

*Issues in Missouri Health Care 2009*

Who Will Care for Missouri's Sick: Assuring an  
Adequate Health Care Workforce

## **Acknowledgement**

This is one in a series of issue papers on critical health care issues facing Missouri and the nation prepared by Health Management Associates, Inc., a national health care policy research and consulting firm and made possible by funding from the Missouri Foundation for Health and the Healthcare Foundation of Greater Kansas City. The papers are intended to provide nonpartisan expert analysis in an accessible format that will contribute to the public dialogue on the state of health care in Missouri. Questions should be directed to Thomas McAuliffe, Policy Analyst, Missouri Foundation for Health, 314.345.5574, [tmcauliffe@mffh.org](mailto:tmcauliffe@mffh.org).

## **Issue Statement**

An adequate supply of health care providers in rural areas has been a long-standing problem throughout the country. States and local communities have tried many different approaches to developing, attracting, and retaining primary and specialty care physicians, nurses, dentists and other allied health providers. The success of these strategies has been uneven, highlighting the difficulty of providing a supply of rural health professionals sufficient to meet demand. In many cases, evaluation of the effectiveness of the various approaches is lacking.

## **Background**

### **The Challenge**

Rural communities across the country face significant barriers to having an adequate supply of medical providers—from nurses and primary care doctors, to specialists, mental health professionals and dentists. In many cases, this problem is compounded by a national shortage of particular types of providers, as is the current situation for nurses and primary care physicians. However, there are endemic, on-going issues that make recruitment and retention of health care providers very difficult in these less populated areas. Key among them are:

- Lack of backup and on-call provider coverage, often resulting in a provider being on-call 24/7 without relief.
- Professional isolation and lack of access to peers or specialists for consultation.
- Limited medical infrastructure such as access to state-of-the-art diagnostic and other medical technologies and an integrated electronic health record system.
- Wide range of generalist skills required and the consequent lack of opportunity to specialize.
- Shortage of career opportunities for spouses.
- Perceived lack of high quality competitive schools for children.
- Lack of desired social opportunities (clubs, theatre, music, sports, restaurants).
- The “Nordstrom Factor” – limited access to shopping opportunities.
- Inadequate reimbursement concerns – Medicare and Medicaid rates and the declining proportion of insured patients.
- No exposure to health career options for young people in rural areas.
- The trend of young adults moving away from rural areas.
- Limited financial and human resources to address health care challenges.

## **The Missouri Context**

The Missouri Department of Health and Senior Services (DHSS) Office of Rural Health has defined “rural” counties as the 103 counties in Missouri that do not contain urbanized areas, as established in 1999 by the U.S. Census Bureau. These rural counties make up 89 percent of the state’s counties and 97.4 percent of the state land mass, but only about 31 percent of Missouri’s population lives in these counties (as of the 1999 Census). Like most of rural America, the population is older than average, and the Hispanic population in rural areas is growing much faster than other ethnicities, raising additional challenges in terms of language and culture that health care providers must accommodate.

Twenty-five counties in Missouri, all rural, have a population-to-primary-care-physician ratio that exceeds 3,500-to-1, the federal standard for health professional shortage areas. Among urban counties, only one (Jefferson) has a ratio greater than 3,000-to-1, while one-third of rural counties exceed this ratio. Most urban counties (75%) have ratios of less than 1,400-to-1. Although 40 percent of Missouri’s population lives in rural areas of the state, only 25 percent of the primary care physicians are located in rural areas. This disparity in primary medical practitioners is a critical factor in assuring access to preventive and maintenance health services in rural Missouri.<sup>1</sup>

Other considerations related to physician shortages in Missouri including the following:

- Missouri ranks second among states in exporting the physicians trained in state to other parts of the country.
- The types of physicians most needed in rural Missouri are primary care, general surgeons and psychiatrists.<sup>2</sup>

There are efforts underway in Missouri to increase the number of physicians locating their practices in rural areas. The University of Missouri School of Medicine works with the local Area Health Education Center (AHEC) to create one of the most comprehensive “pipeline” programs in the U.S.<sup>3</sup> The program staff identifies and selects fifteen undergraduate students in their sophomore year to join a highly focused and well supported program. The students commit to finishing Medical School with the intention to practice in rural areas. Special provisions are made for them, such as exemption from

