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Reaching Out to Older Veterans in Need: The Elko Clinic Demonstration Project

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Abstract

Context: The challenge of providing meaningful health care services to veterans living in rural communities is a major public health concern that involves redefining the traditional facility-based model of care delivery employed in urban areas.

Purpose: This paper describes the steps of a demonstration project, the Elko Telehealth Outreach Clinic. The clinic, located in Elko, Nevada, was created to meet the health care needs of veterans who expressed a desire for greater access to VA services.

Methods: The Elko Telehealth Outreach Clinic is a specific example of the real-life implementation of the community-as-partner model as an operational framework for coordinating local, regional, and VA resources. The Elko Clinic provides a limited set of health care services including medication management, health education, prescription refills, routine lab tests, and specialty services through telehealth.

Findings: From December 2006 to December 2007, a total of 84 unique veterans received health care services through the Elko Clinic.

Conclusions: Our findings support the usefulness of an expanded community-as-partner model to guide a process for addressing the health care needs of veterans in Elko, Nevada, and they have implications for the development and maintenance of outreach clinics in other rural settings.

Key words community-as-partner, Elko, rural, telehealth, veteran.

The challenge of providing meaningful health care services to persons living in rural communities is a major public health concern that redefines the traditional facility-based model of care delivery commonly employed in urban areas to address veterans' health care needs. This issue has important public health implications for the Department of Veterans Affairs (VA) since it is estimated that there are approximately 2 million veterans—40% of the overall veteran population—who reside in areas defined as rural or highly rural.[1]

In a rural area, access to health care is complicated by a number of factors that are difficult to negotiate if care is delivered by a centralized facility that is not in the community where the need arises, including: (1) transportation issues to the centralized facility; (2) limited access to specialty health care providers; and (3) issues related to climate, geography, and distance. These issues are further complicated by the fact that 75% of veterans in rural communities are 65 years of age or older.[2] In rural communities, the absolute distance that persons are

required to travel for VA services can be 2 to 3 times farther than for those living in urban areas.[3,4] It is not surprising, therefore, that older rural veterans attend 10% fewer physician visits per year than those who live in urban areas and receive 75% of their health care from generalists.[4]

Access deficits inherent in rural regions have been visible contributors to the finding that older rural veterans consistently report poorer health status than older nonveterans.[5-7] In response to these challenges, the Veterans Health Administration in 2006 established the Office of Rural Health to improve health care for rural veterans by promoting a best practices approach to rural health care delivery. To achieve this goal, the Office of Rural Health commissioned 3 regional centers whose purpose is to stimulate and coordinate innovative demonstration projects that address health care quality and access issues in rural communities. An essential goal of these resource centers is to define new paradigms of health care tailored to the unique issues facing rural veterans and to develop and refine metrics for measuring outcomes from these intervention efforts.

This report describes a policy-focused case study of community engagement, negotiation, and implementation in the development and the maintenance of a VA community outreach clinic. The case study method was used to describe this process because there were many interacting component processes embedded in the overall outcome. Case study methodology is well adapted to support this kind of complex descriptive detail.[8] For example, Shellman[9] employed a case study method to describe the development, implementation, and evaluation of a community-focused elder wellness program in a rural setting. Case study methods are commonly employed to describe processes that occur in contexts where it is difficult or impossible to create controlled conditions for evaluation purposes.[10]

The goal of the case study, in this instance, was to highlight an operational framework of the community partnership model[11] that was used to set in motion and guide a process for the formation and maintenance of an outreach clinic for veterans living in and around Elko, Nevada, the "Elko Telehealth Outreach Clinic." This description was also designed to elucidate a logic model or to describe a pattern of hypothesized cause and effect that could potentially be replicated in future community outreach clinic development by the Veterans Administration, assuming that similar social and contextual conditions exist as described in this narrative.

As background for this case study, the extant literature has identified 4 strategies employed by the VA to alleviate the access challenges caused by a centralized, but geographically removed, facility-based health care structure: (1) transporting rural veterans to urban VA facilities; (2) employing mobile clinics to deliver health care; (3) utilizing telehealth/ehealth methodologies or Web-based in-home services; and (4) collaborating with health care providers in the rural community itself.

