

The Oregon AHEC Scholars Program: What a Decades-Worth of Data Can Tell Us About Workforce Development Education

Eric Wiser, MD, FAAFP, Oregon AHEC
Russell Nickels, BS, OHSU School of Medicine

The Oregon AHEC Scholars Program: What a Decades-Worth of Data Can Tell Us About Workforce Development Education

Eric Wiser, MD, FAAFP | Oregon AHEC

Russell Nickels, BS | OHSU School of Medicine

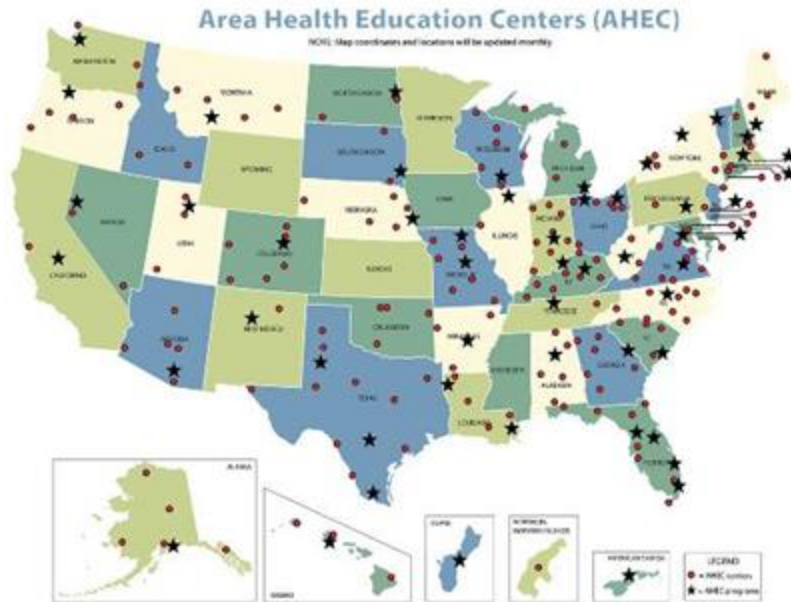
Agenda

1. Describe the Oregon AHEC Scholars Program and its history, including its evolution from Oregon Rural Scholars
2. Describe the findings of the Oregon AHEC Scholars alumni survey, focused on M.D. graduates
3. Discuss meaningful takeaways from the results of the AHEC Scholars alumni survey and what it means for rural physician workforce development

Introduction & Context

- The National AHEC network (300+ centers) serves over 85% of U.S. counties, bringing workforce support to rural and underserved areas.
- Created by Congress in 1971 to strengthen the health care workforce in **rural and underserved areas**.
- Oregon AHEC was established in 1990 through the state's first rural health bill.
- **Federally funded** by the Health Resources & Services Administration (HRSA), **with a 1:1 state match**, administered through OHSU.
- **Five regional centers** deliver statewide services using a hub-and-spoke model.

National AHEC Program



Purpose

To recruit, train and retain a health professions workforce committed to underserved populations.

- AHEC Program developed by Congress in 1971
- Currently serving over 85% of U.S. counties
- 300+ Program offices and regional centers

Oregon Area Health Education Center

Connecting students to careers, professionals to communities and communities to better health

Oregon Pacific AHEC

Hosted by Samaritan Lebanon Community Hospital. The Center serves communities along the Oregon Coast and I-5 Corridor including the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians and the counties of Benton, Clatsop, Columbia, Lincoln, Linn, Marion, Polk, Tillamook and Yamhill.



AHEC of Southwest

Oregon

Hosted by Aviva Health in Roseburg. The Center provides services to Coos, Curry, Douglas, Lane, Jackson and Josephine counties.



Oregon AHEC Program Office

Hosted by OHSU in Portland.



Oregon Healthcare

Workforce Institute

Hosted by Pacific University. The Center serves Clackamas, Multnomah and Washington counties.



Northeast

Oregon AHEC

Located on the campus of Eastern Oregon University in La Grande. The Center serves Baker, Gilliam, Hood River, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco and Wheeler counties.



Cascades East

AHEC

Hosted by St. Charles Health System in Bend. The Center serves Central and Southeastern Oregon and includes the Confederated Tribes of the Warm Springs, Crook, Deschutes, Grant, Harney, Jefferson, Klamath and Lake counties.



Scan each region to learn more!

AHEC Program Goals

- **Diversity:** preparing a diverse, culturally competent primary care workforce representative of the communities we serve;
- **Distribution:** improving workforce distribution throughout the state, particularly among rural and underserved areas and populations; and
- **Practice Transformation:** developing and maintaining a health care workforce that is prepared to deliver high quality care in a transforming health care delivery system with an emphasis on rural and underserved areas and communities



Oregon Rural Scholars

- ❑ OHSU Medical Students
- ❑ Started in 2007 (First Graduating Class 2009)
- ❑ Transitioned 2018
- ❑ Rural clinical experiences ranged from 5-12 weeks
- ❑ Has included both surgical and family medicine students
- ❑ Included a community project

Oregon AHEC Scholars

- ❓ Various health profession students across Oregon, including OHSU MD students
- ❓ Started in 2018, replaced Oregon Rural Scholars (First Graduating Class 2019)
- ❓ Focused on both rural and urban underserved populations
- ❓ Includes optional 12-week rural or urban underserved family medicine rotation for MD students with a community project
- ❓ Upon completion, students eligible for Oregon Primary Care Loan Forgiveness

What is AHEC Scholars?



To properly serve the healthcare needs of underserved populations, having the right platform, processes, and language to deliver care is just as important as willingness to deliver.

-AHEC Scholar, OHSU DMD Student

Health professions students interested in supplementing their education by gaining additional knowledge and experience in medically underserved settings.

Longitudinal program with interdisciplinary curricula to implement a defined set of clinical, didactic, and community-based activities.



Participating Academic Programs

Oregon Health & Science University

School of Dentistry – D.M.D.
School of Medicine - M.D.
School of Medicine - P.A.
School of Nursing - N.P.

OHSU & Oregon State University

College of Pharmacy – Pharm.D.

Oregon State University - Cascades

Doctor of Physical Therapy – D.P.T.

Pacific University

College of Physician Assistant Studies – P.A. B.S.N
College of Pharmacy – Pharm.D.
School of Occupational Therapy – O.T.D.

Western University of Health Sciences

College of Osteopathic Medicine of the
Pacific Northwest – D.O.
College of Health Sciences NW – D.P.T.

Frontier Nursing University

F.N.P.
P.M.H.N.P.

Western Oregon University

Salem Campus – O.T.D.

Mt. Hood CC

Year		COMP-NW	OHSU DMD	FNU & OHSU NP	OHSU MD	OHSU PA	OHSU or MHCC BSN	OSU/ OHSU PharmD	PacificU PA	PacificU PharmD	PacificU OTD	OSU and CHS NW DPT	Totals
AY 23/24	Cohort 6	5	5	1	14	11	0	15	43	8	2	3	107
AY 24/25	Cohort 7	7	3	4	34	12	1	9	36	9	0	1	116
	Totals	41	37	27	136	82	15	49	200	41	11	6	645

AHEC Scholars Cohort Composition

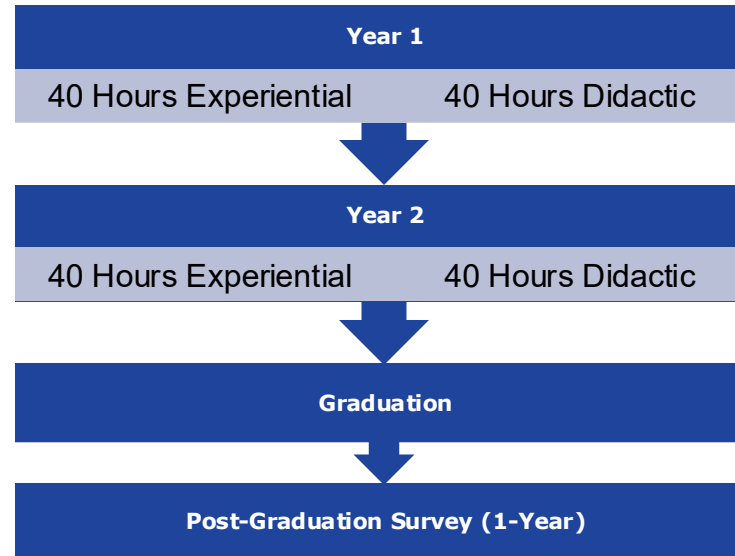
Year		COMP-NW	OHSU DMD	FNU & OHSU NP	OHSU MD	OHSU PA	OHSU or MHCC BSN	OSU/ OHSU PharmD	PacificU PA	PacificU PharmD	PacificU OTD	OSU and CHS NW DPT	Totals
AY 18/19	Cohort 1	20	5	3	16	11	0	1	15	0	0	0	71
AY 19/20	Cohort 2	1	5	7	13	15	5	2	18	4	0	0	70
AY 20/21	Cohort 3	1	14	5	18	12	7	8	19	4	0	0	88
AY 21/22	Cohort 4	3	4	4	25	9	2	7	36	5	8	0	103
AY 22/23	Cohort 5	4	1	3	16	12	0	7	33	11	1	2	90
AY 23/24	Cohort 6	5	5	1	14	11	0	15	43	8	2	3	107
AY 24/25	Cohort 7	7	3	4	34	12	1	9	36	9	0	1	116
	Totals	41	37	27	136	82	15	49	200	41	11	6	645





