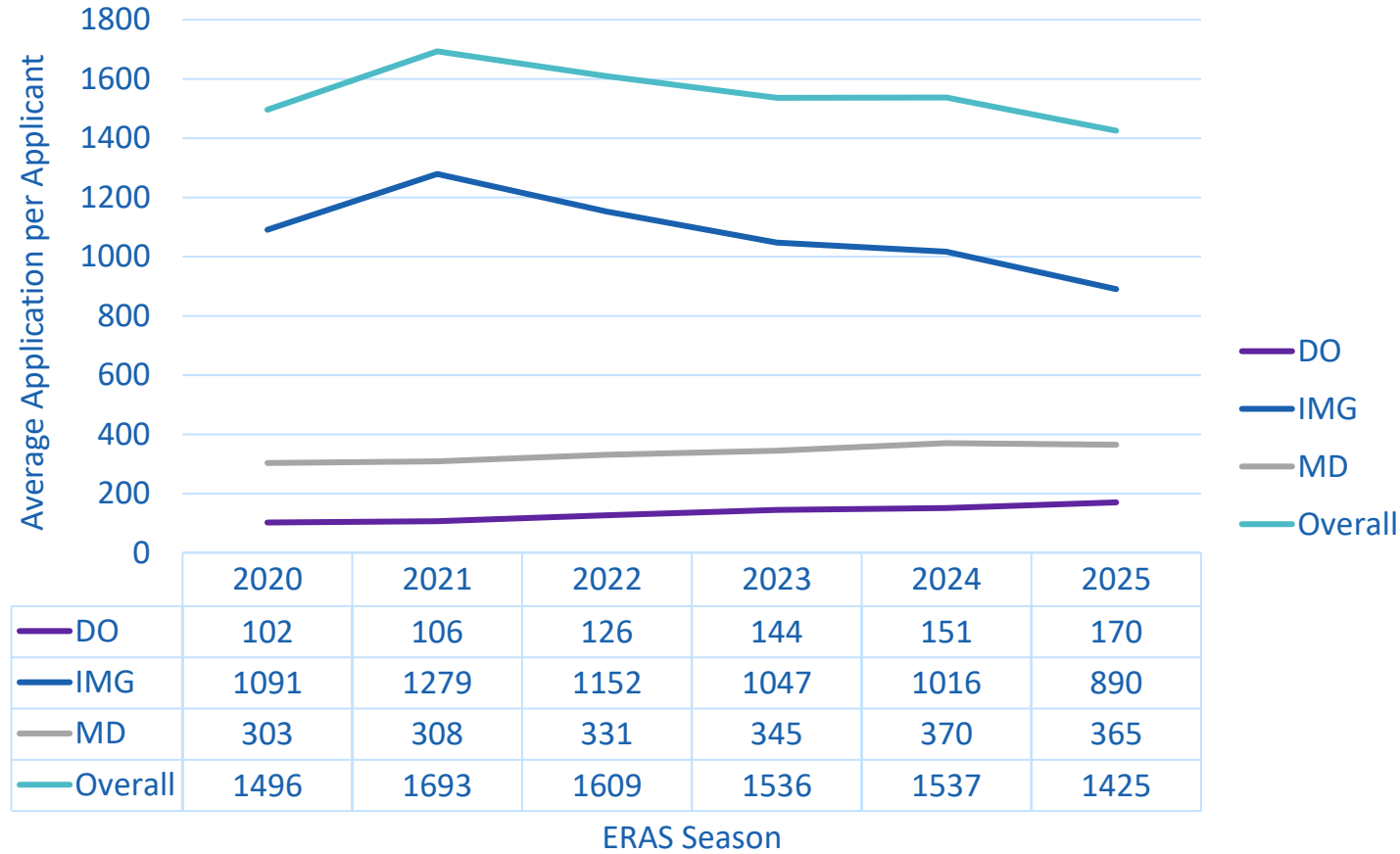
Understanding the Use and Implications of Program Signals and Geographic Preferences in the 2025 Cycle: Pathology

