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Institutionalizing a Comprehensive Tobacco-Cessation Protocol in an Indigenous Health System: Lessons Learned

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Abstract

Background—Native Hawaiians have high smoking prevalence and high lung cancer mortality rates.

Objectives—To describe a comprehensive tobacco cessation protocol and share lessons learned in institutionalizing it across the five Native Hawaiian Health Care Systems (NHHCS).

Methods—NHHCS representatives worked together to culturally tailor the Agency for Healthcare Research and Quality protocol for smoking cessation. Process objectives included number of staff trained in tobacco cessation, inclusion of the Tobacco User Guide Sheet (TUGS) in the intake process and medical record, and expansion of programs for smokers who want to quit. Outcome objectives included percent of individuals asked about smoking status and percent of identified smokers that received brief intervention, set a quit date, were linked to services, and remained smoke-free for 90 days.

Results—After 18 months, the NHHCS were at different stages of protocol adoption. More successful NHHCS were more likely to have several champions for the program and administrative support for staff training, new programs, and integrating the TUGS into client charts. They also showed greater success in getting smokers to set a quit date and remain smoke-free for 90 days.

Conclusion—Although the five NHHCS helped design the protocol, each operates independently. More effort and time are needed to help each system overcome internal barriers to institutionalizing a new protocol and to facilitate support for tobacco-cessation champions among medical records and data management supervisors. These lessons may be useful to other organizations that want to institutionalize a comprehensive tobacco-cessation protocol.

Keywords

Community health centers; guideline adherence; minority; nicotine; organizational change; organizational innovation; Native Hawaiian; Pacific Islander; smoking

Introduction

Native Hawaiians are the indigenous people of the Hawaiian archipelago and comprise about 21% of the state's population. Other large ethnic groups in the state include Caucasians, Filipinos, and Japanese. Smoking is a significant risk factor in heart disease, cerebrovascular disease, chronic bronchitis, emphysema, and 15 types of cancer.[1] Hawai`i's Behavioral Risk Factor Surveillance System (BRFSS) showed a declining trend of current smokers, from 21% in 2002 to 17.5% in 2006. However, among Native Hawaiians, the 2006 prevalence of current smokers was 27.4%, a 3.5% decrease from 2000 but still 9.9% higher than the total state (Figure 1). Hawaiian was the only ethnic group tracked by BRFSS to show an increase in current smokers between 2004 and 2005.[2]

Background

Native Hawaiians bear a disproportionate lung cancer burden, with lung cancer being the leading cause of cancer deaths among Native Hawaiians. Lung cancer mortality rates for Native Hawaiian males were 1.4 to 1.6 times higher than those of Filipino, Chinese, and Caucasian males, and nearly two times higher than for Japanese males. Among females, Native Hawaiians have the highest lung cancer incidence, and mortality rates are three times higher than those of Japanese females.[3,4] Reasons why Native Hawaiians have higher lung cancer incidence and mortality rates include higher prevalence of behavioral risk factors, lower access to and utilization of cancer prevention and control services (due to higher proportions of rural residence and lower percentage with health insurance), and cultural insensitivity of mainstream services.[5]

To increase the development and availability of culturally sensitive cancer prevention and control services, *`Imi Hale* – Native Hawaiian Cancer Network, a program of *Papa Ola Lôkahi*, was established in 2000 with support from the National Cancer Institute. During the first year, priority-setting activities were conducted state-wide that resulted in five community-identified areas for cancer education, programming and research; the foremost was lifestyle issues, specifically, smoking, diet and exercise.[6] Subsequent research with Native Hawaiian former and current smokers suggested need and preference for a multi-component cessation program to address the social, psychological, and physical factors that impeded their tobacco cessation efforts.[7,8]

Native Hawaiian Health Care Systems—The five Native Hawaiian Health Care Systems (NHHCS) are significant partners in *`Imi Hale's* cancer prevention and control efforts, particularly in tobacco cessation. The NHHCS work to: 1) build trust in the agency-client relationship; 2) provide culturally competent outreach and services; 3) assure access to primary care services; 4) develop collaboration and partnerships among existing health service providers; and 5) focus on health promotion, disease prevention, and health education that incorporate traditional Hawaiian values and beliefs as primary preventive methodologies.[9] Types of services include diabetes self-management; hypertension self-management and stroke prevention; transportation; oral health/dental services; asthma programs; cancer education, screening, and patient navigation; nutrition and fitness programs; cardiovascular education and screening; women's health and perinatal education programs; traditional Hawaiian diet and healing practices; behavioral health services including substance abuse and tobacco cessation; and, in four NHHCS, primary care services.

