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The Arizona Psychiatric Physician Workforce Study

Mary E. Rimsza, MD, FAAP

Co-Director

Center for Health Information & Research

William G. Johnson, PhD

Director

Center for Health Information & Research

Mark Speicher

Project Director

Center for Health Information & Research

Michael Grossman, MD, MACP

Executive Director

Arizona Medical Education Consortium

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Data Sources

The results in this report are based on the statewide Medical Board Database (MBD), which includes demographic data on all licensed Arizona physicians as well as their self-reported specialties and office locations. The MBD was compiled from files that the Arizona State University (ASU) Center for Health Information and Research obtained from the Arizona Medical Board (AMB) and the Arizona Osteopathic Board (AOB). The database contains demographic information on every physician licensed in Arizona, including their medical specialty, board certification, office location, practice changes, retirement status, and work hours. The practicing physician's medical school, date of graduation from medical school, and graduate training experiences are also collected. The physician specialty is the specialty reported by physicians on their license renewal applications. For this report, a psychiatrist was defined as any physician (MD or DO) who listed his or her primary or secondary specialty category as psychiatry, had an active license to practice in Arizona, and occupied an Arizona office address. It should be noted that specialty category is self-reported and not verified by the boards or the authors. Census data is from United States Census Bureau Population Estimates (July, 2004).

Arizona Psychiatric Physician Workforce, 2004

There were 691 psychiatrists in active practice in Arizona in 2004. Thus, psychiatrists represent 5.7% (691/12,024) of the Arizona physician workforce. The ratio of psychiatrists per 100,000 population is 12.03/100,000 population (691 psychiatrists/5,743,834 population). Four counties in Arizona are without practicing psychiatrists: Graham, Greenlee, La Paz, and Santa Cruz (Table 1, Figure 1). Approximately 60% (412/691) of the psychiatrists practice in Maricopa County, and 27% (187/691) practice in Pima County (Figures 2 and 3). The highest psychiatrist-per-100,000-people ratio is in Pima County, which has 20.62 psychiatrists/100,000 population, and the second highest ratio is in Coconino County, which has 20.37 psychiatrists/100,000 population (Table 1). In Yuma County, there are 10 psychiatrists and the psychiatrists/100,000 population ratio is 5.68.

Table 1: Psychiatrists By County

<i>County</i>	<i>Psychiatrists*</i>	<i>Population**</i>	<i>Psychiatrists Per 100,000</i>
Apache	1	68,903	1.5
Cochise	9	124,0130	7.3
Coconino	25	122,754	20.4
Gila	1	51,422	1.9
Graham	0	32,993	0.0
Greenlee	0	7,501	0.0
La Paz	0	19,898	0.0
Maricopa	412	3,501,001	11.8
Mohave	9	179,981	5.0
Navajo	3	106,455	2.8
Pima	187	907,059	20.6
Pinal	10	214,359	4.7
Santa Cruz	0	40,784	0.0
Yavapai	24	190,628	12.6
Yuma	10	176,083	5.7

Source: *Arizona Medical Board, Arizona Board of Osteopathic Examiners in Medicine and Surgery; **Arizona Department of Economic Security, July 2004