Program Components

- ☐ *Orientation*
- ☐ Maintain academic enrollment and *good standing*
- ☐ Complete didactic and experiential hours and reporting.
- ☐ Complete AHEC Scholars *end of year* evaluation
- ☐ Complete a *1-year* follow up evaluation





What Are The Didactic Topic Areas?

Core Topic Areas

Interprofessional Education

Social Determinants of Health

Behavioral Health Integration

Cultural Competency

Practice Transformation

Current and Emerging Health Issues

Telehealth & Virtual Learning

CHW and supporting healthcare professionals

HRSA *requires* students to complete training in each of the defined core topic areas.

Current & Emerging topics are *state-specific*.

Definitions can be found on the National AHEC or Oregon AHEC websites.

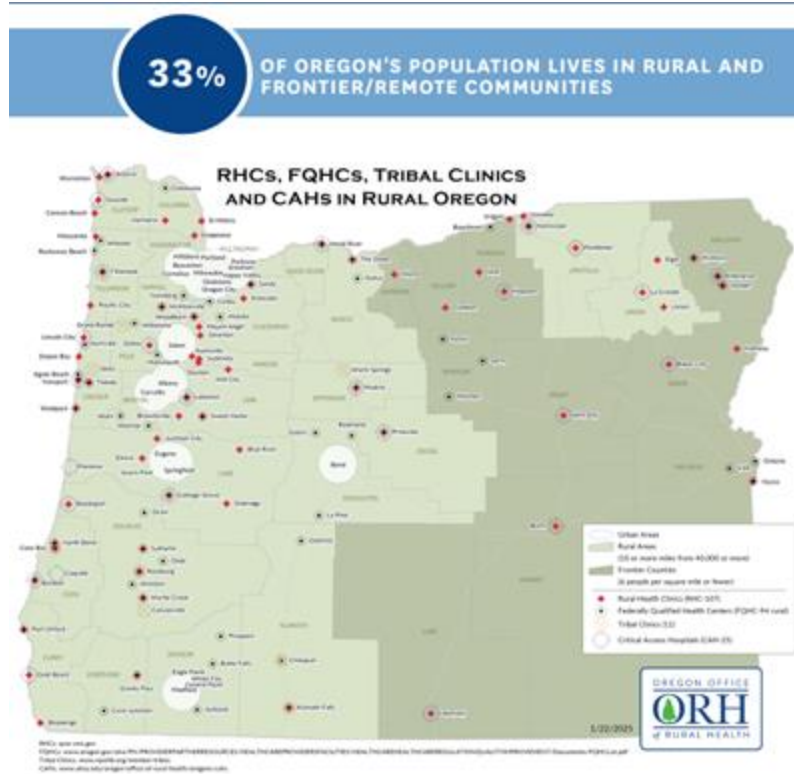
The Oregon Rural Scholars and AHEC Scholars Alumni Survey

Project Background

- Lack of physicians practicing in rural areas of the U.S. is an ongoing public health challenge
- Only ~11% of all physicians in rural areas
- 66.5% of primary care HPSAs are in rural areas

National Rural Health Snapshot	Rural	Urban
Percentage of population	19.3%	80.7%
Number of physicians per 10,000 people	13.1	31.2
Number of specialists per 100,000 people	30	263
Population aged 65 and older	18%	12%
Average per capita income	\$45,482	\$53,657

Project Background



Known positive predictors for future rural practice amongst physicians

- Past living experience and/or having grown up in a rural area (i.e. **rural background**)
 - Most studied and well-established predictor of rural practice
- **Clinical training in a rural-based setting:**
 - Participation in a rural program during medical school
 - Completing residency in a rural-based setting

Rural background

- Of family medicine physicians who completed residency 2013-2015:
 - **39.2%** from a **rural** background chose rural practice
 - **13.8%** from **urban** background chose rural practice

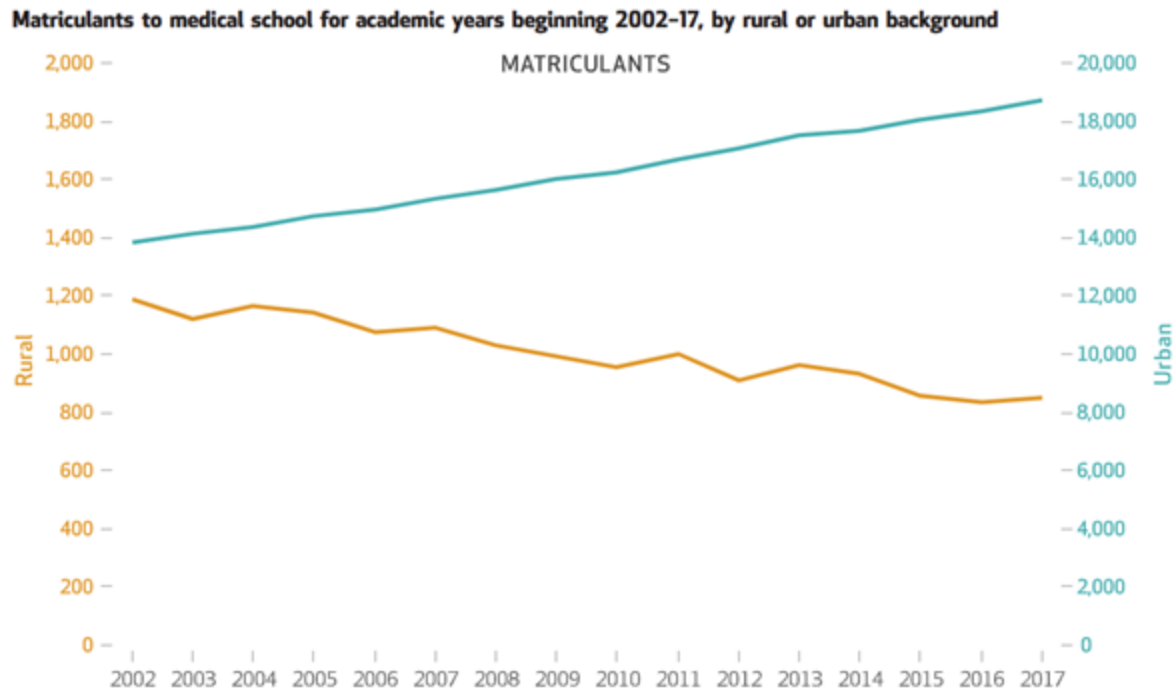
TABLE 2 Associations of demographic characteristics and residency location with rural practice location.

Covariate	Predictive marginal (%)	Lower CI	Upper CI	p-Value
Background ^a				
Urban	13.8	12.5	15.0	REF
Rural	39.2***	35.8	42.5	<0.001

Rural background

Rural MD matriculants
declined by 28%
between '02-'17

Now make up <5% of
all MD students



Medical school rural programs

Offer extended rural clinical experiences for medical students
(such as ORS/AHEC scholars)

Other examples:

- **Minnesota: Rural Physician Associate Program (RPAP)**
 - 9-month longitudinal rural clinical experience in 3rd year
 - 1975-2017: 41.2% current rural practicing graduates
- **Michigan State: Rural Physician Program**
 - Longitudinal rural clinical experiences throughout 3rd and 4th year
 - 1978-2006: 45% current rural practicing graduates
- **Illinois: Rockford Rural Medical Education (RMED) Program**
 - 16-week rural clinical experience in 4th year
 - 1997-2007: 61.3% current rural practicing graduates



Medical school rural programs

- As of a 2021 study:
 - **Most (64.8%)** of U.S. medical schools offer rural clinical experiences to students
 - However, **only 21.4%** do so through a formal rural program



Rural-based residency programs

May be **strongest** independent predictor for future rural practice

TABLE 2 Associations of demographic characteristics and residency location with rural practice location.

