

Recent Studies and Reports on Physician Shortages in the U.S.

August 2007

Center for Workforce Studies

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Over the past several years, a growing number of studies examining the U.S. physician workforce have concluded the nation, a state or a specialty is facing current or future shortages. The report is divided into three sections: 1) a summary of 15 state reports on physician shortages; 2) a summary of 16 specialty shortage reports; and 3) a summary of three national studies on the physician workforce.

STATE REPORTS

Since 2002, there have been at least 15 studies of current or future state physician workforce needs. In nearly all of these studies, the underserved and elderly populations are most likely to be affected. Additionally, many of the state reports point out shortages in specialties that are featured in the specialty report section, including allergy and immunology, cardiology, child psychiatry, dermatology, endocrinology, neurosurgery, primary care, and psychiatry.

Arizona (2005) – “Still Far Below the National Average”

The 2005 Arizona Physician Workforce Study, prepared by the Arizona State University and University of Arizona Health Sciences Center, concludes that while the growth in the physician workforce over the past decade outpaced the increase in population, a number of specialties have decreased in numbers, including allergists, cardiovascular surgeons, endocrinologists, gastroenterologists, hematologists, and infectious disease specialists. Arizona’s high projected population growth combined with the limited number of in-state medical education and training opportunities will make Arizona increasingly reliant on recruiting physicians from other states at a time of projected national shortages.¹

California (2004) – “Likely to Face Physician Shortage in 2015”

The University of California Office of Health Affairs and University of California Health Sciences Committee commissioned a report on California’s physician workforce conducted by the University of Albany’s Center for Health Workforce Studies. The report concludes that “growth in physician demand is likely to outpace growth in physician supply by between 4.7% and 15.9%.” The population of California is growing rapidly which will place great strains on the healthcare delivery system and the physician workforce. More than one-fourth of the state’s practicing physicians were over age 55 in 2000. In addition, the state has a mal-distribution of physicians with 60% of the current physicians practicing in only five counties.² In part in response to this report, in 2006, the California Board of Regents approved the establishment of a new medical school at the University of California at Riverside.³

Florida (2005) – “All Agree Demand Outstrips Production”

According to staff analysis by the Board of Governors of the State University System of Florida, “though data sources are conflicting on the exact number of physicians that will be needed, all agree demand outstrips production.” A quarter of Florida’s practicing physicians are over 65 and only 10% are under 35. Florida’s population is projected to increase 60% by 2030 and the aged population is projected to grow by 124% in the same span which will dramatically increase demand for physician services.⁴ In 2006, the Florida Board of Governors approved the establishment of two new medical schools.⁵

Georgia (2006) – “Physician Marketplace Needs New Physicians”

The Georgia Board for Physician Workforce conducts annual surveys of physicians completing their final year of residency training in the state. The job market for new physicians is strong but seems to be tightening as only 77% of job seekers graduating from GA residency programs received and accepted a job offer, (down from 87% in 2005), and fewer are remaining in Georgia. Only 50% of the graduates with confirmed practice plans are remaining in the state, down from 56% in 2002. Results of the 2006 survey indicate Georgia continues to rely heavily on other states and countries to train needed physicians.⁶

Iowa (2007) – “Aging Population will Alter Demand for Physician Services”

After reviewing physician supply and demand data, a task force established by University of Iowa Health Care leaders developed a set of recommendations for improving the physician supply that focused on modest increases in physician education and training capacity as well as a detailed set of recruitment and retention strategies. The five specialties perceived to be in greatest need were psychiatry, neurosurgery, general internal medicine, orthopedic surgery, and cardiology.⁷

Kentucky (2005) – “Shortage will Continue to Pose Major Challenge”

A study from The University of Kentucky Center for Rural Health found a current and future projected physician workforce shortage and suggests that the “physician shortage will continue to pose a major challenge.” Currently, 2 out of 3 of the state’s counties are officially designated health professional shortage areas (HPSAs) for primary care by the Health Resources and Services Administration (HRSA). To make matters worse, approximately 400 of Kentucky’s currently practicing family physicians are age 60 or older and likely to retire in the near future.⁸