2025 ERAS® Analysis

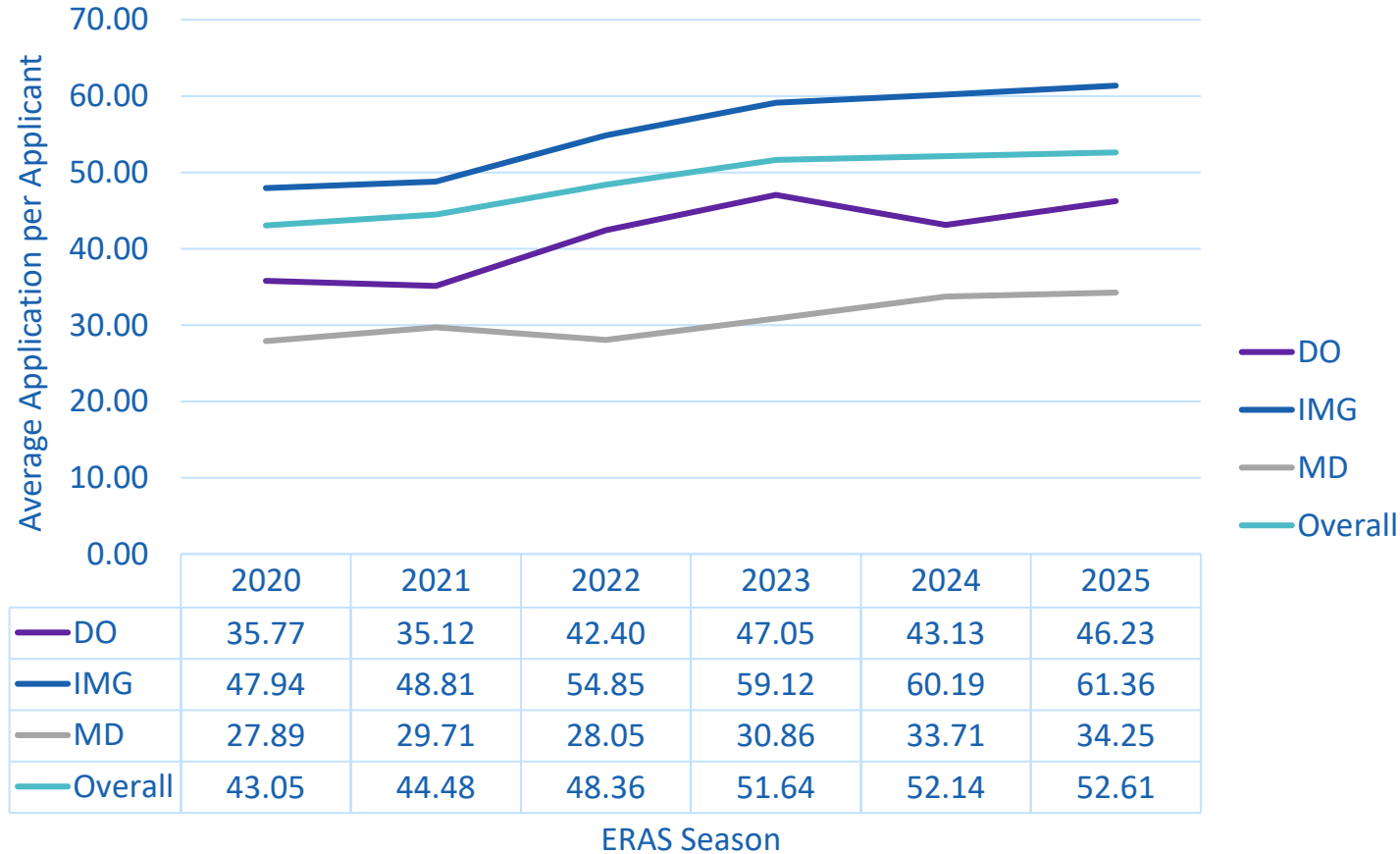
Data as of May 31, 2025

Application Trends

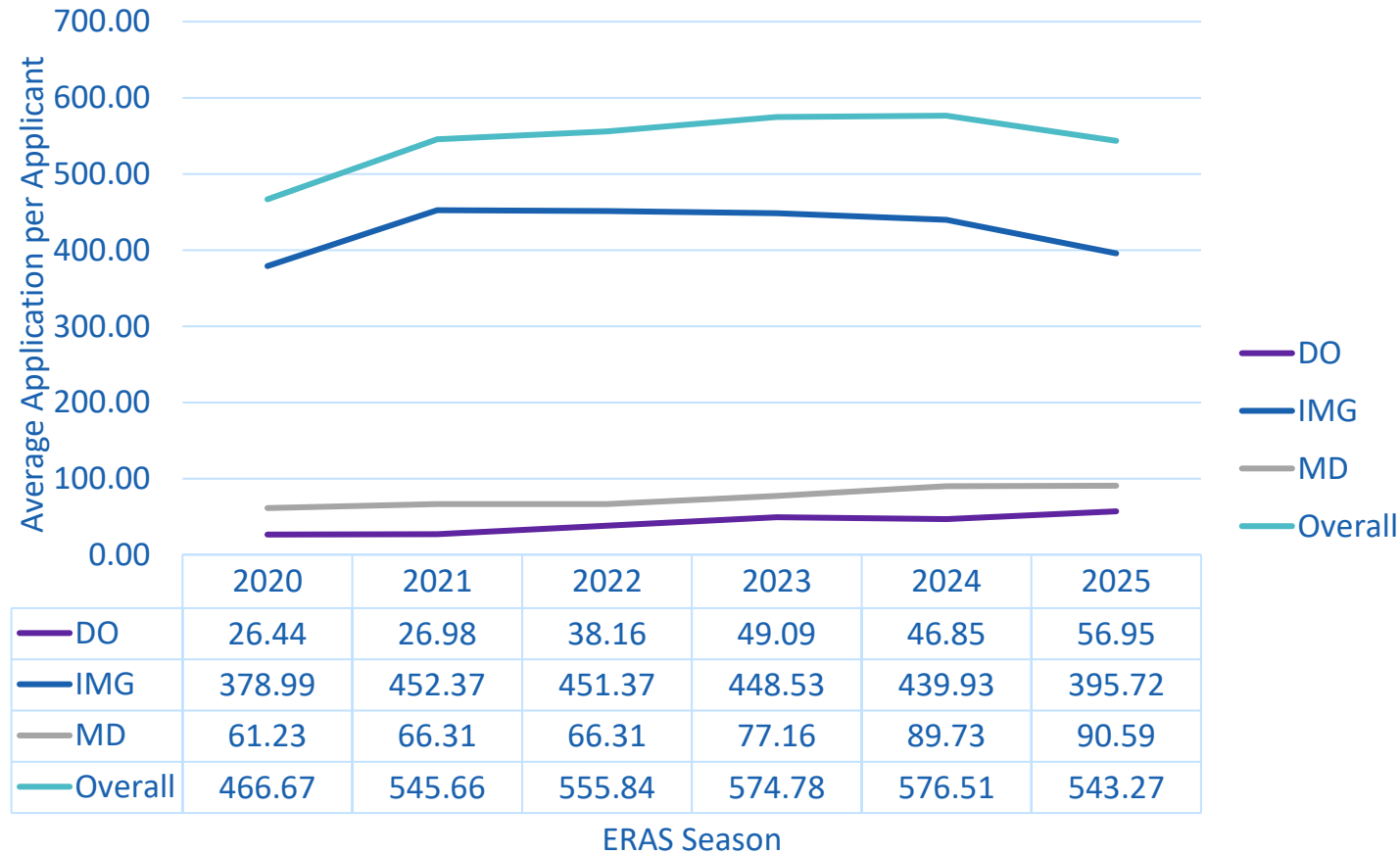
Total # of Applicants by ERAS Season



Average # of Applications per Applicant by ERAS Season



Average # of Applications by Program



Cross-Specialty Applicants*

Specialty	#/Cross-applied Applicants
Pathology-Anatomic & Clinical	1,425
IM Categorical	362
Family Medicine	305
IM Preliminary	212
Transitional Year	182
Pediatrics	138
Emergency Medicine	76
Psychiatry	68
Neurology	67
Radiology-Diagnostic	50
Surgery Preliminary	49
Anesthesiology	37
Surgery Categorical	35
Physical Medicine and Rehabilitation	25
Dermatology	24
IM/Pediatrics	22
Public Health and General Preventive Medicine	20
Radiation Oncology	12
Nuclear Medicine	10
Orthopaedic Surgery	9
Otolaryngology	0



The most common specialties that Pathology applicants cross-applied to during the 2025 ERAS Cycle are:

1. IM Categorical
2. Family Medicine
3. IM Preliminary
4. Transitional Year
5. Pediatrics

*As of May 31, 2025

Cross Application Distribution

	N	Applied to 1 Specialty	1 + 1 other Specialty	1 +2 other Specialties	1 + 3 other Specialties	1 + 4 other Specialties	More than 4 Specialties
DO	170	104	22	16	13	4	11
IMG	890	359	117	115	100	69	130
MD	365	276	30	20	18	6	15
Overall	1425	739	169	151	131	79	156

Fee Assistance Program (FAP) in Pathology

- Beginning with the 2025 ERAS application season, ERAS expanded the Fee Assistance Program (FAP) to include residency applicants who were previously approved for the medical school application Fee Assistance Program.
- These qualifying applicants automatically received a 60% fee discount on up to 50 ERAS applications, significantly alleviating the financial burden associated with the application process.

