Intermediate Outcomes of a Tribal Community Public Health Infrastructure Assessment

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The purpose of this collaborative participatory project was to assess the strengths and needs of a tribal community as part of a larger public health capacity building program. Key project partners included: the Ramah Band of Navajo Indians, the Albuquerque Area Indian Health Board, the University of New Mexico Masters in Public Health Program, and the University of Nevada, Las Vegas, American Indian Research and Education Center. Principal intervention steps entailed: 1) relationship-building activities among tribal programs and between the Tribe and the scientific community; 2) an orientation to public health; 3) a comprehensive public health infrastructure assessment, utilizing a standardized CDC instrument; and 4) a prioritization of identified needs. The direct outcome was the development and beginning implementation of a community specific public health strategic action plan. Broader results included: 1) increased comprehension of public health within the Tribe; 2) the creation of a community public health task force; 3) the design of a tribally applicable assessment instrument; and 4) improved collaboration between the Tribe and the scientific community. This project demonstrated that public health assessment in tribal communities is feasible and valuable. Further, the development of a tribally applicable instrument highlights a significant tribal contribution to research and assessment. (*Ethn Dis*. 2004;14[suppl 1]:S1-63–S1-71)

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Introduction

During the last 2 decades, capacity building and community empowerment have emerged as important public health strategies, with community demands and foundation funding leading the efforts.[1–5] Included within capacity building is the need for an effective public health infrastructure, which is often the key to whether a community enacts a proactive or reactive approach to its health concerns.[6] The value of an effective public health infrastructure cannot be overestimated, especially among tribal populations, which experience significant health disparities, as well as multiple challenges regarding quality and control of their healthcare systems.

Statistical measures of health status reveal a persistent gap between American Indians and non-Hispanic Whites.[7] To make matters worse, the majority of tribes possess remarkably low levels of resources to contend with this disparity, with 2003 per capita spending from Indian Health Services estimated at only $1,914.00 per tribal user, compared to $5,065.00 per user in the general US population.[8] As a result, health care and public health services in tribal communities are often fragmented, and preventive services are in their infancy.

One particular concern for tribal communities is the rising incidence of cancer. For many years, cancer rates among American Indians were significantly lower than among the general population.[9] Unfortunately, this is no longer the case. Cancer is now recognized as a major health problem for most tribes, and studies indicate that American Indians have the poorest cancer survival rates of any group in the United States.[10–13] These alarming statistics hold true for breast and cervical cancers, as well. Breast cancer has become the second leading cause of cancer death among American Indian women, with rates now equal to the US all-races rates.[14] Further, Li et al demonstrated that Native Americans are more likely to be diagnosed at advanced stages of breast cancer, and to have poorer survival rates after diagnosis.[15] With regard to cervical cancer, age-adjusted mortality rates for American Indian women, although significantly reduced over the past 2 decades, are still 68% higher than the US all-races rate.[16]

The Partners in Tribal Community Capacity Building Program of the Albuquerque Area Indian Health Board (AAIHB), funded by the Centers for Disease Control and Prevention's REACH 2010 program, was designed to target the dual challenges of public health capacity building and increasing rates of early detection of breast and cervical cancers, to reduce the burden of disease. The AAIHB is a non-profit inter-tribal organization, which has primarily served 7 member tribal communities in the Southwest since 1980, providing such programs as HIV prevention, audiology, health education, and community development services. In applying for this grant, AAIHB recruited the University of New Mexico (UNM) Masters in Public Health Program to be a partner in the development of community capacity, and the American Indian Research and Education Center at the University of Nevada, Las Vegas (UNLV), as the program evaluator.

This REACH 2010 Program adopted a 4-step model for capacity building, including: 1) building relationships among tribal programs, and between tribes and outside programs to create an atmosphere of inclusion and trust; 2) building skills to expand the individual abilities of tribal members and others working within the tribal health system; 3) promoting interdependence to recognize the mutual reliance upon one another and value all contributions; and 4) promoting commitment to ensure advocacy, collaboration, and sustainability. This model is a cyclical iterative process, with capacity emerging as relationships lead to skill development, which, in turn, leads to interdependence and commitment, which then re-strengthens relationships, and the need for more skills, etc. The model mirrors the principles and values of community-based participatory research.[17]

It was hypothesized that this capacity-building approach would not only bolster the tribal public health infrastructure, but would also maximize the existing community resources to address cancer prevention and other pressing health needs. The expected outcomes for the project, which was initially funded for 3 years, but extended to 7, benefit all project partners and include: 1) increased scientific capacity to develop monitoring, surveillance, and assurance systems; 2) the development of culturally appropriate preventive intervention strategies based on community capacity assessments; 3) the development of interdependent networks and partnerships, which promotes collaboration among tribes, universities, and outside agencies; and 4) a model for developing capacity in public health functions within tribes. The overarching partnership model was based on the expectation that mutual learning would occur within both the scientific and tribal communities.