In the first strategy—transporting veterans to VA facilities—the VA allocates mileage reimbursement to most veterans and "Special Mode Transportation" in the form of handicapped accessible vans to provide intermittent transportation. If a veteran lives within driving distance of a VA facility but cannot find transport due to illness or disability, volunteers working through the Disabled American Veterans service organization provide transportation services from designated locations to regional VA Medical Centers throughout each of the 21 Veteran Integrated Service Networks in the continental United States.[12]

The second strategy, using mobile clinics deployed from centralized VA facilities, was introduced as a way to deliver health services to enrolled veterans beyond the reach of facility-based services. This approach is not unlike the traditional concept of the "bookmobile" that was employed by large urban libraries nationwide, allowing people living in outlying areas to gain access to limited book collections as a way to promote literacy. In the VA, mobile clinics are recreational-type vehicles equipped to deliver primary care and mental health services. The aim of these traveling clinics is to improve access and to meet selected, but very necessary, health care needs (eg, immunizations) of veterans in rural settings who can be reached by road.

With regard to the third strategy, the VA has been a leader of telehealth interventions which, for the most part, operate within homes of veterans to address a range of issues from the management of chronic health conditions, such as diabetes, to the provision of mental health care for chronic mental illness.[13,14] The Care Coordination Home Telehealth program provides in-home monitoring of patient wellness and symptoms and has been effective in addressing the needs of patients with high medical utilization patterns, including reducing hospitalizations, clinic visits and emergency room visits, as well as producing high patient satisfaction self-reports.[15-18]

The fourth strategy is the utilization of local community resources. This strategy has largely relied on 2 options: (1) the building of community-based outpatient clinics in areas that have a minimum, but sufficient, veteran population to justify the expense of a community health care facility; and (2) engaging existing fee-for-service providers in the local community. While the physical construction of community-based outpatient clinics and attempting to engage with existing fee-for-service

providers in local communities to deliver care are both viable options to meet veterans' health care needs, they can be costly and often do not reach the most isolated veterans. Establishing interactive community collaborations via community-based outreach clinics is becoming an increasingly attractive option to the VA. Interactive community collaboration is the most cost-efficient method to reach small numbers of veterans who live in isolated areas. Demonstration projects describing the conceptual model and processes needed to establish and maintain community-based outreach clinics have not been well articulated in the public health literature.

The pilot program that is described in this report elucidates a model-guided process that involves resource recruitment of existing non-VA community-based health care providers, and the application of telehealth technologies, to meet an expressed need of veterans living in and around the city of Elko, Nevada. "The Elko Telehealth Outreach Clinic" was the name given to this collaborative Elko, Nevada—Salt Lake City, Utah, Veterans Administration Medical Center partnership.

The community-as-partner model[11] focuses on the interaction between the patient, the health care delivery system, and the community within which health care occurs. The conceptual elements of this model are depicted in Figure 1: Part A, which illustrates a 4-part process for the formation of lasting community partnerships. This process involves a recurring cycle of: (1) engagement and negotiation with the local health care delivery system, (2) evaluation of the plan by all partners, followed by (3) strategic implementation of services tailored specifically to community needs, and (4) subsequent evaluation of the effectiveness of the services provided. This model is designed to collaborate (versus compete) with community resources for care delivery. The depiction of this model-guided approach as an action plan for the Elko Telehealth Outreach Clinic is depicted in Figure 1: Part B, and this action plan is described in the narrative that follows.

