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### Rural Health Workforce Supply

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University of Washington School of Medicine

NCSL Rural Health Roundtable

Bozeman, MT

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#### WWAMI Rural Health Research Center

- Mission: Improve and sustain rural health through research that engages policymakers, planners, and practitioners advancing equity in rural access to care.
- Funded since 1988 by Federal Office of Rural Health Policy, Health Resources & Services Administration (HRSA)



#### **Rural PREP:**

The Collaborative for Rural Primary care Research, Education, and Practice

 Funded by HRSA 2016-2022 to conduct, promote, and disseminate research on rural primary care health professions education to build a community of practice



#### **UW Center for Health Workforce Studies**

- Conducts policy-relevant research since 1998 on the health workforce, with a focus on allied health and health equity.
- Funded by the National Center for Health Workforce Analysis, HRSA



### Acknowledgments and Disclaimer

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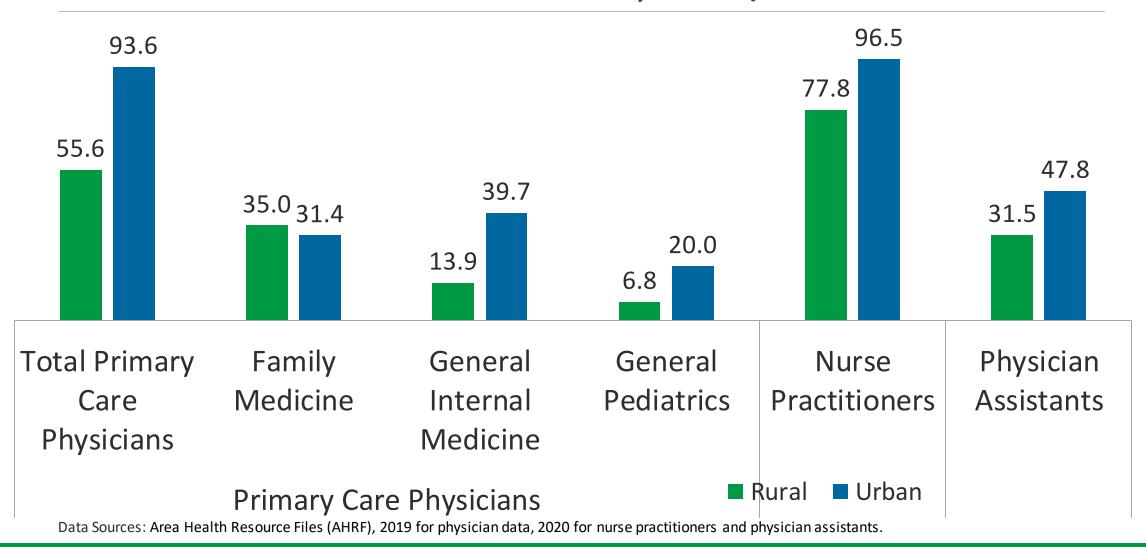
& Health Sciences

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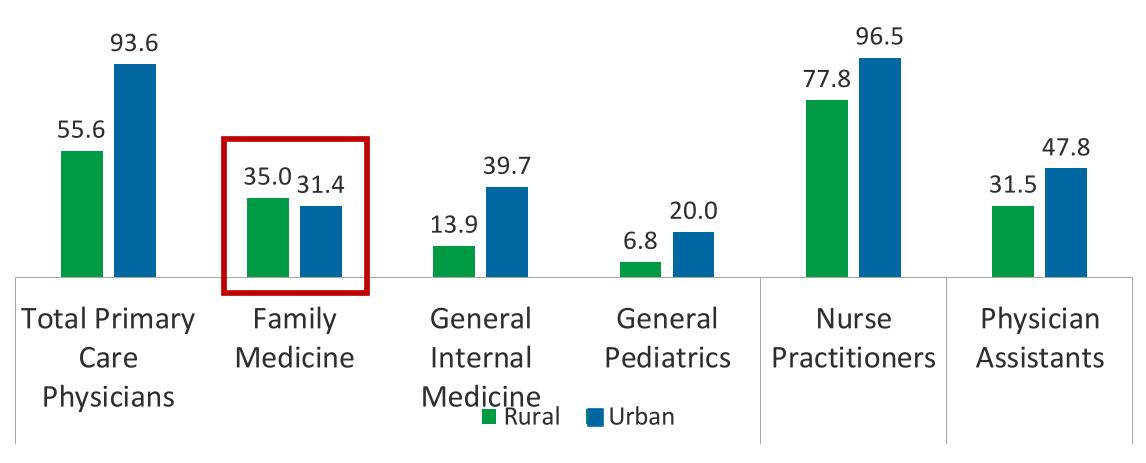


## Primary care

## Supply of primary care clinicians per 100,000 population in rural and urban U.S. counties, 2019/20

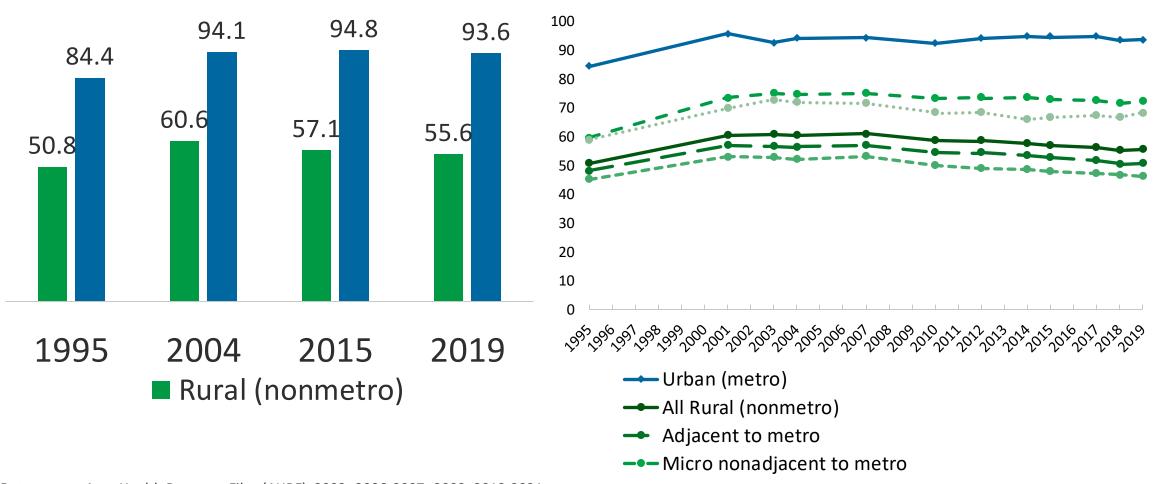


## Family physicians are more concentrated with greater rurality



Data Sources: Area Health Resource Files (AHRF), 2019 for physician data, 2020 for nurse practitioners and physician assistants.