School Type	Total FAP Applicants	% FAP
DO	18	10.4%
IMG	7	<1%
MD	54	13%
Grand Total	79	4.8%

As of May 31, 2025

Self-identification by Race and Ethnicity

Season												
Designation	2020		2021		2022		2023		2024		2025	
	Applicants	Application	Applicants	Application	Applicants	Application	Applicants	Application	Applicants	Application	Applicants	Application
American Indian or Alaska Native	12	424	12	196	8	265	7	147	12	186	7	175
Asian	747	29,712	893	35,615	744	34,896	635	33,284	670	34,132	616	33,079
Black or African American	180	5,803	253	8,119	200	7,659	226	10,367	220	9,227	170	7,510
Hispanic or Latino											170	8,694
Hispanic, Latino, or of Spanish Origin	163	5,218	201	7,447	176	7,216	164	7,701	206	9,401		
Middle Eastern or North African											222	11,194
Native Hawaiian or Pacific Islander	1	10	3	138	2	36	1	15	3	167	3	64
Other	120	4,553	175	8,228	146	7,200	148	7,711	156	8,011		
Some other race or Ethnicity											22	1,339
White	734	25,643	758	27,522	697	27,819	672	28,486	684	27,759	469	18,079
Total	1,957	71,363	2,295	87,265	1,973	85,091	1,853	87,711	1,951	88,883	1,679	80,134

As of May 31, 2025

Applicant and Application Totals by ERAS Season

ERAS Season	Total # of Applicant	Total # of Applications	% Difference, Total Applications
2020	1,496	64,400	
2021	1,693	75,301	↑ 14.5%
2022	1,609	77,818	↑ 3.2%
2023	1,536	79,319	↑ 1.9%
2024	1,537	80,135	↑ 1%
2025	1,425	74,971	↓ 6.7%

As of May 31, 2025

Geographic Preferences

Geographic Preferences: Overview



Geographic Preferences

Goals for Geographic Preferences Section:

- Provide a process for sharing geographic preferences that **enhances accuracy and fairness**.
- Communicate the importance of geography for an applicant.
- Provide an opportunity to share preferences for divisions and location-setting.

Applicant Use of Geographic Preferences

	N	3 Divisions	2 Divisions	1 Division	No Preference
DO	169	73%	8%	8%	9%
IMG	885	56%	4%	7%	29%
MD	362	71%	7%	9%	11%
Overall	1416	62%	5%	7%	22%

Applicant Use of Setting Preferences

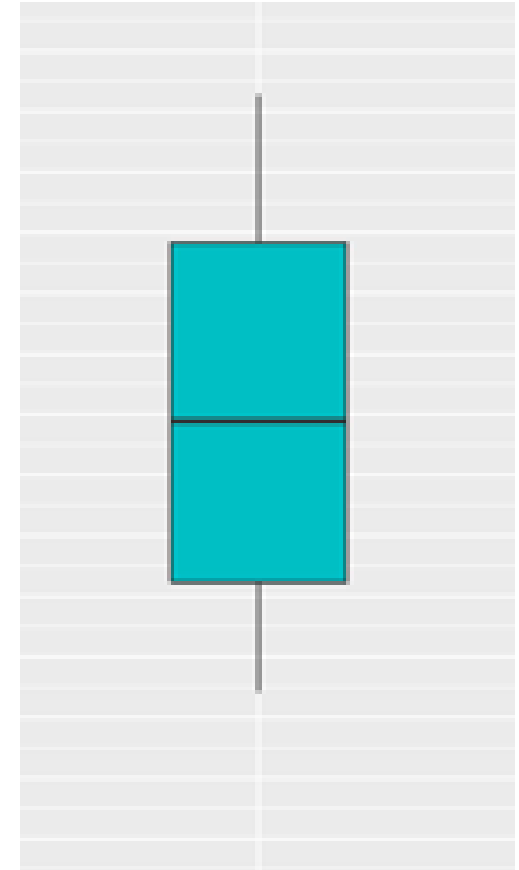
	N	Urban	Suburban or Urban	Suburban	Rural or Suburban	Rural	No Preference
DO	169	--%	30%	--%	3%	--%	62%
IMG	885	3%	18%	--%	2%	1%	72%
MD	362	9%	36%	--%	--%	--%	51%
Overall	1416	5%	24%	1%	2%	<1%	66%

Analysis

- **Predictors:**
 - Geographic Preference.
- **Outcome:**
 - Invited to interview in Thalamus Core as of March 5, 2025 (Main Residency Match only).
- **Analysis:**
 - Results analyzed separately by program.
 - Computed geographic preference to interview conversion rates by program.
 - Summarized the distribution of conversion rates programs using boxplots overall and by applicant type for each specialty.

What information is provided by a boxplot?