Case Study: The Elko Telehealth Outreach Clinic

Background

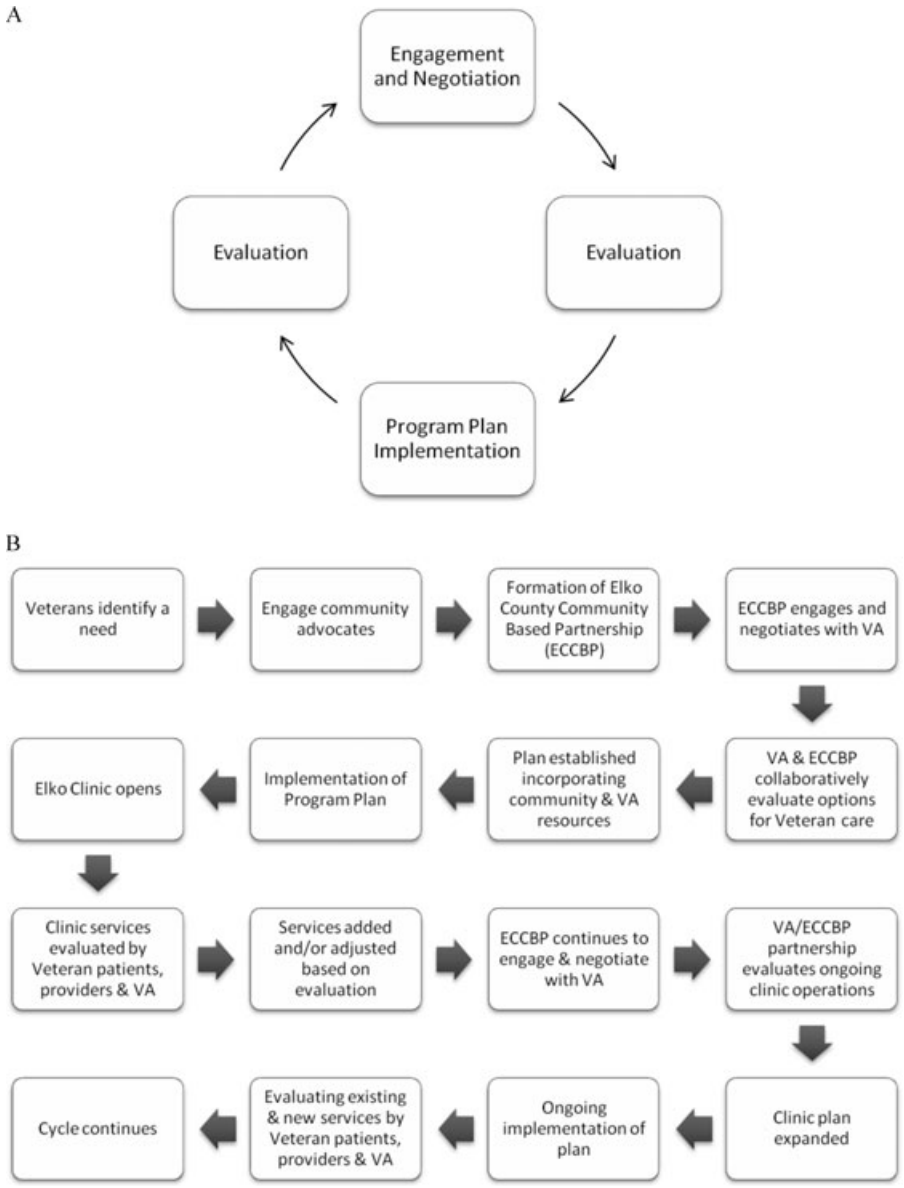
The Department of Veterans Affairs Salt Lake City Health Care System (VASLCHCS) Medical Center is located in the mid-sized metropolitan area of Salt Lake City, Utah. The VASLCHCS is part of the Veterans Integrated Service Network 19 (VISN 19), which spans a geographic area of 470,000 square miles across 9 states and is the largest VISN in terms of geographic area in the 48 contiguous states. VISN 19 serves an area covering the states of Utah, Montana, Wyoming, Colorado, and portions of Idaho, Kansas, Nebraska, North Dakota, and Nevada. It provides medical care to an estimated 700,000 veterans across 470,000 square miles. As part of its service mission, the VASLCHCS is responsible for the delivery of comprehensive health care to veterans living in parts of Utah, Idaho, and Northeastern Nevada, including the city of Elko, Nevada.