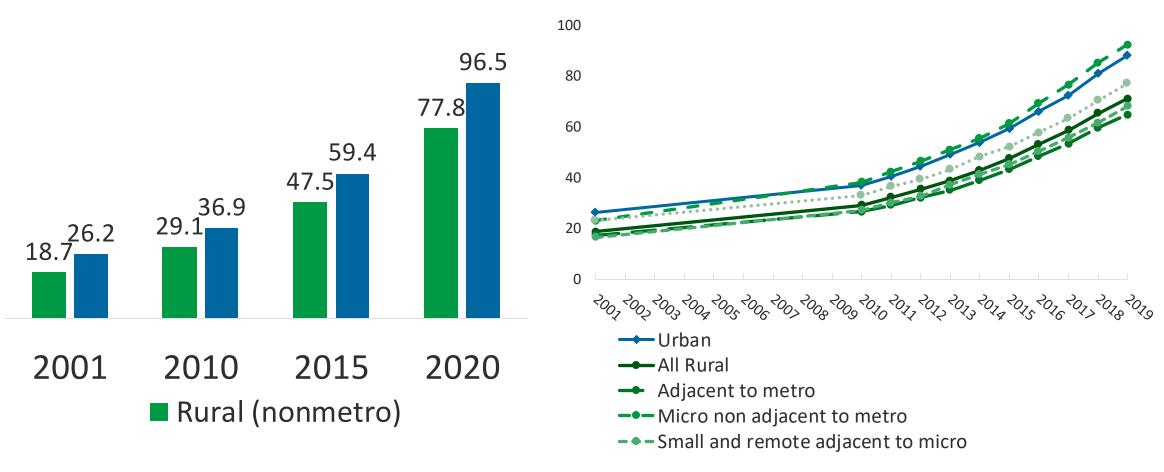
## Trends in the supply of primary care physicians per 100,000 population in rural and urban U.S. counties, 1995-2019



Data source: Area Health Resource Files (AHRF), 2003, 2006-2007, 2009, 2019-2021.

### Nurse practitioner supply is growing rapidly...

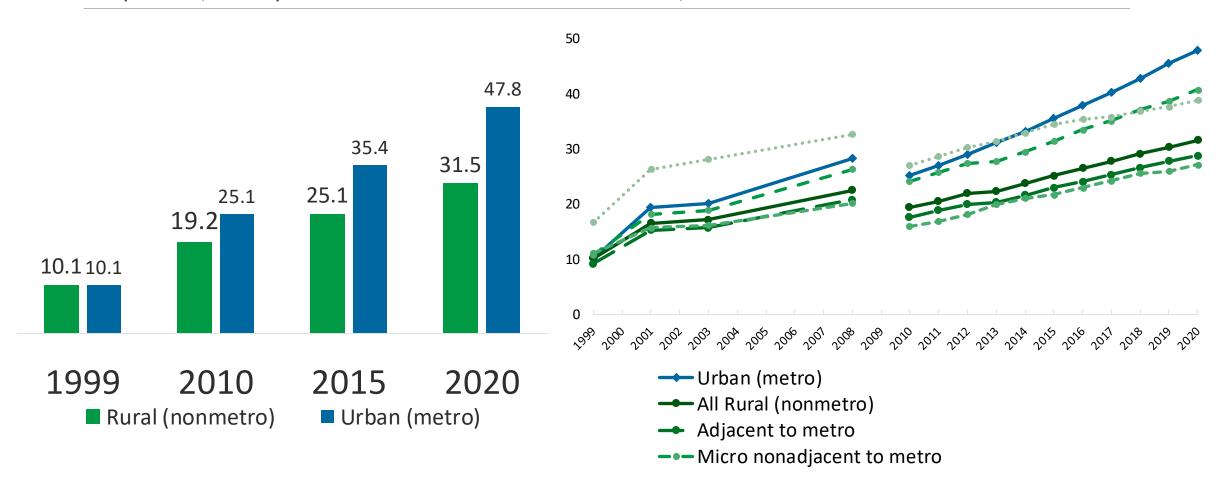
NPs per 100,000 Population in Rural and Urban U.S. Counties, 2001-2019



Data source: Area Health Resource Files (AHRF), 2009, 2019-2021. \*AHRF 2001 data obtained from American Association of Nurse Practitioners (AANP) Survey. 2010-2020 data report NPs with a National Provider Identifier from the Centers for Medicare & Medicaid Services.

### ...as is physician assistant supply!

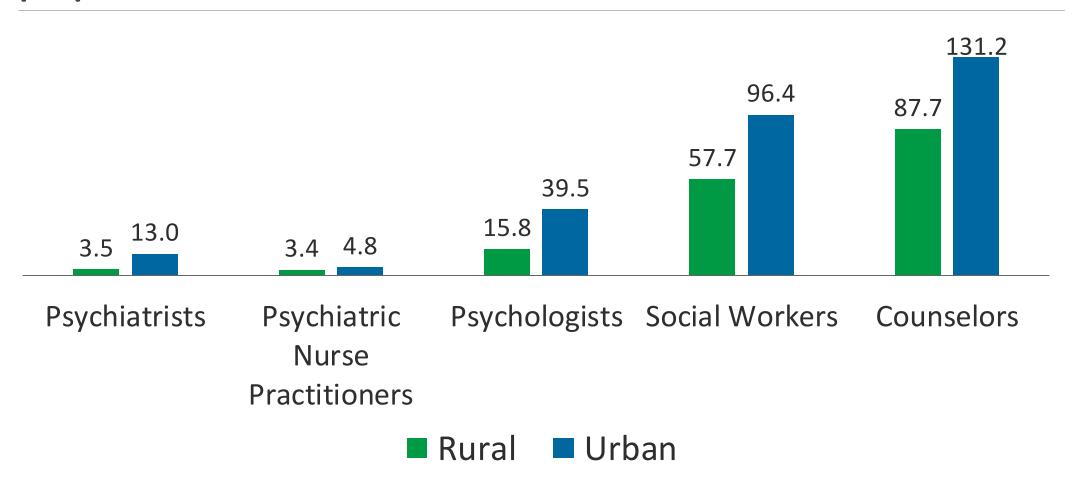
PAs per 100,000 Population in Rural and Urban U.S. Counties, 1999-2020



