

# WHO WILL BE LEFT TO CARE FOR YOU?

by Elizabeth Kumru

KEITH MUELLER, PH.D., HAS COMPILED MASSIVE AMOUNTS OF DATA FOR A COMPREHENSIVE REPORT ON THE LOOMING HEALTH CARE WORKFORCE SHORTAGE IN NEBRASKA.



UNMC's rural health expert has numbers, maps and projections. He knows how the state will suffer along with the rest of the country as the economy worsens, job cuts continue and retiring baby boomers enroll in the already overloaded Medicare program.

Then it hits him. In about 10 years, he expects to retire – and so will his physician.

“Who will take care of my health care needs?” Dr. Mueller asks.

That's the question many will ask in the next 15 years as a disproportionate number of people seek care from a smaller pool of health care professionals. People will have to wait longer or go without care.

As director of the Nebraska Center for Rural Health Research and interim dean of the UNMC College of Public Health, Dr. Mueller is tasked with writing “A critical match: Nebraska's Health Workforce Planning Project Report.”

The comprehensive report provides a snapshot of the current supply, composition and geographical distribution of health professionals in Nebraska. It also compares the state with national averages. The third of the four-part report – a strategic plan for the health planning region – is due this spring.

Already, Dr. Mueller knows: in the next 10 to 15 years, 55 percent of all nurses, one-third of all physicians, dentists and psychiatrists and 20 percent of the pharmacists in Nebraska are likely to retire.

“The shortage is happening everywhere,” Dr. Mueller said. “We'll see the results in the next decade.”

UNMC Chancellor Harold M. Maurer, M.D., said three major health care issues face the country.

“The first is the outrageous cost of health care, the second is health care insurance – these issues have the government's attention,” he said. “But, the third, the workforce shortage issue,

is not being addressed by the government at all.”

Dr. Mueller's report will help call attention to this problem, Dr. Maurer said.

“The population is aging and people are living longer with chronic diseases. There won't be enough health care providers to meet the need. Even today, it's difficult for a family to secure a primary care physician. There are not enough providers to give services,” he said.

Any discussion about the health care workforce shortage is a discussion of numbers and dire predictions.

The federal government estimates that by the year 2020, the United States will be short 200,000 doctors, 1 million nurses and 29,000 pharmacists.

Dr. Mueller's report, a \$100,000 project funded by the Larson Medical Research Fund through the University of Nebraska Foundation, is expected to be the most comprehensive look yet at Nebraska's health care workforce. It will include information on physicians, non-physician clinicians, dental professionals, pharmacists, mental health professionals, allied health professionals, auxiliary health professionals, nurses and public health professionals.

“This is a looming national crisis,” Dr. Mueller said. “Nebraska needs a multi-pronged strategy ready in the next two years to address the workforce shortage and the demand for care. I expect this report to help bring the stakeholders together to develop that plan.”

The strategy should include a public health workforce dedicated to preventive care and solutions to two major problems, obesity and sedentary lifestyles, Dr. Mueller said.

“If we don't address the problems and change behaviors now, we're going to have a lot of young and elderly people who need care,” Dr. Mueller said.

An older population with serious conditions requires more nursing care. Also, there is a need to focus more on public health, long term care, safety and quality issues.

“We're in the middle of a maze and there's no clear path out,” Dr. Mueller said.

The shortage of nurses will be critical in just a few years. On the right, technician Cynthia Marshall and nurse Pamela Denney, who work for UNMC's hospital partner, The Nebraska Medical Center, are part of the health care workforce that will retire in the next 15 years. From left are nurses Jennifer Zehnder, Vince Morris and Jamie Erickson.