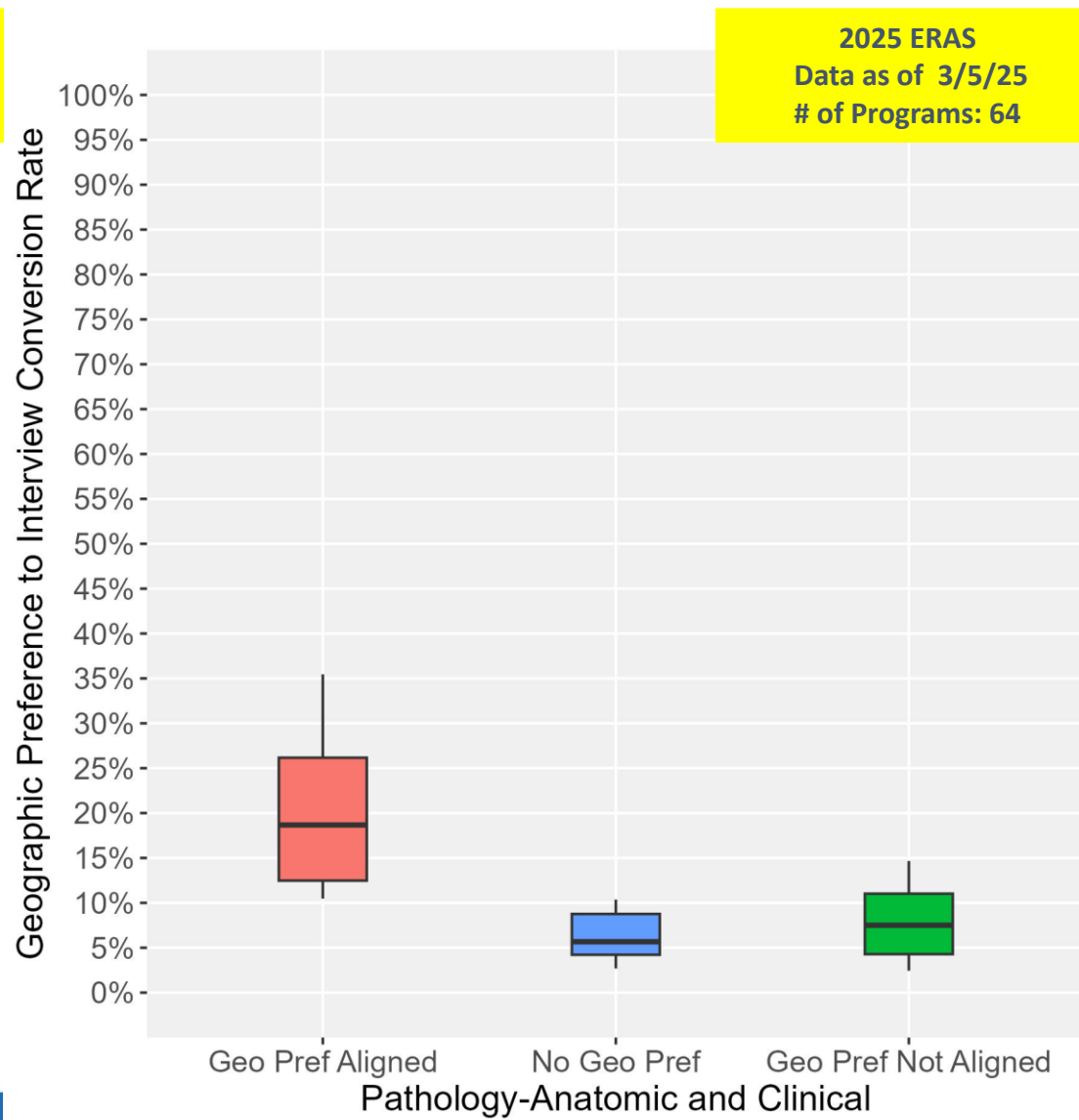
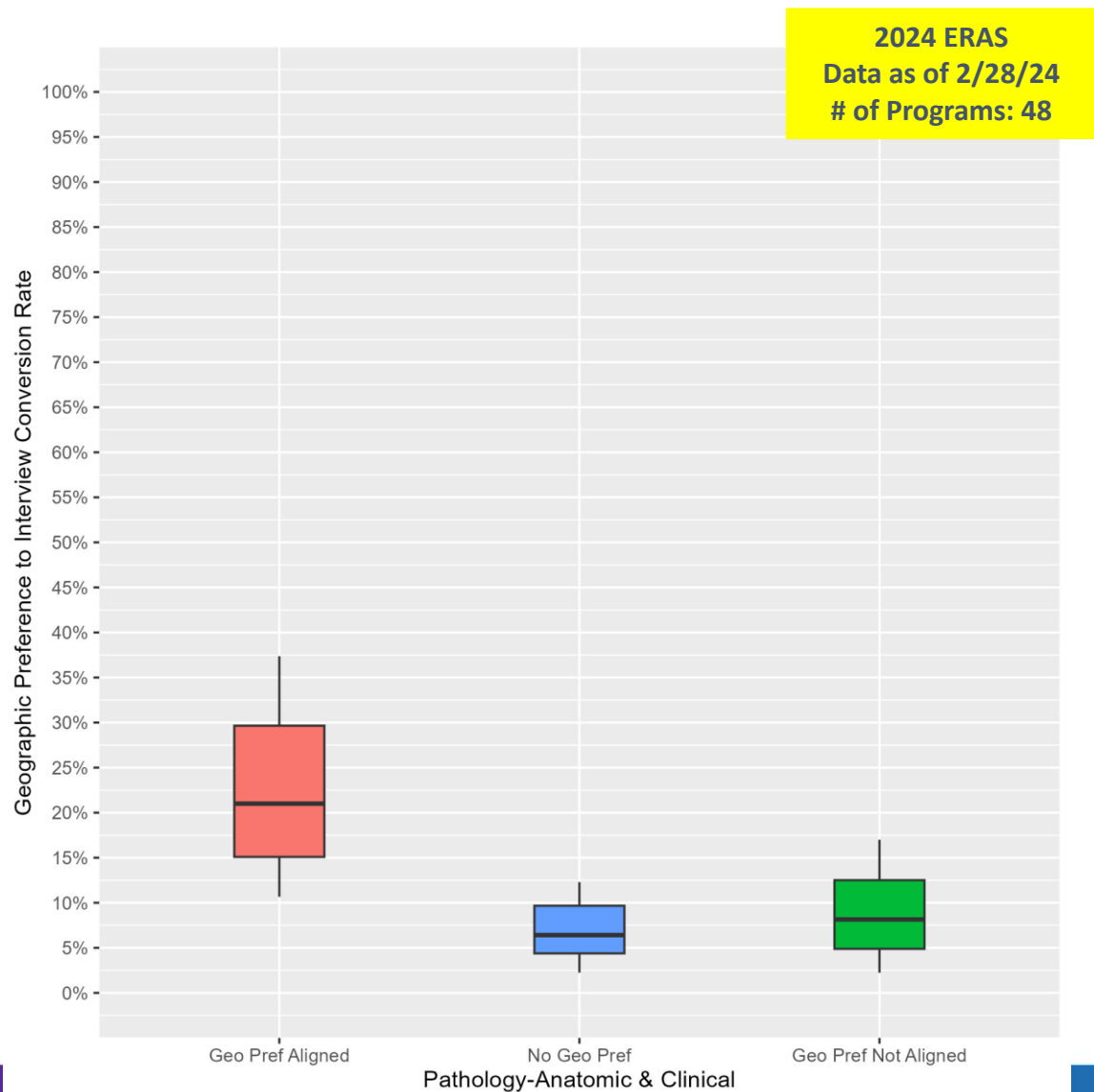
- **Boxplots** show the distribution of interview invitation rates for all programs in a specialty.
- The **colored box** shows the signal to interview conversion rates for the bulk of the programs. The bottom of the box is the 25th percentile, the horizontal line is the median or the 50th percentile, and the top of the box is the 75th percentile.
- **Whiskers** represent the 10th and 90th percentile of programs' interview invitation rates.