Data source: Area Health Resources Files (AHRF), 2009, 2014, 2020-2021. AHRF 1999-2008 data are projections from the American Association of Physician Associates (AAPA) Census; AHRF 2010-2020 data report PAs with a National Provider Identifier from the Centers for Medicare & Medicaid Services.

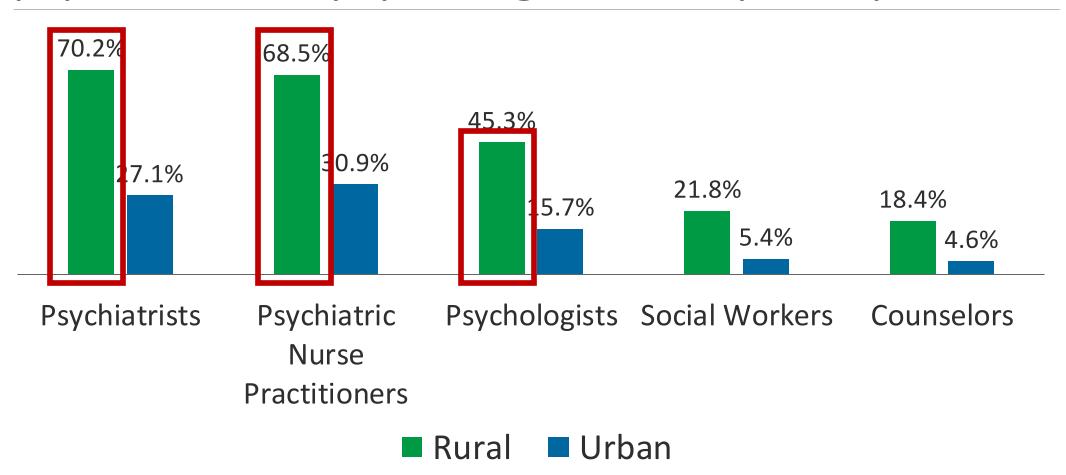
### Behavioral health

## Behavioral health providers per 100,000 population in rural and urban U.S. counties



Data Sources: National Plan and Provider Enumeration System (NPPES) National Provider Identifier (NPI), 2021. Area Health Resource Files (AHRF), 2019 for psychiatrists only.

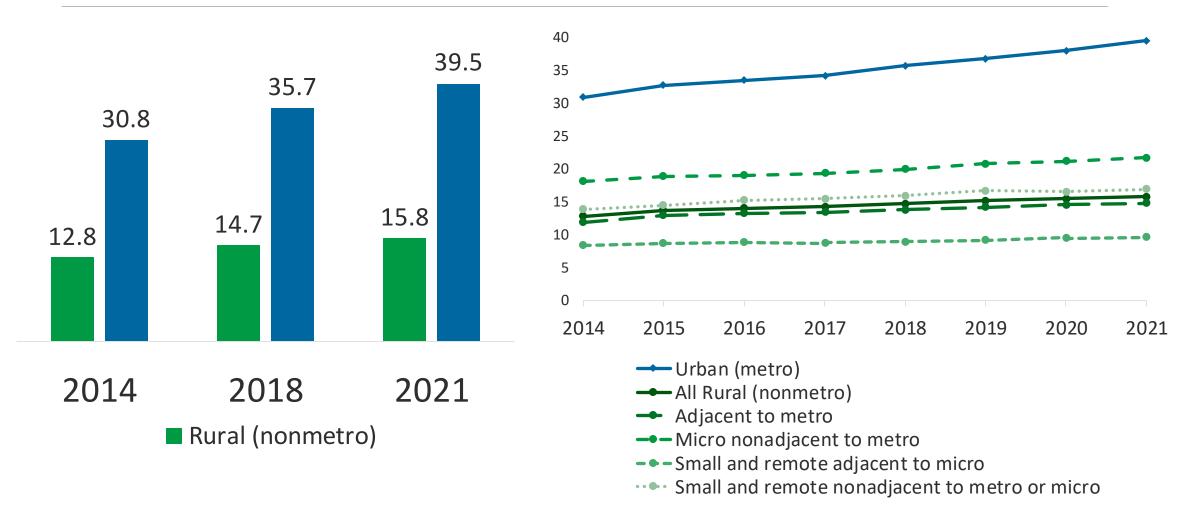
## Counties without providers: rural psychiatrists, psych NPs, and psychologists are especially scarce



Data Sources: National Plan and Provider Enumeration System (NPPES) National Provider Identifier (NPI), 2021. Area Health Resource Files (AHRF), 2019 for psychiatrists only.

### Psychologist supply increasing, but more in urban

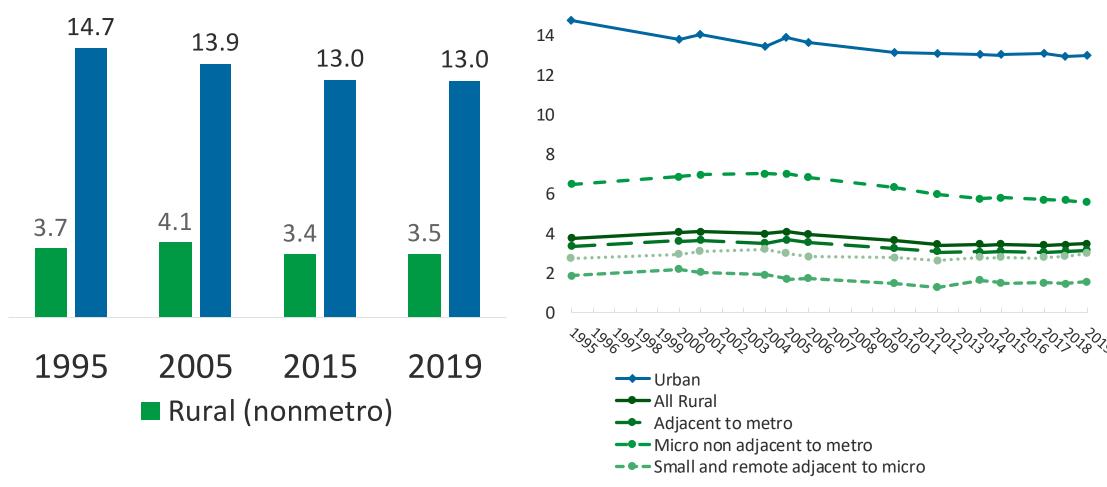
per 100,000 population in rural and urban U.S. counties, 2014-2021