This paper will focus on one major aspect of the first 2 years of this multifaceted program: the process and intermediate outcomes of a tribal community public health infrastructure assessment. The methods utilized, and the concrete and broader results of the activity, will be described, and the article will conclude with a discussion of successful strategies and lessons learned, and will offer insights into some of the future implications of this ongoing project.

METHODS

Identification of Pilot Community and Partners

The Ramah Band of Navajo Indians was selected to be the pilot community from within the 7 tribal communities served by AAIHB. The community is a semi-autonomous Band of Navajo Indians living on 154,553 acres of land in west central New Mexico, which are non-contiguous to the larger Navajo Nation. The population comprises approximately 3000 tribal members, 42% under the age of 18 years, with the majority speaking the traditional Navajo language. This rural community, 2.5 hours from the closest urban center, has a 65%–70% unemployment rate, with the majority of available jobs existing in tribal programs, including education and health care.

The Ramah Navajo Chapter is a sub-governmental unit of the Navajo Nation, and serves as the local government for the Ramah Band of Navajos. Until 1970, the Ramah Band of Navajo Indians had historically relied on the Navajo Nation and the Federal Government for the provision of much needed services in the community. However, with the unanimous passage of a 1970 Ramah Navajo Chapter Resolution, the community opted to assume control over its own educational services through the establishment of the Ramah Navajo School Board, Inc (RNSB).[18] The RNSB was charged with the responsibility of securing funding, constructing and overseeing a local school, which would "give parents a voice in the education of their children," and would stop forcing the community to "send its students to distant boarding schools." This historic community effort also contributed to the development and passage of the 1975 Indian Self-Determination Act, Public Law 93-638. In 1978, RNSB further expanded its mission of community self-determination by assuming control of the local Indian Health Services Health Clinic, and other health and human services programs.

The success of RNSB, as a tribal organization responsive to its grassroots, has enabled the community to engage in problem solving, to facilitate active participation of tribal members in health and education, to support community members in their professional development, and to achieve consensus for community and organizational goals. This level of community empowerment and value of self-determination was the basis for the Ramah Band of Navajos' readiness to participate in the public health capacity-building program.

Other significant partners in this project included the Albuquerque Area Indian Health Board, Inc., and the University of New Mexico (UNM) Masters in Public Health Program (MPH). The AAIHB is a leader in community development and capacity building among local tribes, and among Indian people across the United States. For more than 20 years, AAIHB has developed interdependent working relationships with all 7 of the tribal communities it serves, which has greatly facilitated program implementation, and established mutual lines of respect between the organization and the tribes. The primary role of AAIHB in this REACH 2010 Program is to function as the facilitator of project activities, and as a bridge between the tribes and outside partners.

The UNM MPH Program, begun in 1994, is a fully accredited program whose mission is "to provide leadership in graduate and community-based education to improve the health of the di-

verse populations of New Mexico, the Southwest, the United States/Mexico border region, Latin America, and among Native American populations. Based on a social justice perspective, the MPH works in partnership with communities, tribes, and the public and the private sector to build on community strengths, and to increase their capacity to respond to public health problems." The MPH Program's principal role in this project is to provide expertise in community capacity and assessment issues, and to promote the formation of sustainable partnerships between the Tribe and university. The university also serves as the facilitator of a host of public health skills trainings for tribal health workers through its innovative Public Health Outreach and Education Program (PHOEP), which brings quality public health instruction directly to the communities where it is most needed.

Public Health Assessment Process

Following the selection of the Ramah Band of Navajo Indians as the first pilot tribe, an initial orientation meeting was held in the community in May 2002. It was important that this meeting took place in the community, rather than in Albuquerque, 2.5 hours away, where the AAIHB and the UNM are located. An initial group, representing the primary health clinic, behavioral health, nursing, field health, continuing education, and several other community programs, was invited to: 1) introduce the project partners; 2) hear the proposal and confirm interest; 3) discuss the potential benefits of participating; and 4) discuss the broader perspective of public health capacity, and the project's specific emphasis on screening for breast and cervical cancers.