Pathology-Anatomy and Clinical: Program Sample & Inclusion Criteria

	N of Programs for Geographic Preference
Total programs participating in ERAS	138
Total programs who made geographic preference viewable at their program	83
Met inclusion rule equal to or larger than 7:1; Provided PGY1 info in GME track; Submitted interview offer data via Thalamus Core by March 5, 2025	64
Total analytic sample	64
Total % of programs who made geographic preference viewable at their program	77%
Total % of all Pathology-Anatomic and Clinical programs in 2025 ERAS cycle	46%

Pathology-Anatomy and Clinical: Interview Rates by Geographic Preference Alignment Year Over Year Comparison



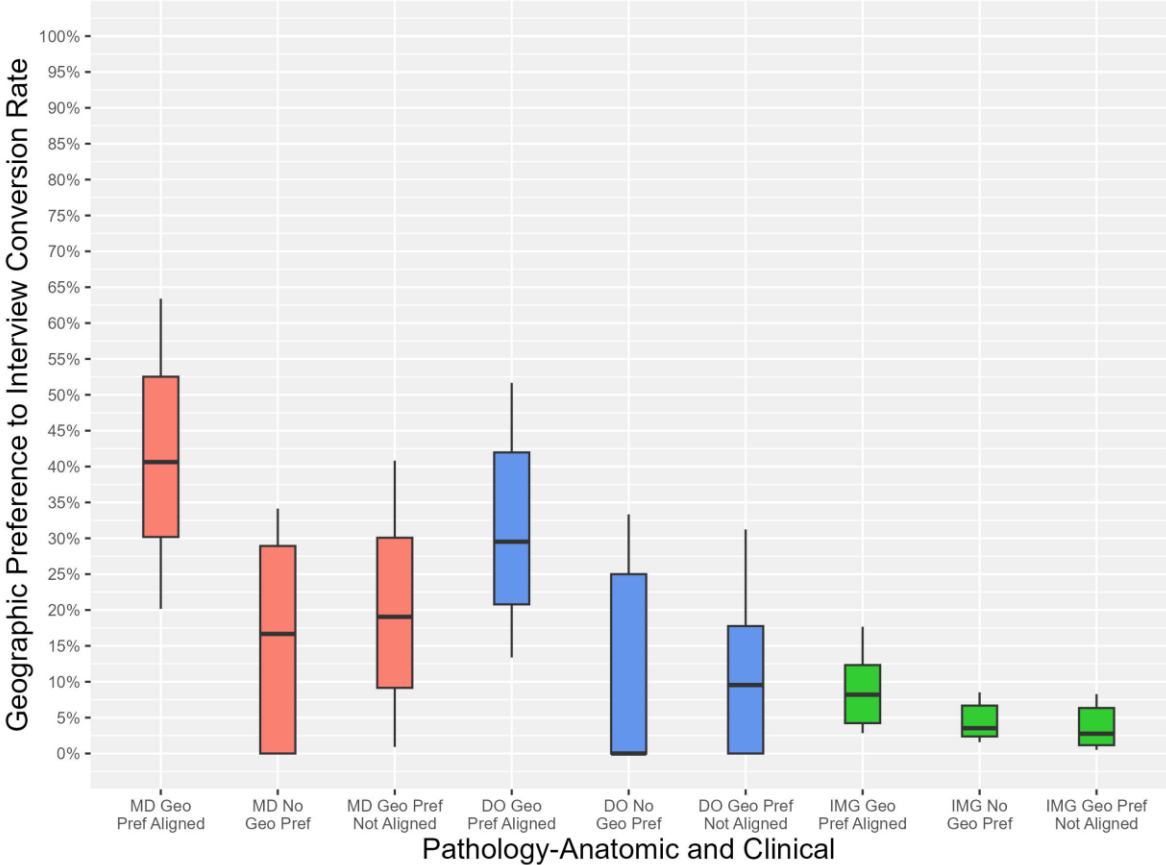
2025 ERAS
 Data as of 3/5/25
 N: MD (365), DO (170), IMG (890)

Pathology: Interview Rates by Geographic Preference & Applicant Type

Median Interview Rates

Applicant Type	Aligned	No Geo Pref	Not Aligned
MD	41%	17%	19%
DO	30%	0%	10%
IMG	8%	4%	3%

Interpret results with caution: (a) sample sizes vary at the program level and (b) analyses do not control for all factors considered in the selection process



General Trends

- **Interview Invitation Rates:** In general, interview invitation rates are higher for applications with aligned geographic preferences. The effect is smaller than what is observed for program signals.
- **Applicant Type:** The geographic preference effect is strongest for MD applicants.

Limitations and Future Research

- **Sample size** may limit generalizability. Some programs did not make geographic preferences viewable by 3/5/25 and were excluded from analyses. Additionally, the number of DO and IMG applicants is small in some programs and specialties.
- **Holistic Review:** Geographic preferences are only one part of the application. Programs often consider them alongside program signals, applicant's geographic location, experiences, and other data.
- **Future Research:**
 - Explore the effect of geographic preferences in the context of other data.
 - Explore alternative structures for collecting geographic preferences.

Program Signals

Applicant Use of Signals in the 2025 Cycle

Pathology (5 signals)

