

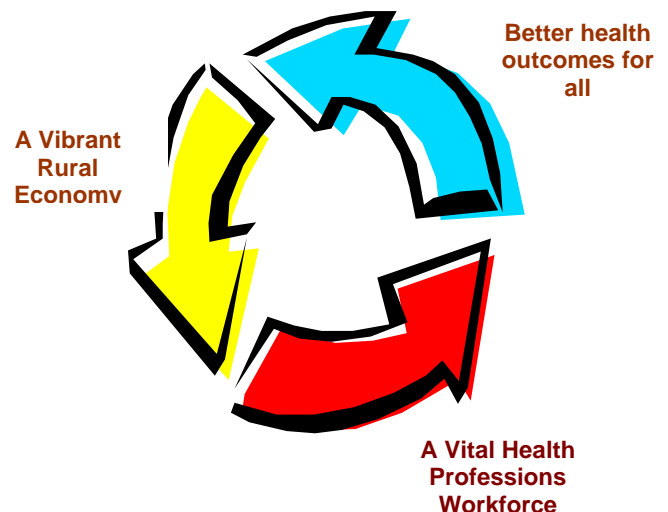
The University of Minnesota Academic Health Center
**The Greater Minnesota Strategy:
Community-Campus Partnerships in Action**

Rural Minnesota communities host health professions students who complete experiential learning rotations in local health systems, physicians' offices, pharmacies, dental clinics, rural clinics, community health centers and social service agencies. These students, from the University of Minnesota and other institutions of higher education, learn about rural health and rural life as they master professional skills under the guidance of community-based health professionals. They also learn how to work as a team on interprofessional community-based projects. Many who are exposed to rural practice during training choose rural Minnesota for their practices once they graduate.

Community-based health professionals serve as role models, or preceptors, to these health professions students before, during and after students' clinical rotations in rural communities. Bringing expertise and services, University faculty work with students, communities and preceptors on community-specific goals of health promotion. These partnerships provide opportunities for communities to attract future health professionals, strengthening the workforce and contributing to a vibrant local economy.

The result of these community-campus partnerships focused on teaching the future health professions workforce? Healthier communities. Rural community members benefit from expanded and accessible health care services in their home communities. Through community-identified health projects, citizens are alerted to health risk factors, learn how to manage chronic illness, such as diabetes, and have greater access to health care resources and health professionals.

All of this is made possible through a new technology learning platform that makes education available to students any time, any place. The technology learning platform integrates new online learning tools with face-to-face and experiential learning to make health professional education more accessible to students throughout Greater Minnesota.



This is partnership in action. And it's happening now.



The Greater Minnesota Strategy: Building on Success

Our vision for our rural education programs in Minnesota is to:

- promote **health outcomes** by developing future health professionals who value community engagement;
- assure a **vital health professions workforce** through community-campus partnerships with the University of Minnesota; and
- contribute to a **vibrant rural economy** by eliminating health professions shortage areas.

The Greater Minnesota Strategy builds upon successful partnerships and works with communities, other institutions of higher education, and rural programs to seek opportunities and solve problems. Successful community-campus partnerships include the following programs:

Minnesota Area Health Education Center (Minnesota AHEC)

Fact: A vibrant health professions workforce contributes to Minnesota's rural economy.

Rural Minnesota needs physicians, dentists, advanced practice nurses, pharmacists, public health professionals and veterinarians. The University of Minnesota's Minnesota AHEC is a statewide network of community and academic partners committed to meeting the health professional workforce and community health needs of Greater Minnesota. The network promotes rural health educational experiences for students across a continuum, addressing the needs of K-12 students, undergraduates, health professions students, health professionals, and community members. Since its inception in 2002, Minnesota AHEC has established AHECs in the Northeast, Northwest, Central and Southern Minnesota regions. These regional AHECs operate as independent nonprofit organizations and work with the University of Minnesota to form community-campus partnerships.

- Supported 250 health professions students in Greater Minnesota with stipends.
- Provided health career educational activities for 2,316 K-12 students.
- Facilitated clinical training, internships, and other activities for 524 health professions students.

A Healthy Collaboration for Kids: Minnesota AHEC and Extension's 4-H

Minnesota AHEC has developed an alliance with the University of Minnesota Extension to expand the University's presence and capacity across Greater Minnesota. A University liaison is working closely across many University units to connect students and faculty with community-based opportunities to advance health.

Through these focused community-based efforts, partners are working together to link resources in support of healthy communities. One developing partnership is with Extension's Center for 4-H and Community Youth Development. Through this collaboration, both organizations are identifying ways to work together to create opportunities for 4-H students to learn about health careers, interact with health professions students and spend time in local health care facilities.