The presentation made by the AAIHB project director and the UNM principal investigator of the university contract, stimulated much discussion about health issues in the community and the need to broaden participation.

Table 1. Ten essential public health services*

1. Monitor health status to identify community health problems.
2. Diagnose and investigate health problems and health hazards.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure a competent public and personal healthcare workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.

* CDC Local Public Health System Performance Assessment Instrument. Available at: http://www.phppo.cdc.gov/nphpsp/.

The attendees created a list of over 25 additional community members and programs that should be part of the wider discussion of public health, and involved in the next meeting. Key community stakeholders with leadership roles, or a personal connection to cancer, were included in this list. At the conclusion of the meeting, participants agreed to personally invite the aforementioned individuals to join this process.

Once interest was confirmed, the next major step was to initiate the capacity-building process by conducting a community public health needs assessment. A review of existing assessment instruments was conducted to determine which tool would best serve the community's needs. The CDC Local Public Health System Performance Assessment Instrument was selected, due to its comprehensive focus on the 10 essential public health services (Table 1). The instrument describes an optimal level of performance and capacity to which all public health systems should aspire, and allows for comparisons to the current status, so that community systems are able to identify strengths and areas for improvement. An added benefit is that its implementation requires the assembly of local program leaders to discuss each indicator and determine its score. Therefore, the instrument performs the dual functions of assessing a broad range of community public health services, and stimulating much-needed communication and collaboration among leaders of tribal health-related programs. To our knowledge, this instrument had not been previously utilized with a single tribal entity; however, no tribal-specific instruments were available at the time, and the community's readiness was increasingly evident.

To begin the assessment process, project partners determined that it was critical to generate excitement about the concepts of public health and public health systems. Therefore, the next gathering took place in June 2002, as an all-day forum on public health. It was held at a community restaurant with enough space for participants to brainstorm and share ideas with one another. There was improved representation from the elementary school, law enforcement personnel, the clinic, and both leadership bodies.

The day began with a blessing, essential to working with tribes, asking for the Creator to help this group of people in their important task ahead. The UNM and AAIHB staff then led a small group visualization exercise, as a way to create ownership and dreams for the future. The sketches of people's visions 20 years from now included new services and improvements, such as additional sewers, telephone lines, electric lines, parks, hospitals, recreation centers, stores, small businesses, improved markets and fire and police departments. Participants also envisioned intangibles, such as a non-violent community, improved educational opportunities, fewer dysfunctional families, more job opportunities, healthy people, and less diabetes and substance abuse. The excitement

about the visions led to recommendations that this exercise be taken to other community members later in the project.

Project staff next led a brainstorming session around the question, "what is public health?" and the group began to picture health as an inter-related concept, deriving from the community as a whole, not just from the primary healthcare facility. All agencies and organizations were listed and were collectively labeled as the Ramah Navajo local public health system. After lunch, the CDC Local Public Health System Performance Assessment Instrument was introduced. It was agreed that, on this day, the group would only undertake the first of the 10 essential public health services, to ensure that ample time was devoted to fleshing out the logistical details of the assessment process.

Facilitators first reviewed the tool's format and scoring system. Next, the optimal benchmark standard, and subsequent indicators, for the first essential public health service were read aloud and clarified by the facilitators, as necessary. Once the intent of the section was clear, each assessment question was stated individually and was immediately followed by discussion among the participants to share ideas and assess the extent to which activities related to the service were actually taking place in the community. Upon completion of this dialogue, participants were asked to vote simultaneously on the score by holding up one of 4 color-coded response cards. Response choices included: 1) No (white), which indicated that no more than 25% of the activity described within the question was being conducted within the current public health system; 2) Low Partially (orange), indicating that more than 25%, but not more than 50%, of the activity described within the question was being conducted within the current public health system; 3) High Partially (yellow), meant that more than 50%, but not more than 75%, of the activity described within the question was being conducted within the current public health system; and 4) Yes (pink), indicated that more than 75% of the activity described within the question was being conducted within the current public health system. To ensure accuracy in reporting, 2 facilitators recorded the average score.

