

Health Workforce

Averages and Trends

I. The Big Picture

- Nationally, approximately 9-10% of employed persons work in the health care industry, with numbers projected to rise higher in the future.
 - Fully 9 out of the 20 fastest growing occupations in the U.S. are in health care, with a 28.8% growth rate projected between 2002-2012, contrasted to a 13.8% growth rate for non-health care jobs.¹
 - Arizona shows similar growth, though the state remains below the national averages:
 - In 1970, approximately 23,000 people in the state worked in health care, which represented 4.1% of total jobs. In 2003, about 200,000 Arizonans worked in health care, or 8% of jobs. This puts Arizona well below the average in percentage of persons working in health care.²
 - In the 1988-2000 period, employment in the Arizona health care sector grew 58%, while the population grew 46%, resulting in a net per capital growth rate of 8% – significantly lower than the national per capital growth rate of 21%.
 - According to the Arizona Board of Regents, a total of 10% of state wages, or \$2 billion, was generated through health care jobs in 2002.³
 - Roughly 42% of Arizona health care workers are employed in ambulatory health services (physician offices, outpatient clinics, etc.), 37% are employed by hospitals and 21% in the long-term care sector.⁴
 - Ethnic minorities continue to be under-represented in many health professions in Arizona, especially among physicians. In 1998 just 6% of active practitioners were Hispanic at a time when Hispanics represented 22% of the general population.⁵
- The growing bioscience industry presents a challenge to the health services sector, with demand for new hires anticipated to equal 20% of the current employment level in Arizona – or 1,200 new jobs over the next two years. Like clinical professions, bioscience positions generate demand for postsecondary education, particularly in the areas of lab/research technicians, manufacturing and production.⁶
- Continued high turnover rates exacerbate the demand for health care workers. Industry-wide turnover rates increased from 8% in 2001 to 11% in 2003, from a low of 6% among Physician Assistants to a high of 39% among Nursing Aides. Occupations with some of the highest turnover rates (Nursing Aides, Phlebotomists, Registered Nurses) also have some of the highest rates of projected future demand.⁷

II. Physicians

- In 2000, Arizona ranked 33rd among states in physicians per capita, with 172 physicians per 100,000 population compared to a national average of 198.⁸
 - For primary care physicians, Arizona reported 61 per 100,000 population, compared to a national average of 69.
- Close to one-half of all physicians trained in Arizona – 47.7% – were practicing in the state in 1999-2000. However, this group represented just 14.7% of *all* physicians practicing in the state.⁹
- The number of licensed, active allopathic physicians (MDs) increased by 8.3% (720) between 1997-2004, while the number of osteopathic physicians (DOs) increased 41% (522) in the 1993-2004 time period.¹⁰ Meanwhile, the state's population grew 26.5% in the same time period (1,208,000 projected).
- Arizona's medical profession is growing older:
 - In 1996, 50% of active MDs were 45 years of age or younger, compared to 39% in 2003.
 - DOs follow a similar trend, with physicians under the age of 45 falling from 57% of the total in 1992 to 46% in 2003.¹¹
 - In 1998, Arizona ranked 5th and 2nd respectively among the states in percent of active physicians 55 and older; and 65 and older.¹²
- The number of physician residents per capita declined 6.2% between 1989-1999, compared to national increase of 3.9% in the same period.¹³
 - Less than one-fifth of allopathic residents in Arizona (17.3%, 2001) are from in-state medical schools.¹⁴

III. Nurses

- There is a shortage of nurses in Arizona compared to national averages:
 - In 2000, there were 628 nurses per 100,000 population in Arizona, compared to a national average of 782.¹⁵
 - Arizona's reported nurse vacancy rate is 26%, which is significantly higher than the national rate of 15%.¹⁶
- Arizona nurses are older than the national average (46.8 years compared to 42 years nationally) and in 2001 had a higher annual turnover rate (26.7% compared to 15% nationally).¹⁷ The Arizona Hospital and Healthcare Association reports that the turnover rate decreased to 15% in 2003.
- Employment in nursing grew 17% in the 1994-2002 period, but wage growth remained flat. The exception was 2002, when real wages grew 5%, primarily in hospitals, where the wage growth for nurses was approximately twice the rate of non-hospital settings.¹⁸
 - Practically all employment gains in nursing were due to the recruitment of foreign-born RNs and nurses over the age of 50 returning to the workforce.¹⁹