Figure 1. Psychiatrists per 100,000 people, Arizona, 2004

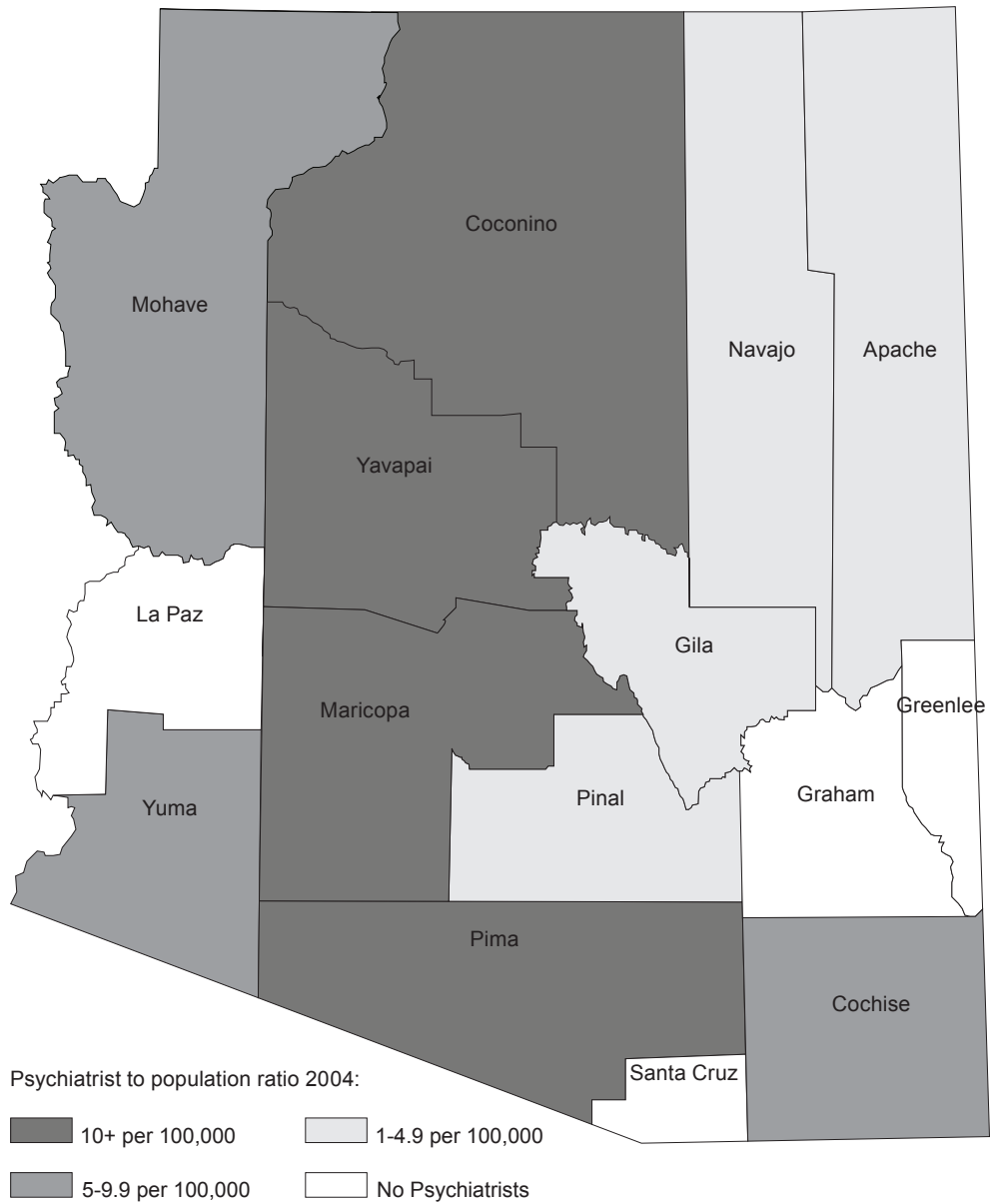