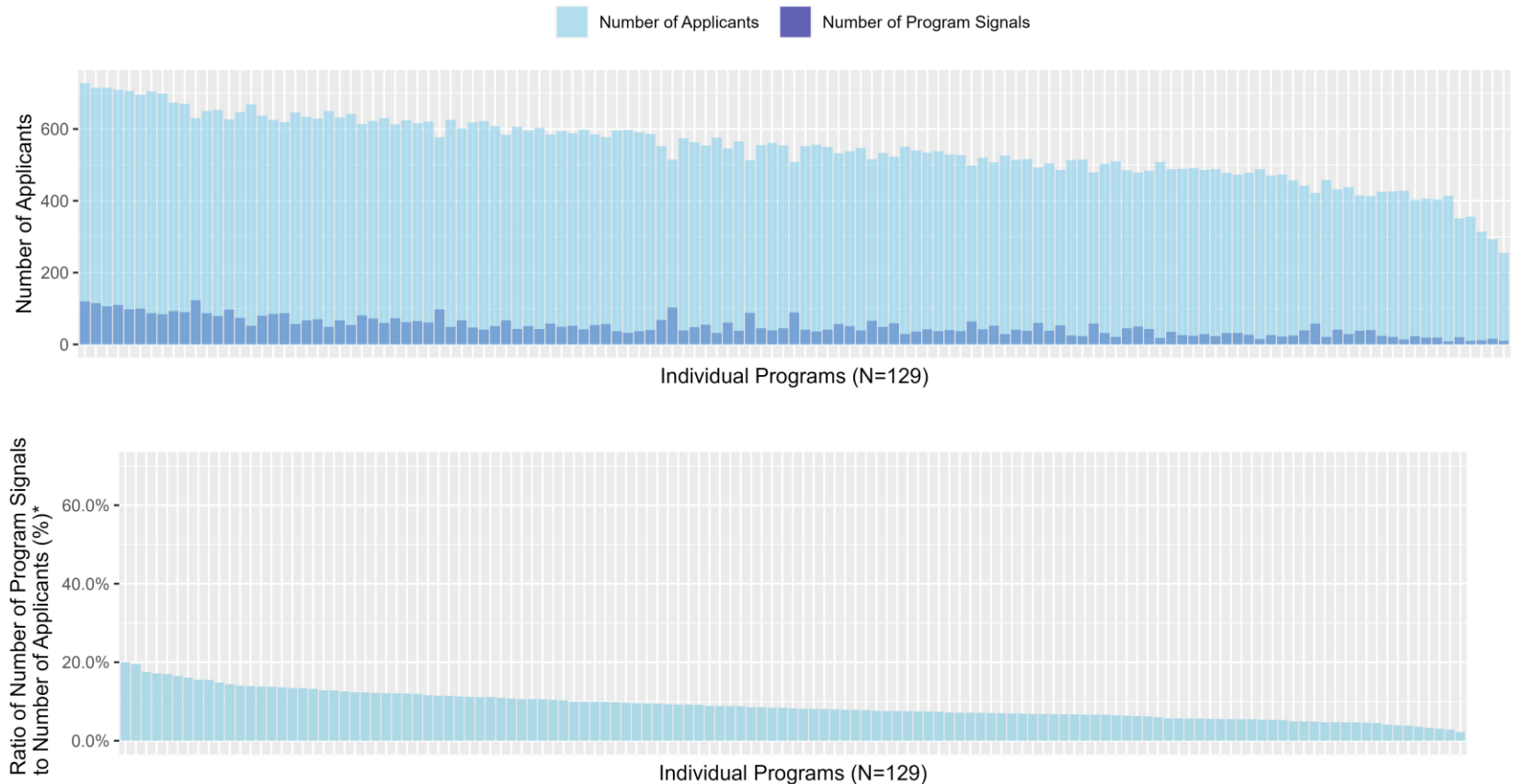
	N	Mean	SD	Min	Max
DO	167	4.91	0.51	1	5
IMG	856	4.67	1	1	5
MD	354	4.88	0.59	1	5
Overall	1377	4.75	0.87	1	5

Distribution of Signals

Signal Distribution Statistics: Signals (Total: 5)

- Mean: 50.75 (SD = 25.71)
- Range: 9-123

12 programs received 19% of all signals



Analysis

- **Predictors:**

- Program signal.

- **Outcome:**

- Invited to interview using Thalamus Interview Scheduler as of March 5, 2025.

- **Analysis:**

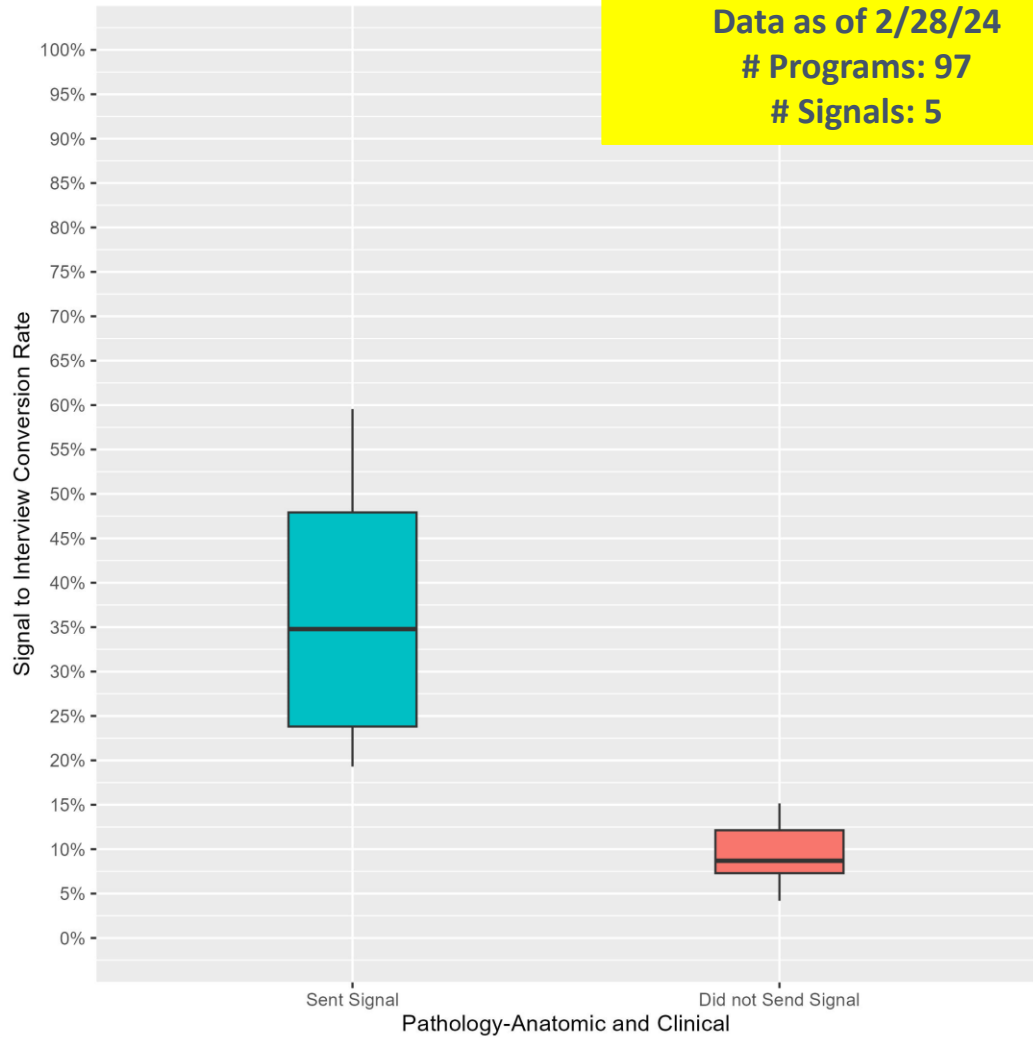
- Results analyzed separately by program.
- Computed signal to interview conversion rates by program.
- Summarized the distribution of conversion rates of programs using boxplots overall and by applicant type for each specialty.