- Provided continuing and community education activities for 2,050 health care professionals and community members.
- Provided CPR manikins to support training in Basic Life Support and/or Infant/Child CPR for more than 534 people since January 2006.
- Trained 55 medical interpreters.
- Supported two dental clinics in Greater Minnesota that provide access to dental care for underserved residents.
- Facilitated 11 community health projects.

Some Minnesota communities have received funding from the Medical Education and Research Costs to support locally-identified health projects. Local health professionals collaborate in teams to facilitate these health outcomes. Projects are taking place in Hibbing, Fergus Falls, Montevideo, St. Cloud, Moose Lake, Mountain Iron, New Ulm, Park Rapids, Brainerd, and Willmar.

The goal is to build specialized community teaching sites that will attract health professions students who will learn about rural health, contribute to health outcomes, and consider a rural practice upon graduation. Additionally, these sites expect to attract University of Minnesota faculty who want to engage in community-campus projects, research, and continuing education programming.

Battling Diabetes in Hibbing: One Community's Project

Hibbing chose to focus on improving diabetes outcomes. How can the community, the University of Minnesota, and other higher education institutions collaborate to build a system to address this self-identified need? We are working to:

- Use Healthy People 2010 outcomes for diabetes and obesity.
- Engage University programs that rotate through Hibbing area to participate in project. These might include health programs, Extension, 4-H, researchers, etc.
- Discuss project with community and healthcare leaders and other stakeholders.
- Ask each program or student that rotates through Hibbing to complete a task that contributes to Healthy People 2010 outcomes. For example, dental students might screen patients for diabetes.
- Engage AHC health science librarians to develop materials focused on healthy lifestyles, eating and diabetes prevention and care.
- Encourage and track student projects that work toward the Healthy People 2010 goals.

The Rural Physician Associate Program (RPAP)

Fact: Health professions students who train in rural communities are more likely to practice in rural communities.

The University of Minnesota Medical School Rural Physician Associate Program (RPAP) offers third-year medical students an opportunity to participate in a nine-month, community-based educational experience in rural Minnesota primary care. Our experience demonstrates that communities that have engaged with RPAP students during rotations and stayed in touch after they leave have benefited long-term.

- 1,127 third-year medical students have participated in this program since its inception in 1971.
- Of those former RPAP students, 575 are practicing in Minnesota. Of those practicing physicians, 63% or 361 are in rural communities.
- 68% of former RPAP students are family physicians; 79% are in primary care.

A RPAP Alumnus Story

Dennis Peterson, M.D., was an RPAP student in Canby, Mn in 1988. After a residency in Family Medicine, Dr. Peterson joined the Family Practice Medical Center in Willmar in 1992. Beginning in 1994, Dr. Peterson began mentoring RPAP students in his practice. He is recognized as an excellent teacher and role model. The community of Willmar has educated 50 RPAP students in family practice settings since 1971 when the program began. Twenty physicians trained through RPAP are currently practicing in the Willmar community.

Hibbing Community College Dental Clinic

Fact: Placing dental students in a community practice setting directly increases access for patients who would otherwise not receive care.

The University of Minnesota School of Dentistry is committed to educating community-engaged dentists and promoting access to dental care. The Hibbing Community College Dental Clinic, a community-based dental clinic in Northeast Minnesota, is one example of the extraordinary impact a clinical dental education partnership can yield for patients, students, and for the larger community. The Dental Clinic, a partnership between the University of Minnesota School of Dentistry, Hibbing Community College and the city of Hibbing, has significantly increased access to dental care for uninsured, underserved, and public program patients in the ten-county region of northeast Minnesota, while providing a critical outreach experience for dental and dental hygiene students.

- Since 2002, 13,468 patients have been seen during 21,100 patient visits involving 277 University of Minnesota dental students.
- The Hibbing Community College Dental Assisting Program now enrolls a full class of 30 assistants with an active waitlist compared to 9 assistants enrolled in 2002.
- **The Dental Clinic's successful business model is being adapted by the newly established Rice Regional Dental Clinic in Willmar.**

College of Pharmacy, Duluth Expansion

Fact: From 2000 – 2002, Minnesota was designated the number one state for pharmacist workforce shortage in the nation.

A Rural Pharmacy Success Story

Born and raised in St. Paul, MN, Todd Johnson attended the University of Minnesota College of Pharmacy during the 1970's. Following graduation, Dr. Johnson was offered an opportunity through AHEC to establish clinical pharmacy services in the Fergus Falls area and become a faculty member of the College.

Never living outside the metro area, Dr. Johnson took the opportunity, becoming the first clinical pharmacist (Pharm.D) in Greater Minnesota. 30 years later, Dr. Johnson is still practicing in Fergus Falls, and also serves as a Regional Experiential Coordinator for pharmacy students in his region of the state.

