

Issue Brief

Maine's Health Care Workforce

Affordable, quality health care is critical to Maine's continued economic development and quality of life. Yet substantial shortages exist at almost all levels of the health care workforce in Maine. These shortages can impact the cost and availability of care, two areas of growing concern for everyone who relies on the health care system.

Maintaining a strong health care workforce is a serious challenge for the state of Maine. Understanding current conditions and needs throughout the state, and addressing the gaps through education, incentives and collaborative partnerships, will help to attract, build and maintain a strong and qualified pool of health care professionals to serve Maine's population.

Maine's Unique Challenge

Maine has an aging population with changing health care needs and a high degree of chronic illness. **Maine has the highest median age in the United States, at 41.2 years. The Census Bureau projects that 26.5% of the state's population will be 65 or older by 2030.**¹ With age comes an increase in utilization of health care services. In addition, problems such as obesity, tobacco use and poor nutrition continue to impact the health of Maine residents.

The health care industry is Maine's largest industry, employing over 75,000 people in 2004 and accounting for 14% of total wages paid in the state.² Maine's health care workforce is also aging, and many will reach retirement age and move from being health care service providers to recipients of these services. Hiring alone will not fill this gap. Increasing the pipeline of an educated, skilled and substantial health care workforce, as well as expanding training program capacity and

accessibility, will be critical to meeting Maine's needs.

The challenge of providing adequate health care access is particularly acute in Maine's rural areas, where wages are lower and opportunities for professional development are more limited. Recruiting health care professionals to live and provide badly needed services in the most rural parts of the state is one of the state's greatest challenges, and most pressing needs.

The good news is that average health care wages in Maine are 12% higher than the all-industries average, at \$35,690, with lower relative turnover. Demand for jobs in the health care sector remains strong.

The 10 fastest growing occupations in the U.S. include seven occupations related to health, and two-thirds of the fastest growing jobs in Maine are related to health care.

Many of these skilled professions – such as licensed practical nurses – require two years or less of post-secondary education. Particularly at a time of a weakened economy, new opportunities in health care careers for those facing job losses or cutbacks could benefit both the state's health care workforce shortfall and the individuals affected.

Current State of Maine's Health Care Workforce

The U.S. Department of Health and Human Services has developed criteria for Health Professional Shortage Areas in order to determine areas of critical need across the country. Notably, all 16 of Maine's counties have geographic areas or minor civil divisions with a HPSA designation.³

Fast Facts

- Maine has the highest median age in the U.S., at 41.2 years
- 26.5% of Maine's population will be 65 or older by 2030
- Health care is Maine's largest industry, employing over 75,000 people
- Health care jobs account for 14% of total wages paid in the state
- Two-thirds of the fastest growing jobs in Maine are related to health care
- All 16 of Maine's counties have areas designated as Health Professional Shortage Areas (HPSA)

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The disparity between the demand for skilled health care workers and the anticipated supply in Maine was outlined in “A Call to Action” report conducted by the Health Care Workforce Leadership Council in 2001 and included in a final report presented to the Maine Legislature in 2004. This trend continues in 2009 and includes a significant deficit in jobs for registered nurses and nurse practitioners, as well as for technicians in radiology, health information, and pharmacy.⁴

- **The New England Regional Healthcare Workforce Collaboration’s September 2008 report identified physicians (and in particular, primary care physicians), nurses, oral health and mental professionals, pharmacists and physician assistants, as the professions for which strategies addressing rural supply shortages and recruitment/retention needs should be developed.**⁵

In addition, demand for workers in allied health – such as physician assistants, occupational therapists, and physical therapists – remains strong as Maine’s population ages and service utilization increases. Training capacity does not currently meet demand in these fields. At the University of New England, for example, over 1,000 applicants were received for 43 available slots in its Physician Assistant program in 2008.

Outlined below are four healthcare occupations where supply and demand in Maine present particular challenges.

