

## The Project

In Fiscal Year 2005, the Office of Telemedicine at the Wyoming Department of Health received federal partnership assistance from the Department of Health and Human Services, Office for Advancement of Telehealth. This funding supports the WyNETTE project, which has as its main goal the promotion of telehealth in addressing the health challenges faced by Wyoming as a frontier state.

The mission of the WyNETTE project is to improve access to, and quality of, health care in Wyoming through information and telecommunications technology. The project's primary objectives are to:

- 1) increase health care opportunities for the state's residents through telemedicine;
- 2) increase the number, types, and skills of health professionals in the state through distance delivery of health care education; and
- 3) increase access to information to support both health care and the administration of care through informatics and information technology, research, and policy development.

Under the guidance of an Advisory Committee representing a variety of disciplines, several demonstration projects are already underway which illustrate the basic telehealth infrastructure and address each of the primary objectives.



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# WYNETTE

WYOMING NETWORK FOR TELEHEALTH



*Improving Wyoming Health  
Care Access and Quality  
Through Technology*



This document was developed, in part, by grant #1D1BTH03755-01-00 from the Department of Health and Human Services (DHHS) Health Resources and Services Administration, Office for the Advancement of Telehealth. The contents are the sole responsibility of the authors and do not necessarily represent the official views of DHHS.

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**Objective 1:**

Increase Health Care Opportunities Through Telemedicine

**Objective 2:**

Increase the Number, Types, and Skills of Health Professionals Through Distance Education

**Objective 3:**

Increase Access to Information on Support and Administration of Care Through Informatics

**The Challenge:** Wyoming's citizens continually face problems in accessing quality healthcare and health education. Distance, geography, inclement weather, and rural communities all present challenges for the state's residents in gaining access to health care. Population dispersion makes it difficult to achieve the economy of scale necessary to support adequate primary care, much less specialty care. Currently Wyoming is forty-eighth among the fifty states in physicians per 100,000 population.

**The Challenge:** Healthcare services in the state are primarily affiliated with the most heavily populated cities and counties, causing significant shortages and geographically regionalized health care resources. Of Wyoming's twenty-three counties, twelve are currently designated as a Primary Care Health Professional Shortage Area (HPSA), thirteen are designated Dental HPSAs, while all twenty-three counties are designated Mental Health HPSAs. Several counties are designated in all three areas. This means that many of Wyoming's residents must travel long distances to access even basic care services, and often seek healthcare in neighboring states when unable to access needed care locally.

**The Challenge:** Wyoming's isolation creates unique situations for health care providers with respect to their professional quality of life. Professionals face difficulty in obtaining consultations, finding educational opportunities, and networking with peers. It is hard to arrange coverage for personal and professional leave. Health care providers face burnout and in extreme cases, work-related traumatization. Negative professional quality of life issues compound the shortage of health care providers, contributing to high turnover and increased error risk.

**Telemedicine as a Solution:** Use technology to support consultation, supervision, home health, and interdisciplinary care conferencing in underserved areas with:

- **Direct patient care**
- **Consultation with other professionals**
- **Supervision for licensure, training**
- **Home health and other residential settings**
- **Interdisciplinary conferences**

Telemedicine can increase access and quality of care by linking appropriate care when it is needed. Patients may receive appropriate care in a more timely way through consultation and/or supervision. This may provide greater access to specialty care, integrated care, and disease management. The use of supervision and consultation via home health interactive technology provides an avenue to customize management of medical conditions in a less restrictive setting.

**Distance Education as a Solution:** Use technology to provide new, continuing, and upgraded education for place-committed providers through three types of educational activities:

- **Training new professionals**
- **"Upgrading" existing health professions workforce**
- **Continuing education for physicians and other health professionals**

Creating new providers will improve access. Increasing the knowledge base of existing professionals will improve quality, increase retention, and in some cases, upgrade professionals to primary care level (e.g., RN to advanced practice nurse).

**Informatics as a Solution:** Use technology to connect Health care providers to each other and to the resources they need to provide quality care to patients:

- **Health services information**
- **Health policy, legal, and regulatory information**
- **Digital medical libraries**
- **Data access, acquisition, and archiving**

Increasing access to information increases quality of care and gives professionals information specific to treatment concerns. Increasing access to professional resources increases access and quality by reducing the risk factors associated with isolation, which can lead to poor recruitment, retention, burnout, and compassion fatigue. Increasing access to information may increase professional quality of life and compassion satisfaction, which can increase protective factors associated with recruitment and retention.