Covariate	Predictive marginal (%)	Lower CI	Upper CI	p-Value
Background ^a				
Urban	13.8	12.5	15.0	REF
Rural	39.2***	35.8	42.5	<0.001
Residency program location ^b				
Urban	18.0	16.8	19.2	REF
Rural	50.9***	43.0	58.8	<0.001
Interaction term (background × residency program location)				
Urban background × urban residency	12.5	11.3	13.8	REF
Rural background × urban residency	37.3	33.9	40.8	<0.001
Urban background × rural residency	42.7	33.0	52.4	<0.001
Rural background × rural residency	82.7	72.1	93.4	<0.001

Rural-based residency programs

- Only ~2% of residency spots in rural-based setting
- HRSA Rural Residency Planning and Development Program (RRPD)
 - 2019-2025 awarded **\$77 million** to establish new rural residency programs
 - **62** new programs, **752** new rural residency slots

RRPD Program Award Locations



1. Health Resources & Services Administration. Rural Residency Planning and Development (RRPD) Program. U.S. Department of Health & Human Services; September 2025. <https://www.hrsa.gov/rural-health/grants/rural-health-research-policy/rpd>

2. Temple KM. Growing the Rural Physician Workforce: Decades of Federal Funding Impacts Rural Graduate Medical Education. *The Rural Monitor*; Rural Health Information Hub. November 6, 2024. <https://www.ruralhealthinfo.org/rural-monitor/graduate-medical-education>

Medical school + rural residency program effectiveness

- In general, 30%-65% of those who complete rural programs will practice rural

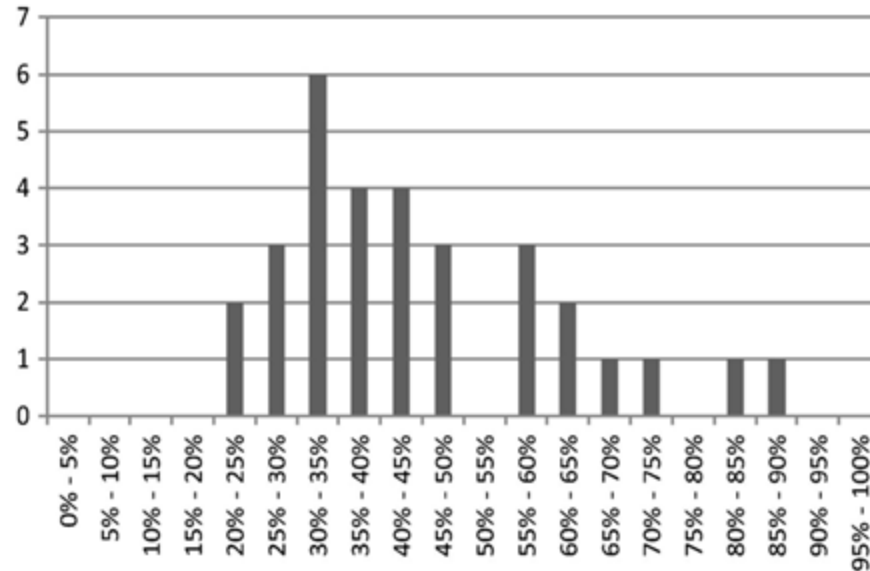


Figure 1 Proportion of students going into rural healthcare after rural-focused training. Note: the figure shows the percentage of all students who completed a rural-focused training program who practiced in rural healthcare as their current or initial job after graduation.

Our study

We surveyed 132 OHSU M.D. alumni of the Oregon Rural Scholars and AHEC scholars programs from 2011-2023

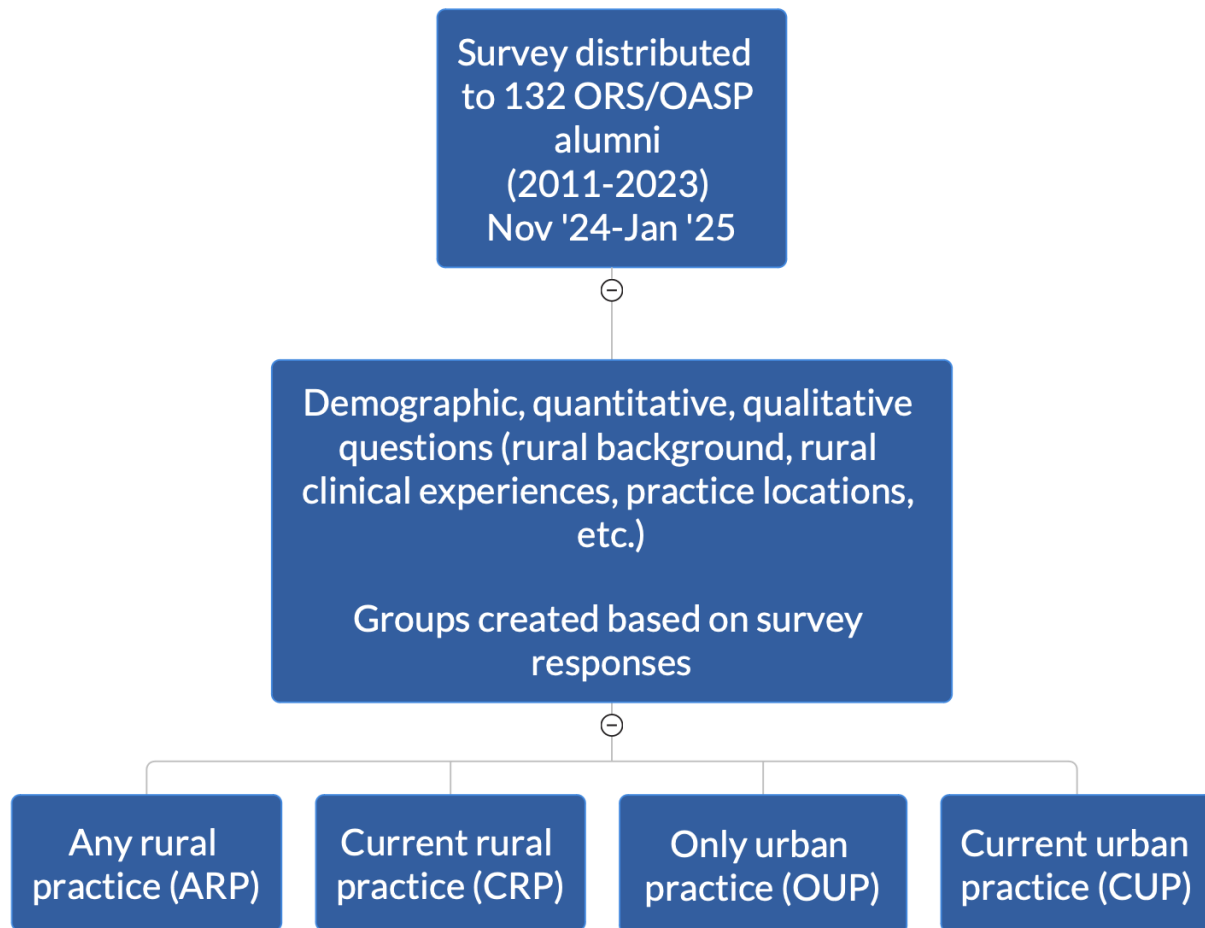
Within this group, we sought to answer:

- 1) What percentage of graduates have chosen rural practice?**
- 2) For those practicing rurally, what factors drove that decision?**
 - Specifically: rural background, rural clinical experiences (med school and residency), rural financial incentives (loan repayment, scholarship programs, etc)
- 3) What keeps rural-practicing graduates in their respective communities (i.e. retention factors)?**