Data Source: National Plan and Provider Enumeration System (NPPES) National Provider Identifier (NPI), 2021.

### Psychiatrist supply is decreasing

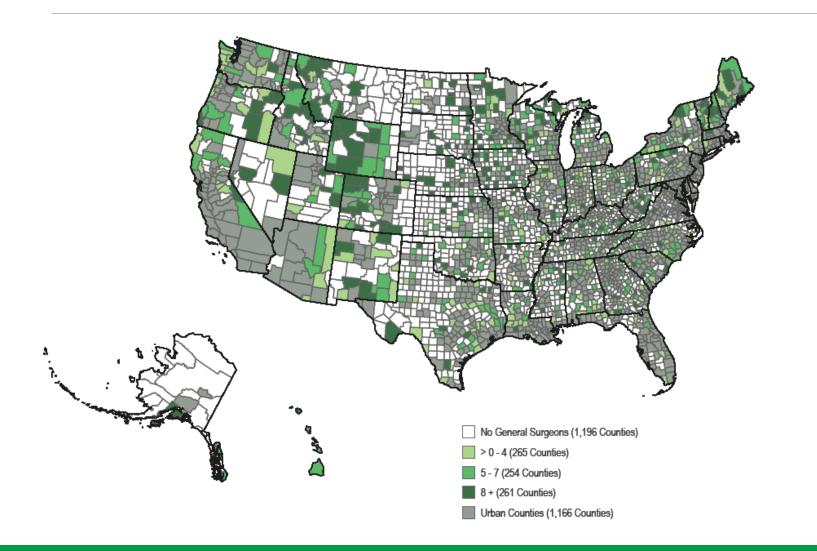
per 100,000 Population in Rural and Urban U.S. Counties, 1995-2019



Data Source: Area Health Resource Files (AHRF), 2019.

## General surgery

#### 60% of rural counties had no active general surgeon in 2019.

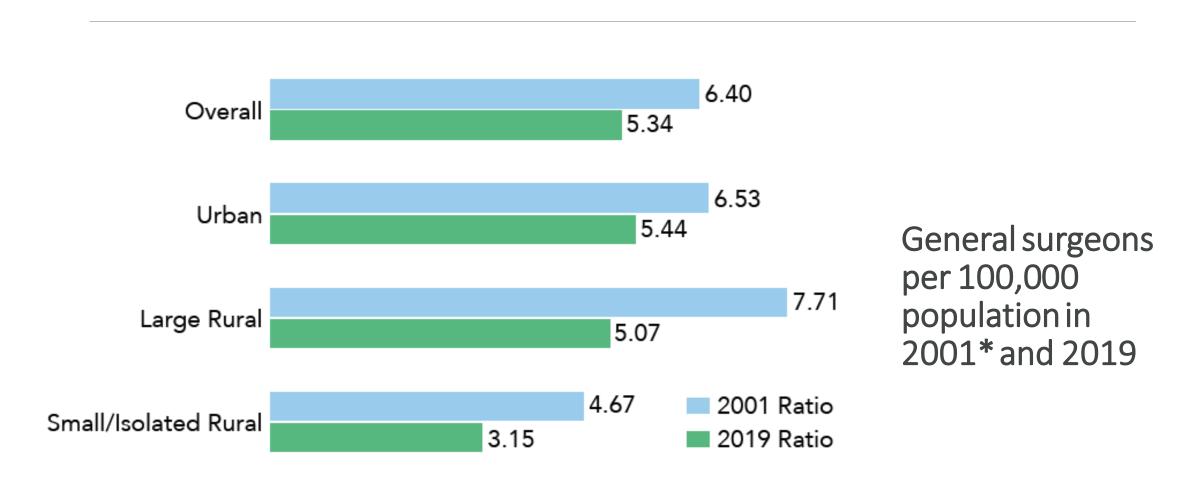


Active general surgeons per 100,000 population in rural U.S. counties, 2019

https://familymedicine.uw.edu/rhrc/wp-content/uploads/sites/4/2021/03/RHRC\_PB MAR2021 LARSON.pdf

Data Source: American Medical Association (AMA) Physician Masterfile, 2019

### Rural general surgeon supply is declining (29%, 2001-2019)

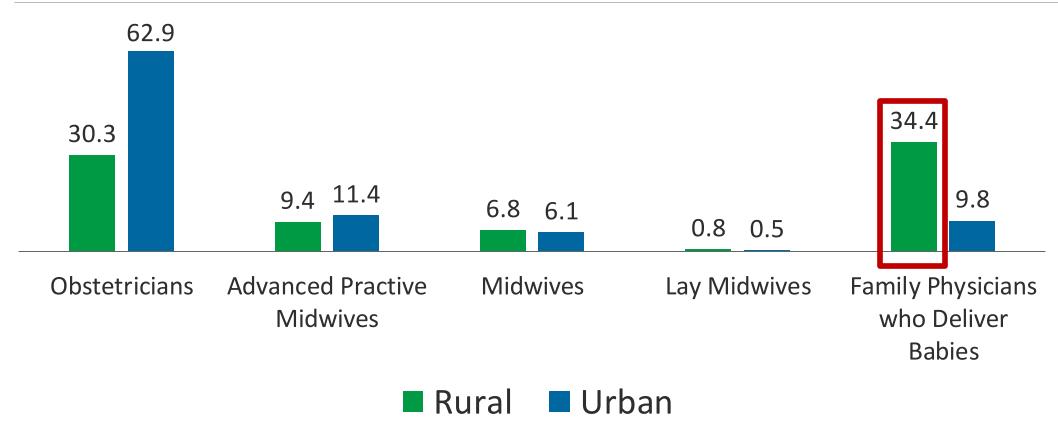


<sup>\*2001</sup> Ratios were sourced from Thompson et al. Characterizing the general surgery workforce in rural America. Arch Surg. 2005;140(1):74-79. doi:10.1001/archsurg.140.1.74