Pathology-Anatomic and Clinical: Program Sample & Inclusion Criteria

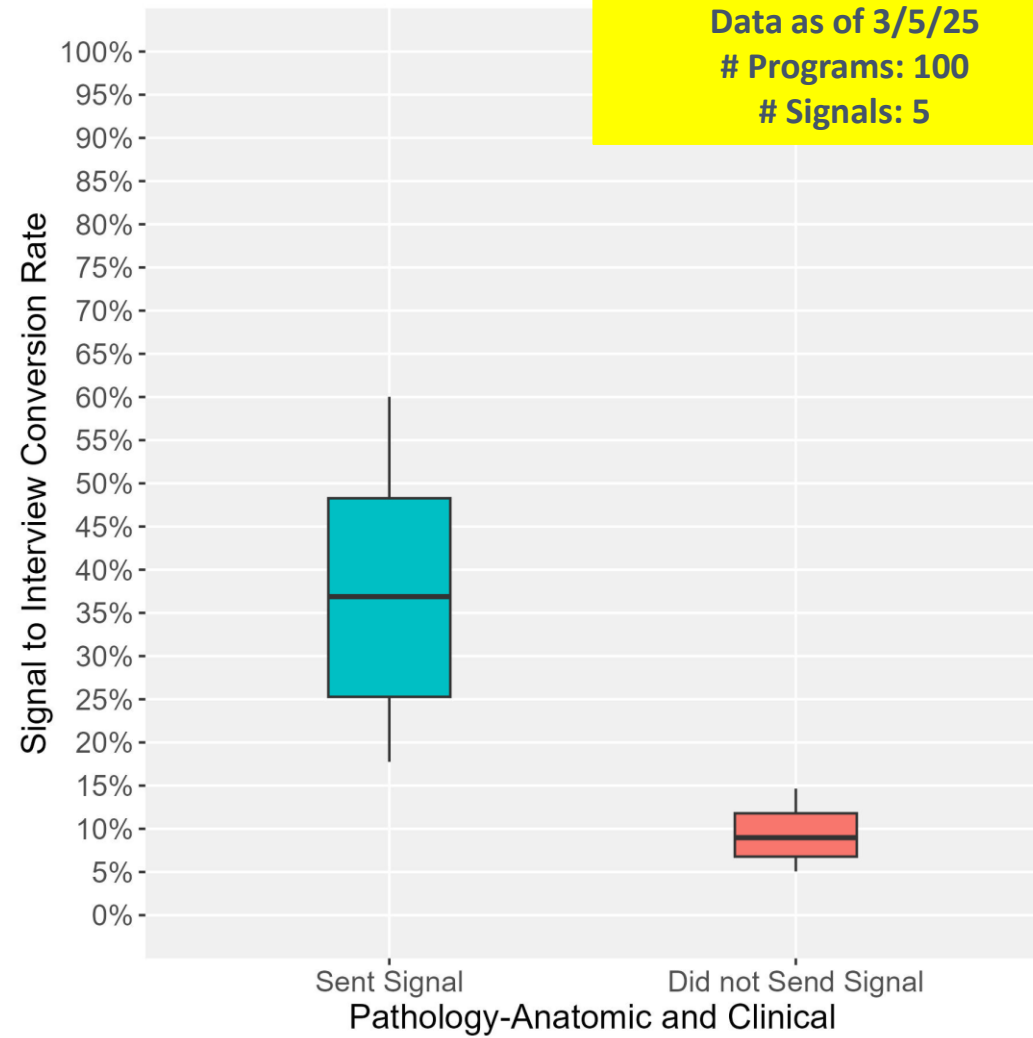
	N of Programs for Program Signals
Total programs participating in ERAS	138
Total programs participating in program signaling	129
Met the inclusion rule with a ratio equal to or greater than 7:1, provided PGY1 information in GME Track, and submitted interview offer data via Thalamus Core by March 5, 2025	100
Total analytic sample	100
Total % of programs participating in program signaling	78%
Total % of all Pathology programs in 2025 ERAS cycle	72%

Pathology-Anatomic and Clinical: Interview Rates by Program Signal Status Year Over Year Comparison

2024 ERAS
Data as of 2/28/24
Programs: 97
Signals: 5



2025 ERAS
Data as of 3/5/25
Programs: 100
Signals: 5



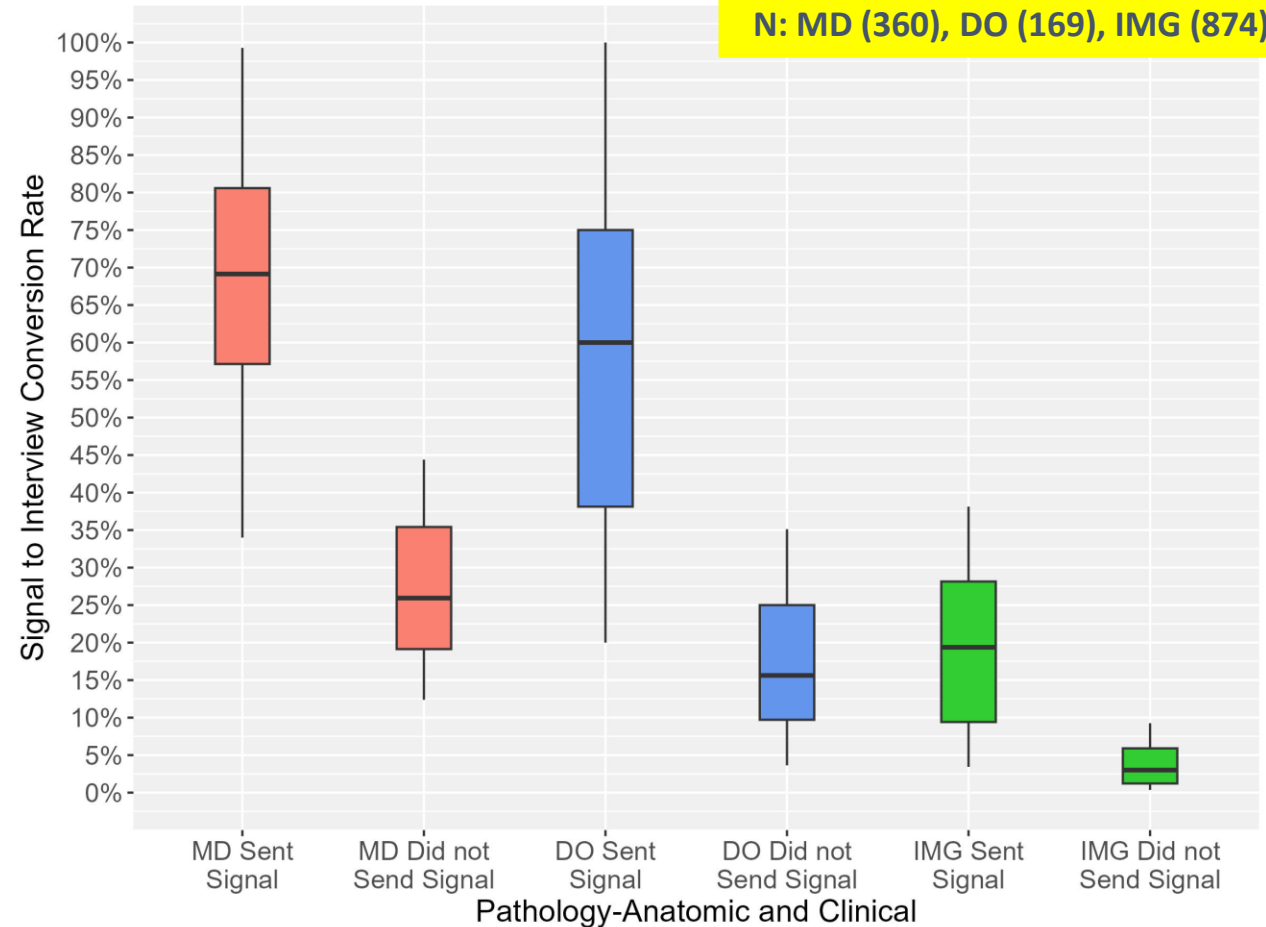
Pathology-Anatomic and Clinical: Interview Rates by Program Signal Status & Applicant Type