Methods

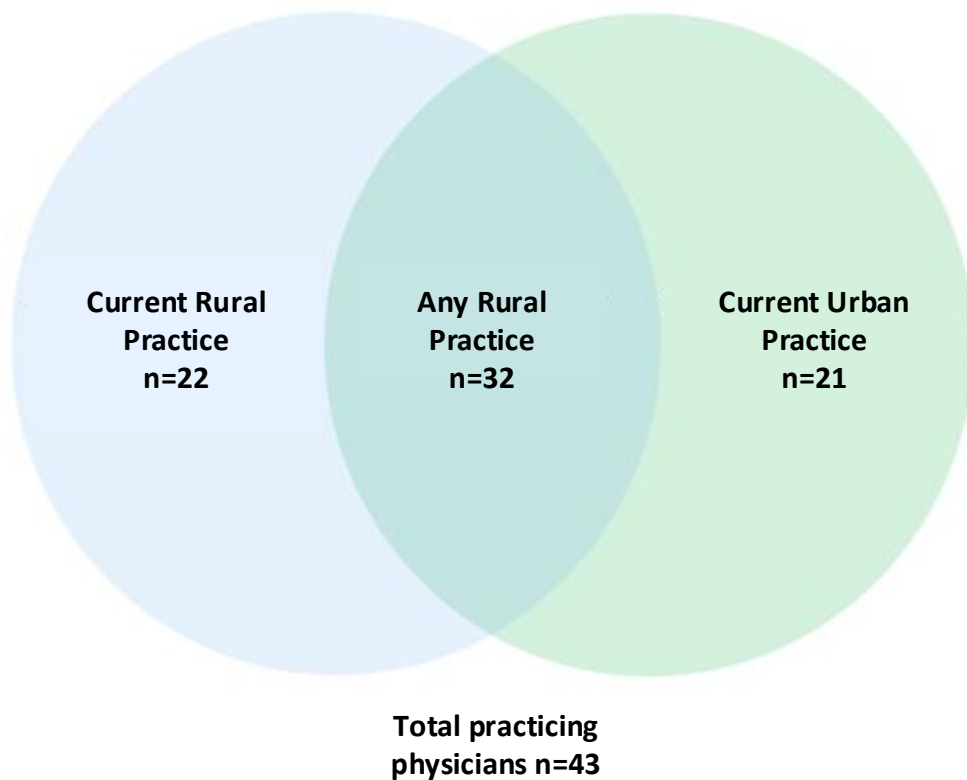
Definition of rural:

Population <40,000,
>10 miles from
population >40,000
(zip-code lookup)



Results

- 61/132 (46%) respondents
 - 43 practicing (licensed) MDs
 - 18 trainee MDs
- Of practicing MDs (n=43):
 - 32 (74.4%) any rural practice (ARP)
 - 22 (51.2%) current rural practice (CRP)
 - 10 (23.2%) former rural practice
 - 11 (25.6%) only urban practice (OUP)
 - 21 (48.8%) current urban practice (CUP)



Results

Categories for rural practicing physicians (ARP, n=32)

Practice category	n (%)
Currently practicing in a rural setting (CRP)	22 (51.2)
Practiced in a rural setting at some point (former rural practice, FRP)	10 (23.3)

Results

Rural setting years of practice:	CRP (n=22)	FRP (n=10)	ARP (n=32)
Mean (SD)	3.74 (2.87)	4.60 (3.78)	4.01 (3.14)
Range (years)	0-10	0-13	0-13

Results

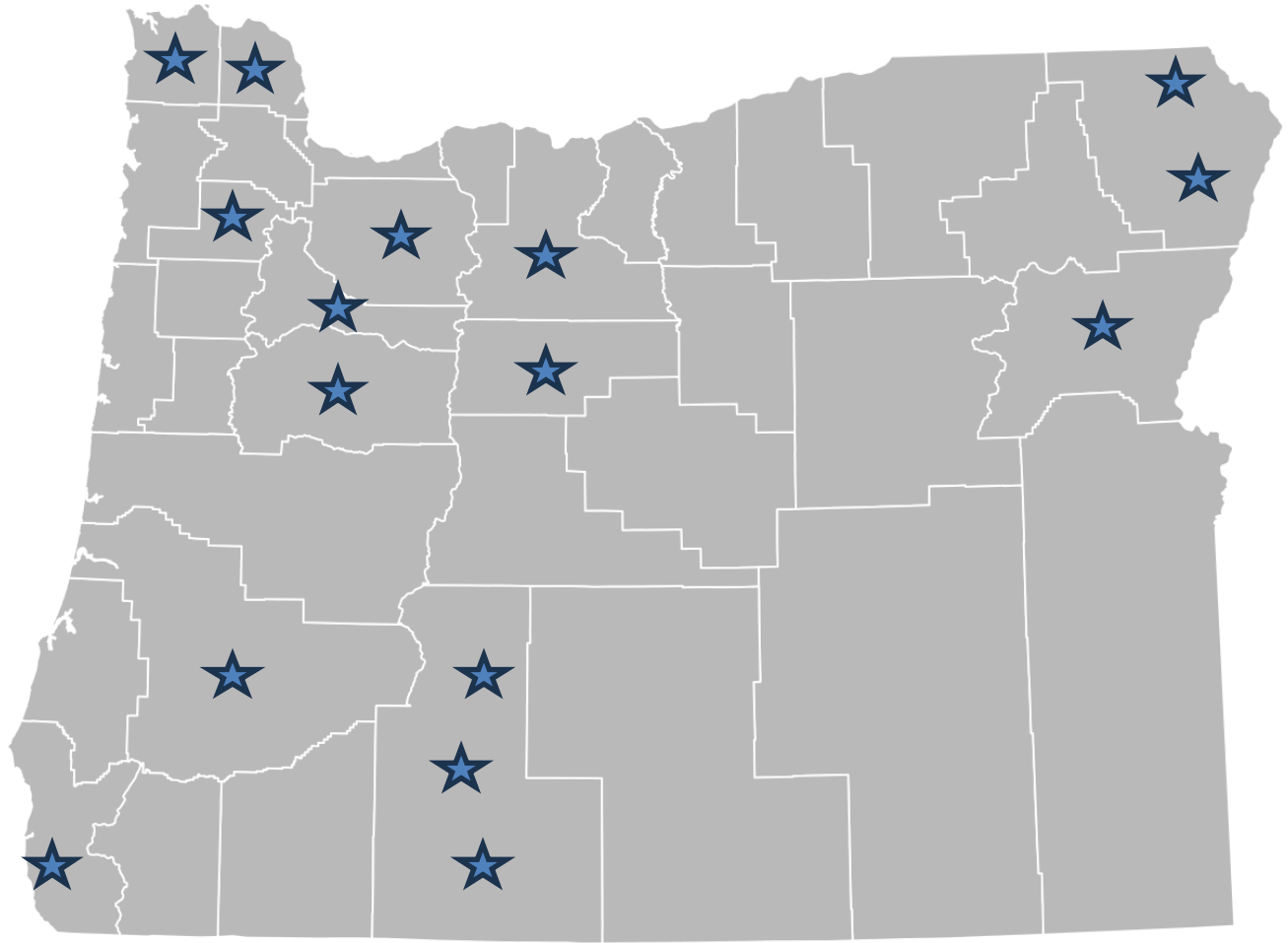
17/22 (77.3%) of current rural physicians practicing in **Oregon**

Vast majority practice **family medicine**

Specialties for current rural-practicing physicians in Oregon (n=17)

Specialty:	n (%)
Family Medicine	13 (76.5)
Family Medicine and OB	1 (5.9)
Internal Medicine/Geriatrics	1 (5.9)
OB/GYN	1 (5.9)
Palliative care	1 (5.9)