### Obstetrics

## Family physicians deliver babies more often than other OB providers in rural places

Obstetric providers per 100,000 women of childbearing age\* in rural and urban counties



<sup>\*</sup>Women ages 15-49

Data Sources: Area Health Resource Files (AHRF), 2020-2021 for obstetricians and advanced practice midwives; National Plan and Provider Enumeration System (NPPES) National Provider Identifier (NPI), 2021 for midwives and lay midwives; American Board of Family Medicine Certification Examination Registration Questionnaire (2014-2018) for family physicians who deliver babies.

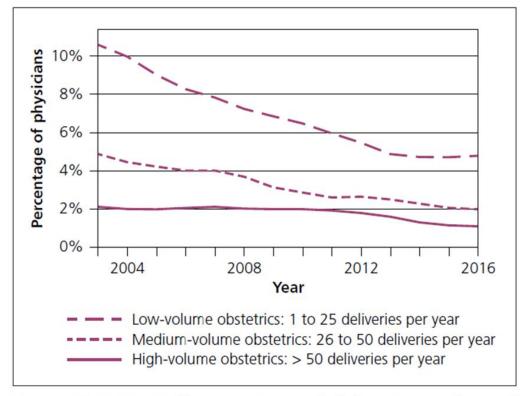
https://familymedicine.uw.edu/rhrc/studies/the-supply-and-rural-urban-distribution-of-the-obstetrical-care-workforce-in-the-u-s/

#### But fewer and fewer family physicians are delivering babies

### 23% in 2000 7% in 2016

Barreto T, Peterson LE, Petterson S, Bazemore AW.

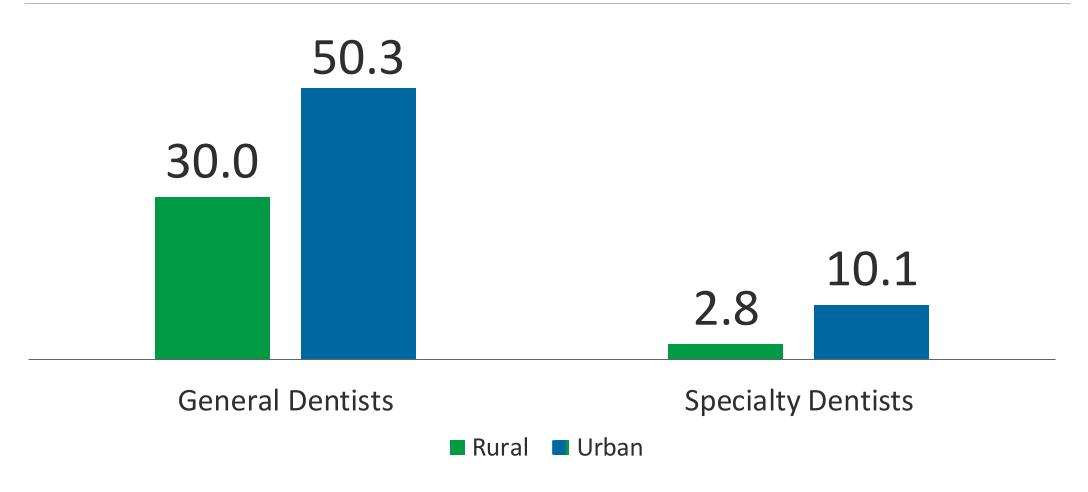
Family physicians practicing high volume obstetric care has recently dropped by half. *American Family Physician*. 2017;95(12):762.



**Figure 1.** Estimated percentage of deliveries performed by family physicians who practice obstetrics, 2003 to 2016. Data from the American Board of Family Medicine's certification examination registration questionnaire (n = 95,750).

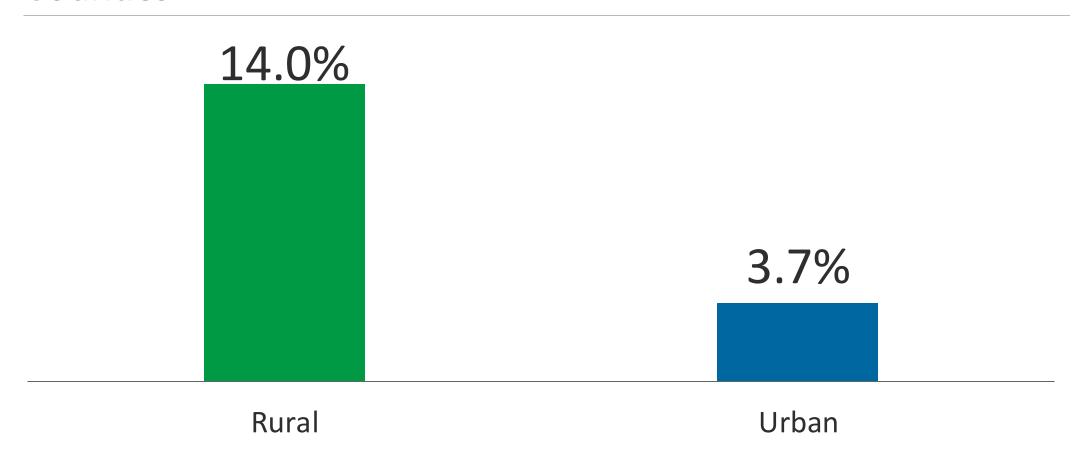
### Dentists

## Supply of General and Specialist Dentists per 100,000 Population in Rural and Urban U.S. Counties



Data sources: American Dental Association (ADA) Masterfile, 2022; U.S. Census Data, 2021.