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<sup>1</sup> *Missouri Office of Rural Health Biennial Report 2006-2007*, Office of Primary Care and Rural Health, Department of Health and Senior Services. Accessed 10/08 at <http://www.dhss.mo.gov/PrimaryCareRuralHealth/RuralHealthReport07.pdf>

<sup>2</sup> Conversation with Kathleen Quinn and Weldon Webb, Missouri Office of Rural Health, May 2008

<sup>3</sup> *Ibid.*

taking the MCAT, mentoring and clinical rotations in rural areas working directly with physicians there, and financial assistance from federal grants as well as financial and housing assistance from many of the local hospitals. Students participate in community integration projects focused on health trends that are supervised by community organizations. Community “Ambassadors,” usually young couples from the area, also volunteer to provide social support and assistance to the medical students while working in their community, a strategy the students report as being very helpful.

The program also has a placement function that matches graduates with communities and facilities needing their expertise. Continuing Medical Education is also made available. Analysis of ten years of data from this effort shows that out of thirteen students who have finished the program, ten stayed in state and five of those now practice in communities with populations less than 50,000.

When asked what additional resources would be helpful, program administrators indicated a need for additional regional clinical campuses, better statewide data gathering on rural communities’ specific medical personnel needs, and modifying the loan repayment program to target it at the medical school level rather than undergraduate level. However, the greatest weakness they cited is the lack of rural residencies for their program, which hampers the strong connection that can be forged during the medical residency.

## **Policy Options**

The following discussion highlights policy options that have been undertaken by other states around the nation. It is not an exhaustive list, and there has been no effort to determine best practices among these options. A more extensive analysis would seek to assess the data generated by the different initiatives. For purposes of this paper, options have been included (a) based on their prevalence among the states and/or (b) positive outcomes identified by those states.

### **Option 1: Data Development and Planning**

The Institute of Medicine points out the need for states to assemble reliable data on the supply of health professionals, enabling states to design more effective policies and programs directed at maintaining and enhancing that supply.

#### ***Iowa Health Professions Inventory (IHPI)***

The Iowa Health Professions Inventory (IHPI) contains demographic, educational and professional information on every active Iowa health practitioner in selected professions

(physicians, nurse practitioners, physician assistants, dentists and pharmacists). The computerized system provides “real time” access to supply and demand data on health professionals in the state. The tracking system allows the state to: 1) characterize its health workforce in real time; 2) monitor workforce trends (e.g., age, supply, demand); 3) provide support and justification for new workforce initiatives, such as recruitment and retention programs; 4) evaluate existing workforce programs; and 5) conduct research that results in policy changes.<sup>4</sup>

## **Option 2: Graduate Medical Education**

Graduate Medical Education (GME) payments are funded through a variety of sources, including Medicare and Medicaid. Historically, the payments have been linked to inpatient care, which has not improved the financing of programs to train the office-based generalists who provide most rural health care – especially primary care physicians and general internal medicine physicians. Only a very small proportion of Medicare GME monies are paid for resident training in ambulatory clinic sites.

After Medicare, Medicaid is the next largest public payer of graduate medical education, but most states – with the notable exception of Michigan, Minnesota and Tennessee – do not have Medicaid GME initiatives that link residency programs to accountability and to public need.

### ***Utah Medical Education Council***

For the last several years, Utah has been driving decisions on the shape of graduate medical education in the state by collecting and utilizing information on how many physician residents will be trained, in which practice settings, and in which specialties. A state-chartered Medical Education Council is now receiving and disbursing all Utah Medicare Direct Medical Education payments. The Council also has authority within the demonstration to receive all Medicare Indirect Medical Education payments and Medicaid Graduate Medical Education payments. One of the goals of this demonstration is to use graduate medical education monies to increase the number of graduating physicians who choose to practice in rural areas.<sup>5</sup>