Elko is a small city in northwest Nevada with an approximate population of 16,708.[2] According to census statistics, Elko is defined as "rural" due to its population density and related geography consisting of grazing lands surrounded by rugged semiarid mountain ranges. The city of Elko is approximately 230 miles from the VASLCHCS. The economy in Elko and the surrounding area consists of traditional agriculture, mining, and the casino/resort industry. The county, which is also named Elko, encompasses parts of 4 American Indian reservations.

The Problem

According to the 2000 US Census, there were approximately 4,300 self-identified veterans living in Elko County.[2] In 2004, 211 of these veterans, or approximately 5% of the total number, were catalogued by the VASLCHCS as traveling at least once annually to the VASLCHCS to obtain primary care services. One-way travel time from the county of Elko to Salt Lake City is approximately 3 hours; however, in the winter months due to harsh weather conditions, travel time increases substantially. For those veterans living on limited fiscal budgets, the loss of pay (if they are still employed), costs for gasoline and, in some instances, overnight accommodations, involve substantial financial costs beyond paying for health care services, not to mention the burden of extended travel for an ill veteran. A concern expressed by the veterans living in the county of Elko was that many of their health care visits were for routine care including the renewal or change of prescription medications and/or lab tests. The general sentiment among these veterans was that if there was a community clinic in Elko County, these services could be provided locally. In fact, a common strategy employed by this small number of 211 veterans in Elko County was to access health care services from local, non-VA providers. Given this environment, there was a strong community impetus for the possibility of creating a local VA health care infrastructure linked to the VASLCHCS to provide limited, but accessible health care services in Elko County.

Figure 1 Part A: Theoretical community partnership model (Adapted). Part B: Applied ECCBP and VA community partnership model



The Solution Process

The first step in the solution process occurred prior to any involvement by VASLCHCS health care administrators. Local leaders organized a series of town hall meetings where community veterans, local veterans' organizations, Elko community medical services representatives, Elko County and Nevada state policy makers, as well as other concerned citizens living in and around the Elko community met to identify how best to meet veterans' health care needs. VASLCHCS officials were not aware of these meetings since they were stimulated primarily by local civic officials in Elko County at the request of local veterans' groups who were frustrated with the lack of accessible VA services. Thus, at this very early point, the VASLCHCS officials were not formally participating in these planning activities, although elements of the community-based partnership model were inherently actualized through a naturalistic community engagement process (see Figure 1, Part B).

One result of this local veteran-initiated meeting was the formation of the Elko County Community-Based Partnership (ECCBP) consisting of a representative group

of local veterans who were presently enrolled and receiving health care services through the VASLCHCS, representatives from the Board of County Commissioners, administrators from the Northeastern Nevada Regional Hospital, the University of Nevada-Reno Medical School Rural Outreach Department, Great Basin College, and Nevada Health Center. The working agenda for the ECCBP focused initially on the feasibility of 2 possibilities for care provision that could address local community health care needs: (1) care for veterans, and (2) care for the uninsured, underinsured, and Medicaid populations in the region. The ECCBP formally approached the VASLCHCS to assist them with an application to the VA to determine whether the Elko community qualified for a community-based outpatient clinic.

By way of background, a VA community-based outpatient clinic is a health care infrastructure through which the VA provides veterans with primary and preventive care through a community health care clinic that is constructed and sustained exclusively with VA resources. Health care services provided at these clinics are comprehensive including annual physicals, preventive health care and screening, patient education, routine lab tests, EKGs, immunizations, medication review, and mental health care. In 2003-2004, the VA underwent a landmark study of the national VA health care infrastructure. This internal VA process, known as the Capital Asset Realignment for Enhanced Services program, involved determining the percentage of enrollees living within specific travel times to the nearest appropriate VA facilities. The data from Capital Asset Realignment for Enhanced Services were used to evaluate each regional area that was served by the VA to determine whether the building of a community-based outpatient clinic was feasible. Evaluation was, therefore, based on 2 thresholds: (1) the percentage of veterans living within access guidelines, and (2) a specified number of enrollees living outside access guidelines. Capital Asset Realignment for Enhanced Services prescribed that the development of a new community-based outpatient clinic would be assessed according to 3 priority levels: (1) highest priority group—markets that have large future capacity gaps in addition to large access gaps, and in which the number of enrollees who do not meet access guidelines per specified area is greater than 7,000 veteran enrollees per proposed clinic location; (2) second-priority group—markets that are required to meet the criteria of priority level 1, but in which the number of enrollees who do not meet access guidelines is fewer than 7,000 per proposed clinic location; and (3) third-priority group markets are areas with large demand gaps but where 70% or more of enrollees are within access guidelines.