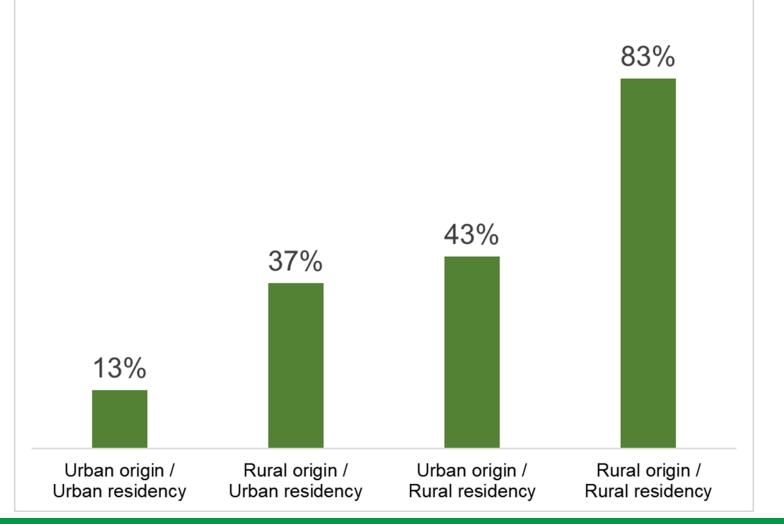
## Percent of Counties Without a Dentist in Rural and Urban U.S. Counties



### The value of rural training

## Family physicians: how rural/urban origin vs. residency training location predict rural practice

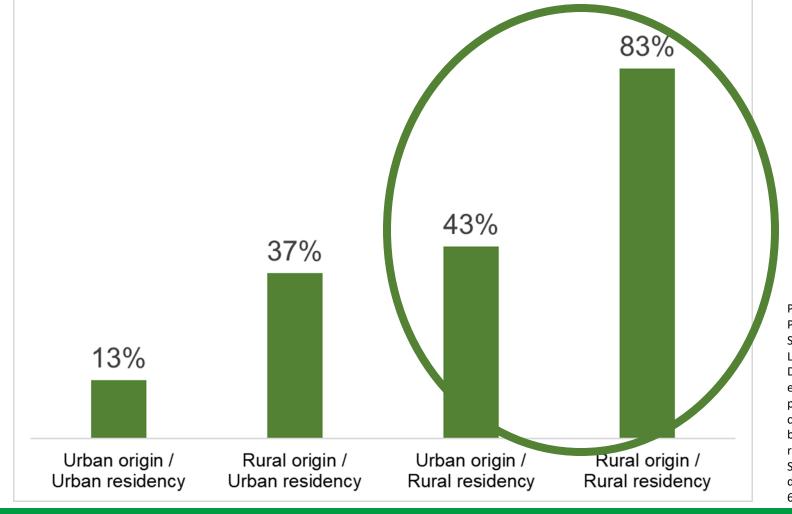
% in rural practice post-residency



Patterson DG, Shipman SA, Pollack SW, Andrilla CHA, Schmitz D, Evans D, Peterson LE, Longenecker R. 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. 2023;1-7. doi:10.1111/1475-6773.14168

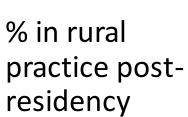
## Family physicians: how rural/urban origin vs. residency training location predict rural practice

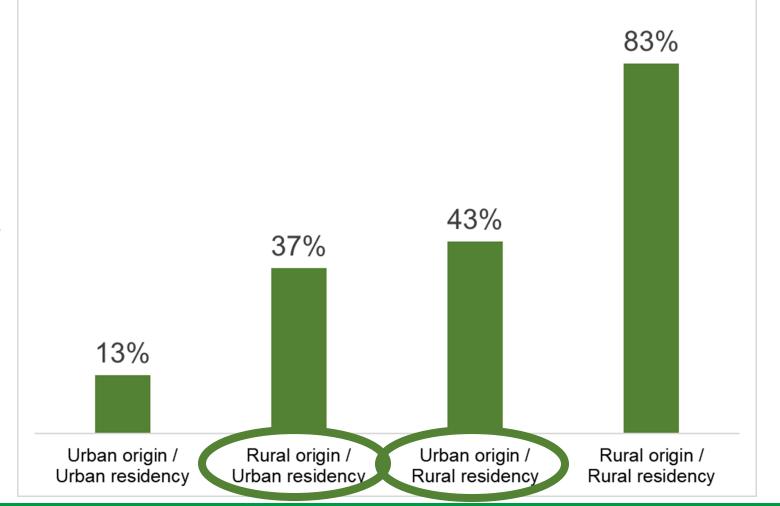
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## Family physicians: how rural/urban origin vs. residency training location predict rural practice





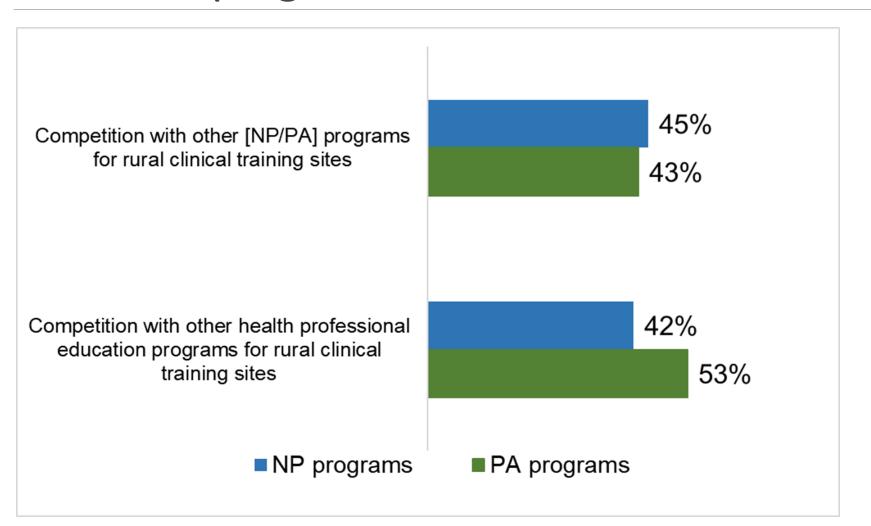
Patterson DG, Shipman SA, Pollack SW, Andrilla CHA, Schmitz D, Evans D, Peterson LE, Longenecker R. Patterson DG, Shipman SA, Pollack SW, et al. Growing a rural family physician workforce: the contributions of rural background and rural place of residency training. Health Serv Res. 2023;1-7. doi:10.1111/1475-6773.14168