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<sup>4</sup> Who Will Care For Our Patients? Wisconsin Takes Action to Fight a Growing Physician Shortage, Wisconsin Hospital Association and Wisconsin Medical Society, March 2004. Accessed 10/08 at [http://www.wha.org/pubArchive/special\\_reports/March2004WhoWillCareForOurPatients.pdf](http://www.wha.org/pubArchive/special_reports/March2004WhoWillCareForOurPatients.pdf)

<sup>5</sup> *Utah Links Federal Funding for Graduate Medical Education to State's Physician Workforce Needs*, Pat Taylor, PhD, Office of Rural Health Policy, Health Resources and Services Administration. Accessed 10/08 at <http://ruralhealth.hrsa.gov/pub/UtahGME.asp>

### **Option 3: Holistic Approach to Attracting Needed Professionals**

Uneven geographical distribution of health care professionals is a major challenge for states, and shortages of physicians in rural areas are a persistent occurrence. Several medical school programs are taking the lead to increase the number of rural physicians by selectively admitting students who come from rural areas in the belief that they will return to practice in those areas. Physicians very commonly decide to stay in the community or hospital system where they did some or all of their residency training.

#### ***Pennsylvania: Physician Shortage Area Program (PSAP)***

The Physician Shortage Area Program (PSAP) at Jefferson Medical College of Thomas Jefferson University in Philadelphia, Pennsylvania, recruits and then selectively admits students who have grown up in rural areas or small towns and who intend to return to a similar rural area to practice family medicine. PSAP students follow a curriculum similar to their non-PSAP classmates but take some courses that focus on practicing family medicine in a rural community. In addition, they receive training in rural or small town areas and pair with an academic advisor from Jefferson's family medicine department. During their third and fourth years, PSAP students are required to complete their clerkships and sub-internships in rural or small town family practice centers. Following graduation, PSAP participants are expected to complete rural family medicine residencies.

Since 1978, PSAP has also been supported by the PSAP Cooperative Program, a joint program with six undergraduate institutions in Pennsylvania: Allegheny College, Bucknell University, Franklin and Marshall College, Indiana University of Pennsylvania, the Pennsylvania State University and the University of Scranton. All of these Institutions assist in the recruitment and selection of PSAP applicants.<sup>6</sup>

### **Option 4: Developing and Sustaining Interest in Needed Health Careers**

Several states have developed innovative ways to attract middle and high school students to health careers, while others have developed strategies to break the cycle of hiring and training employees who then leave to work in other systems.

#### ***California: Grow Your Own K-12***

In Northern California, the Regional Health Occupations Resource Center (RHORC) at Butte College has collaborated with Chico-based Enloe Medical Center to develop, test,

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<sup>6</sup> *Who Will Care for Our Patients*

and promote an outreach initiative targeting local middle and high school students with the intent of increasing their awareness of health care careers. RHORC at Butte and Enloe developed a health care recruitment kit containing a career fair template, resources to introduce middle and high school students to the wide range of health sector job opportunities, and guidelines for counselor workshops and parent orientation sessions.<sup>7</sup>

***California: Health Career Opportunities for Local Job Seekers***

For many years, the Shasta-based Mercy Medical Center (Mercy) recruited the vast majority of its health care workers from outside of the community. Mercy saw an opportunity to break the cycle of hiring, training, and then losing staff to other systems.

In partnership with the College of the Siskiyous, Mercy launched a major campaign to “sell” health care careers to the local population. The two institutions flooded the local community with health care career information. They participated together in health career fairs, let prospective health care workers shadow hospital workers to see what working in the field was like, and recruited heavy media involvement.

The hospital also opened its doors to community residents interested in health care careers, providing them with a \$7.50/hour incentive to job shadow incumbent health care workers. The job shadow initiative extended to existing health care workers, so that certified nursing assistants were paid to job shadow licensed vocational nurses (LVNs) and LVNs to job shadow registered nurses.

Mercy decided to survey local residents to determine the barriers to entering health care occupations. Not surprisingly, the most important obstacles were a lack of awareness of job opportunities, the cost of health care training programs, and/or anticipated financial problems resulting from being a full time student with no income.