In May 2005, a proposal for a community-based outpatient clinic in Elko was submitted to the VA by the ECCBP, in consultation with the VASLCHCS. The outcome of this process resulted in the Elko region receiving a second-priority grouping score, which was not a sufficient priority for the Veterans Administration to initiate clinic funding or begin the physical construction of a community-based outpatient clinic. This setback, however, was the impetus for activating the second element of the community-as-partner model: negotiation. Undaunted by this initial setback, the ECCBP continued its efforts to seek a higher priority status for Elko.

A Community Partnership: Elko and the VASLCHCS

Concurrently, the ECCBP also moved forward to negotiate with the VASLCHCS for resources to establish an access point to health care services for veterans within the community of Elko. The director of the VASLCHCS became a formal member of the ECCBP, attending town hall meetings in Elko and working to secure consistent health care services for Elko veterans. The VASLCHCS director and the ECCBP proposed several joint options for veterans to access services in Elko County. This negotiation included identifying the degree to which resources within the VA system could be leveraged to complement existing community resources to create a stable infrastructure. Implementation began when facilitators were identified within the VASLCHCS who had a working knowledge of resources and technologies that could be employed in Elko. It was believed that in order to optimally address veteran needs in this remote location, the use of telehealth technology would be required. Therefore, the VASLCHCS Associate Director of Patient Care Services and its Manager of Telehealth were enlisted to help integrate telehealth within a community outreach clinic.

The manager of the telehealth program initiated the following tasks: (1) evaluate existing VASLCHCS telehealth technologies and their utility to address the identified needs articulated by the ECCBP; (2) engage the ECCBP to determine areas of potential collaboration that could be forged between the VASLCHCS and local Elko health care providers; (3) develop a business plan, including financial feasibility to identify both short-term and long-term solutions to the expressed veteran needs; (4) help the VASLCHCS and the ECCBP implement the plan; and (5) monitor the effectiveness of the plan. The community-as-partner model predicts that sustainable community collaborations are reciprocal in nature and much of what transpired within the implementation

phase also involved the evaluation of veteran patient needs and the assessment of how those needs could optimally be met.

As part of this patient evaluation process, a small number of Elko veteran patients were identified who had complex medical conditions requiring specialty care that could not be met by local community resources. A telehealth technology resource was identified within the VASLCHCS, as well as several demonstration projects that employed specialty health care delivery through telehealth, to address the needs of patients with complex medical conditions. These resources were recruited by evaluating and enrolling these veterans in respective VASLCHCS telehealth programs. It was also decided that ongoing monitoring of these patients required involvement of a local health care provider; therefore, plans were enacted to incorporate telehealth technology into the Elko Clinic.

Two telehealth technologies were specifically identified: (1) an in-home messaging program that would enable the user to transmit biometrics such as blood pressure, weight, and blood sugar levels, as well as answers to critical health assessment questions, through an analog telephone line to the VASLCHCS Medical Center and (2) a kiosk-based videophone support health monitor was proposed as a telehealth device that would allow users to engage real-time verbal and visual access to a Primary Care Provider at the VASLCHCS. To employ the device would require a fixed location, such as an office, where veterans could access the kiosk along with a professional staff member to monitor and manage the visit. The benefits and barriers of each option were evaluated. It was concluded that the expense associated with the individual in-home unit for each veteran in the Elko area was prohibitive and inefficient. The second option, the facility-based videophone kiosk, was identified as viable and could be supported by VASLCHCS resources. However, sufficient funding was needed for the leasing of office space within the community; therefore, sources for this funding were sought through VA resources. The ECCBP identified specific requirements for implementing this telehealth technology, including (1) physical space for housing the device, (2) a high-speed fiber optic telephone line for facilitating use of the VA Computerized Patient Record System (CPRS), and (3) a trained professional with expertise to operate the telehealth technology, collect vital signs and history, and document these data in the CPRS. Because a Medicare/Medicaid clinic had already been established in collaboration with Great Basin College and the University of Nevada-Reno, the ECCBP coordinated with this existing provider partnership to designate permanent space for the Elko Telehealth Outreach Clinic.

