

BILLINGS AREA

The Billings Area Office installed videoconferencing equipment at the Blackfeet, Fort Belknap, Fort Peck and Wind River Service Units. The equipment lacks medical peripherals and is used mainly for administration. Similar videoconferencing equipment was installed under federal grants at the Crow Agency PHS Indian Hospital, Lama Deer PHS Indian Hospital and the Rocky Boy Cree Health Center. Fort Belknap and Rocky Boy have had limited telepsychiatry use. The Fort Peck Tribe operates a dialysis unit with access to videoconferencing at a neighboring non-Indian hospital. The Rocky Boy Chippewa Cree Tribe is a member of a regional telehealth network. The Salish & Kootenai Tribal College is planning 60 health courses leading to accredited degrees for Montana, Idaho, and Washington.

1. Fort Peck Tribal Dialysis Unit

Area Office	Billings Area
Indian Facility	Fort Peck Tribal Dialysis Unit
Primary Use	Telemedicine (nephrology)
Use Status	Sustainable
Facility Contact	Patti Faller, Registered Nurse, Fort Peck Tribal Dialysis Unit, 1107 H Street East, Poplar, MT 59320 Phone 406-768-3491, E-mail <rfaller@nemontel.net>
Grantee	Operated by Tribal Funds
Funding	Operated by Tribal Funds
Grant Contact	See Facility Contact
Summary	The Fort Peck Tribal Dialysis Unit has a supporting nephrologist located 300 miles away and remote consultation is available through a neighboring hospital.

In 1989, the Fort Peck Tribe started an 18-patient kidney dialysis program that is operated by five nurses, two technicians and two social workers. A supporting nephrologist is provided through Medcenter One located 300 miles away in Bismarck, North Dakota. The nephrologist is on-site once a month. Videoconferencing service with the nephrologist is available through the Poplar Community Hospital, which belongs to a regional telemedicine network. The program also contracts with Vision Net in Great Falls, Montana, for diabetic eye care. Patient referrals are received from Indian Health Service, hospitals within a 200-mile radius and, occasionally from the Trenton Indian

Service Area near Williston, North Dakota. The tribal program worked with Indian Health Service to formalize a kidney health protocol for care, prevention and education.

2. Lame Deer PHS Indian Hospital

Area Office	Billings Area
Indian Facility	Lame Deer PHS Indian Hospital
Primary Use	Telehealth, telemedicine available
Use Status	Sustainable
Facility Contact	Lionel Green, On-Site Coordinator, Lame Deer PHS Indian Health Center, Lame Deer, MT 59043 Phone 406-477-4400, Fax 406-477-4427
Grantee	St. Vincent's Hospital
Funding	TOP - FY 97-00 - \$464,264 NASA in-kind equipment
Grant Contact	John Zauher, Project Director, Saint Vincent Hospital, PO Box 35200, Billings, MT 59107 Phone 406-237-4530, E-mail <jzauher@svhhc.org>

Summary **The Lame Deer PHS Indian Hospital is using a NASA developed portable telemedicine unit for a homebound diabetic education program. Equipment use may be expanded to dermatology.**

This project represents a transfer of technology used by NASA astronauts to Native Americans in rural Montana. St. Vincent's Hospital in Billings administers the project grant. Originally, the project partner was the Crow Agency PHS Indian Hospital, which declined participation when it learned that the technology could not be used in an ambulance setting. The nearby, smaller Lame Deer PHS Indian Hospital accepted the technology transfer project. Prior to the change, St. Vincent's had already provided Crow with a \$30,000 videoconferencing system and installed telecom improvements. Lame Deer received the same videoconferencing equipment and one-year salary for an on-site coordinator. St. Vincent's accommodated the Indian Health Service by placing three higher cost switches at Crow and Lame Deer at a \$33,000 cost. It also provided the Area Office with an estimated \$20,000 for related personnel costs. In exchange, IHS is responsible for the reoccurring telecom costs.