Although they offer similar services, the five NHHCS operate independently and are governed by boards comprised of elected representatives from the Hawaiian communities they serve. Providing primary care services has never been the purpose of the NHHCS; however, the Kaua`i NHHCS started two community health centers on the east and west ends of their island because of a lack of primary care in these communities. Similarly, the Hawai`i NHHCS

established a primary care center in response to that island's shortage of doctors, and the Maui NHHCS provides primary care services due to the lack of on-island healthcare professionals and the isolation of some communities, such as Keanae and Hana. The O`ahu NHHCS now employs a Native Hawaiian physician and two nurses for a clinical office housed within a hospital that is centrally located. Collectively, the NHHCS serve an average of 25,000 Native Hawaiian clients annually.

The NHHCS serving the island of Hawai`i, Hui Malama Ola Na `Oiwi, has 32 staff at its main office, primary care center, and six satellite offices. The NHHCS serving the island of Maui, Hui No Ke Ola Pono, has 43 staff in its main office, remote satellite office, and Simply Healthy Café (serving nutritious, affordable meals to the Maui community). The NHHCS serving the islands of Moloka`i and Lana`i, Na Pu`uwai, has 21 staff for its two island offices and off-site Fitness Center. The NHHCS serving the island of O`ahu, Ke Ola Mamo, has 34 staff at its administrative and programs office, medical clinic, and three satellite offices. The NHHCS serving the islands of Kaua`i and Ni`ihau, Ho`ola Lahui Hawai`i, has 80 staff at its administrative and program offices and two community health centers.

`Imi Hale supports a community outreach worker from each of the NHHCS at half-time (50%) to coordinate cancer education activities, including tobacco cessation services. This contractual relationship has existed since 2000. The community outreach workers are members and residents of the communities they serve, bringing cultural grounding and sensitivity to our tobacco resistance efforts. These community outreach workers meet at least quarterly with *`Imi Hale* staff, our collaborations are reviewed at least annually with the NHHCS administrators, and we routinely survey NHHCS staff on their satisfaction with the materials, training, and technical assistance we provide them. Additionally, all education materials developed are pre-tested with each of the NHHCS and their communities.

The importance of having established relations with community partners such as the NHHCS cannot be overemphasized. Mutual trust related to tobacco programming had been established between *`Imi Hale* and the five NHHCS over 6 years prior to the development of this tobacco protocol. For example, we collaborated to: 1) conduct and analysis of two statewide surveys of Native Hawaiian smokers' attitudes toward cessation and preferences for programs (2000 and 2005); 2) compile inventory of tobacco services on each island (2001–2002); 3) conduct of focus groups to inform the development of a culturally sensitive Native Hawaiian smoking cessation program (2002); 4) interview former smokers of Native Hawaiian ancestry and the creation of a cessation brochure based on their stories (2002–2003); and 5) partner with the Hawai`i Department of Health to look at Native Hawaiian-specific tobacco-use data, which showed that Native Hawaiians have continued to have the highest smoking rates with no significant impact, despite availability of mainstream cessation programs. These data proved that Native Hawaiians were not being reached, which led NHHCS staff to agree on the need for a cessation program developed and provided by Native Hawaiians for Native Hawaiians.

Thus, our long-established relationships with the NHHCS and its outreach staff facilitated a quick response to a request for proposals, through which we secured funding to institutionalize the protocol across the five NHHCS. With the approval of each NHHCS director and staff buy-in, implementation for a comprehensive tobacco-cessation intervention was initiated in January 2006. The purpose of this paper is to describe our comprehensive protocol and to share lessons learned in institutionalizing it across the NHHCS.

Method

Designing the Protocol

A community-based participatory process was used to design a comprehensive tobacco-cessation intervention for implementation across the five NHHCS.[10,11] Specifically, outreach staff from each system joined with *`Imi Hale* program and research directors to discuss their current tobacco-related programs (or lack thereof), evidence-based programs from the literature, and preferences of their clientele before designing the program. We decided to adopt and culturally tailor the Clinical Practice Guideline "Treating Tobacco Use and Dependence" published by a consortium of agencies led by the Agency for Healthcare Research and Quality (AHRQ) in 1996 and 2000.[12] It attends to three intervention categories—Brief, Intensive, and Systems.