A mutually beneficial partnership was established with the Great Basin College nursing program and the University of Nevada-Reno. Great Basin College agreed that a portion of the building could be designated for the VA kiosk telehealth station with the establishment of a telehealth training program for the nursing students. The academic programs donated the office furniture and contracted and paid for the necessary building renovations. This put the repeating cycle of the community-as-partner model into play.

The VA Manager of Telehealth engaged start-up resources to address functional issues of clinic operation including: (1) installing DSL lines, (2) purchasing computers, (3) ensuring that physical space remodeling met HIPAA and ADA requirements with regard to patient privacy and accessibility, and (4) contracting for the construction of countertops.

VASLCHCS leadership applied for and received a $150,000 teaching grant, which allowed for the purchase of additional equipment including a television, VCR, and multimedia equipment. The grant also paid for the initial training of 1 member of the nursing faculty from the Great Basin College to provide clinical supervision and instruction to students in the nursing program at the college, as well as to staff the clinic. Over the course of the 3-year grant cycle the faculty position evolved, with collaborative funding through Great Basin College, into a permanent clinical instructor line that was used to provide ongoing supervision to the Elko Telehealth Outreach Clinic.

The Elko Community Outreach Clinic Operation Begins

In November 2006, the Elko Telehealth Outreach Clinic held an open house to reach out to enrolled and unenrolled veterans in the area to familiarize the veterans with the specific services offered. On December 28, 2006, the clinic began official operation one-half day per week. Health care services were initially limited to noninvasive, nonurgent follow-up appointments, medication management, and prescription refills. Through a contractual relationship with a clinical laboratory in Reno, Nevada, which was initiated very early in the Elko Clinic planning process, veterans were also able to receive routine blood draws by a phlebotomist several days prior to their telehealth visit. Blood work was sent by courier to the clinical laboratory for processing and these results were electronically transmitted to the VASLCHCS Medical Center for data entry into the CPRS. Clinical providers at the distant medical center were able to access this information prior to the patient's telehealth visit in Elko, thereby providing continuity of care.

In order to engage general community support for the Elko Telehealth Outreach Clinic, advertising was disseminated though the local media describing the VA-Elko Community partnership. In addition, a recruitment effort through the VASLCHCS was initiated to encourage veterans who were not enrolled in VA care to attend the Elko Clinic to enroll for services.

From December 2006 to December 2007, a total of 84 veterans received health services through the Elko Clinic. Table 1 summarizes the demographics and selected utilization statistics for the veterans who attended the Elko Clinic during this time period. The veterans who served in Elko were primarily male and the average age was 65. Nearly half completed their military service during the conflict in Vietnam. Sixty-nine percent had no service-connected disability and the average number of visits to the Elko Clinic for the year was 2.84 per veteran. Although this represents only a third of the 211 initial veteran patients who reported traveling to Salt Lake City for services to be performed at the VASLCHCS, it is anticipated that the number of clinic users will increase as resources become available to extend the operating hours of the clinic from one-half day per week to 30 hours per week. This expansion of the clinic will serve better both those veterans currently enrolled with the VA for care and those new to VA services.