Although the group participated willingly, some of the participants began to wonder if this was a worthwhile project, or an academic exercise for "those government people at the Centers for Disease Control." The language of the instrument appeared academic and stilted to community members, and the entire process seemed long and difficult to wade through. For instance, terms such as "constituency development," "catchment area," and "sentinel event" are not readily utilized in tribal settings, and the facilitators struggled to help translate this "foreign approach" to practicalities of life in a tribal community.

To address these concerns, the facilitators solicited input from the community on how to improve and continue the process. A few important recommendations emerged including: 1) providing all participants with a summary of each essential public health service and sample questions at least 2 weeks before the next meeting; 2) creating a worksheet on which participants could take notes and document specific needs and strengths identified during the process; and 3) having the facilitators pay particular attention to defining complex terminology, and reviewing the criteria for the model standard of each essential service prior to conducting it. At the end of the day, the group decided to move forward with the assessment process, and planned a 2-day retreat in Albuquerque, away from work, to complete the remaining 9 essential services.

Sixteen people, representing multiple sectors, participated in this assessment retreat in July 2002. While this group did not have representation from all health-related programs in the community, it constituted a highly representative sample. On the first day, 5 of the remaining 9 essential public health services were completed, which left a manageable load of 4 sections for the final day. Throughout the entire process, both quantitative and qualitative data were collected for analysis. The qualitative data primarily included specific examples of capacity, which participants ascribed for each measure of performance, as well as definitions of terminology required to make the assessment instrument more relevant for tribes. The quantitative data consisted of the average numerical score for each indicator. After completing the 10 services, UNM sent the quantitative information to CDC for their web site analysis, and analyzed the qualitative data locally to provide timely feedback to the community.

The quantitative results of the process were disseminated at an all-day meeting in the community in October 2002. The assembled workgroup reviewed the identified strengths and needs for each of the 10 essential public health services, and then consolidated these community needs into a maximum of 3 key priorities for each section. This prioritization session led to another all-day meeting in January 2003 (at a location half-way between the community and the city) to bring together the workgroup and tribal leaders to hear the outcomes of the assessment. Forty people came to this event to collaboratively interpret the identified public health priorities, and to develop action objectives for the community.

Since January 2003, monthly meetings have taken place in the community to support the ongoing development and implementation of the pilot community public health strategic action plan. To culminate this assessment phase of the project, and gain a better sense of overall participation and partnership development, program evaluators from UNLV facilitated a qualitative focus group in the community. The focus group met at the end of a regularly scheduled community meeting to bol-