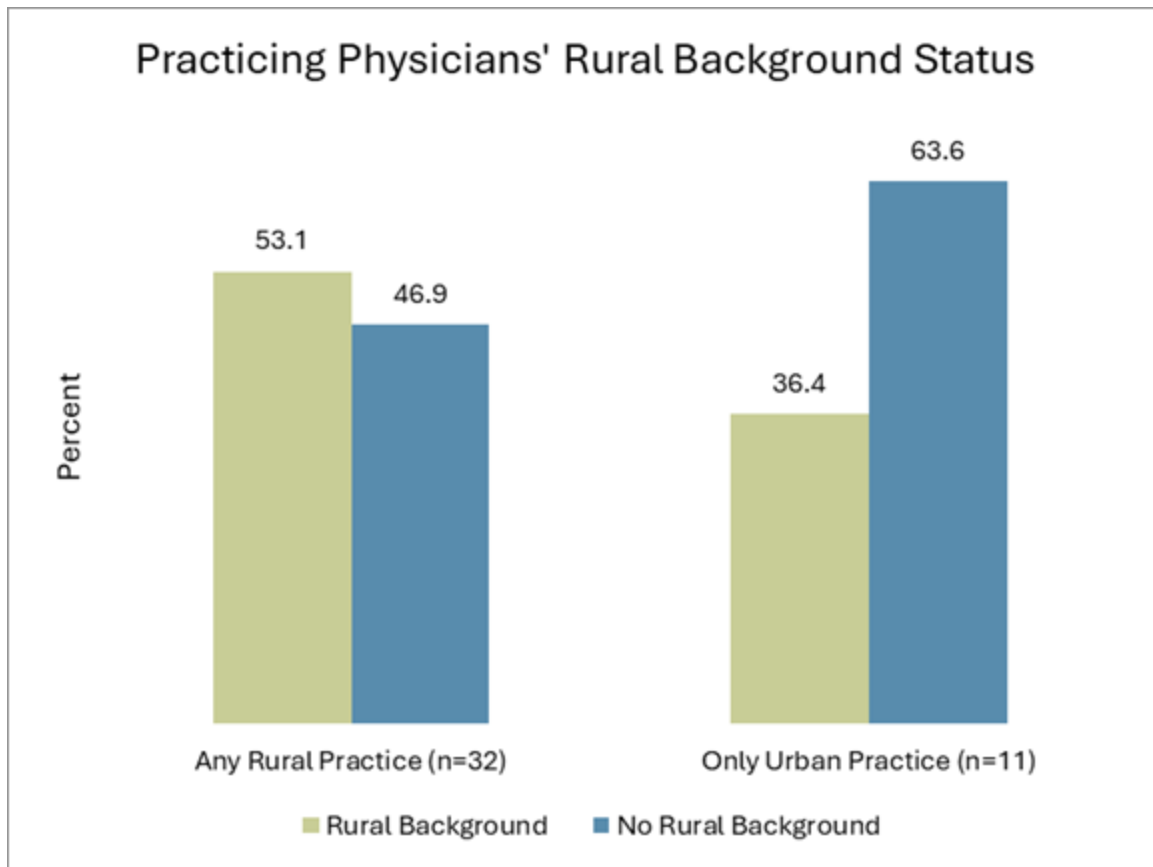
Results



Results

“Do you self-identify as
being from a rural
background?”

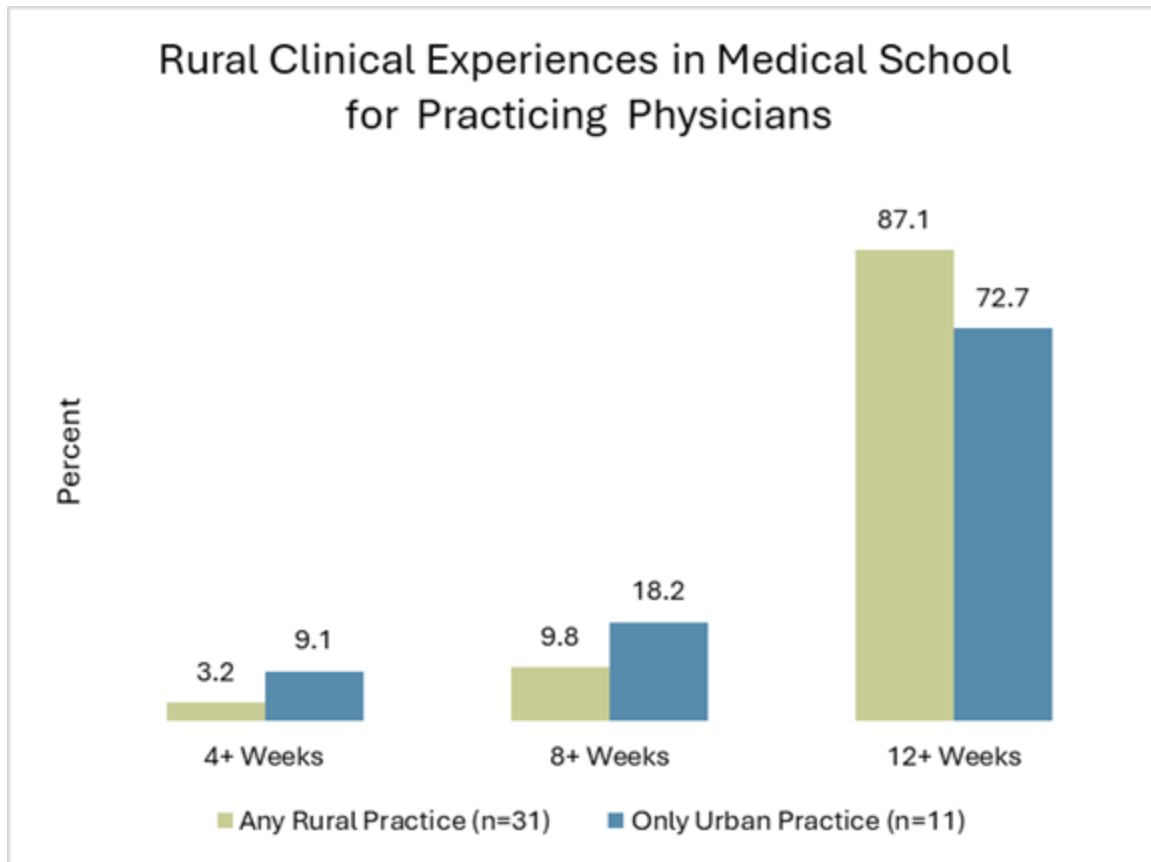
Total: 21/43 (48.8%)



Results

“How many weeks of rural clinical experience did you have in medical school?”

Total: 35/43 (81.4%) 12+ weeks

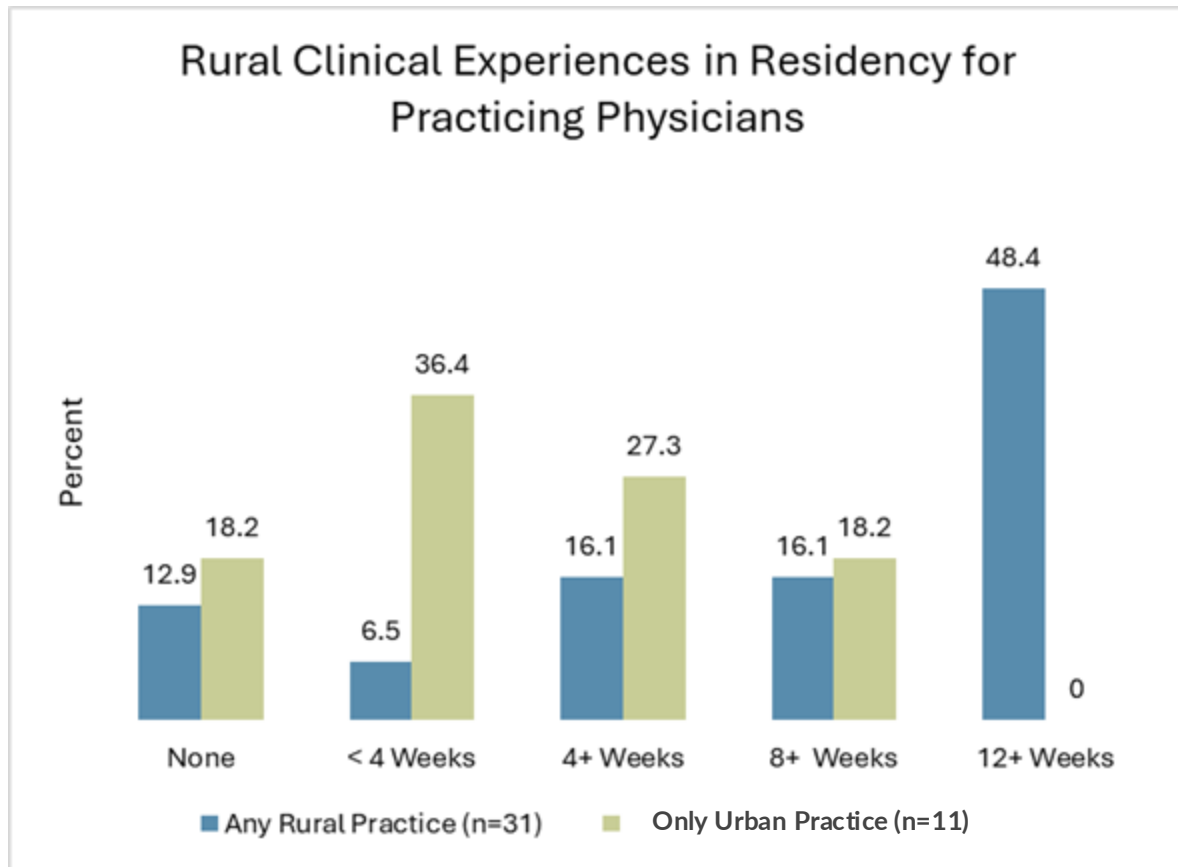


Results

“How many weeks of rural clinical experience did you have in residency?”