Massachusetts (2007) – “Physician Labor Market Continues to be Under Extreme Stress”

For six years in a row, the Massachusetts Medical Society has conducted a physician workforce study and each successive report points to a strained health care market. This most recent report continues to show the state facing critical or severe shortages in neurosurgery, anesthesiology, cardiology, gastroenterology, family practice, internal medicine, psychiatry, and vascular surgery and adds urology to the list. As the new health care initiative goes into effect, this could further strain the state’s ability to meet demand for services.⁹

Michigan (2005) – “Significant Gap Between Supply and Demand in 2020”

A June 2005 analysis of the physician workforce conducted by the Michigan State Medical Society projects that “each major region in Michigan will exhibit a significant gap between physician supply and demand in 2020.” The aging of the population will drive the increased demand for physicians. Several specialties that primarily serve the elderly are particularly at risk for shortages, including general surgeons, radiologists, urologists, otolaryngologists, and ophthalmologists.¹⁰

Mississippi (2003) – “Extant Physician Shortage will Become More Severe”

Even before hurricane Katrina devastated the gulf coast region, Mississippi was facing a shortage of physicians. Findings presented in a 2003 white paper by the Health Policy Research Center at Mississippi State University indicate an “extant physician shortage will become more severe.” Over half (56%) of the states physicians practice in four counties and 2 out of 3 counties are officially designated health professional shortage areas (HPSAs) with high levels of chronic illness and poverty.

A survey of practicing physicians indicates that many are considering relocation or early retirement which will likely exacerbate the current shortages.¹¹

Nevada (2006) – “School Too Small to Meet State’s Growing Health Care Needs”

A 2006 report by LarsonAllen, a Minnesota consulting firm charged with reviewing Nevada medical education capacity and need, recommends that the state develop a health sciences center in order to dramatically increase medical school and graduate medical education training opportunities. With one of the lowest physician to population ratios and one of the highest population growth rates in the nation, the existing medical education system cannot keep up with the need.¹²

North Carolina (2007) – “State Likely to Face a Severe Shortage Over Next 20 Years”

A Task Force convened by the North Carolina Institute of Medicine concluded that without major changes in the health care delivery system or significant increases in the number of physicians, the state is likely to face a severe shortage of physicians. The projected shortages are not limited to physicians and will also include nurse practitioners, physician assistants and certified nurse midwives. The projected gap is mainly due to population growth, aging of the population and providers, and the increasing prevalence of chronic diseases.¹³

Texas (2002) – “Physician to Population Ratios Increasingly Unfavorable”

The Texas Higher Education Coordinating Board released a report in 2002 stating that, “if the number of physicians does not increase, the [physician to population] ratios will become increasingly unfavorable.” While the number of Texas medical school graduates has remained relatively flat over the past twenty years, the state’s population has grown by 50% in the same span. In addition, underserved populations and the under-representation of Hispanics and African-Americans are critical issues for the state.¹⁴ In June 2007, the governor of Texas signed legislation approved by the 80th Texas Legislature to fund the final components necessary for the Texas Tech University Health Sciences Center El Paso School of Medicine to become a fully operational four-year medical school.¹⁵

Oregon (2004) – “Looming Shortage of Physicians”

Oregon Health & Science University’s Center for Rural Health has been collecting workforce data since the mid-70’s; 2004 data suggests a “looming shortage of physicians.” Population growth in Oregon exceeds growth in the number of physicians; nearly half of the state’s practicing physicians are over 50 and approaching retirement age. This comes at a time when the state is already experiencing shortages in rural areas and in several specialties, including rheumatology, nephrology, gastroenterology, cardiology, allergy-immunology and pediatrics.¹⁶

Utah (2006) – “Shortages Exist in many Specialties”

In 2003, the Utah Medical Education Council sent a survey to all practicing physicians licensed in the state to better understand the existing workforce and to forecast future supply and demand. There are current shortages in pediatric neurology, child psychiatry, adult psychiatry, obstetrics & gynecology, general surgery, dermatology, urology, and cardiology. The state will need to recruit up to 270 physicians a year in order to keep up with growth in demand due to the growth and aging of the population and to replace loss of FTEs due to retirements. Given the nationwide shortages, it will be a challenge to even maintain current recruitment levels.¹⁷

Wisconsin (2004) – “Who Will Care for Our Patients?”