Table 1 Descriptive Statistics of Veterans With a Record of at Least 1 Elko Clinic Visit During the Clinic's First Year of Operation

Variable	N = 84 (%)
Sex	
Male	82 (97.6)
Race	
White	28 (33.3)
Age (years)	
30-59	30 (35.7)
60-89	54 (64.3)
Service period	
WWII	8 (9.5)
Korean	15 (17.9)
Post-Korean	10 (11.9)
Vietnam	41 (48.8)
Post-Vietnam	6 (7.1)
Persian Gulf	4 (4.8)
Service connection	
No service connection	58 (69.0)
10%-50%	12 (14.3)
60%-100%	14 (16.7)
Number of Elko Clinic visits	
1-3	66 (76.2)
4-6	10 (11.9)
7 or greater	8 (9.5)
Number of SLC VAMC hospital admissions	
0	62 (73.8)
1	20 (23.8)
2	2 (2.4)
Length of hospital stay in days	
1-5	19 (73.1)
6-10	3 (11.5)
11 or greater	4 (15.4)
Number of prescribed medications	
0	3 (3.6)
1-5	20 (23.8)
6-10	28 (33.3)
11-15	19 (22.6)
16-20	9 (10.7)
21-25	3 (3.6)
26-30	2 (2.4)

Implications for Future Community–VA Partnerships

The process that led to the establishment of the Elko Telehealth Outreach Clinic highlights the creative thinking and problem solving that is possible within the VA structure. Dedicated professionals from the VASLCHCS Medical Center understood that: (1) traditionally, veterans living in rural or highly rural areas have difficulty accessing consistent routine medical care; (2) providing specialty care services for isolated rural veterans might be implemented by using similar concepts employed while establishing the primary care model for Elko; and (3) veterans can receive continuity of care from a consistent provider without incurring the burdens of time and cost associated with travel to larger medical centers.

When grant funding for the clinic nurse ended in May 2008, the VA recognized the value of continuing to provide services through the Elko Telehealth Outreach Clinic and designated it as an official "Outreach Clinic." This designation allowed the hiring of a permanent full-time clinic nurse, thus opening the possibility for expanding the operating hours of the Elko Clinic. The nurse training program established within the Elko Clinic in partnership with the Great Basin College Nursing program has become an active conduit for recruiting additional health care professionals who are interested in working with veterans in rural settings. This ongoing process is consistent with predicted outcomes from the community-as-partner model, which argues that community assets and capacity (not an external resource entity) are at the foundation of any sustainable community-based initiative.

The essential lessons learned from the process of establishing the Elko Telehealth Outreach Clinic have implications for extending outreach clinic services in other regions nationally. It is our view that the initiation and maintenance of an outreach clinic will have a higher likelihood of success if it is guided by a model or framework that provides direction for (1) engaging a local community that has its own cultural identity and

established resources, (2) strategies for negotiating with a local community to initiate change, (3) guiding the process of implementation, and (4) ongoing evaluation and assessment that can then influence the implementation process. The community-as-partner model is one example of a framework for addressing these issues, and this case study articulates how this model was enacted. It predicts that sustainability is most likely when (1) the local veteran patient population is involved in identifying its own health care issues, (2) local strategies are prioritized in the health care provision plan—a step that can be easily overlooked if there is an aggressive system-wide initiative to deliver services to a group (rural veterans) with a need that has primarily been identified by outside sources, (3) the culture of the local community is empowered as an active partner in the plan—the formation of the ECCBP exemplifies how this process occurred, and (4) linking, where possible, with local professional education institutions or extension services to provide additional resources for clinic sustainability. The Elko Telehealth Outreach Clinic was an instrument for facilitating continuing nursing education through Great Basin College and the University of Nevada-Reno. This ensured the ongoing infusion of local resources through a process of community-clinic interdependency and has stimulated evaluation expertise through partnerships between the educational training institution and the Veterans Administration Medical Center delivery system.

A systematic approach to prioritizing the elements discussed in this paper can assist with regional and national strategic planning for rural outreach clinics. Implementation of these processes during the formation of outreach clinics will add to the stability and long-term success of rural-based outreach clinics. Using this systematic model for clinic planning and initiation also allows for ongoing adaptations to be introduced as the population and its needs change over time. Perhaps the most important overall effect of this systematic approach is that the main focus remains on how to meet the health care needs of individual rural veterans.

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