Brief Intervention is offered to clients and is based on the 5 A's--**ask** about tobacco use, **advise** users to quit (using clear, strong, and personalized language), **assess** readiness to quit, **assist** in quitting (e.g., set a quit date, develop a quit plan, provide practical counseling, provide intra-treatment support, link to extra-treatment support, and prescribe NRT), and **arrange** follow-up contact in person or by phone. Research suggests that Brief Intervention can increase cessation rates to 10%.[13]

Intensive Intervention consists of 4 or more sessions of cessation education and practical counseling in problem solving and coping (individual or group). Follow-up is provided to individuals in person or by phone that encourages cessation, communicates caring, and encourages the person to talk about the quitting process. Clients can learn to solicit social support for their new behaviors, e.g., setting no-smoking policies in their homes. Intensive clinical interventions plus pharmacotherapy (e.g., NRT) can increase cessation rates to 20–25%.[12]

Systems Intervention include attempts by clinics and managed care organizations to ban smoking on and near its facilities, adopt protocol to identify smokers, train clinicians in brief intervention, hire dedicated staff as cessation specialists, provide intensive interventions and access to low or no-cost NRT, and modify forms to trigger an assessment of readiness to quit as well as referrals to smoking cessation services. Research shows that systems-level change can reduce smoking prevalence among enrollees of managed health care plans.[14]

Description of our Protocol

Out of a day-long planning session grew the idea for a program called PAU (a Native Hawaiian word meaning "quit" or "done"). It incorporates interventions in all 3 categories—brief intervention, intensive intervention, and systems intervention. Specifically, it calls for 1) assessing clients' tobacco use and readiness to quit at each visit; 2) advising smokers to quit; 3) working with those "ready to quit" to set quit dates; 4) offering intensive intervention (e.g., individual or/and group counseling) and access to nicotine-replacement therapy (NRT); and 5) following up with clients to support and track quit attempts. PAU also is a systems intervention, in that all NHHCS agreed to implement it with all clients.

In line with CBPR, our comprehensive protocol built on successful tobacco-control resources from the different NHHCS.[10] For example, all NHHCS agreed to adopt the Tobacco User Guide Sheet (TUGS), a client screening and tracking form based on the 5 A's that already was in use at the Kaua`i NHHCS. The TUGS helps workers document their interactions with tobacco users and capture data on tobacco use history, readiness to quit, supports and barriers to quitting, quit date, services offered and accepted, scheduled follow-up dates, and so forth. The community health worker at the Hawai`i NHHCS, who was certified as a Basic Tobacco (Cessation) Intervention Skills Instructional Specialist by the Arizona Cessation Training and

Evaluation (ACTEV) project[15] agreed to train staff at the five NHHCS in brief intervention. The Moloka`i NHHCS, through their Native Hawaiian clinical psychologist, established a successful multi-week tobacco cessation counseling program offered to groups of smokers, and all NHHCS were interested in replicating it. The counseling component takes into account biological, psychological, and sociocultural factors that contribute to tobacco dependence. For example, in line with Hawaiian values for family solidarity, it emphasizes the health and wellness of family members as a motivator to quitting.8 Knowing that culturally targeted tools can help deliver health messages,16,17 tobacco cessation materials and tools attractive to Native Hawaiians were developed by the Kaua`i NHHCS and *`Imi Hale*. These included a month-long cessation aid (with a prize for each smoke-free day), Tobacco Quit Kits (with items that can help overcome cravings or be substituted for a cigarette) and a brochure featuring a well-respected Hawaiian physician and testimonials from former smokers. The PAU protocol also triggers referral to the Hawai`i Tobacco Quit Line. [18]

Thus, the NHHCS worked together to conceptualize the program, engage staff in buy-in, draft and finalize the grant proposal, and tailor the AHRQ model to be culturally responsive.10, 16,19–20 In line with CBPR, this approach also promoted capacity building of NHHCS staff (in tobacco cessation as well as other skills) and considered staffs' perceived needs and preferences of NHHCS clientele.10,20 Grant funds ($150,000), were used for training and capacity-building of NHHCS staff, purchase of NRT, development of products to support quitting, and evaluation. Although most training was tobacco related (e.g., training staff in brief intervention, forms integration, and intensive intervention skills), trainings by local and national experts were offered in developing promotional and educational materials as well (Table 1). The NHHCS and *`Imi Hale* staff also worked to help pass a smoke-free workplace law in 2006, making Hawaii the 14th state to do so.[21]

Evaluation Methods

The implementation of the protocol was evaluated against process and outcome objectives by the Program Director (LAS) and Evaluator (KLB) with staff from each of the NHHCS to ensure HIPAA compliance. Process objectives included number of staff trained and certified (in brief intervention), inclusion of the Tobacco User Guide Sheet (TUGS) in the intake process and in the medical record, and personalized counseling (intensive intervention) for smokers who want to quit. By the end of the project, we wanted to show increased NHHCS capacity in treating tobacco use and dependence by: 1) having at least two staff per NHHCS trained in Basic Tobacco Intervention Skills (Brief Intervention); 2) having at least two staff per NHHCS certified as Basic Tobacco Intervention Skills Instructional Specialists so they could train other NHHCS staff in Brief Intervention; 3) having at least one staff per NHHCS certified as a Tobacco Treatment Specialist so he/she could provide Intensive Intervention to individuals and/or groups; and 4) have all trainees familiar with the TUGS.