A 2004 report from the Task Force on Wisconsin’s Future Physician Workforce, entitled “Who Will Care for Our Patients? Wisconsin Takes Action to Fight a Growing Physician Shortage” concluded that Wisconsin has current unmet needs for physician services that are likely to worsen in the foreseeable future. Shortages in primary care physicians, general surgeons, and radiologists already exist in rural areas of the state and many specialists are in demand and hard to recruit on a statewide basis. Demand for physician services is projected to exceed even the most optimistic estimate of future physician supply in the state due to population growth and the aging of the population. Demand for primary care services is projected to increase by an additional 13.5% and is expected to exceed 20% for all other physicians.¹⁸

SPECIALTY SPECIFIC STUDIES

Recent workforce studies indicate that we face current and future shortages in a wide array of specialties. In addition to potential shortages in primary care specialties, as the population ages, the demand for specialists that provide care for patients over 65 will increase significantly. As indicated by a number of the studies below, the aging of the population is expected to contribute to shortages in many of these specialties.

Allergy and Immunology (2000) – “Shortage within Next Ten Years”

A June 2000 report prepared for the American Academy of Allergy, Asthma, and Immunology by SUNY Albany’s Center for Health Workforce Studies concludes, “there will be a shortage of allergist/immunologists within the next ten years.” Demand is rising and the supply of new physicians will not be able to keep pace with the current retirement rate of practicing allergists and immunologists and unable to meet the projected increase in demand.¹⁹

Anesthesia (2003) – “Current Shortfall of Anesthesiologists”

A 2003 assessment of the supply of and demand for anesthesiologists found a current shortage. There was not enough data to determine with confidence how demand for anesthesiologists would change in the coming years. If demand increases above 1.5%, the authors project a continued shortage through 2015.²⁰

Cardiology (2004) – “Serious Shortage of Cardiologists”

The American College of Cardiology (ACC) Task Force on Workforce concluded that the U.S. is facing a “serious shortage of cardiologists.” A report from their 35th Bethesda Conference, endorsed by the American Heart Association and a host of other cardiology-related societies, predicts that, by 2020, there will be a 20% decrease in the age-adjusted supply of cardiologists at the same time we will see a substantial increase in the incidence and prevalence of cardiovascular disease due to the aging of population and the epidemic of obesity.^{21 22 23}

Child Psychiatry (2006) – “Evident Shortage Will Continue Well into the Future”

A 2003 Academic Psychiatry article finds that, “despite the decades-long projection of an increasing utilization of child and adolescent psychiatry services and an undersupply of child psychiatrists, the actual growth and supply of child and adolescent psychiatrists has been very slow.” A 1990 report by the

Department of Health and Human Services concluded the nation should have over 30,000 child psychiatrists but there are less than 7,000 currently practicing in the nation.²⁴

Critical Care Workforce (2006) – “Growing Supply of Intensivists will be Insufficient”

In June 2003, Congress asked HRSA to examine the adequacy of the critical care workforce in response to concerns that the number of pulmonary and critical care physicians would not be able to meet the needs of the aging baby boomer population. HRSA worked with the College of Chest Physicians to update physician workforce models to include critical care physicians and found that “demand for intensivists will continue to exceed available supply through the year 2020 if current supply and demand trends continue.”²⁵

Dermatology (2004) – “Inadequate Supply of Dermatologists to Meet Demand”