# NEBRASKA HEALTH CARE WORKFORCE SHORTAGE BY THE NUMBERS

POPULATION – 1.77 MILLION  
PEOPLE PER SQUARE MILE – 22

EMPLOYED REGISTERED NURSES	14,348
PRACTICING PHYSICIANS	3,432
PRACTICING MENTAL HEALTH PROVIDERS	1,796
PRACTICING NURSE PRACTITIONERS	654

## NEBRASKA COUNTIES – 93

### COUNTIES WITHOUT:

NURSE PRACTITIONERS	33
MENTAL HEALTH PROVIDERS	31
PHYSICIANS	18
DENTISTS	18
REGISTERED NURSES	9

### COUNTIES WITH A SHORTAGE OF:

MENTAL HEALTH PROVIDERS	88
NON-PHYSICIAN PRIMARY CARE PROVIDERS	76
PRIMARY CARE PHYSICIANS	46+
REGISTERED NURSES	23
DENTAL HEALTH	11

Data for these 2007-08 statistics came from a variety of sources, including the Health Professions Tracking Center, part of the UNMC College of Public Health; the Nebraska Department of Health and Human Services' Licensure and Regulation Unit; the Nebraska Center for Nursing; Nebraska Nurse Practitioners Association database; Nebraska Center for Nursing Employer Vacancy Survey, and state and local public health departments.

## WHAT YOU CAN DO

- Educate young people about the available health care opportunities.
- Make teachers, counselors and parents more aware of the variety of health care jobs so they can help children explore potential careers.
- Raise awareness among state, local and federal officials of the health care worker shortage.
- Support the health care professions and encourage people to pursue such careers.
- Increase the cultural diversity of the health care workforce and, thereby, increase community access to care.
- Practice preventive care to lower your health risk.
- Mentor a young person interested in health care.

## UNMC'S RESPONSE

Competition for quality health care professionals will only become fiercer as the shortage grows. New graduates seek high paying jobs in order to pay off school loans that climb into six-figures. The average debt for UNMC medical students is \$120,000; the national average is \$139,500.

The bidding war may get too pricey, especially for rural areas where the workforce shortage is greatest. The federal government and the state of Nebraska both have student loan and loan forgiveness programs to encourage students to practice, and hopefully stay, in shortage areas.

The problems surrounding the health care workforce shortage are complex and require multi-faceted solutions. UNMC recognized the need for an increased number of health care professionals more than a decade ago and initiated new programs to boost general enrollment and recruitment and subsequent retention in rural communities.



Keith Mueller, Ph.D.

## RURAL HEALTH

UNMC administrators developed several programs in the early 1990s to recruit and educate rural health practitioners with the idea that they ultimately will practice in shortage areas. These programs have paid large dividends:

- The Rural Health Education Network, a partnership between UNMC and Nebraska communities to meet the health profession needs of greater Nebraska;
- Rural Health Opportunities Program, a partnership between Chadron State College and Wayne State College that allows early acceptance into medical and dental school when qualified students begin undergraduate studies. To date, 333 RHOP students have graduated from UNMC and 203 are attending Chadron State, Wayne State or UNMC. Of the UNMC graduates who have completed residencies and are practicing health professionals, 61 percent are practicing in rural communities with 52 percent practicing in rural Nebraska, and 71 percent of all practicing graduates have worked in a rural community at some point in their career; and
- UNMC students are required to do rural rotations, during which health profession training is provided under the supervision of volunteer preceptors in communities.

"What's impressive is that these programs permeate throughout all of what UNMC offers and develops a pipeline for future rural health care professionals," Dr. Mueller said.

## NURSING

UNMC turned away more than 1,000 qualified nursing school applicants in the past five years due to a lack of space in its facilities and a shortage of those who teach students.

### To meet future needs, the College of Nursing has:

- Increased enrollment by 30 percent since 2002 — without new resources;
- Initiated accelerated programs for students and faculty - one-year Bachelor of Science in Nursing (BSN), Fast-Track BSN to PhD, Registered Nurse (RN) to BSN to advance current nurses, and added education tracks to prepare more teachers in the Master of Science in Nursing (MSN) and PhD programs;
- Invested \$600,000 in classrooms, skills labs and educational technology in Scottsbluff;
- Broke ground on a \$14 million additional building in 2008, thanks to a large gift from Ruth and Bill Scott. The building will enable the college to annually enroll 265 additional students in Omaha by the year 2020 — an increase of nearly 70 percent over the current 385 students. The college also will dramatically increase graduates in its master's and doctoral programs — programs that prepare nurses to become faculty members;

- Planned a new \$17.5 million home for the Lincoln Division. By 2020, with the new facility, the division is projected to increase by 40 undergraduate students, 16 master's degree students, eight doctoral students and seven professors.
- Supported a dynamic regional effort to establish a College of Nursing Division in Northeast Nebraska.
- Investigated student capacity expansion and learning support upgrades at the Kearney division.