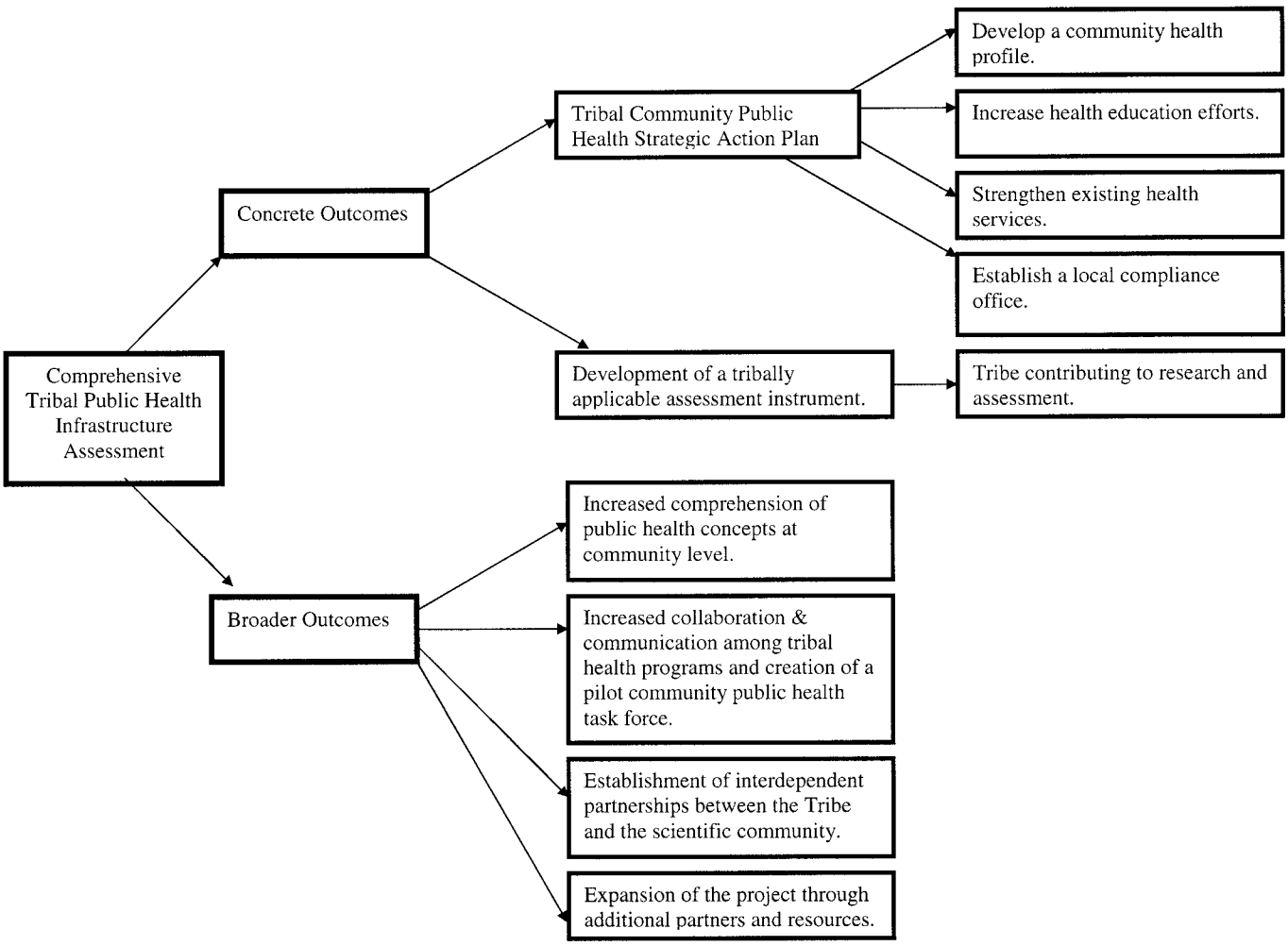

Fig 1. Results of assessment process

ster attendance, and to minimize the burden on participants from too many meetings. Gift certificates to a local business were offered as incentives. Fifteen community members participated in this 1.5 hour focus group. Data was recorded by the facilitators, and presented to project staff and partners to increase understanding of participants' perspectives, and so that adjustments could be made to improve the process in the future.

RESULTS

This comprehensive public health infrastructure assessment yielded a host of concrete results, as well as broader outcomes in the community (Figure 1). The results of the quantitative analysis, which demonstrated the extent to which the pilot community met the indicators for each of the 10 essential public health services, are listed in Figure 2. The strongest areas of performance were in the community's ability to investigate health problems, link community members to health services and enforce laws protecting health. The public health services that revealed the greatest level of need included monitoring community health status, researching health problems, building and utilizing partnerships, and evaluating health services.

These results were consistent with the qualitative data collected throughout the assessment process. For example, the community's strength in investigating health problems is a likely product of its progressive leadership, its willingness to seek out external resources, and its experiences in addressing several Hanta virus outbreaks, which occurred in the community in the 1990s. Similarly, linking its members to existing health services has always been a key priority of the tribe. Its solid performance in this area can be attributed to its strong field health program and its extensive translation, transportation, and outreach services.

The majority of the identified areas of need reflect the significant lack of resources, which persists, not only in the pilot community, but also in many tribal communities throughout the United