Nursing

According to the Maine Department of Labor (DOL) 2006 Healthcare Occupations Report, Maine has a greater share of jobs in nursing and residential care facilities than the rest of the country (30.5% vs. 23.4% of the healthcare work force, respectively), largely attributed to the state’s older population. Nursing needs within mental health services, in particular, are acute – within that job pool exists a much larger concentration of mental health professionals vs. the national average, relative to population size. Between 1994 and 2004, nursing job growth in Maine’s residential mental health, community care facilities for the elderly, and other residential care exceeded 100% in each area.⁶

The report states that attracting and retaining a sufficient number of nurses in Maine is a challenge. In 2005, 6.3% of all RN positions were vacant. The average age is 49, an age at which many are at or nearing retirement, so attrition is a significant factor in projecting nursing workforce needs in the state. Only about 25% of RNs are 41 years old or younger. Similar problems exist in supply and demand for licensed practical nurses (LPNs). Replacing retiring workers remains a key challenge for employers in Maine. Developing and supporting policies to retain existing nurses, as well as attracting a new generation of qualified professionals to enter the field, is critical to addressing the gap between supply and demand.

Maine colleges and universities offer a number of educational opportunities in nursing, including programs at several entities in the University of Maine system, Husson University, St. Joseph’s College, University of New England, and five community colleges.

Physicians

As in most other workforce areas outlined in this brief, Maine’s expanding and aging population continues to influence the need for physicians in the state. Other factors, such as individuals’ health insurance options, residency opportunities in Maine, and reimbursement policies, are affecting demand for physician services.

A recent article in the *Journal of the American Medical Association* predicts a substantial shortage of primary care physicians (PCPs) nationwide by 2025. It states that the projected 40,000 PCP shortfall is likely to be felt even more acutely in underserved areas and among vulnerable populations such as the elderly and those in rural areas.⁷

The reimbursement policies of MaineCare and Medicare present a challenge in the delivery of healthcare services, particularly among PCPs in the most rural parts of the state. There are a larger percentage of Medicare and MaineCare patients in rural areas of Maine, and low reimbursement levels together with increased administrative demands present a cost burden to many PCPs.

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- Maine’s only medical school, the University of New England College of Osteopathic Medicine (UNECOM) in Biddeford, has 310 graduates practicing in Maine, 68% of whom are primary care physicians. UNECOM graduates comprise 9% of Maine physicians, 15% of Maine primary care physicians, and 24% of Maine physicians serving in rural areas.⁸
 - Maine Medical Center has established a medical school partnership with Tufts University School of Medicine that will begin in 2011 and offer a combined diploma from MMC/TUSM. The program will reserve 20 of its 36 seats for Maine residents or those in adjacent locales to encourage and emphasize rural and small town practice.
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Providing incentives to students who attend medical school in Maine will help to ensure that a larger proportion remain and practice here. Policies that support and enable access, particularly in underserved areas, should also be considered to improve health outcomes across the state. The *JAMA* article cites a successful program through the National Health Services

Corps (NHSC) that provides clinicians with scholarships and student loan reimbursement in exchange for working in underserved areas for at least two years; physicians who participate in a NHSC program for at least four years are substantially more likely to remain in an underserved area after leaving the program.

Positive Impact of Primary Care Physicians

- The addition of one primary care physician per 10,000 population in the U.S. resulted in 3.5 fewer people dying each year.
- Each 10th percentile increase in primary care physician supply equals a 4% increase in odds of an early-stage breast cancer diagnosis.
- In U.S. Standard Metropolitan Statistical Areas, an increase of one PCP/10,000 would decrease:
 - Inpatient admission by 5.5%
 - Outpatient visits by 5.0%
 - ER visits by 10.9%
 - Surgeries by 7.2%
- Increasing the number of primary care physicians in a state by 1 per 10,000 population was associated with a rise in that state's quality rank of more than 10 places and a reduction in overall spending of \$684 per Medicare beneficiary.

Source: American College of Physicians (2008)⁹

Pharmacists

According to the Health Resources and Services Division (HRSD) Report to Congress, Maine has just 52.2 pharmacists per 100,000 people, one of the lowest ratios in the country (vs. the national average of 68.1).¹⁰ A scoring system developed by the Pharmacy Manpower Project, Inc., ranks Maine's demand index for pharmacists close to the highest level, with a score of 4.4 out of 5. The Northeast region also has high demand, with an index of 3.94.

The HRSD report cites expanded responsibilities and administrative duties of pharmacists, the aging population and an increased growth in prescription medication usage as among the reasons contributing to the pharmacist shortage. Moreover, in rural areas, pharmacists may be the most accessible (or only) healthcare professionals, so this shortage is more problematic.

The DOL Health Occupations Report projects 2.5% annual employment growth for pharmacists. Job vacancies for pharmacists in 2005 increased markedly vs. 2002, while the job vacancy rate also increased to 3.7%. This trend is expected to continue. Pharmacists who choose to work in Maine are rewarded with higher-than-average wages vs. the national average.

