

# Telepharmacy Project models cooperation and service

The North Dakota Telepharmacy Project is a model of rural pharmacy service delivery, job creation, innovation and cooperation among medical establishments and the proof is in the funding.

The project received \$813,535 in federal funding for fiscal year 2008 through the advocacy of North Dakota Sen. Byron Dorgan, a long-standing supporter of the program. The new funding will develop telepharmacy services in nine small hospitals across the state, most of which are critical access or those with 25 or fewer beds. Thirty-four of North Dakota's 46 hospitals are considered critical access facilities and 39 are considered "rural" (having 49 or fewer beds). The vast majority of the grant money goes into the communities as sub-awards to create, maintain or enhance services.

The project was established in 2002 to restore, retain and establish access to pharmacist and pharmacy services in medically underserved rural communities in North Dakota. It is well on its way to being a national model for delivering telepharmacy services to remote rural retail pharmacies and hospitals and making the state a national leader in delivery of pharmacy services to rural areas.

In early December, NDSU's telepharmacy was a featured program at the American Society of Health-Systems Pharmacists national convention in Las Vegas. In 2006 it received the Outstanding Rural Health Program Award. The award is presented to programs that deliver services in innovative ways, highlight coordination among providers or improve the quality of care to rural residents.

The aging of North Dakota's rural population has increased the health care needs, but everyone benefits from the telehealth movement. Praising the program, Charles Peterson, dean of the College of Pharmacy, Nursing, and Allied Sciences, said "Approximately 40,000 rural citizens have had pharmacy services restored, retained or established through telepharmacy services. The project has restored valuable access to health care in remote medically underserved areas of the state and has added approximately \$12.5 million annually in economic development to the local rural economy."

## ND Telepharmacy by the numbers

- \$12.5 million economic development benefit to N.D.
- \$3.3 million grant funds received since 2002
  - 40,000 rural citizens benefiting
  - 67 participating pharmacies
- 33 medically underserved areas helped
  - 50 new jobs created



North Dakota's collaborative Telepharmacy Project successfully uses video conferencing to bring high-quality pharmacy services to remote and underserved areas.

According to Peterson, who directs and is principal investigator for the project, current studies indicate 35 percent of rural hospitals have a pharmacist on site for less than 40 hours per week. Eight percent of hospitals have a pharmacist on site for two hours or less per week. One-third of rural hospitals with 0.5 full-time equivalent or less pharmacists share a pharmacist with another hospital.

"As a result, many rural hospitals have limited pharmacist coverage, which greatly impacts their ability to deliver even the most basic pharmacy services," said Peterson. "So, there is a critical need for telepharmacy services for remote rural critical access hospitals in North Dakota."

Telepharmacy coordinator Ann Rathke said the new funding will start or enhance telepharmacy programs in 10 sites, nine remote hospitals and one central order entry site in Fargo. Catholic Health Initiatives is the program partner for the order entry site. The sites use computers, video-conferencing technology and high-resolution cameras so the pharmacist can verify the correct medication and dosage is being dispensed to a patient. The video-conferencing system is encrypted for privacy and standard pharmacy software allows the pharmacist to check for allergies and drug interactions so patient safety is greatly enhanced. The project is a cooperative venture among many partners and that group effort is one of its great strengths. "It's important to share the lessons we've learned and the successes we've had," said Rathke, who consults regularly on the project and travels along with Dean Peterson and David Scott, associate professor of pharmacy practice, to present the project. Both Rathke and Scott are co-principal investigators. *Laurie Baker*