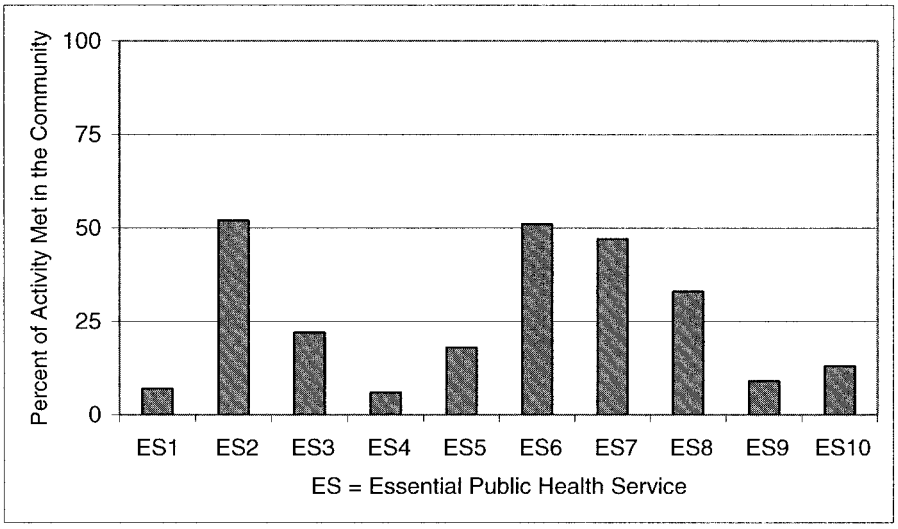

Fig 2. Quantitative pilot community assessment scores for each of the 10 essential public health services

States. Activities such as monitoring health status, researching health problems, and utilizing partnerships typically mandate the presence of an established and proactive public health system. Although the Ramah Band of Navajos has consistently strived to maximize its available resources, its healthcare system has historically entailed a reactionary approach, with minimal emphasis on prevention. Consequently, this lack of a coordinated infrastructure has precluded the establishment of much-needed public health initiatives, such as strong monitoring systems and partnership models.

A subsequent result of this assessment process has been collaborative work conducted with project partners at the Indian Health Services and the CDC, to adapt the Local Public Health System Performance Assessment Instrument to improve its applicability for tribes. Despite its comprehensive focus, the instrument's lack of tribal specificity was a barrier, and led to multiple challenges during the implementation phase. To address these pertinent concerns, community participants and project partners created 2 reports outlining methods to bolster the applicability of the instrument for tribes. The first report highlighted specific components of the tool that were confusing, unnecessary, or repetitious, and provided numerous recommendations for improving the applicability of this tool, and other similar instruments, for use among tribes (Table 2). The second report included suggested methods to facilitate the implementation of such processes as a whole (Table 3), tribal feedback that represented a beneficial contribution to research and assessment, and illustrates the value of establishing interdependent relationships between the scientific and tribal communities.

As a result of this collaboration, a revised assessment instrument is near completion. It remains grounded in the ability of a community to address the 10 essential public health services; however, it also incorporates the recommendations from the Tribe. Redundant and non-applicable questions have been removed, which has substantially shortened the length of time it takes to administer the instrument. Terminology has also been clarified, or revised, to better reflect actual tribal community infrastructure(s). Lastly, a tribal users' guide has been developed to aid the implementation process, which includes preliminary exercises to encourage tribal

Table 2. Recommendations to improve the tribal applicability of assessment instruments

1. Limit length by keeping instruments concise and direct.
2. Avoid complex and bureaucratic terminology.
3. Provide tribally specific examples in sections where it is necessary to keep unfamiliar terminology.
4. Have American Indian researchers and community members review content and terminology prior to implementation.
5. Avoid including unrealistic objectives, which may engender unwarranted feelings of inadequacy in resource challenged communities.
6. Create a tribal users guide to accompany all instruments.
7. Respect tribal sovereignty issues, especially with regard to tribal data ownership.
8. Pilot test all instruments in tribal communities.

Table 3. Strategies for implementing the tribal version of the CDC Local Public Health System Performance Assessment Instrument

1. Build relationships between scientific community and tribe before proceeding with any component of the assessment.
2. Engage the community at multiple levels—grassroots to leadership.
3. Start with a visioning process to motivate community engagement.
4. Incorporate public health trainings, if possible, to ground the instrument in broader learning about public health functions.
5. Define and discuss the local public health system prior to initiating the process.
6. Utilize a retreat style format to maximize participation, ensure commitment, and avoid distractions.
7. Record qualitative information in addition to the necessary quantitative data.
8. Have participants collectively brainstorm a summary log of strengths and needs after each essential service is completed. Collect this information upon completion and add to the qualitative report.
9. Emphasize that a needs assessment is an opportunity to initiate collaboration and communication, not an exercise in assigning blame or engendering unwarranted feelings of inadequacy.
10. Upon completion of the assessment process, immediately establish a plan for results dissemination, priority setting, and strategic planning to maintain continuity.

participation, such as visioning and public health trainings.