In response, Mercy and the College of the Siskiyous offered a work-study program that is available to students enrolled in college health care program and to those taking classes that are required to enter these programs.<sup>8</sup>

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<sup>7</sup> *The Rural Kaleidoscope: A Guide on Promising Practices for Diversifying California's Rural Healthcare Workforce*, California State Rural Health Association, December 2005. Accessed 10/08 at <http://www.csrha.org/outreach2/ruralkaleidoscope.pdf>

<sup>8</sup> Ibid

## **Option 5: Regional Collaboration**

States and their higher education systems in some parts of the country have formed regional efforts to increase the supply of health care professionals. The Western Interstate Commission for Higher Education (WICHE) is one such collaboration that has resulted in three student exchange programs and a distance learning initiative available to students in Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

### ***Professional Student Exchange Program (PSEP)***

PSEP enables students to enroll in selected out-of-state professional programs (e.g., dentistry, medicine, occupational therapy and optometry, to name just a few), usually because those fields of study are not available at public institutions in their home states. Exchange students receive preference in admission. The home state pays a support fee to the admitting school to help cover the cost of the students' education. As a result, students pay reduced levels of tuition, usually resident tuition in public institutions or reduced standard tuition at private schools.

Traditionally, the PSEP program has supported the training of professionals in out-of-state programs because of three conditions: 1) the sending state has identified the profession as critical; 2) the sending state's higher education institutions do not offer programs of study in the identified critical profession; and 3) the receiving higher education institutions have capacity to accept students into their established programs.

Students must meet the participating institution's requirements for certification and admission. Regarding certification, each state establishes its own requirements for certification through an application process and designates a state certifying officer. Most states have some residency requirements. There are also states that have a payback or other obligation once schooling is complete, such as repayment of all support fees (plus interest) or practicing in the "sending" state one year for each year of academic support received.<sup>9</sup>

### ***The Western Undergraduate Exchange (WUE)***

Through WUE, students in western states may enroll in many two-year and four-year college programs at a reduced tuition level. The tuition is 150 percent of the institution's regular *resident* tuition, which is considerably less than nonresident tuition. Students do

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<sup>9</sup> *Mental Health Workforce in the WICHE West: Meeting Workforce Demands Through Regional Partnership*, Western Interstate Commission for Higher Education, Office of Rural Health Policy, Health Resources and Services Administration, US Department of Health and Human Services. Accessed 10/08 at <http://ruralhealth.hrsa.gov/pub/WicheMH.asp>

not need to demonstrate financial need to receive the WUE tuition benefit. Students who enroll in participating Western Undergraduate Exchange programs qualify for the WUE tuition rate.

As of the date of the cited study, more than 17,000 students participate in the WUE program. Through the WUE program, WICHE states have saved a combined total of \$77.8 million.<sup>10</sup>

***The Western Regional Graduate Program***

The Western Regional Graduate Program (WRGP) makes high-quality, distinctive graduate programs available to students of the West at a reasonable cost. As part of the Student Exchange Program of WICHE, WRGP helps place students in a wide range of graduate programs, all designed around the educational, social and economic needs of the West. Through WRGP, residents of Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming are eligible to enroll in available programs outside of their home state at resident tuition rates.<sup>11</sup>

***The Northwest Educational Outreach Network Project***

WICHE also is partnering with the Northwest Educational Outreach Network (NEON), a group of 32 higher education institutions and state governing and coordinating boards in 10 states, to develop new strategies to improve student access to various academic disciplines using technology-mediated education. Through institutional collaborations, NEON is working to extend the availability of degree programs in three disciplines to students via Web-based or electronically-delivered courses. The initial programs include: a Ph.D. in nursing; a graduate certificate in logistics and supply chain management; and online courses that lead to fulfilling the certification requirement for school librarians. This interstate project is funded by the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE). Over time, NEON's collaborations may be expanded to include other academic programs, allowing students to enroll in courses while remaining in their communities.<sup>12</sup>

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<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

## **Implications**

The policy options discussed above only begin to scratch the surface of the complex dynamics that drive health professional supply and demand in Missouri. What these examples do illustrate is the opportunity to craft a multi-dimensional approach to meeting the state's medium- and long-term need for a health care workforce that can keep pace with the changing needs of Missouri's growing population.