# Recruitment to Rural Residency Programs: Match Rates and Best Practices

Davis Patterson, PhD David Schmitz, MD

RTT Collaborative Annual Meeting April 29, 2022









#### Study team

Randall Longenecker\*
Davis Patterson†
Natalia Oster†
David Schmitz‡
Lars Peterson§
Holly Andrilla†
David Evans\*
Zachary Morgan§
Samantha Pollack†

\*Ohio University Heritage College of Osteopathic Medicine †University of Washington School of Medicine ‡University of North Dakota School of Medicine & Health Sciences §American Board of Family Medicine



#### Acknowledgement and disclaimer



This research was supported by the Bureau of Health Workforce (BHW), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement #UH1HP29966. The information, conclusions and opinions expressed in this presentation are those of the authors and no endorsement by BHW, HRSA, or HHS is intended or should be inferred.

#### Background



- Many <u>rural residency programs</u>,\* including integrated rural training tracks (IRTTs) and other rurally located programs, <u>struggle to recruit residents</u>.
- Accrediting agencies, prospective students, and faculty advisors may conflate program desirability with publicly available <u>match</u> <u>rates</u> from the National Resident Matching Program (NRMP).
- No comprehensive studies of NRMP match rates and their correlation with program outcomes have been conducted in the past two decades.

<sup>\*</sup>programs in which residents spend >50% of their time training in a rural location

#### Study goals



Document patterns in NRMP match rates for rural residency programs from 1996 to 2020.

Compare rural residency match rates with measures of program attractiveness and outcomes for graduates (2013-2015).

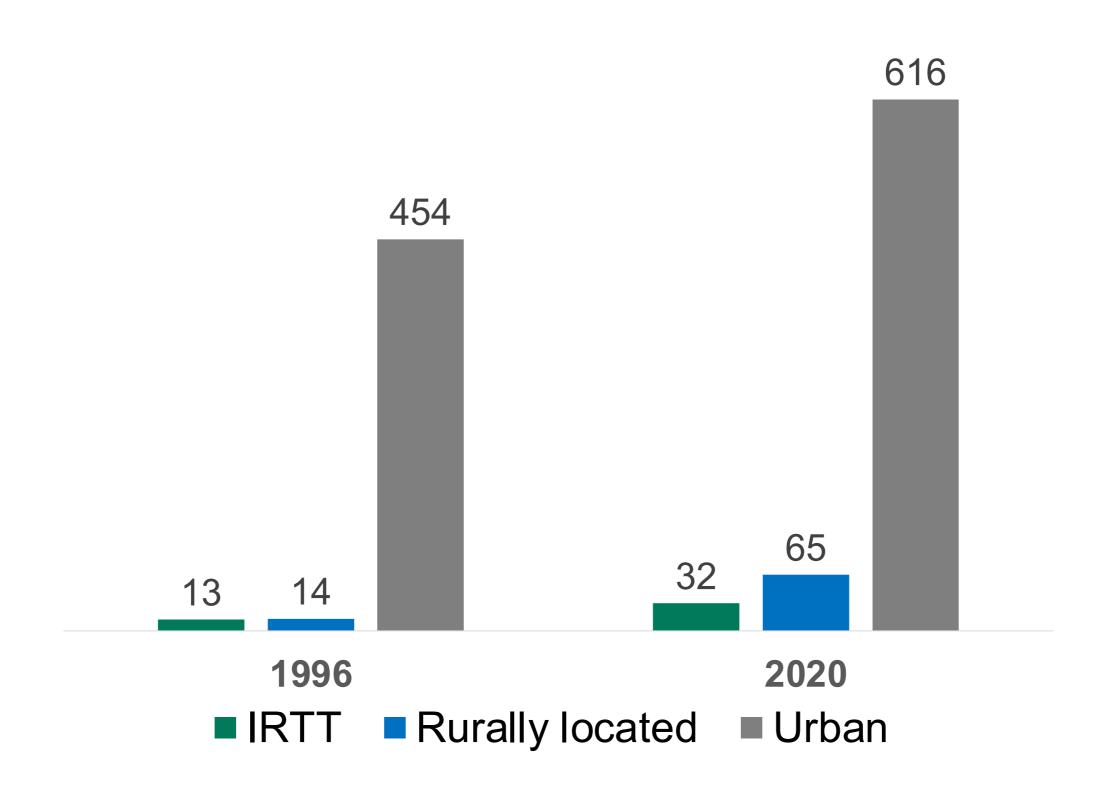
Explore successful recruitment strategies among rural residency programs.