All these measures combined will prepare 1,000 new nurses by 2020 and impact the anticipated state shortage by 25 percent.

"We're forming benefit-laden educational partnerships throughout Nebraska to help communities attract, retain and upgrade nurses," said Virginia Tilden, D.N.Sc., dean of UNMC's College of Nursing. "We work with community leaders, med centers, hospitals, community clinics, physician groups, nursing homes, community colleges, school systems and other stakeholders. About 95 percent of our graduates get jobs in Nebraska."

## MENTAL HEALTH

In one-third of Nebraska's 93 counties, residents have no one to turn to when in distress.

In fact, the entire state — outside the Omaha-Lincoln area — is considered a shortage area for mental health professionals.

There are 1,796 mental health practitioners in the state, but only 475 practice in greater Nebraska. Of those, 23 are psychiatrists and 51 are psychologists.

Patients are known to drive 300 miles round trip for an appointment, said Joe Evans, Ph.D., director of psychology at the Munroe-Meyer Institute and professor in the department of pediatrics.

"The main problem is a lack of access for individuals and families to mental health services," Dr. Evans said. "We operate 14 clinics across the state and because people drive long distances to get care they don't return on a regular basis."

UNMC's clinics serve as a mental health pipeline to rural Nebraska. Each year, eight interns spend a year at these clinics. Some stay another year as a post-doc. If they settle in the community, they become faculty and help train new interns.

"Our goal is to recruit, train and retain," Dr. Evans said. "We'd like to get a pediatric psychologist in every one of the 16 pediatric practices outside Omaha and Lincoln."

"But, it's hard to recruit and retain interns because Medicaid rules changed last year and now they aren't paid for their services," he said. "New resources are needed to help the interns."

"Rural families turn to their family practice physician for treatment of anxiety, depression, drug and alcohol abuse, ADHD and other stress-inducing mental health issues," he said. "Physicians are becoming burned out because they have no mental health professionals nearby that they can refer their patients."

## ALLIED HEALTH

Allied health professionals work alongside physicians, nurses, pharmacists and public health specialists to provide critical diagnostic, intervention or technology support services. Increased awareness of allied health opportunities is vitally important in the midst of an extensive workforce shortage.

The demand for the allied health professionals will only increase in the years ahead. Based on estimates of the U.S. Bureau of Labor Statistics, demand for many of the allied health professionals educated at UNMC will vary from 15 percent to 27 percent over the next eight years.

Last year, UNMC's School of Allied Health Professions received nearly four times the number of applications needed to fill the 170 slots in its 11 programs, said Kyle Meyer, Ph.D., associate dean of SAHP.

### In response to the demand, SAHP has:

- Increased student enrollment in its physical therapy program by 25 percent beginning with the fall of 2009 entering class. The physician assistant program also is investigating a possible increase in class size.
- Offered clinical laboratory science courses through distance education to students in rural areas since 1992. Participants — about 10 per year — go through clinical training at affiliated hospitals in Norfolk, Kearney, Hastings, Grand Island and North Platte. A similar program exists for radiography in Grand Island and Columbus.



More on shortage areas and student loan/repayment programs [www.dhhs.ne.gov/orh/](http://www.dhhs.ne.gov/orh/)

Workforce Shortage Report  
[www.unmc.edu/rural/documents/InterimWorkforceReport090308.pdf](http://www.unmc.edu/rural/documents/InterimWorkforceReport090308.pdf)

# UNMC A LEADER IN SERVING RURAL NEBRASKA

UNMC has been a national leader in innovative primary care and rural education programs. Most notably, the Primary Care Program was the first collaborative family medicine and internal medicine training program and the Rural Training Tracks was one of the first programs in the country to allow university-based residents to train in rural communities.