The HRSD report suggests that a contributing factor to a pharmacist shortfall in some states with low ratios is the lack of a school of pharmacy. Two universities in Maine are moving to address the shortfall. The University of New England will

enroll its first class of Pharm.D. (Doctor of Pharmacy) students at its new College of Pharmacy in September 2009, and is expected to graduate close to 100 pharmacists per year by 2013. Husson University in Bangor has also launched a School of Pharmacy and expects to admit 65 students in its inaugural Pharm.D. class in the fall of 2009.

Oral Health Professionals

Oral health is recognized as a critical component of overall health and wellness. Poor oral health and periodontal disease are associated with health conditions such as stroke, heart disease, diabetes, and negative outcomes for pregnant women.¹¹ Securing access to local, affordable oral health care is therefore important to state health planning from both a prevention and treatment perspective. Maine ranks in the bottom half of states (31st) in percentage of residents who have visited a dentist within the past year¹².

Maine's dentist to population ratio is one to 2,165 residents, significantly lower than the national ratio of one to 1,656 people. Further analysis shows an even lower ratio — one dentist to every 3,160 residents — when considering only those dentists who are general practitioners.¹³ Given that 67% of Maine's dentists are 45 years and older and a full third of Maine's dentists are approaching retirement age, it is critical to invest in the infrastructure necessary to educate and retain dentists for the current — and future — Maine workforce.¹⁴ Finally, trends in dental education demonstrate that in the year 2014 more dentists will be retiring from the workforce than

graduating from dental school.¹⁵ This information indicates that all sectors of society, not just those in the lower socio-economic groups, will have difficulty accessing dental services.

Dental assistants and dental hygienists are on the top ten list for growth in the U.S. between 2004 and 2014.¹⁶ These occupations are growing quickly because the demand for dental services is expanding. Dentists will be in demand and will need to increase productivity by employing allied health personnel to meet society's oral health needs.

Addressing Maine's Health Care Workforce Needs

Maine will continue to experience a serious shortfall in its health care work force if it does not address three critical areas:

- **The health care training program capacity in Maine must be expanded and made accessible to people in rural areas.** Our colleges and universities need to expand not only classroom space and find enough qualified faculty, but also increase the number of clinical training sites in Maine (such as hospitals, clinics, and other sites). Options to consider to make training accessible in rural areas include satellite clinical campuses and distance learning programs (using IT capacity).
- **Maine must increase retention and incentives for its healthcare work force.** The state should expand scholarships, loan forgiveness and debt relief programs, increase reimbursements for primary care physicians and others, and offer tax incentives to practice and remain in rural areas.
- **Maine must continue to build awareness of health careers among a variety of populations,** including K-12 students, undergraduate college students, mid-career workers who want to change careers, older Mainers who want to remain in the work force, and individuals who face job losses in other professions. Generating interest in and exposing people to the opportunities available in health care occupations will help to grow the workforce pipeline as our existing workforce ages and reaches retirement.

Collaborating to Meet the Challenge

For years, numerous individuals and groups within the state have actively worked to address Maine's health care workforce issues. Health care providers and educators are making significant inroads through training and education.

In 2005, the Legislature formally identified the need to develop a comprehensive way of collecting and reporting data, which led to the 2006 Health Occupations Report. The Legislature established the Maine CDC Health Workforce Forum, which comprises stakeholder groups, including employers, professional associations, and policymakers, who are coordinating and connecting the individual efforts already under way.

The Forum is looking at health care, long-term care, and public health workforce issues, and draws upon the expertise of the stakeholders to collaborate on solutions and make long-term recommendations. The goal is that an organized collaboration of professionals across many service areas will lead to an effective and systemic approach to solving the state's critical health care workforce shortages.¹⁷

For More Information

New England Rural Health Roundtable:
www.newenglandruralhealth.org

Maine Primary Care Association:
<http://www.mepca.org/>

Maine Area Health Education Center (AHEC) Network:
<http://www.une.edu/com/ahec/>

Maine Office of Rural Health and Primary Care:
<http://www.maine.gov/dhhs/boh/orhpc/>

Maine CDC Health Workforce Forum
<http://www.maine.gov/dhhs/boh/orhpc/>

Maine Department of Labor:
<http://www.maine.gov/labor/lmis/pdf/HealthcareReport.pdf>

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