Over the past decade, nearly 100 rural Minnesota pharmacies have closed. In 2002, in response to the severe impact of pharmacy closures in rural Minnesota, the University of Minnesota College of Pharmacy expanded class sizes by creating a branch program on the University of Minnesota, Duluth campus to provide outreach to Greater Minnesota.

- Class size expanded from 100 to 160 pharmacy students in each class in 2002.
- One third of pharmacy students study in Duluth and focus on rural pharmacy practice.
- Rural student admissions have

increased by 223% since 2002.

- One third of fourth-year students train in Greater Minnesota hub cities: St. Cloud, Mankato, Fergus Falls, Bemidji, Brainerd, and Rochester.
- As advocates for rural pharmacy, College of Pharmacy faculty conduct major federally funded research and outreach projects throughout Greater Minnesota focused on pharmacy access and workforce development.

Center for Public Health Education and Outreach (CPHEO), School of Public Health

Fact: 50% of Minnesota's public health workforce has no formal training and cannot leave jobs, homes and families for additional education.

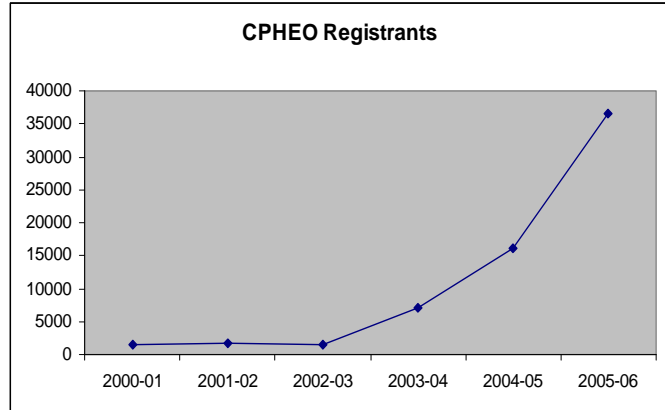
The University of Minnesota School of Public Health's many Centers work to address Minnesota's most pressing health issues: childhood obesity, health insurance access, tobacco cessation, teen pregnancy, infectious diseases, emergency preparedness, and long-term care research. The Center for Public

Summer Internship in Medicine Medical School, Duluth

The Medical School, Duluth has a long history of commitment to the education of rural physicians. Several programs offered through the School provide medical students with rural experiences that shape their future decisions about the selection of a practice location.

The Summer Internship in Medicine is one such program. Created by Dr. Ray Christiansen, the program partners with Minnesota's regional AHECs (Northeast and Southern, with the addition of Central and Northwest in the near future) and area health care centers to provide medical students with an experience in a rural community. The goal is for the students to understand the unique assets and challenges of delivering health care in rural communities. Students work with law enforcement, public health, health care, education and community organizations during their internships.

Health Education and Outreach is the School's central platform for professional outreach and continuing education for public health workforce, including Greater Minnesota. Distance learning through Internet, Webcast, and podcast technologies and short institutes enable the School to provide high-quality coursework to adult and distance learners whose life and work situations may preclude regular campus-based and classroom attendance.



- Student enrollment in outreach programming is now more than 1,000, up from 346 in 1999.
- Coursework has expanded from 86 courses serving 1,483 registrants in 2000 to 263 courses serving 36,661 registrants in 2006.
- Through partnerships with regional health departments and universities, the School has become the chief platform connecting public health education, research and practice in Minnesota, Wisconsin and North Dakota.

Other School of Public Health Outreach Programs

- The School of Public Health began offering a Certificate of Management Studies in Health Services Administration (also called ISP) in Summer 2006. The program is intended to be an “access” program tailored for senior executives, particularly those from smaller institutions and middle managers who need specialized training in health services administration. The three-year cohort program serves students in the United States and abroad, including many individuals from foreign governments that are encouraged to seek additional education through the University of Minnesota School of Public Health through their employers.
- In July 2006 the University of Minnesota Board of Regents approved a School of Public Health Part-time Master of Healthcare Administration (MHA) program for delivery in Rochester and southeastern Minnesota. The curriculum is a combination of online courses, summer Public Health Institute courses, and physical presence courses in Rochester. Students can complete the part-time curriculum in three years. Fall semester 2006 marked the opening of this educational option in Rochester.

School of Nursing Expansion to Meet Workforce Needs

Fact: The School of Nursing is the primary producer of nursing faculty for the State of Minnesota.

Recognized for its graduate and research programs, the University of Minnesota School of Nursing plays a unique role in Minnesota's nursing profession. The School has the state's largest graduate nursing education program, preparing masters and doctoral graduates for practice and teaching in higher education. Health care ethics is a cornerstone in all of its academic programs. The School prepares approximately 55% of all nursing faculty in the State of Minnesota.