According to the Health Professions Tracking Service at UNMC, approximately 64 percent of the practicing primary care physicians in Nebraska – and 74 percent of those in rural counties – received their medical education from UNMC.

## LACK OF PRIMARY CARE DOCTORS PRESENTS A MAJOR CHALLENGE

by Lisa Spellman

**Matt Johnson, M.D., looked forward to building a career and raising his family in rural Nebraska.**

But, being one of only a few physicians in a small primary care practice in North Platte proved to be overwhelming for the UNMC graduate.

Dr. Johnson's enthusiasm was high when he joined the practice in 2005, but that soon was replaced with exhaustion. He worked long hours and moonlit at Omaha hospitals on the weekends to provide for his family and meet his student loan obligations.

Now, he has returned to UNMC to specialize in cardiology.

Dr. Johnson's story is not unique. In the past decade alone, the number of U.S. medical school graduates entering family practice residencies has dropped by 50 percent.

"The dwindling number of primary care physicians and decreasing number of medical students choosing primary care as a career is becoming critical," said Thomas Tape, M.D., chief of general internal medicine at UNMC and governor of the Nebraska chapter of the American College of Physicians.

A study published in the *Journal of the American Medical Association* last fall sounded an alarm. Of 1,200 fourth-year medical students, only 2 percent planned to go into primary care internal medicine, compared with 9 percent in a 1990 survey.

The demands on a primary care physician – which includes those who specialize in family medicine, general pediatrics or general internal medicine – are often overwhelming.

"Today's primary care physicians struggle to keep up with the swelling tide of patients and paperwork," Dr. Tape said. "They face inadequate reimbursement from Medicare and Medicaid, which impacts how well they can meet the costs of running a clinic, support their families and pay their student loans."

The American College of Physicians (ACP) worked with Congress on the Preserving Patient Access to Primary Care Act (H.R. 7192), designed to help reverse the growing shortage of primary care physicians.

The bill, which will be reintroduced this session, proposes easing the financial burden on primary care physicians by having

their medical education expenses paid for, or reduced, through scholarships or repayment of debt. In return, the physician would have a primary care service obligation care to fulfill.

While Nebraska does offer scholarships and loan repayment programs, these are targeted toward rural areas and require local matching funds. More support for primary care will be needed to meet the demand for patient care across the state.

Nebraska is facing a terrible shortage of primary care physicians and it will just get worse as the population ages, said Michael Sitorius, M.D., professor and chairman of family medicine. Dr. Sitorius has served on the Rural Health Advisory Commission for 12 years.

"UNMC has taken the lead on this issue, but we need more incentives for students to practice in rural areas. The programs in place now are underfunded," he said.

In Nebraska, only 39 percent of physicians are primary care doctors. That translates to 1,441 doctors. Not nearly enough to meet the demand.

"We need to redesign the primary care practice so it is something that people want to do and will be financially feasible for them," Dr. Tape said.

The Patient Centered Medical Home concept, which also is promoted by the bill being submitted to Congress, would do just that. A physician practicing in a "medical home" can practice medicine as it should be practiced, Dr. Tape said.

In this concept, each patient would have a personal physician who works with a health care team to provide comprehensive care. The concept also involves the patient as a partner in working with the team to enhance wellness. Medical homes would monitor the progress of their patients and remind them when recommended care is due.

"The medical home approach is expected to improve health as well as save money," he said. "It's the best hope for saving primary care."

Students who came to UNMC through the Rural Health Opportunities Program (RHOP) meet monthly to encourage other students to consider rural practice.

Andrew Pohlmeier, a second-year medical student from Lawrence, Neb., is president of the Student Association for Rural Health.

"We host speakers and forums to stimulate interest in rural practice and it works. I've heard from several students that they've decided to locate in a rural community after they graduate," he said. The group also helps with high school career day and RHOP student visits.



Thomas Tape, M.D.