In an article published in the *Journal of the American Academy of Dermatology*, “survey data examining wait times, physician perception, use of physician extenders, searches for new employees, and experience of recent graduates entering the workforce [indicates] there is an inadequate supply of dermatologists to meet the demand for services.” Nearly half of practicing dermatologists believe their community could use more dermatologists. One third are recruiting new associates and new graduates are readily able to find jobs.²⁶

Emergency Medicine (2006) – “National Crisis in Emergency Care”

In 2006, the IOM released a series of three reports on the future of emergency medicine concluding that emergency departments and ambulatory services are overburdened, under-funded, and highly fragmented. Patients face long waits in overcrowded emergency rooms and often needed on-call specialists are not available. A significant contributing factor is that more and more patients are turning to emergency departments for care because of lack of insurance, for after-hours care, or due to limited options in rural communities.²⁷

Endocrinology (2003) – “Demand Will Exceed Supply from Now until 2020”

According to a study published jointly in the May 2003 issues of the journals *Endocrine Practice*, *Diabetes Care*, and the *Journal of Clinical Endocrinology & Metabolism*, the supply of newly trained endocrinologists will not be sufficient to offset retirements and future increases in demand. As it stands, current demand exceeds supply by 15% and the aging of the population compounded with physician retirements will exacerbate the situation. The authors present multiple models for estimating the future demand for endocrinologists and even the conservative estimates predicate a widening shortage by 2020.²⁸

Geriatric Medicine (2004) – “Severe and Worsening Shortage”

A report from the American Geriatrics Society (AGS) and the Association of Directors of Geriatric Academic Programs (ADGAP) suggests a “severe and worsening shortage.” With only 7,000 practicing geriatricians we are currently only meeting 35% of estimated need. The Alliance for Aging Research estimated that another 14,000 geriatricians are needed to adequately care for the existing elderly population. By 2030, they estimate the need to more than double to 36,000. However, 26% of geriatric medicine GME slots are unfilled, and 54% of geriatric psychiatry slots are not filled. Financial disincentives (low Medicare reimbursement rates) are cited as the largest barrier to entry to the field.²⁹

Medical Genetics (2004) – “Situation is Critical”

An October 2004 Report of the Banbury Summit Meeting on Training of Physicians in Medical Genetics states that “the medical genetics workforce situation is critical.” As the scope of practice for geneticists increases beyond rare pediatric disorders and becomes increasingly relevant to common health concerns (including some forms of cancer and a number of neurological and cardiovascular disorders), declining numbers of physicians are going into the field. 58% of clinical genetics GME slots are unfilled. 17 states currently have shortages and the 5 to 15 year forecast indicates further shortages.³⁰

Neurosurgery (2005) – “Severe Decline in Number of Active Neurosurgeons”

According to a study published in the February 2005 issue of the Journal of Neurosurgery the nation is encountering a “severe decline in the number of active neurosurgeons and a static supply of residents.” The number of practicing neurosurgeons has declined while at the same time there has been a significant increase in the demand for neurosurgeons. Evidence cited includes a doubling in the average number of journal-advertised academic and private neurosurgery positions per year between 1994 to 1998 and 1999 to 2003.³¹

Oncology (2007) – “Oncology Moving to a State of Acute Shortages in 2020”

A 2007 report in the Journal of Oncology Practice concludes that the nation will face a shortage of oncologists if current cancer rates and practice patterns continue. Demand is projected to increase by 48% by 2020 due to the growth in the aged population and to the increasing number of cancer survivors. Supply is only projected to increase by 14% by 2020 due to physician retirements and limited expected growth in the number of oncology fellowship training slots. The authors note there are opportunities to minimize the gap in supply and demand but that no single remedy alone can fully address the likely shortage.³²

Pediatric Subspecialties (2003) – Federal Expert Panel Created in Response to Shortage