Total: 15/43 (34.9%) 12+ weeks

9/15 (60%) completed **rural-based residency**



Results

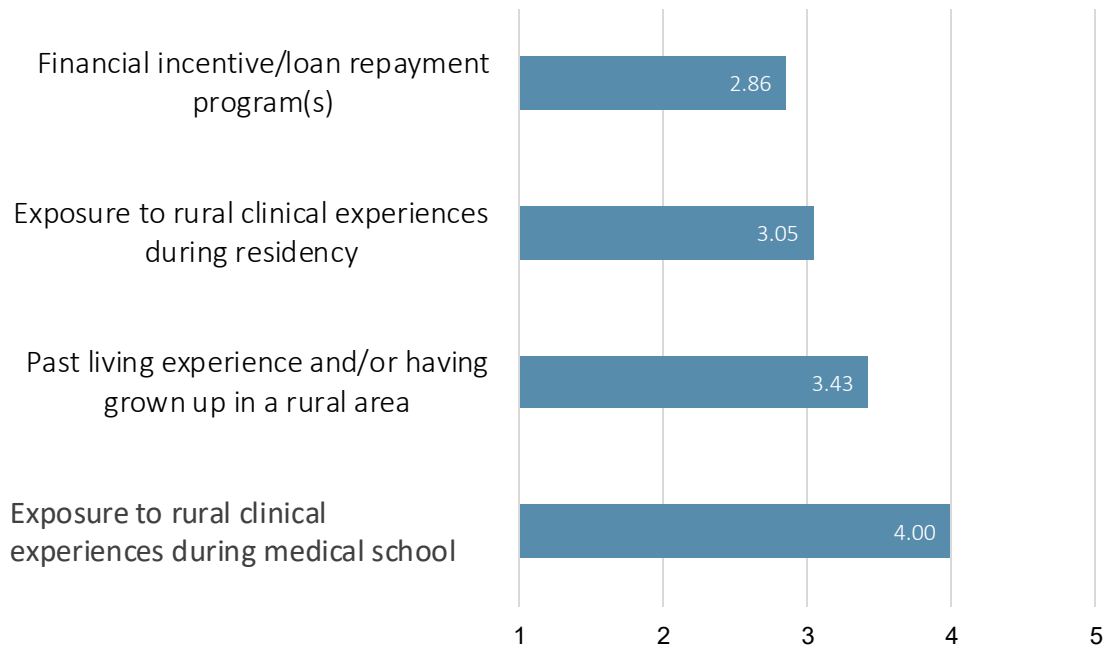
“Please rate the impact the following factors had on your decision to practice in a rural setting initially”

Scale of 1-5

1 = no impact

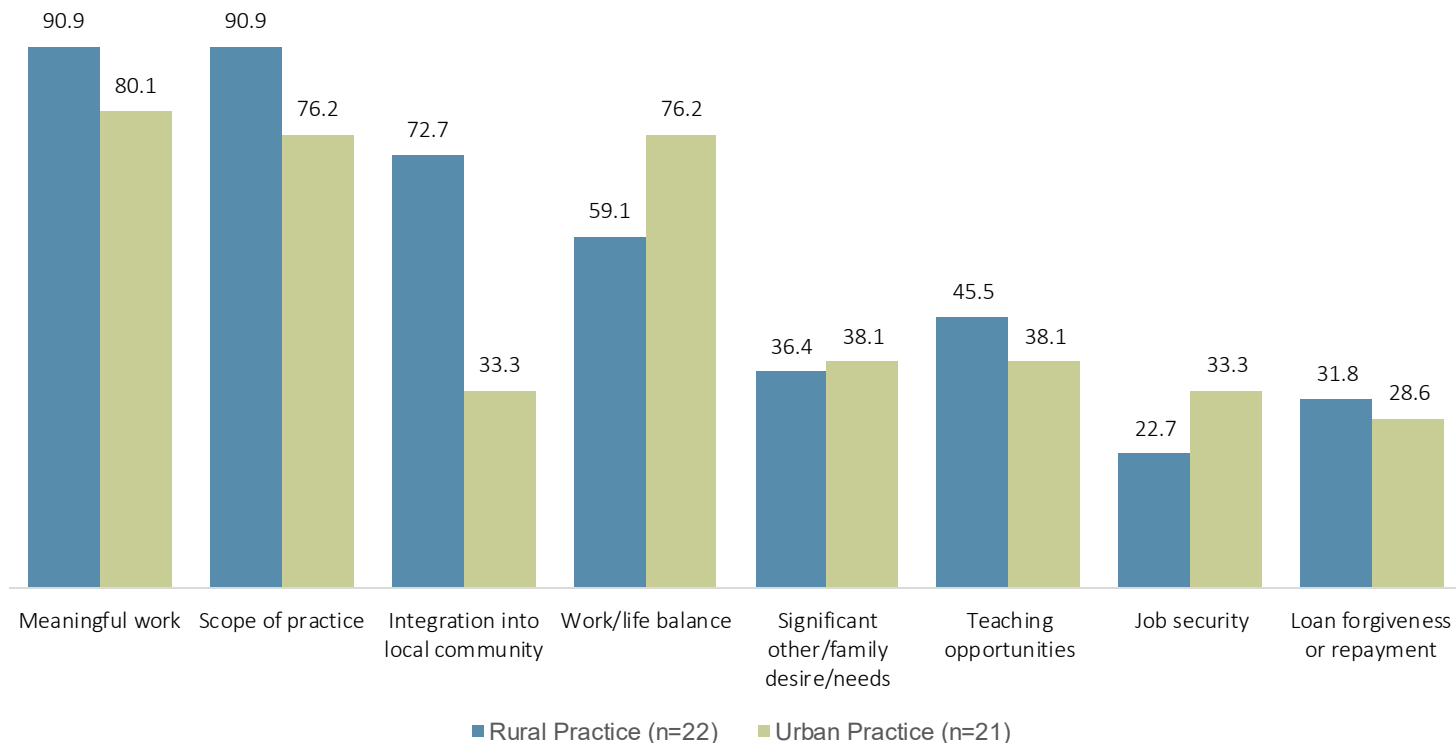
5 = strong impact

Impact of Factors Influencing Rural Practice Decision (n=21)



Results

Percent of Practicing Physicians Reporting Retention Factors for Current Practice Location



Q#1: What percentage of ORS/AHEC graduates have chosen rural practice?

- 32/43 (74.4%) respondents have practiced in a rural setting post-residency
 - 22/43 (51.2%) currently practicing rural
 - 17/22 (77.3%) in Oregon
 - Comparable to rates of rural practice to other programs