### Results

### The number of rural residency programs increased over 25 years





#### Trends in growth and fill rates



- This growth has been most affected in the last 5 years by the transition to a single accreditation system.
- The <u>fill rate for rural programs</u> (both IRTTs and rurally located programs) has generally <u>improved</u> relative to urban over 25 years.

## Total positions offered and filled in Main Match, 1996-2020



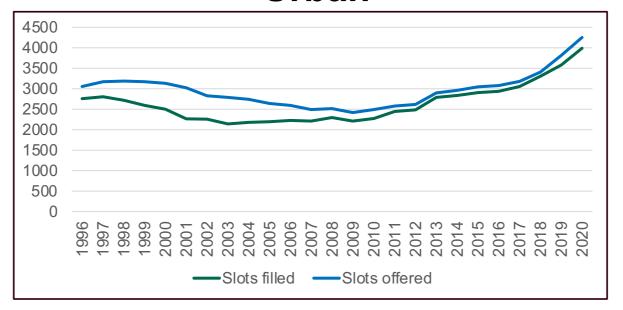
#### **IRTTs**



#### **Rurally located**

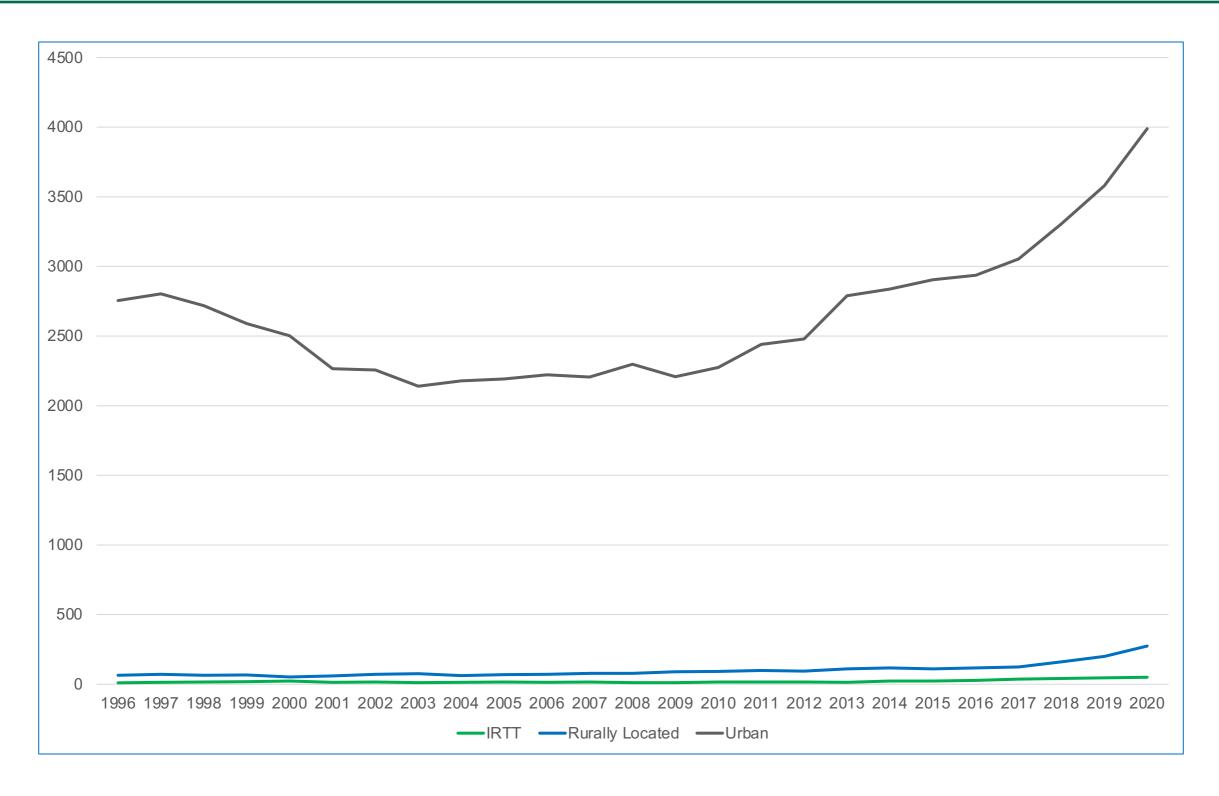


#### **Urban**



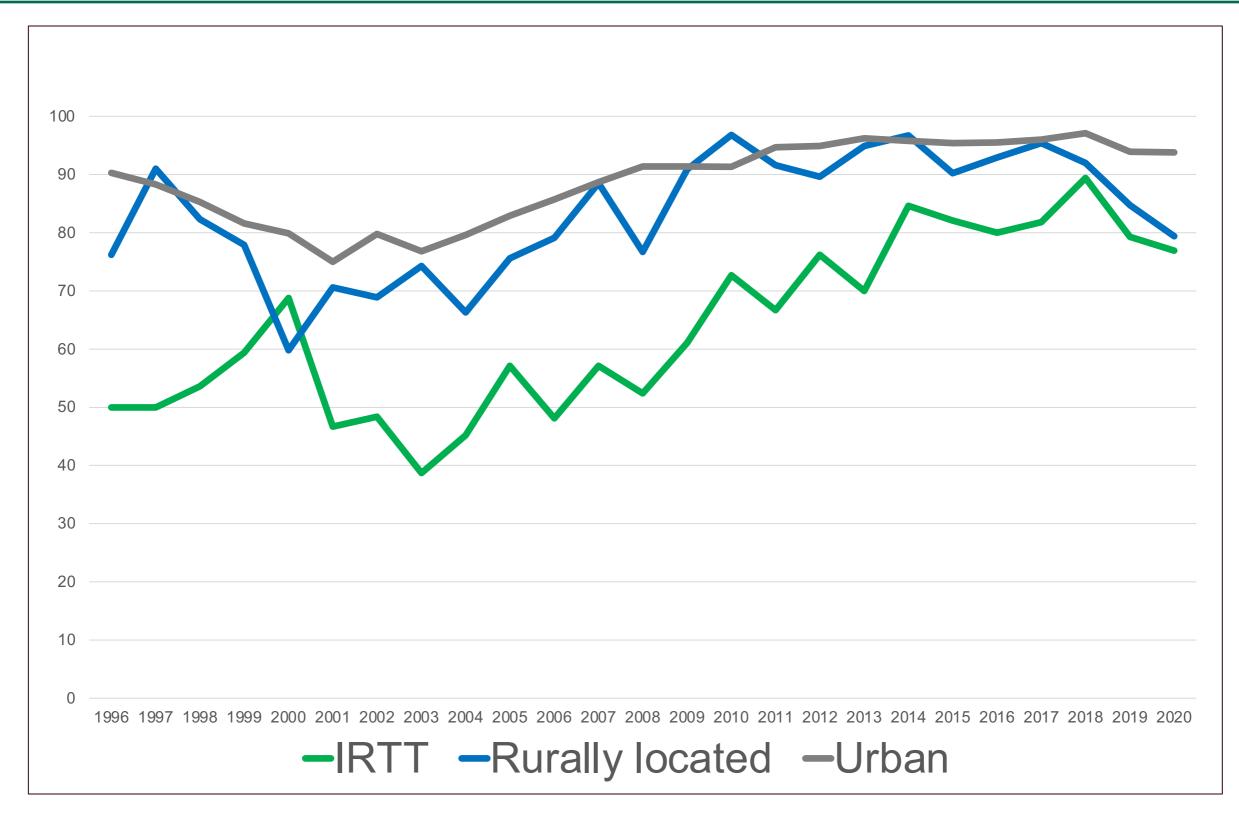
## Total positions filled in Main Match, 1996-2020