Another, and perhaps the most significant, result of the community public health assessment process, has been the development and beginning implementation of a Ramah Navajo public health strategic action plan. All the priorities of the strategic plan came directly from the Ramah Navajo community members and leaders who formed an official project task force during the multiple stages of the assessment. The resultant strategic plan consists of 4 priority areas, each with numerous measurable objectives. The key priorities include: 1) developing and maintaining a local community health profile; 2) strengthening and increasing health education efforts; 3) strengthening and ensuring culturally appropriate health services; and 4) developing a local compliance office, which can bring together all tribal policies related to health and community well-being. For the past year, intensive work has centered on the first 2 priority areas: co-development of a community profile instrument that includes health as well as education, housing, economic development, natural resources, culture and language, and other tribal interests that relate to health; and the production of a tribally driven health education video and other approaches to cancer screening and prevention. The overarching goal of this strategic plan is to strengthen the emerging project task force as a sustainable partnership with a structure for collaborative planning and action among community programs, and between the Tribe and outside programs.

The assessment process has also yielded a range of broader outcomes in the community, such as: 1) increased comprehension of the public health concept by tribal members and staff who work in the health and human services field department; 2) increased communication and collaboration among tribal health programs, and the creation of a public health task force in the community; 3) development of partnerships between the Tribe, AAIHB, and 2 universities; and 4) expansion of the capacity-building program through the inclusion of additional partners and resources.

The assessment process, itself, reinforced the public health concept by delineating the important role that multiple programs play in the health and quality of life of a community. It generated much-needed communication and collaboration among programs such as the clinic, environmental health, law enforcement, schools, adult education, natural resources, and government, ultimately resulting in the creation of a public health task force in the pilot community. Further, this assessment process, along with the capacity-building program, have promoted significant interest in public health as a field of study, with one community task force member having already enrolled in a masters-level university program, and several others becoming interested and taking classes.

Sound relationships are also being formed among the pilot community, AAIHB, and the 2 universities. This development was reflected in the qualitative data collected at the evaluation focus group in July 2003. Participants stated that there is "a growing sense of partnership" between the tribe and all partners, and mentioned "an important need to continue developing these relationships." Many also expressed that this collaborative assessment process is helping them "create a community vision" for the long-term development of "skills and tools for self-sufficiency." With regard to interdependence, however, the community stated that they "don't yet feel like equal partners, although a sense of mutual partnership is growing," and they also offered, "we don't yet know what we need with regard to public health." These data demonstrate that, although still in process, partnership development is heading in the right direction.

A final outcome of this assessment process has been an acute recognition of the need to collaborate with outside programs and to expand resources, especially in the case of cancer screening and prevention. Project task force members are presently engaged in relationship-building activities with a nearby healthcare facility which provides mammography services to Ramah Navajo women. This action has already yielded an increase in communication, and is likely to facilitate improvements in appointment scheduling, data sharing, results dissemination, and follow up. The project task force has also worked diligently to acquire additional funding to expand the program. The group successfully presented a compelling argument for the need to fund a community cancer awareness campaign, and project activities associated with this new grant opportunity are now underway.

DISCUSSION

The original intent of the entire program was to build relationships, build skills, establish working partnerships, and, ultimately, build capacity to create a long-term commitment to the development of a tribal public health infrastructure. The community assessment process, beginning with the CDC Local Public Health System Performance Assessment Instrument, affirmed this approach, and has provided the opportunity for each of the project partners to envision the potential use of data for future tribal public health efforts. Partners had different initial expectations and needs for utilizing the CDC instrument. The University of New Mexico partners wanted to assess whether the tool would be useful to tribes, ie, whether a standardized, mainstream instrument could be appropriately adopted for use with tribal communities. The tribal partners wanted to find a mechanism to identify community needs and resources. As discussed, the instrument's terminology,

complexity, and length became issues. Similarly, elements the scientific community thought essential were not appropriate for tribes, and concepts the Tribe thought essential were not part of the tool.

The high level of commitment, however, to the several-day assessment process strongly reflected the quality of the relationships established at the project's start. The group was able to define and redefine concepts, and, ultimately, developed recommendations for modifying the assessment instrument for use with tribal communities. With an underlying framework of respect and communication, diverse skills and knowledge, the group was able to work together toward short- and long-term outcomes. This supports the project's original contention that relationship building, a step often neglected and under-valued by the scientific community, is critical to the development of long-term partnerships with tribal communities.