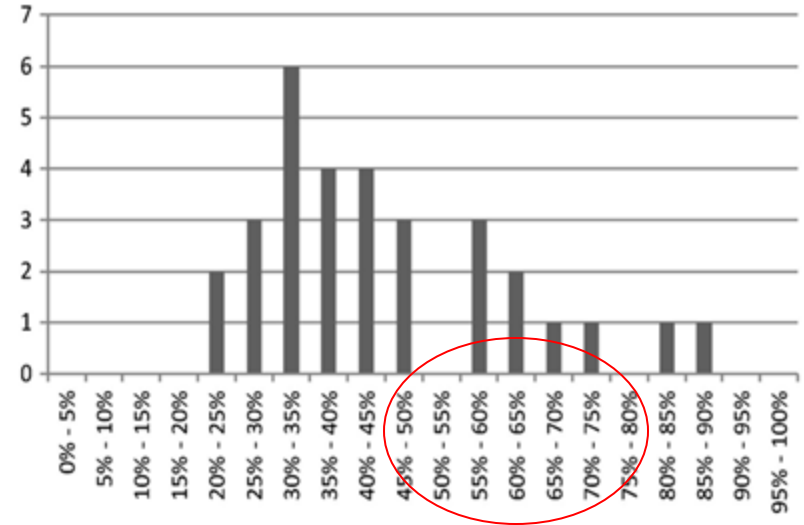
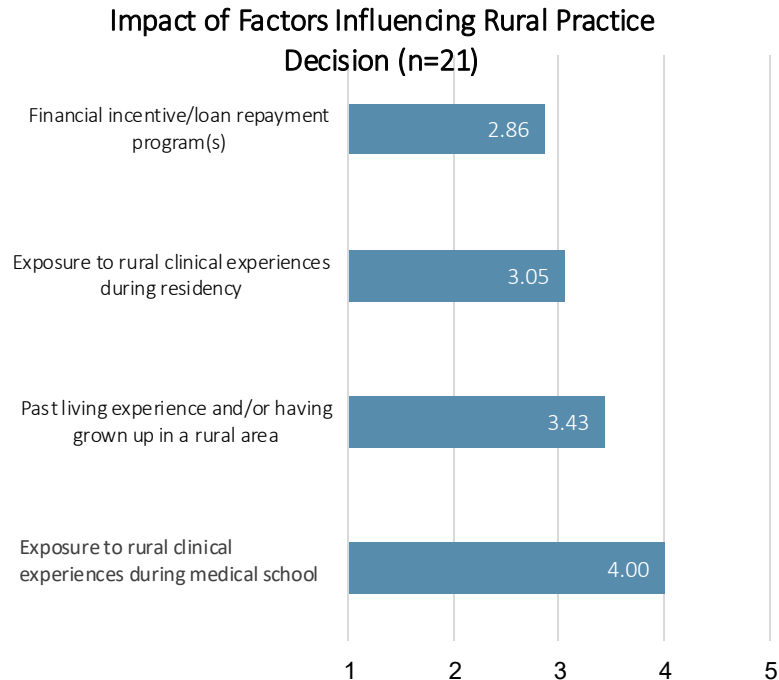


Figure 1 Proportion of students going into rural healthcare after rural-focused training. Note: the figure shows the percentage of all students who completed a rural-focused training program who practiced in rural healthcare as their current or initial job after graduation.

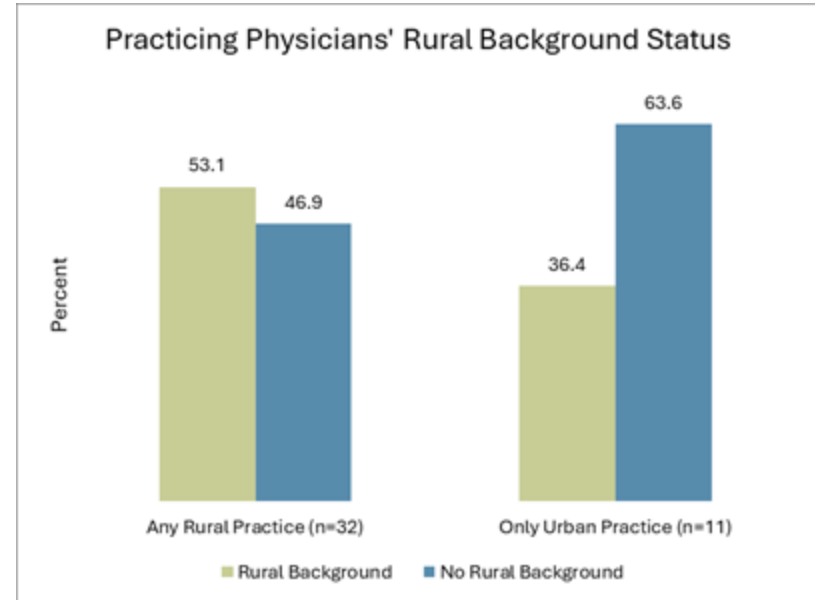
Q#2: For those practicing rurally, what factors drove that decision?

- Rural clinical experiences in medical school reported **subjectively** as the **most influential** factor amongst current rural practitioners
 - Followed by:
 - #2 rural background
 - #3 rural clinical experiences in residency
 - #4 financial incentive/loan repayment programs



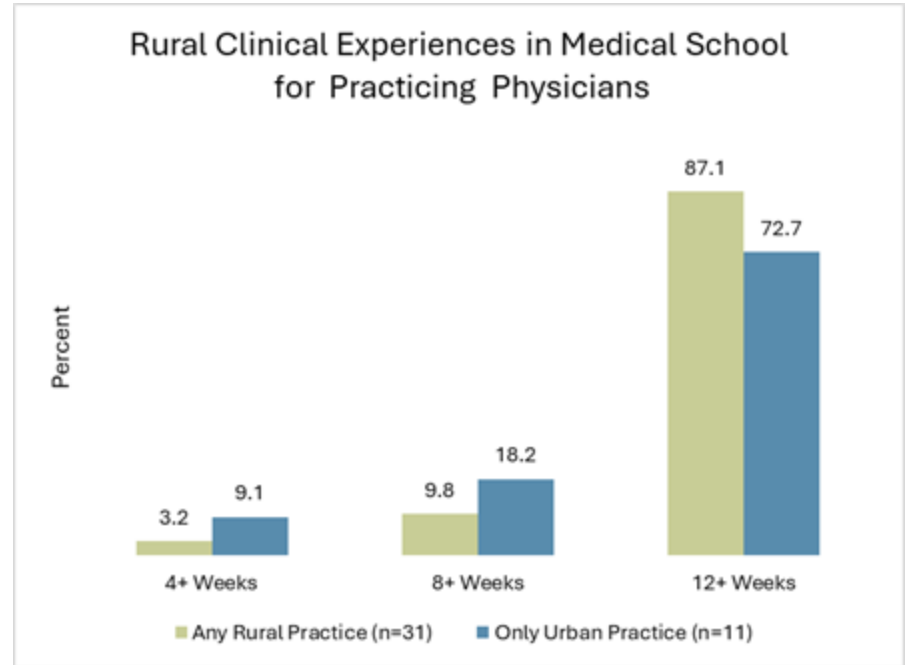
Q#2: For those practicing rurally, what factors drove that decision?

- Rural background slightly more common amongst rural practicing physicians
 - 53.1% (ARP) vs 36.4% (OUP)
 - Not statistically significant difference
 - Much higher overall than general MD student population



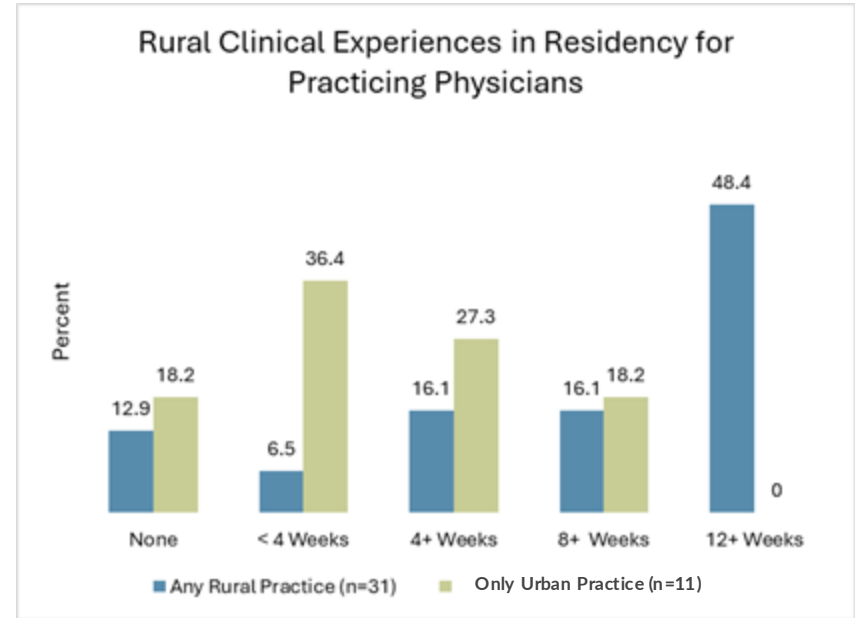
Q#2: For those practicing rurally, what factors drove that decision?