### Rural v. urban residency slots filled in Main Match, 1996-2020 (%)





### What are predictors of better and worse match rates?



- Examined average match rates (from main match), 2009-2013.
- 74 programs included in model (37 rural programs)
   and 37 geographically-matched urban programs).
- Multivariate analysis including multiple program and area characteristics

## Small rural programs have lower match rates



Linear regression predicting residency program match rates (2009-13)

<u> </u>			
	Regression	p-value	
Predictor	coefficient		
Program size			
Urban programs	Ref		
Rural, ≤ 2 residents	-0.27	<0.001*	
Rural, 3 to 4	-0.02	0.77	
Rural, >4	0.03	0.68	

Removed from the model – not significant:

Type of sponsoring institution

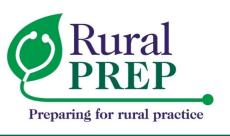
Census Region

Area Deprivation Index

**AARP Livability Index** 

Years of participation in the match

### Do match rates indicate program value?



- Using data from NRMP and the American Board of Family Medicine (ABFM), examined bivariate associations of match rates (from main match, 2009-2011 averaged) with these outcomes:
  - In-Training Exam (ITE) slope
  - ABFM certification exam scores
  - Self-ratings of residency preparation for practice
  - Rural vs. urban practice location
  - Self-reported scope of practice
    - ...for graduates from 2013-2015.

### Match rates are not associated with program outcomes



**No significant associations** (p < .05) between residency match rates and program outcomes

Program outcome	Rural	Urban	Total
ITE slope	-0.04	-0.04	-0.04
Board scores	-0.23	0.04	-0.09
Preparation index	0.01	-0.10	-0.03
% graduates in rural practice <sup>a</sup>	0.04	-0.18	-0.02
Scope of practice index <sup>a</sup>	-0.26	-0.17	-0.14

a. Two rural programs closed prior to 2013; n=31 (rather than n=33) for rural programs

### Interviews with 20 rural residency coordinators

#### Program characteristics: Between 2018-2020, most interviewed programs...

Preparing for rural practice

- Received 500-1000 applications
- Invited 50-100 applicants for an interview
- Interviewed 25-75 applicants
- Put 25-50 applicants on their rank order list

### Interviews with residency coordinators



#### Of the 20 RCs interviewed:

- 12 noted that their program's mission is to provide rural training
- 13 programs attended the AAFP national conference
- 14 programs attended regional/state fairs
- 11 used ERAS filters for interview selection
- 16 limited post-interview contact with applicants
- 13 had participated in SOAP at some point

## Successful strategies to recruit residents to rural programs



- Highlight <u>small-town connections</u> that characterize rural life, practice, and training
- Collaborate with <u>community members outside health care</u> to introduce applicants to the rural community
- Use <u>unique community and program assets</u> to create a recruiting niche (e.g., osteopathic recognition)
- <u>Teach medical students</u> for rotations, for longitudinal integrated clerkships, or (for larger rural programs) as a regional campus
- Emphasize scope of training tailored to the individual

## Practical tips for recruitment to rural programs



- Open up your home
- In-person visits are best (avoid virtual if possible)
- Get your name out there in order to connect with people that don't know you're there
- Highlight graduates who stay nearby
- "Be yourself and highlight what's best about your program. If you have the best hot wings or ice cream, just say that; whatever makes you as a person want to stay in the community, say that".

#### Conclusions



- Significant growth in rural family medicine residency programs and positions, but rural still underrepresented
- Improving rural residency match rates overall
- Small rural programs have lower match rates than urban, but no other program or community characteristics examined were predictors of match rates
- Match rates are not indicative of any the 5 measures of program value that we examined
- Rural program residency coordinator interviews identified emphasizing unique program assets and "small-town connections" outside of work as examples of successful recruitment strategies

#### Contact



Davis Patterson: davisp@uw.edu

David Schmitz: david.f.schmitz@und.edu

Follow us on social media: @ruralprep

Website: <a href="https://ruralprep.org/">https://ruralprep.org/</a>