- More than 5,000 graduates work in Minnesota, serving every county in the state.
- With funding from the Minnesota State Legislature, the School expanded its bachelor's degree program to Rochester in 2003. Thirty-three students matriculated in 2006. To date, the total number of Rochester graduates is 54.
- Federally funded grant projects focused on web-based innovations in distance education have expanded student opportunities for graduate study, including rural Minnesota.
- Since 2000, the student body has grown by 72 percent, from 477 to 820 students.
- In collaboration with the School of Public Health, the School of Nursing was awarded a \$2.7 million federal grant to establish MERET, a statewide effort to help communities prepare for public health and bio-terrorism emergencies.
- The School of Nursing is preparing to offer two new professional practice degrees in the Rochester community. The Masters of Nursing (MN) is designed for students with bachelors' degrees in any field that wish to pursue a nursing career. The doctorate of nursing practice (DNP) is a terminal practice degree designed for practicing professionals.

College of Veterinary Medicine

Fact: The field of veterinary medicine is on the forefront of some of the nation's emerging human health concerns, including Chronic Wasting Disease and pandemic bird flu.

The College of Veterinary Medicine is one of the nation's premier centers for the study of animal and human health. The close proximity to the Medical School, the College of Biological Sciences, the College of Food, Agricultural, and Natural Sciences, and the School of Public Health ensures many collaborative opportunities for faculty and students that benefit Minnesota and the nation. It is estimated that 80% of Minnesota veterinarians were trained at the University of Minnesota College of Veterinary Medicine.

- Beginning in 2003, the College partnered with the MN Department of Natural Resources and Board of Animal Health to provide surveillance for Chronic Wasting Disease. Each year 50-100 veterinary students collect samples from deer during the hunting season in all regions of the state to process for testing.
- Veterinary students assist in more than 100 births of sheep, pigs and cattle at the State Fair-Miracle of Birth Exhibit. Students also talk with the public about the role and importance of veterinarians.

- More than 20 different courses are available through the College that link students with experiences on area farms. These experiences provide valuable learning opportunities while assisting farmers statewide with essential testing and animal care.
- Two University Centers are focused on the safety and security of the nation's food systems. The Center for Animal Health and Food Safety contributes to the safety and security of the global food system and significantly strengthens the nation's ability to anticipate and respond to emerging issues and imminent threats from animal and foodborne illnesses. The Center for Post Harvest Food Protection and Defense was named one of three Homeland Security Centers of Excellence in 2004 by the U.S. Department of Homeland Security. The Center received a three-year, \$15 million grant to help develop ways to protect the nation's food supply from deliberate contamination or terrorist attack.
- The University of Minnesota received the two largest grants ever to be awarded for animal disease research from the United States Department of Agriculture. The grants, totaling \$8.8 million over four years, are to study Johne's disease in cattle and porcine reproductive and respiratory syndrome in swine.

Center for Allied Health Programs: The Technology Learning Platform

The Center for Allied Health Programs is the University's newest effort and is a proof of concept for a technology-based learning platform. The Center is designed to meet volatile allied health workforce needs in Minnesota. It will accomplish this through a learning platform that coordinates with other higher education institutions across the state and utilizes new online learning tools with face-to-face and experiential learning to allow for distance-based education. The Center will initially operate in two performance sites: Twin Cities and Rochester. Some highlights of the new Center include:

- A memorandum of understanding with Winona State University to facilitate collaboration across institutions to provide a seamless experience for students as they transition from one institution to the other for degree completion.
- Occupational Therapy and Clinical Laboratory Science will be the first degree programs offered through the Center for Allied Health Programs. These programs were identified because of their role in the state for training professionals in their fields. Enrollment in both programs will be expanded to meet growing workforce demands.
- Rochester will serve as the first new performance site for the Occupational Therapy and Clinical Laboratory Science. Both programs will accept a student cohort on the Rochester campus beginning Fall 2007.

University of Minnesota Health Sciences Libraries Outreach

Fact: With easy access to information, students, faculty, and community-based health professionals stay up-to-date with current research and publications.

The Health Sciences Libraries provide access to quality health information when and where needed so Minnesotans can make better decisions about their health in partnership

with health care professionals. Students, preceptors and others have easy access to health information and library resources regardless of where they practice or train.

- **My Health Minnesota -> Go Local** is a partnership of libraries around the state working to connect national health resources available through www.MedlinePlus.gov with local health resources, making it easy for community members to access local health information.
- **Mini-Med School** –Medical librarians demonstrate how to use health information websites during Mini Medical School sessions that are open to the public.
- **Electronic Library of Minnesota (ELM):** The University facilitates access to electronic publications for all Minnesotans through its MINITEX agency.

The Greater Minnesota Strategy: Community-Campus Partnerships in Action

Through these community-campus partnerships and many others, the University of Minnesota is working with Greater Minnesota communities to attract future health professionals, strengthen the workforce and contribute to a vibrant local economy.

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