Figure 2. Psychiatrists per 100,000 people, by Zip Code, Maricopa County, 2004

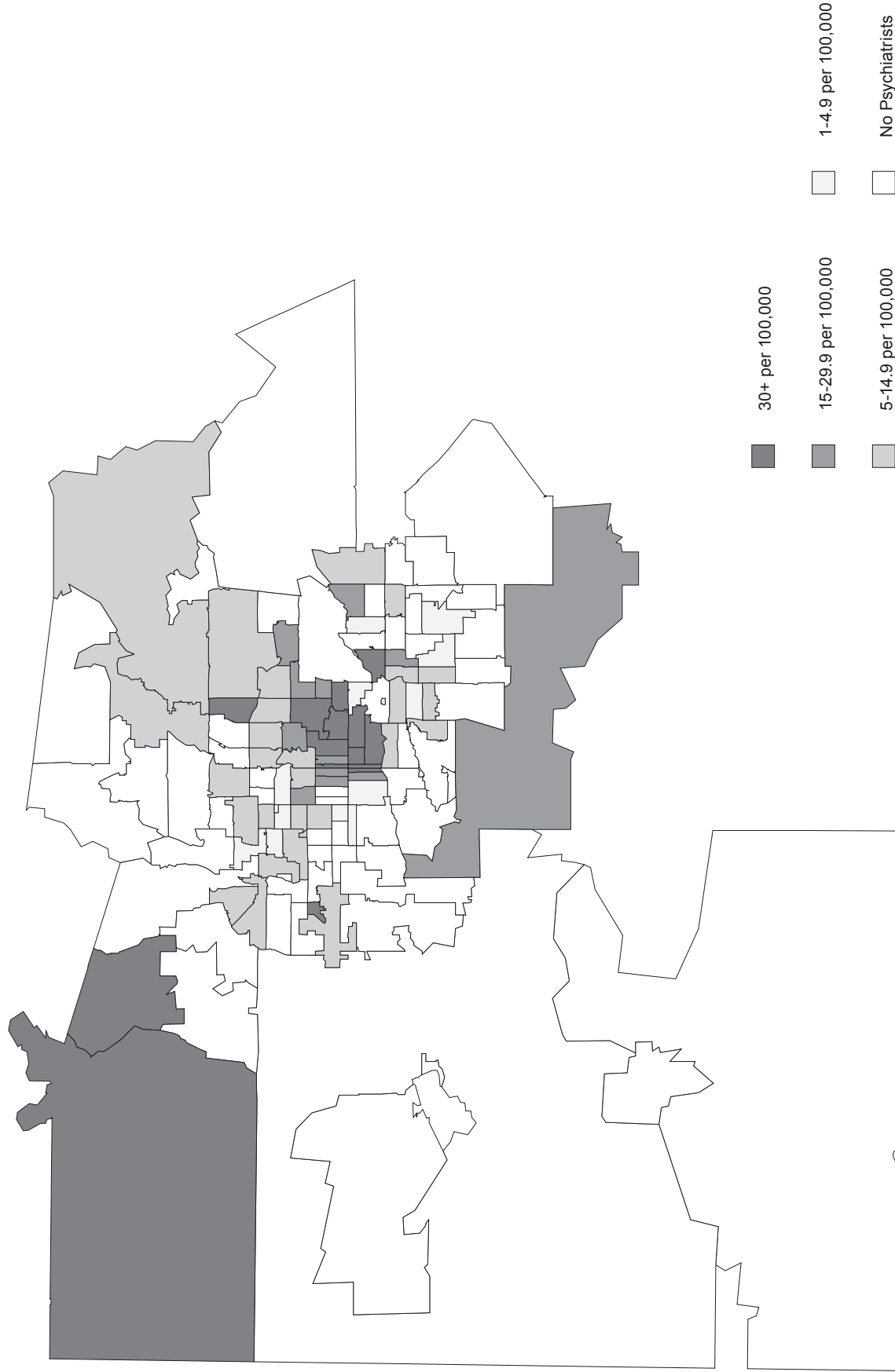
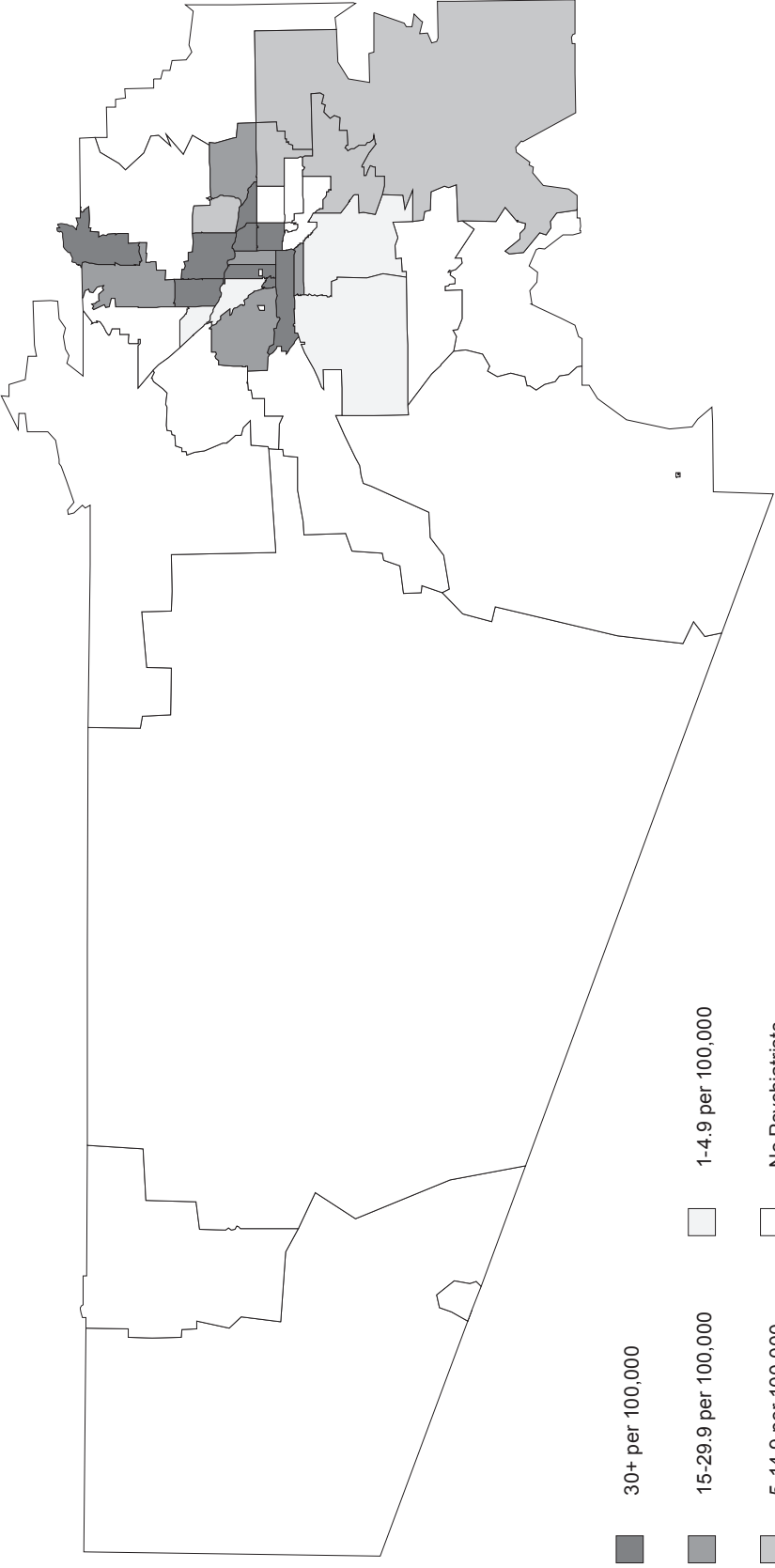