### How available is rural training?

### Family medicine

Only 4% of family medicine residency positions are in rural residencies

## Top "major" barriers to rural clinical training reported by NP and PA programs with a rural mission



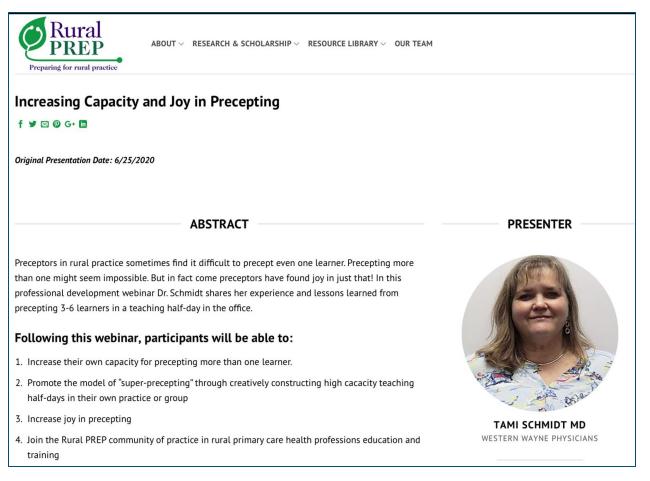
Kaplan L, Pollack S, Skillman S, Patterson D. NP programs' efforts to promote transition to primary care rural practice. Nurse Pract. 2020;45(10):48-55.

Larson EH, Oster N, Jopson A, Andrilla CHA, Pollack S, Patterson DG. Routes to rural readiness: enhancing clinical training experiences for physician assistants. J Physician Assist Educ (in press).

# Rural-centric workforce policies and practices

# Create educational pathways to prepare and recruit rural health professionals.

- Articulate career pathways (on the job, "nontraditional," etc.).
- Provide equitable resources for rural place-based education.
- Promote collaborative, interprofessional educational models to maximize rural placements.



https://ruralprep.org/research-scholarship/webinar/

# Promote development, scopes of practice, and expanded roles that use the workforce we have to maximum capability.

- Support newer types of health professionals who can increase capacity and effectiveness of the rural health care team. Examples:
  - community health workers
  - community paramedics
  - dental therapists

### Welcome all learners

Students from racial and ethnic minority backgrounds may experience discrimination from preceptors, patients, and community members.

"I think it would also be helpful to have...an outright conversation of...the racism, sexism, and the many –isms you're going to experience in the clinical environment and more likely outside of the clinical environment—especially if you're not from these communities."

DOI: 10.1111/jrh.12745

#### **BRIEF REPORT**



Positive yet problematic: Lived experiences of racial and ethnic minority medical students during rural and urban underserved clinical rotations

Brian Cedeño BA<sup>1</sup> | Genya Shimkin MPH<sup>2</sup> | Alexa Lawson MA<sup>3</sup> | Bopha Cheng M.Ed.<sup>3</sup> | Davis G. Patterson PhD<sup>4</sup> | Toby Keys MPH<sup>3</sup> ©

#### Abstract

**Purpose of Study:** Medical students who identify as Black, Indigenous, and People of Color (BIPOC) regularly experience mistreatment and discrimination. This study sought to understand these student experiences during rotations in rural and urban underserved community teaching sites.

**Methods:** Self-identified BIPOC medical students who completed the University of Washington School of Medicine's Rural Underserved Opportunities Program from 2019 through 2021 were invited to participate in a 60- to 90-minute focus group dis-

https://doi.org/10.1111/jrh.12745

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### Remember retention!

#### **Forbes**

#### **Healthcare Worker Burnout Is** Rampant - Here's What Should Be Done





Help health care staff shortages by reducing factors that contribute to burnout

Billing and collections | Coding and documentation | Concierge Medicine | Malpractice | Patient Relations | Practice Management | Telehealth | Value<sub>TER</sub>

Mar 21, 2023 Richard Payerchin

March 21, 2023 06:00 AM

Home > Providers

#### Health systems bet on employee mental health initiatives

LAUREN BERRYMAN

WEST HILLS, CALIFORNIA - JANUARY 12: Monique Hernandez, a nurse at Riverside Community Hospital in ... [+] GETTY IMAGES FOR SEIU

### Contact

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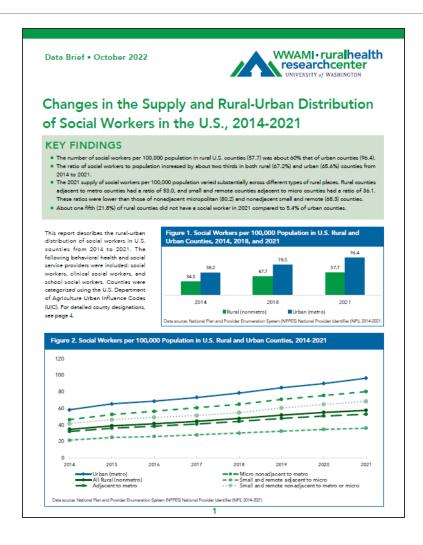
Celebrating 35 Years

https://familymedicine.uw.edu/rhrc/

Twitter and Facebook: @wwamirhrc

## Additional resources

### Behavioral health workforce trend briefs available



- Psychiatrists
- Psychologists
- Psychiatric NPs
- Social workers
- Counselors

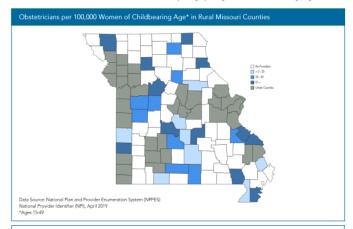


https://familymedicine.uw.edu/rhrc/publications/

# State- and county-level workforce supply analyses available on our website

#### Missouri Obstetrical Workforce: 2019

The maps and tables show obstetrical professionals, including obstetricians, advanced practice midwives, midwives (see <a href="https://npidb.org/taxonomy/">https://npidb.org/taxonomy/</a> for full definitions), and family physicians who deliver babies in Missouri as of April 2019. Counties were categorized using the U.S. Department of Agriculture Economic Research Service Urban Influence Codes (UICs). For detailed county category designations, see the following page