Relationship building is complex and multi-faceted. For tribes, relationships are historical, political, formal and informal, and personal. They extend beyond the individual to the family, clan, and tribe, and are implicit to establishing trust, respect, reciprocity, and effective communication. Relationship building takes time. In Western scientific circles there is often an assumption that if people just come together, the work will then be accomplished. However, the legacy of these relationships in tribal communities has been one of outsiders coming into a tribal community, dictating program design, and making assumptions about the abilities, needs, and interests of the tribal community.

Three additional key factors contributed to the success of the project thus far: 1) the presence of an effective coordinating entity; 2) strong support and commitment from both tribal leadership and university faculty; and 3) fidelity to the concept of mutual learning. First, while both the tribal community and the university partners were highly motivated, the role of the AAIHB as facilitator and bridge between the partners has been important to the project's success. Trusted and respected, both by tribes and the scientific community, the AAIHB served a key role in coordinating activities, translating both tribal and university "cultural" concepts, and providing continual reinforcement for the concept of mutual learning, and the development of long-term partnerships.

Second, community health professionals received strong support and involvement from both health administrators and tribal leadership. The cooperation of the clinic director allowed staff to fully participate in project activities. The support of Tribal leaders has opened lines of communication between the project, the Ramah Navajo School Board, Inc., and the Chapter, and has brought additional perspectives and resources to the project. There is also a strong, visible commitment from the administration of the UNM MPH Program, with dedicated faculty and resources supporting the university's involvement.

The concept of mutual learning is being embraced, both within and between the partner entities, and, as a result, the project is building the capacity of all partners, not just the Tribe. The community has taken this concept a step further, recognizing that tribal organizations and agencies other than the clinic have an important role in addressing local public health issues. Community professionals from the fields of social services, education, law enforcement, natural resources, and tribal administration, are now recognizing their roles in public health, and are actively contributing to the project. The consistent emphasis on mutual learning has helped partners and participants articulate their own needs, and acknowledge the need to honor the contributions of others.

Success did not come without the need to address 2 primary challenges: bridging cultures and creating a balance between short- and long-term results. This project brought together the 2 very different cultures of the Tribe and the University. All activities at the tribal level address the native language, tribal culture and tradition, and historical and current perspectives of American Indian people. The university and the scientific community also have a distinct language, culture, and history that are part of their contribution. An underlying premise of community capacity building is that before people can work together effectively, each must acknowledge, understand, and respect their differences. There must be trust, mutual respect, and a common frame of reference.

Although both the Tribe and the University came to the project with a strong desire to work together, and a great deal of respect for each others' culture, it still took time to establish effective communication and a process by which to promote mutual learning. This required, in essence, an extended 2-year planning process, and an atmosphere conducive to building effective long-term relationships. Consistency was important for this to be accomplished, ie, participation by the same university faculty, and a commitment to conducting meetings in the community on a regular basis. Now that the value of the project and the process are apparent, the community has expressed the desire to revisit and strengthen the relationships between partners.

The second challenge addressed was how to use limited project resources to fulfill both immediate and long-term needs. Although the community is invested in the broader goals of building a public health infrastructure, there is a critical need to focus on pressing health concerns. Initially, the community partners were focused on tangible short-term activities, such as increasing the rates of cancer screenings, while the university partners were focused on long-term activities, such as community capacity building. Finding a balance be-

tween activities that address the rising incidence of cancer, while ensuring long-term community capacity to address all key health issues, has emerged as an important goal for all partners.

The need for increased capacity to understand and address health issues, such as breast and cervical cancers, involves both tribal communities and the scientific community. Each entity needs to build knowledge, skills, and abilities, in order to effectively work together and share critical resources. For tribes, capacity may include the development of a public health infrastructure to identify changing patterns of cancer incidence, and to establish effective cancer education, prevention, and screening programs. Non-Indian practitioners and researchers who work with tribes need training and education to better understand the local resources and cultural strengths, and to value these assets when addressing challenges faced by isolated, under-served tribal communities.

This project has demonstrated that addressing disparities requires those involved to see the issues from multiple perspectives, and to develop strategies for working together. As the tribal communities develop public health knowledge and skills, so must the scientific community develop a deeper understanding of the tribes, and of the people at the forefront of public health practice in American Indian communities. Success is only possible when the tribes are equal partners in the process, with ownership of both the problems and solutions, and when the scientific community is willing to learn about cultural issues, tribal healthcare systems, and community strengths and needs, from the communities themselves.

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