- Extensive (12+ wks) rural clinical experiences in medical school slightly more common amongst rural practicing physicians
 - 87.1% (ARP) vs 72.7% (OUP)
 - Not statistically significant difference
- Universally high given nature of participation in ORS/AHEC scholars
 - Difficult to draw conclusion



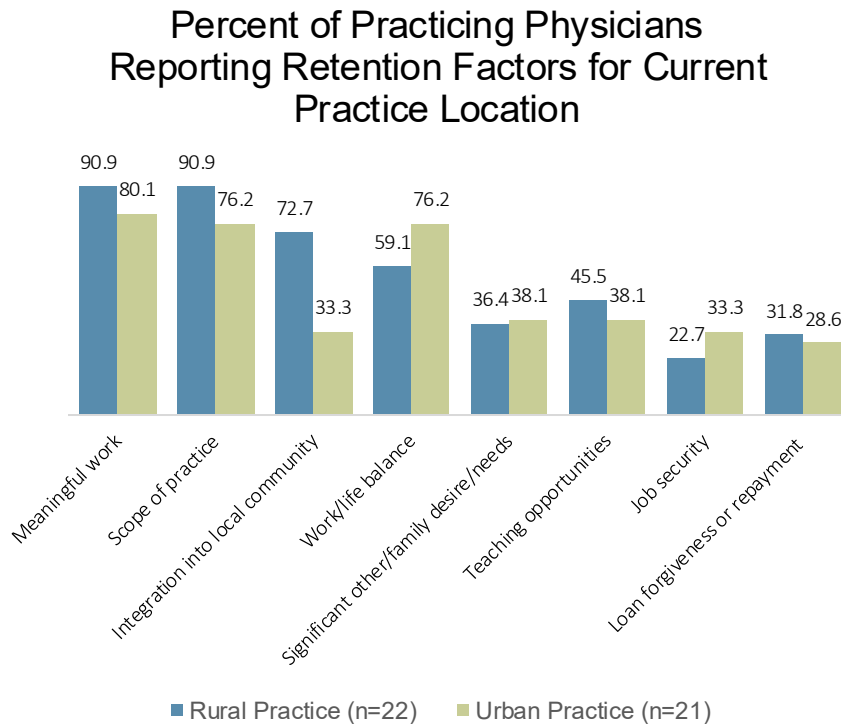
Q#2: For those practicing rurally, what factors drove that decision?

- Extensive (12+ wks) rural clinical experiences in residency highly associated with eventual rural practice amongst respondents
 - 48.4% (ARP) vs none (OUP)
 - Statistically significant difference
- 9/9 who completed rural-based residency have practiced rural
 - 8/9 remain currently practicing rural



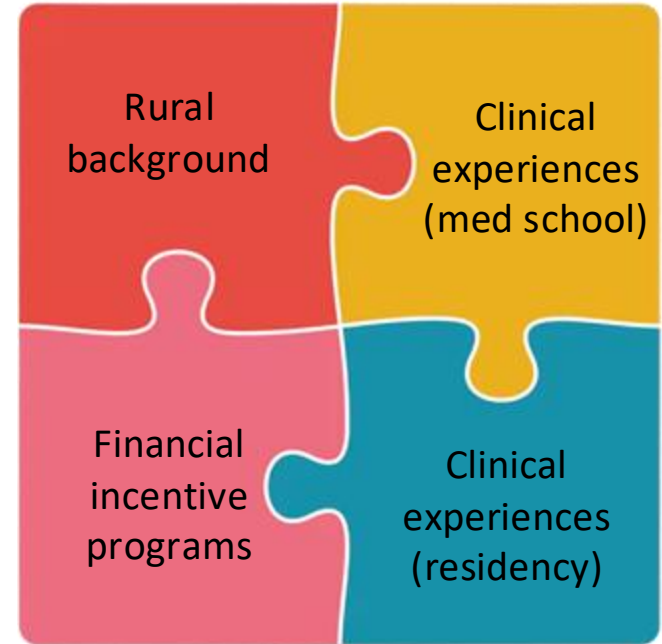
Q#3: What factors keep rural-practicing graduates practicing in their respective communities?

- Compared to urban-practicing graduates, rural practitioners more frequently cited:
 - Meaningful work (90.9% vs 80.1%)
 - Scope of practice (90.9% vs 76.2%)
 - Integration into local community (72.7% vs 33.3%)
- Cited less often than urban practitioners: Work/life balance (59.1% vs 76.2%)



Conclusions: putting together the pieces

- ORS/AHEC Scholars has resulted in a **high rate of physicians choosing rural practice**
- **Rural clinical experiences MATTER**
 - **Rural clinical experiences in residency** more likely to solidify **career choice** in past scholars
- Rural retention driven by **meaningful work, scope of practice, community integration**



Study limitations

- Narrow (highly specific) population
- Response/selection bias
- AHEC Scholars is for both rural and urban underserved
- Definition of rural varies

Q&A

"It provided opportunities to immerse myself in a rural community so that I could experience it first hand. Without that I would not have been as confident in my decision to go into a rural residency program and then rural practice"

"Huge impact in raising interest in rural medicine."

"It was THE deciding factor in my pursuit of family medicine with OB. Prior to the rotations I was intending to apply to pediatrics. It also solidified my desire to always practice in a rural location. I love the spirit and feel of a small community."

"Confirmed my desire to practice in a smaller community."

"I did my AHEC rotation at the site that I currently practice so I would say quite a lot"

"Compelled me to pursue full spectrum family medicine in a rural setting"

"How did participating in Oregon Rural Scholars or AHEC Scholars influence your decisions about your current career?"

"Helped solidify that I wanted to practice in a rural setting, exposed me to eastern Oregon (where I work now), helped me identify role models/preceptors who I kept in contact with throughout the course of my med school and residency"

"It had a huge impact. It was during the Rural Scholars retreat that my partner and I decided we would be interested in living in Klamath Falls. My rural scholars rotation in Enterprise confirmed that I wanted to be a rural family doctor."

"It confirmed my desire to return to a rural area."

THANK YOU!

Contact

Oregon AHEC Director Eric Wiser: wisere@ohsu.edu

Russell Nickels: nickelsr@ohsu.edu



References

1. **National Rural Health Association.** About Rural Health Care. *National Rural Health Association*. . <https://www.ruralhealth.us/about-us/about-rural-health-care>
2. **Oregon Office of Rural Health.** 2024 Year-End Report. . https://www.ohsu.edu/sites/default/files/2025-02/ORH_2024YearEndReport%20-%20FINAL.pdf
3. **Patterson DG, Shipman SA, Pollack SW, et al.** Growing a rural family physician workforce: The contributions of rural background and rural place of residency training. *Health Serv Res.* 2024;59(1):e14168. doi:10.1111/1475-6773.14168
4. **Shipman SA, Wendling A, Jones KC, Kovar-Gough I, Orlowski JM, Phillips J.** The Decline In Rural Medical Students: A Growing Gap In Geographic Diversity Threatens The Rural Physician Workforce. *Health Aff (Millwood)*. 2019;38(12):2011-2018. doi:10.1377/hlthaff.2019.00924
5. **Butler L, Rosenberg ME, Miller-Chang YM, et al.** Impact of the Rural Physician Associate Program on Workforce Outcomes. *Fam Med.* 2021;53(10):864-870. doi:10.22454/FamMed.2021.563022
6. **Wendling AL, Phillips J, Short W, Fahey C, Mavis B.** Thirty Years Training Rural Physicians: Outcomes From the Michigan State University College of Human Medicine Rural Physician Program. *Acad Med.* 2016;91(1):113-119. doi:10.1097/ACM.0000000000000885
7. **MacDowell M, Glasser M, Hunsaker M.** A decade of rural physician workforce outcomes for the Rockford Rural Medical Education (RMED) Program, University of Illinois. *Acad Med.* 2013;88(12):1941-1947. doi:10.1097/ACM.0000000000000031
8. **Longenecker RL, Andrilla CHA, Jopson AD, et al.** Pipelines to Pathways: Medical School Commitment to Producing a Rural Workforce. *J Rural Health.* 2021;37(4):723-733. doi:10.1111/jrh.12542
9. **Health Resources & Services Administration.** Rural Residency Planning and Development (RRPD) Program. U.S. Department of Health & Human Services; September 2025. <https://www.hrsa.gov/rural-health/grants/rural-health-research-policy/rripd>
10. **Temple KM.** Growing the Rural Physician Workforce: Decades of Federal Funding Impacts Rural Graduate Medical Education. *The Rural Monitor*. Rural Health Information Hub. November 6, 2024. <https://www.ruralhealthinfo.org/rural-monitor/graduate-medical-education>
11. **MacQueen IT, Maggard-Gibbons M, Capra G, et al.** Recruiting Rural Healthcare Providers Today: a Systematic Review of Training Program Success and Determinants of Geographic Choices. *J Gen Intern Med.* 2018;33(2):191-199. doi:10.1007/s11606-017-4210-z