In 2003, the Department of Health and Human Services (DHHS), through its Bureau of Maternal and Child Health (MCHB/HRSA), created a federal Expert Panel on Pediatric Subspecialty Capacity in response to growing concerns over shortages of pediatric subspecialists across the country. Though the work of the Expert Panel is ongoing, early reports have identified current and future problems with the pediatric specialty workforce leading to problems in access to appropriate subspecialty care for children with special needs throughout the country. For example, a recent review of the pediatric rheumatology workforce found that many children with juvenile arthritis and other serious autoimmune conditions are often forced to seek care from adult specialists because of a lack of adequately trained pediatric providers.³³

Primary Care (2006) – “Primary Care on the Verge of Collapse”

In 2006, the American College of Physicians released a report entitled “The Impending Collapse of Primary Care Medicine and Its Implications for the State of the Nation’s Health Care”. At a time of growing demand for primary care due to growth in the number of people with chronic diseases and long term care needs of an aging population, there has been a decline in the number of medical students entering primary care. The authors cite a number of policy recommendations for averting a crisis, including implementing the advanced medical home (a care coordination model), reforming reimbursement policies, and creating financial incentives for improving quality and efficiency.³⁴

Psychiatry (2003) – “Unclear Rate of Growth will Keep Up with Demand”

In the Winter 2003 issue of *Academic Psychiatry*, an analysis of the current psychiatric workforce trends makes it doubtful “the rate of growth will be able to keep up with the rate of growth of demand.” The average age of practicing psychiatrists is 55.7 and the percentage under 40 dropped from 24% in 1989 to 8% in 2002. Additionally, analysis of the Professional Activities Survey data reveals reductions in the average number of hours worked per week and in the percent of time psychiatrists spend in direct patient care.³⁵

Rheumatology (2007) – “Shortage Exists Now and is Likely to Worsen”

In a 2007 *Arthritis and Rheumatism* article, the authors predict substantial excess in demand relative to the supply of rheumatologists between 2005 and 2025. The nation is facing an increasing prevalence of musculoskeletal diseases due to the growth and aging of the population at a time when the supply of rheumatologists is not projected to increase. The authors note it appears there is a current shortage as a survey of rheumatologists reveals an average wait for a new appointment of 38 days.³⁶

NATIONAL REPORTS**“Growth and Aging of the U.S. Population will Cause a Surge in Demand” – The federal Department of Health and Human Services (DHHS) (2006)**

The Health Resources and Services Administration (HRSA) in the U.S. Department of Health and Human Services (DHHS) released a report in 2006, projecting a shortfall of approximately 55,000 physicians in 2020. If current trends continue, the full time equivalent (FTE) physician supply is projected to grow to 866,400 by 2020, while demand for physicians will increase to 921,500 due to the growth and aging of the U.S. population. The report projects shortages will be in greatest in non-primary care specialties.³⁷

“U.S. Likely to Face a Shortage in 2020” – U.S. Council on Graduate Medical Education (COGME) Report (2005)

In January 2005, the Council on Graduate Medical Education (COGME) released its 16th Report, “Physician Workforce Policy Guidelines for the United States, 2000-2020” recommending an increase of 3,000 medical school graduates by 2015 in order to meet rising demand and need. Only under the most optimistic of various supply and demand scenarios outlined in the report would the nation have an adequate supply to meet demand in the year 2020. When the mid-points of the projected supply and demand scenarios outlined in the report are used, the net result is a projected shortage of about 85,000 physicians in 2020 – which is equivalent to approximately ten percent of today’s physician workforce.³⁸

“America is Running out of Physicians” – Merritt, Hawkins & Associates (2004)

In 2004, Merritt, Hawkins & Associates, a health care staffing and consulting firm, published, “Will the Last Physician in America Please Turn off the Lights? A Look at America’s Looming Doctor Shortage.” The authors predict there will be a shortage of 90,000 to 200,000 physicians and that average wait times for medical specialties are likely to increase dramatically beyond the current range of two to five weeks. Various factors, including the demise of managed care, the aging of the population, changing practice patterns, increasing regulation and paperwork are some of the reasons cited for the impending shortage.³⁹

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