Figure 3. Psychiatrists per 100,000 people, by Zip Code, Pima County, 2004



Arizona Child Psychiatric Physician Workforce, 2004

Child psychiatry is a subspecialty of psychiatry. Physicians who practice child psychiatry usually complete graduate medical training in general psychiatry, which is followed by additional training in child psychiatry. Nationally, the growth of child psychiatrists has exceeded the growth in the number of general psychiatrists from 1990-2000. There were 134 child psychiatrists in active practice in Arizona in 2004. Five counties in Arizona are without practicing child psychiatrists: Gila, Graham, Greenlee, La Paz, and Santa Cruz (Figure 4). Approximately 58% (78/134) of the child psychiatrists practice in Maricopa County and 28% (37/134) practice in Pima County. The highest child psychiatrist per 100,000 people ratio is in Coconino County, which has 5.70 child psychiatrists/100,000 population, and the second highest ratio is in Pima County, which has 4.08 child psychiatrists/100,000 population (Table 2).

Figure 4. Child Psychiatrists per 100,000 people, Arizona, 2004

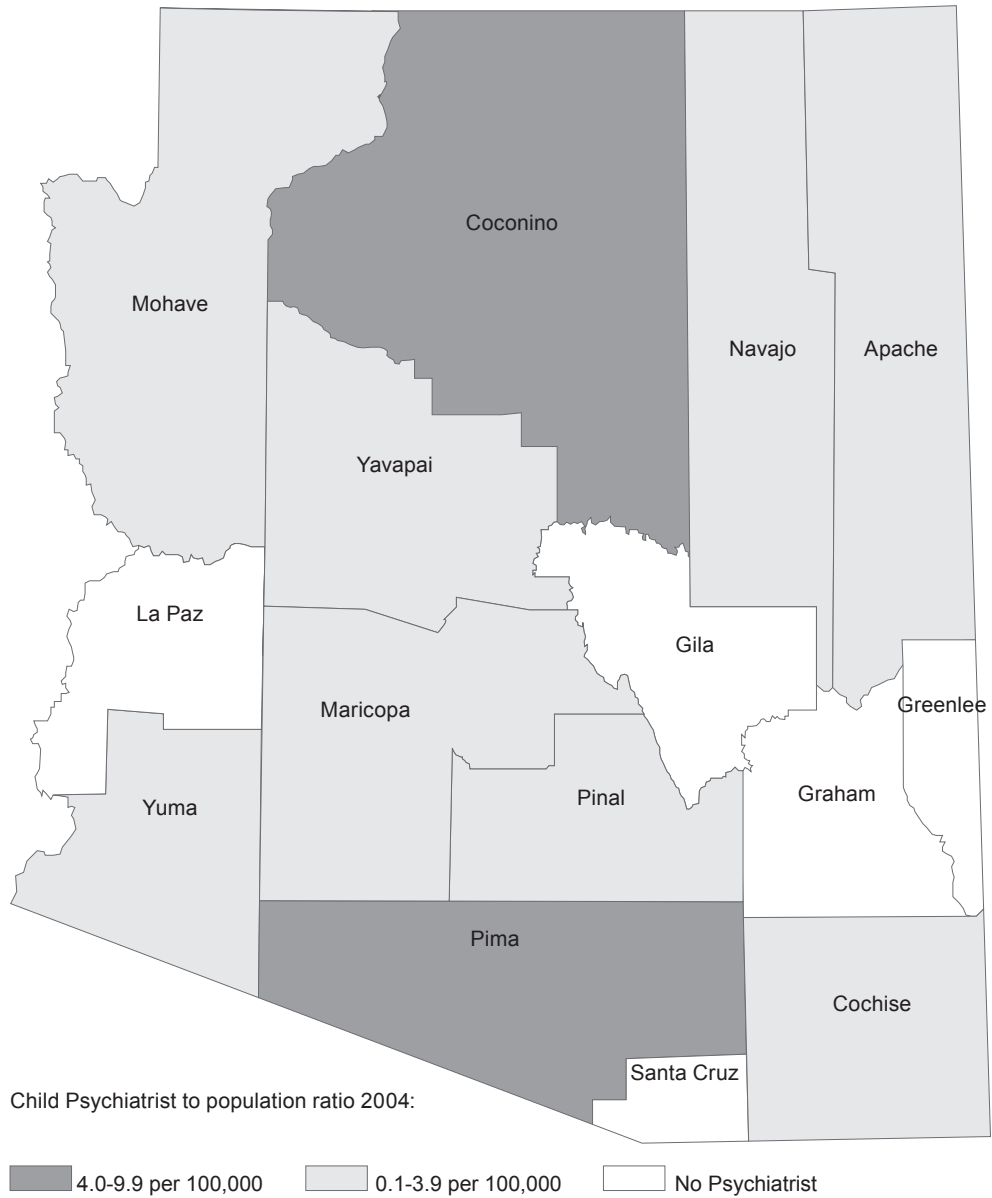


Table 2: Child Psychiatrists By County

<i>County</i>	<i>Child Psychiatrists*</i>	<i>Population**</i>	<i>Child Psychiatrists Per 100,000</i>
Apache	1	68,903	1.5
Cochise	2	124,013	1.6
Coconino	7	122,754	5.7
Gila	0	51,422	0.0
Graham	0	32,993	0.0
Greenlee	0	7,501	0.0
La Paz	0	19,898	0.0
Maricopa	78	3,501,001	2.3
Mohave	1	179,981	0.6
Navajo	1	106,455	0.9
Pima	37	907,059	4.1
Pinal	1	214,359	0.5
Santa Cruz	0	40,784	0.0
Yavapai	3	190,628	1.6
Yuma	3	176,083	1.7

Source: *Arizona Medical Board, Arizona Board of Osteopathic Examiners in Medicine and Surgery, 2004; **Arizona Department of Economic Security, July 2004

National Psychiatric Physician Workforce

Psychiatry is the fourth largest medical specialty in the United States. In 2000, there were 45,615 psychiatrists in active practice in the US, and the ratio of psychiatric physicians/100,000 population was 16.5/100,000. However, there are large disparities in the distribution of psychiatrists throughout the US. For example, the psychiatric physician/100,000 population ratio ranges from a high of 31.1 in Massachusetts to a low of 4.6 in Idaho. The number of psychiatrists practicing in New York in 2000 was 6,125. The five states with the highest ratio of psychiatrists/100,000 population are Massachusetts, New York, Pennsylvania, California, and Texas, and the five