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- Comparative Arizona statistics for selected nursing specialties (2000):²⁰
 - The per capita number of Nurse Practitioners in Arizona is 41.1 per 100,000 population, higher than the national rate of 33.7.
 - The number of certified Nurse Midwives is 40% higher per capita than the national average.
 - The number of Nurse Anesthetists is lower – 3.3 per 100,000 compared to 9.3 nationally.
 - In 2002, the Arizona Legislature passed SB 1260 calling for the state’s educational institutions to double the capacity of nursing education programs by 2007. In response, a coalition of groups have developed a five-year, \$126 million plan to meet the requirements of the legislation.

IV. Other Selected Health Occupations²¹

- Arizona ranked just below the median when compared to national rates for psychiatrists, psychologists and social workers.
- Arizona ranked 41st in the nation in the number of dentists per capita – 44 per 100,000 compared to 63.6 nationally. Dental assistant rates mirrored those of dentists, while the number of dental hygienists was higher than the national rate.
- With just 2,150 pharmacists in 2000, Arizona ranked 50th in the nation in the number of pharmacists per capita.
- Conversely, Arizona ranked 3rd in the nation in the number of chiropractors, and 6th in the percent of health employment in offices and clinics.²²

V. Informal Caregivers

- Informal caregivers – family, friends, volunteers – supplement the health care workforce and provide the majority of long-term care services in the U.S.
 - In 2003, there were approximately 27 million unpaid, informal caregivers in the U.S., accounting for a market value of \$257 billion in hours of care provided.
 - In Arizona, an estimated 490,000 caregivers provided a total of 523 million hours of care in 2003 with an estimated annual market value of \$4.6 billion.²³
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- 1 See Carol Lockhart, *Controlling the Curve: Health Workforce Regulation in Arizona*, St. Luke's Health Initiatives, Oct. 2004, for documentation and a listing of the fastest growing health occupations. www.slhi.org.
- 2 Current employment statistics, Arizona Dept. of Economic Security, August 2004. These numbers likely understate the actual number of persons employed in health care, due to definitional issues.
- 3 Arizona Board of Regents, *The Economic Impact of Arizona's Health Care Industry: Report to the Governor's Task Force on Nursing*, Feb. 18, 2003.
- 4 *State Health Workforce Profiles 2000*. U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, <http://bhpr.hrsa.gov>.
- 5 Ibid.
- 6 *Battelle Bioscience Workforce Needs Assessment (2003)*. Maricopa Community Colleges, Center for Workforce Development, www.maricopa.edu/workforce.
- 7 *2003 Industry Cluster Summary: Healthcare*. Maricopa Community Colleges, Center for Workforce Development. www.maricopa.edu/workforce.
- 8 State Health Workforce Profiles, op. cit.
- 9 *The Healthcare Workforce in Eight States: Education, Practice and Policy – Arizona*. <http://bhpr.hrsa.gov/healthworkforce/reports/states04/arizona.htm>.
- 10 Preliminary data (unpublished), July 2004, Arizona Medical Education Consortium, Arizona State University, W.P Carey School of Business.
- 11 Ibid.
- 12 *Boom or Bust: The Future of the Healthcare Workforce in Arizona*, St. Luke's Health Initiatives, Spring 2002.
- 13 Ibid.
- 14 *The Healthcare Workforce in Eight States*, op. cit.
- 15 *State Health Workforce Profiles*, 2000. op. cit.
- 16 *The Healthcare Workforce in Eight States*, op. cit.
- 17 *Boom or Bust*, op. cit.
- 18 Peter Buerhaus, et. al., "Is the Current Shortage of Hospital Nurses Ending?" *Health Affairs* 2003, 22 (6), pp. 191-198.
- 19 Ibid.
- 20 *State Health Workforce Profiles*, 2000, op. cit.
- 21 Ibid.
- 22 *Boom or Bust*, op. cit.
- 23 Peter Arno, *Prevalence and Economic Value of Family Caregiving: A State by State Analysis*. www.nfcacares.org.



Our Mission

To improve the health of people and their communities in Arizona, with an emphasis on helping people in need and building the capacity of communities to help themselves.

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