## Describing The Primary Care Shortage in Arizona Summary of Health Professional Shortage Area Data

Arizona needs at least **482 primary care physicians (PCPs)** to eliminate the current primary care shortage. Access to primary and preventive care can, improve health outcomes,<sup>1</sup> lower the cost of health care,<sup>2</sup> and decrease emergency department visits and hospital readmission.<sup>3,4</sup>

This brief summarizes the Full-Time-Equivalent (FTE) shortage of PCPs by county and tribal area in Arizona. While multiple health care professionals like nurse practitioners and physician assistants can provide primary care, the primary care Health Professional Shortage Areas (HPSAs) are based on a ratio of primary care physicians to population. The target ratio is 1: 3,500 to 1 or 1 to 3,000 in high need areas.

### ▶▶Arizona has PCP shortages in all counties & worse in rural areas.

- Arizona meets just 39.21% of its PCP need.<sup>5</sup>
- Arizona ranks **42nd of 50 states** in total active PCPs at 80.2 per 100,000 population (U.S. is 94.4).<sup>6</sup>
- Arizona ranks **31st in total active physicians** at 252.0 per 100,000 population (U.S. is 286.5).6
- Arizona is **one of the fastest growing states in population**, growing 1.13% between 2010 and 2020, compared to median growth of 0.55%.<sup>7</sup>

Health Professional Shortage Areas (HPSA) are "geographic areas, populations, or facilities that have a shortage of primary, dental or mental health care providers." These designations from the Health Resources and Services Administration (HRSA) were created by the National Health Service Corps (NHSC) program describe workforce needs and are used identify eligible locations for programs like Nurse Corps, IHS Loan Repayment, and more.

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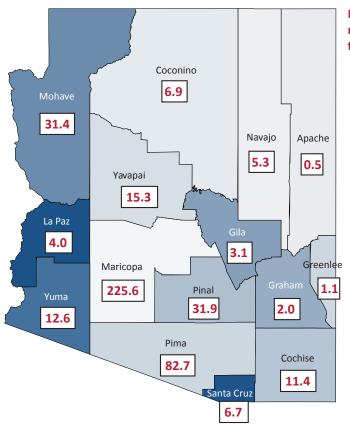
Designated Indian Health Service, Tribal Health, and Urban Indian Health Facility Primary Care HPSAs

### AZ Tribal Nations Primary Care Physician Shortage (2023)

HIGHEST

TRIBAL NATION	HPSA SCORE	PCPs SHORT	
Colorado River Indian	18	1.4	
Fort McDowell Yavapai	10	0.2	
Gila River	20	2.2	
Hualapai	13	0.5	
Navajo Nation & Hopi	11	2.2	
Pascua Yaqui	19	o.8	
Salt River Pima-Maricopa	19	1.4	
San Carlos Apache	21	2.0	
Tohono O'Odham	17	o.8	
White Mountain Apache	21	4.1	

### Percent Living in Primary Care Shortage Areas (HPSAs) and Number of Providers Needed to Eliminate Shortage (2023)



Number of providers needed to eliminate the PCP shortage

Percent population livning in a HPSA

75-100%

51-75%

26-50%

0-25%



### Number of Designated Correctional, Federal Qualified Health Center, FQCH Look A Like, or Rural Health Clinic Facility Primary Care HPSAs

County	FQHCs & FQHC Look A Likes	Rural Health Clinic	Correctional Facility	Correctional Facility FTE Short*
Apache	0	1	0	0.0
Cochise	1	6	1	0.3
Coconino	3	0	0	0.0
Gila	0	6	0	0.0
Graham	0	1	2	2.3
Greenlee	0	0	0	0.0
La Paz	0	4	0	0.0
Maricopa	9	1	4	10.8
Mohave	1	0	0	0.0
Navajo	0	0	1	0.9
Pima	4	0	2	4.1
Pinal	2	2	5	20.1
Santa Cruz	1	0	0	0.0
Yavapai	2	0	0	0.0
Yuma	1	2	1	2.2
Total	24	23	16	40.59

### **▶▶**Definitions

HPSAs are a geographic area, population, or facility with a shortage of primary care, dental, or mental health providers and services. HPSAs are based on factors illustrated below. In the primary care HPSAs the following primary care physicians are included, "(M.D.) and doctors of osteopathy (D.O.) providing direct patient care who practice principally in one of the four primary care specialties—general or family practice, general internal medicine, pediatrics, and obstetrics and gynecology..."

### **▶▶Primary Care HPSA Score Formula**

Populationto-Provider Ratio

[10 points]

+

% Populations < FPL < 100% Federal Poverty Level

[5 points max]

Inde

Infant Health Index (based on IMR or LBW) [5 points max]

Travel time to nearest source of care (NSC)

[5 points max]

HPSA Score 0-25

#### **▶▶Brief Methods**

This brief uses HPSA data from the HRSA. The HPSA data files can be found here https://data.hrsa.gov/data/download and an interactive site can be found here https://data.hrsa.gov/tools/shortage-area/hpsa-find on the HPSA Find site. HRSA includes data on designated, proposed for withdrawal, and withdrawn HPSAs. This brief only includes data on designated HPSAs. In the HPSA quarterly report, HRSA includes data for both designated and HPSAs that are proposed for withdrawal. Thus, this brief is a more conservative estimate of the shortage than provided by HRSA. The percentage of the population living in a HPSA area was calculated by adding the population reported in each HPSA type (geographic, geographic high needs, and population) and then dividing by the total population in the county (from the U.S. Census American Community Survey, 2020). Some HPSAs span county boundaries, we assigned HPSAs to a single "majority" county based on land area that composed the majority of the land area in the HPSA.

#### References

- 1. Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of primary care to health systems and health. The milbank quarterly, 83(3), 457-502.
- 2. Friedberg, M. W., Hussey, P. S., & Schneider, E. C. (2010). Primary care: a critical review of the evidence on quality and costs of health care. Health Affairs, 29(5), 766-772.
- 3. Capp, R., Misky, G. J., Lindrooth, R. C., Honigman, B., Logan, H., Hardy, R., ... & Wiler, J. L. (2017). Coordination program reduced acute care use and increased primary care visits among frequent emergency care users. Health Affairs, 36(10), 1705-1711.
- 4. National Research Council, & Committee on Population. (2013). US health in international perspective: Shorter lives, poorer health.
- 5. Health Resources and Services Administration (HRSA). (2023). Designated Health Professional Shortage Areas Statistics. Second Quarter of Fiscal Year 2023. Retrieved from: https://data.hrsa.gov/Default/GenerateHPSAQuarterlyReport
- 6. Association of American Medical Colleges. (2022). State Phsician Workforce Data Report 2021. Retrieved from: https://www.aamc.org/data-reports/workforce/report/state-physician-workforce-data-report
- 7. Pew Charitable Trusts. (2021). Population Growth Sputters in Midwestern, Eastern States. Retrieved from: https://www.pewtrusts.org/en/research-and-analysis/articles/2021/07/27/population-growth-sputters-in-midwestern-eastern-states
- 8. Health Resources and Services Administration. (2023). What is Shortage Designation. Retrieved from: https://bhw.hrsa.gov/workforce-shortage-areas/shortage-designation
- 9. Designation of Health Professional(s) Shortage areas. 42 C.F.R part 5. Retrieved from: https://www.ecfr.gov/current/title-42/chapter-l/subchapter-A/part-5

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