	Obstetricians/100,000 Women of Childbearing Age (Count)	Advanced Practice Midwives/100,000 Women of Childbearing Age (Count)	Midwives/100,000 Women of Childbearing Age (Count)	Family Physicians Who Deliver Babies/100,000 Women of Childbearing Age (Count)
Missouri	66.6	5.1	3.2	17.7
	(906)	(70)	(44)	(240)
Metropolitan	77.0	5.2	3.4	13.4
	(808)	(55)	(36)	(140)
Non-Metro	31.5	4.8	2.6	32.1
	(98)	(15)	(8)	(100)
Micropolitan	45.7	8.4	1.9	42.3
	(71)	(13)	(3)	(66)
Non-core	17.3	1.3	3.2	22.0
	(27)	(2)	(5)	(34)

WWAMI • ruralhealth

The Supply and Rural-Urban Distribution of the Obstetrical
Care Workforce in the U.S.: A State-Level Analysis

- Primary care
- Behavioral health
- General surgery
- Obstetrics



https://familymedicine.uw.edu/rhrc/publications/

### Article just published on rural residency training

Patterson DG, Shipman SA, Pollack SW, Andrilla CHA, Schmitz D, Evans D, Peterson LE, Longenecker R. 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*. 2023;1-7. doi:10.1111/1475-6773.14168



# Identifying Policy Levers to Bolster the Health Workforce



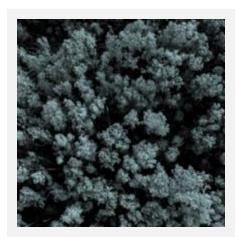
- O What has your state done?
- O What legislation is your legislature considering this session?
- O What bills have you proposed or sponsored?
- O What policy levers have you heard mentioned that you'd like to learn more about?

### Identifying Policy Levers to Bolster the Health Workforce









Understanding the health workforce

Increasing the supply of professionals

Expanding the reach of existing professionals

Retaining professionals in the health workforce

### Understanding the health workforce

- Creating a health workforce council
- Removing continuing education requirements
- Conducting a legislative study of health care worker burnout
- Creating more direct correlation to services and tax exemptions
- Supporting the workforce with ancillary needs (e.g., housing)
- Creating incentives for providers
- Broadening telehealth availability and reimbursement
- Collecting data on provider diversity

## Increasing the supply of professionals

- Addressing licensure, re-licensure and certification requirements for Dental Assistants, Dental Therapy, Midwives, Mental Health Therapist, Peer Support Specialists and Behavioral Heath Specialist
- Joining interstate licensure compacts
- Appropriating funds for residencies
- Establishing loan forgiveness programs for rural professionals
- Establish more rural fellowship and residency sites (e.g., leveraging Medicaid GME or provider taxes)
- Increasing Medicaid access to dentistry
- Increasing funding for WWAMI
- Funding for graduating seniors to enter the professional shortages areas
- Expanding scope of practice for advanced providers
- Increasing salaries for nurse educators and nursing preceptors
- Addressing access for international students and foreign MDs to residency and licensure
- Creating certificate programs within community colleges
- Addressing pay and Medicaid rates
- Establishing health care training sites, like veterinary schools or teaching hospitals

### Expanding the reach of existing professionals

- Giving more money to OHA for expanding Regional Health Equity Coalitions
- Creating community paramedicine programs by EMS providers
- Focusing on home grown talent
- Joining interstate licensure compacts
  - Studying the outcomes from interstate licensure compacts
- Expanding access to telehealth for mental and behavioral health care
- Enacting medical record access amendments (e.g., moving HIPPA records safely and fluidly)
- Establishing a rural nurse loan incentive offering loan repayment
- Removing telehealth virtual health barriers
- Expanding scope of practice (practice and prescriptive authority) for:
  - NPs
  - PAs
  - Psychologists
  - Pharmacists

### Retaining professionals in the health workforce

- Creating standards and enforcement of standards for hospital staffing
- Joining interstate licensure compacts
- Expanding student loan repayment programs
- Establishing loan forgiveness for rural health care workers
  - Doctors
  - Nurses
- Establishing an assistance program for health care professionals with mental health or substance use disorders
- Ensuring compliance with staffing plans for nursing
- Addressing nursing staffing, ratios and workload
- Establishing a housing for relocation allowance for health workers
- Establishing provider incentives and assessments
- Increasing Medicaid reimbursement rates
- Improving provider rates

## Large-Group Discussion

- What was one important takeaway from your group's discussion?
- Is there a policy lever that would address multiple provider shortages?
- What additional information or resources would be helpful moving forward?





### **NCSL** Databases!



	Health Costs, Coverage and Delivery State Legislation
Ug	Scope of Practice Policy
	Maternal and Child Health
*	Injury Prevention Legislation
19	Emergency Medical Services Legislative
* <u>=</u>	Occupational Licensing

### Scope of Practice Policy Website



### www.scopeofpracticepolicy.org

- Information on 22 policy areas across 9 professions
- Practice and prescriptive authority for:
  - Advanced Practice Registered Nurses
  - Physician Assistants





## 50-STATE SCOPE OF PRACTICE LANDSCAPE

This site provides nonpartisan, unbiased and objective policy information about the scope of practice laws in the 50 states, District of Columbia and territories.

### **NCSL** Publications



- O Behavioral Health:
  - State Actions to Recruit and Retain the Behavioral Health Workforce Policy Report
  - Behavioral Health Policy Series
- Maternal Health:
  - State Policies on Midwives and Doulas Webinar Recording
- Direct Care:
  - Strengthening the Direct Care Workforce Policy Brief
  - Supporting the Direct Care Workers: Recruitment and Retention Strategies Policy Brief
- Primary Care:
  - Coming soon! Our American States Nursing Shortages Podcast
- Other Resources:
  - Workforce Strategies to Improve Access to Oral Health Care
  - Understanding the Medicaid's Role in Graduate Medical Education Webinar

Sign up for NCSL's Health and Human Services Link Newsletter for upcoming publications and resources!







### Reach out anytime!

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