Median Interview Rates

Applicant Type	Signal	No Signal
MD	69%	26%
DO	60%	16%
IMG	19%	3%

CAUTION: Interpret results with caution: (a) small DO sample size at the program level and (b) analyses do not control for all factors considered in the selection process.

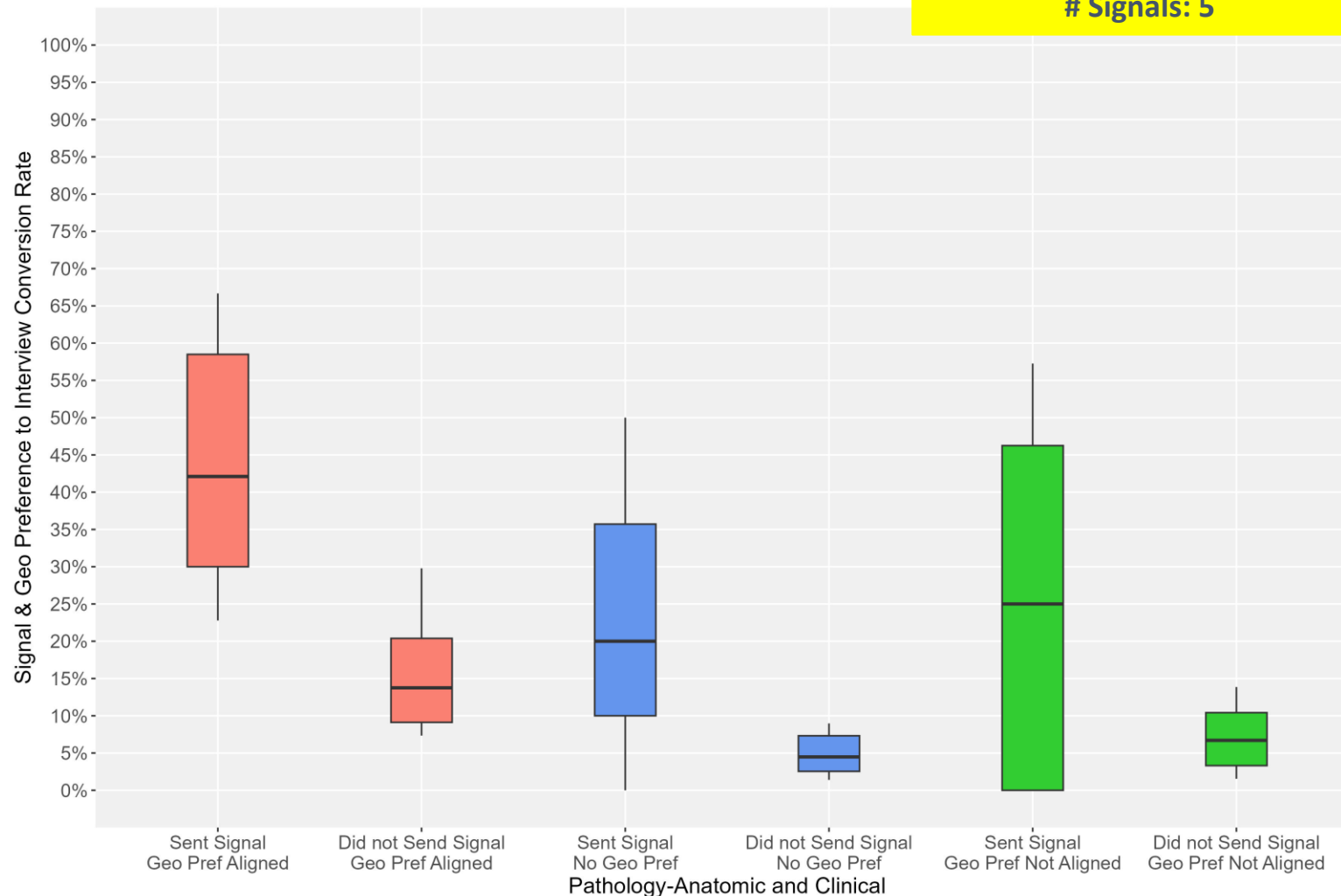
2025 ERAS
Data as of 3/5/25
N: MD (360), DO (169), IMG (874)



What is the relationship between signaling, geographic preferences, and interview invitation?

2025 ERAS Data as of 3/5/25
Programs: 61
Signals: 5

Interview Rate by Program Signal and Geographic Preference



General Trends

- **1-Tier Signal:** Interview invitation rates are higher for applicants who signaled. There continues to be variability in program use of signals. Interview invitation rates for applicants who did not signal were low and there is less variability in how programs interpret the lack of a signal.
- **Applicant Type:** In general, the signaling effect holds for all applicant types. However, the effect is stronger for MD and DO than IMG applicants.
- **Signal X Geographic Preference:** Applicants who signaled and have aligned geographic preferences were interviewed at the highest rates. Applicants who did not signal but had aligned geographic preferences were invited to interview at higher rates than those with unaligned or no geographic preference.

Limitations and Future Research

- **Holistic Review:** Program signals are only one part of the application. Programs consider signals alongside geographic preference, experiences, academic qualifications, and other components when making interview invitation decisions.
- **Sample Size:** For some specialties and programs, the number of IMG and DO applicants are small, which may limit the generalizability of findings.
- **Future Research:**
 - Examining the role of race, ethnicity, and gender in signaling outcomes.
 - Exploring the impact of signals in the context of other application data.
 - Investigating match outcomes in partnership with the NRMP.