states with the lowest ratios are Idaho, Wyoming, South Dakota, North Dakota, and Alaska. While the number of psychiatrists in the US has increased by 86.7% from 1970 to 2000, and the number of child psychiatrists increased 194.6%, there is concern about the capacity of the workforce to meet the needs of the population because of the disparate geographic distribution of psychiatrists, aging psychiatric workforce, and decreased work hours of psychiatrists nationally. There are three psychiatry residency training programs in Arizona with 53 residents in training. Since residents in training usually have training licenses, and not an active license to practice in the state, most of these physicians are not included in the total number of psychiatrists practicing in Arizona.

Summary

The psychiatric physician-to-population ratio in Arizona is less than the national averages. Four Arizona counties have no psychiatric physicians, and five have no child psychiatric physicians. Only two counties (Pima and Coconino) have a psychiatric physician-to-population ratio that is higher than the national averages.

Limitations of the Study

This report is based on the self-reported specialty of Arizona physicians with an active license who list an Arizona office address. It is possible that the self-reported specialty is not the specialty in which a physician received residency training and obtained board certification or is the field of medicine in which they provide care. In addition, the adequacy of the psychiatric physician workforce is not determined solely by the number of psychiatrists in practice. To determine the adequacy of the workforce, we must know the demand for mental health services by geographic area, the productivity of the psychiatric workforce (e.g., number of patients seen per day per psychiatrist), and the number and productivity of non-physician mental health clinicians providing care. Also, the psychiatrist-to-population ratio may not accurately reflect the availability of psychiatrists in a community because physicians may have more than one office location and only their primary office location is recorded in the MBD. Finally, it should be noted that psychiatrists who practice in federal facilities such as the Veterans Administration Hospitals or the Indian Health Service facilities are not required to have an Arizona license, so these physicians may not be included in the MBD.

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