The project uses the Telemedicine Instrumentation Pack (TIP) developed for NASA for spaceflight land telemedicine applications and videoconferencing. TIP is a rugged portable diagnostic system housed in a suitcase. It provides complete telemedicine solutions for primary healthcare and can operate on any available bandwidth that supports real-time video or store-and-forward for high data integrity remote diagnosis. Non-physician personnel (nurses, physician assistants, technicians and rural health workers) can use the equipment.

The system can accommodate new sensors and software. TIP comes with a NASA software package called ALICUBE™ that easily combines paper-based patient records, medical images, digital files, text, voice recordings and other material into a single electronic patient chart. The chart can be e-mailed to any location in the world for consultation. NASA provided a free TIP unit that was bench assembled prior to commercialization. A commercial off-the-shelf TIP unit is now available by CyberMdx, Inc. for \$30,000.

Lame Deer for most of the project recorded limited telemedicine use. The on-site coordinator hired with project funds for the last year used the TIP unit for a diabetic educational program that served approximately 50 households. The coordinator and a nurse visited homes of known diabetics with overdue clinical visits. The Community Health Representative informed the patients in advance of the pending visit. The nurse used the TIP unit to record vital statistics, which were later downloaded, at the hospital for a doctor's review. When necessary, the doctor scheduled a clinic appointment. Older patients, in particular, appreciated the technology because the service appeared more personal than in a clinic setting. The educational information received in the home with this equipment made some patients aware that diabetes can be controlled to a far greater degree than they thought. As a result, patients sought a higher level of continued care.

Lame Deer is considering a dermatology application for this equipment.

3. Rocky Boy Health Board, Chippewa Cree Tribe

Area Office	Billings Area
Indian Facility	Chippewa Cree Health Center
Primary Use	Telehealth, telemedicine available
Use Status	Sustainable
Facility Contact	Gail Torres, On-site Coordinator, Chippewa Cree Tribe, Rocky Boy Health Board, Rural Route 1, Box 664, Box Elder, MT 59521 Phone 406-395-5008, Fax 406-395-4781

Grantee Rocky Boy Health Board, Chippewa Cree Tribe

Funding ORHP/OAT - FY 97 - \$151,721

Grant Contact See Facility Contact

Summary The Chippewa Cree Health Center is member of an educational network operated by Benefis Healthcare in Great Falls that also offers telemedicine applications.

In January 1998, Chippewa Cree Health Center joined the REACH (Realizing Education and Community Health) Montana Telemedicine Network. The network provides a link to a tertiary care hospital in Great Falls and seven other rural hospitals. The telemedicine network provides specialty services and physician consultations, obstetrical, geriatric, and mental health/addiction services. On the telehealth side, the network provides education for lab technicians, X-ray technicians, physical therapists, registered and licensed practical nurses, medical records personnel, EMTs, and administrators. Rocky Boy pays \$500 monthly for the network's telecom fee. Grant funds purchased a Picture Tel 45 Concord video conferencing unit at an estimated at a cost of \$80,000. The rollabout equipment can be accessed in the emergency room, patient exam room and a conference room. The on-site coordinator is also a computer and data entry operator.

Current use by Rocky Boy is limited to educational programs and occasional patient information consults that do not involve a clinician. Earlier in the project, Rocky Boy had used the system for bi-monthly mental health consultations. REACH was started in FY 1994 with a Rural Utilities Service grant of \$100,000 to Benefis Healthcare (formerly Deaconess Medical Center).

4. Salish Kootenai College, Pablo, Montana

Area Office Billings Area

Indian Facility Salish Kootenai College

Primary Use Telehealth
Use Status New project

Contact Mike O'Donnell, Director, Distance Education, S&K College, PO Box 117 Pablo, MT, 59855
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Grantee Salish-Kootenai College

Funding RUS - FY 00 - \$108,780

Grant Contact See Facility Contact

Summary The tribal college serving the Flathead Indian Reservation received a grant to implement a plan for 60-health related course offering to other colleges in Idaho, Oregon, and Washington.

The Salish-Kootenai College is located on the Flathead Reservation and serves an Indian Health Service health compact tribe. Funding will be used to establish a distance learning program on ten reservations in Idaho, Oregon, and Washington. As many as 60 health-related courses, leading towards accredited degrees is planned.