Outcome objectives included the percent of individuals asked about smoking status and percent of identified smokers who received brief intervention, set a quit date, were linked to other services (e.g., intensive intervention, NRT, quit line), and remained smoke-free for 90 days. By the end of one year, we hoped to see 100% of clients asked about tobacco use. Of identified smokers, we wanted 100% to be assessed for readiness to quit and provided Brief Intervention services and 20% to set a quit date. Of those who set a quit date, we wanted 100% to be connected to support services and 25% to remain smoke-free for at least 90 days.

Outcomes monitoring was conducted by *`Imi Hale* staff through randomly selected chart reviews at the five NHHCS at the end of the first year. The random client chart reviews involved a two-step process. First, NHHCS staff compiled a list of adult clients seen in the past 6 months, and 30 charts were selected from each list based on random-number series. The chart was reviewed to see if clients had been assessed for smoking status and, if they were smokers, the

presence and completion of the TUGS. If any chart indicated the client was a smoker, the chart was set aside to be included for review in the next step of the evaluation process. In total, 150 randomly selected adult charts were reviewed to verify assessment of smoking status and presence and completion of the TUGS, of which 53 were identified as smokers. To compile 30 smokers' charts per NHHCS, we randomly selected additional charts from a list of clients seen in the past 6 months who had been assessed as smokers. These 150 charts were reviewed to verify the provision of Brief Intervention, setting a quit date, linkage to services (NRT, intensive intervention, quit line), and 90-day smoking status.

In addition, *`Imi Hale* staff interviewed at least three key staff from each NHHCS, including an Executive Director, a Chief Operating Officer, a Director of Resource Development, a Program Administrator, a Program Service Coordinator, a Senior Health Care Worker, a Community Health Service Project Coordinator, a Cancer Program Coordinator, a Licensed Clinical Psychologist, a Social Worker, a Medical Assistant, four Tobacco Treatment Specialists, a Tobacco Cessation Project Coordinator, and three Community Health Workers. Participants were also asked open-ended questions to: 1) identify barriers and supports to implementation, 2) identify perceptions of capacity building efforts, and 3) suggest ideas for additional trainings and resources that would lend to program success.

Results

Process Objectives

At the end of a year, capacity building targets were met or exceeded. Specifically, 85 NHHCS staff members (50% of staff at each NHHCS) were certified in Brief Intervention; 12 NHHCS staff members (at least two in each NHHCS) were trained and certified as Brief Intervention Instructors; and nine NHHCS staff members (at least one in each NHHCS) were certified as Tobacco Treatment Specialists to provide Intensive Intervention (practical counseling, individual and group sessions, and follow-up (Table 1). However, our goal of having all 5 NHHCS use the TUGS was not realized (Table 2). Although all five NHHCS agreed to adopt the TUGS and staff were instructed on its use, only two of the five NHHCS were consistently using the TUGS with all clients.

Outcome Objectives

Despite the fact that the TUGS was not consistently incorporated into the patient record at three NHHCS, an assessment of clients' smoking status was documented somewhere in the chart. Thus, in all five NHHCS, at least 80% of clients had been asked about their smoking status (Table 2). According to a review of the TUGS or other chart documentation, between 57% and 100% of clients who smoked received Brief Intervention and were asked about readiness to quit. Of those who received Brief Intervention, 20% or more set a quit date. Although all smokers (100%) were connected to support services across the 5 NHHCS, the distribution of services by island was unequal, e.g., one NHHCS did not refer smokers without a home phone to the Quit Line; another NHHCS did not prescribe NRT because they were in the midst of hiring clinical staff, including a physician; and another NHHCS did not offer intensive intervention services through its tobacco program until July 2007 because of staff turnover. Finally, the percent of clients completing the protocol who remained tobacco free for 90 days ranged from 0% in one NHHCS to 43% in another.

Key Informant Interview Findings

At the end of the first year, key informants at all five NHHCS expressed enthusiasm about the protocol. They especially liked the cessation-related training and the enhanced capacity of their NHHCS to identify and intervene with clients that smoke. We also learned that the NHHCS were at varying stages of readiness for and compliance with full implementation of the protocol.

Common barriers were lack of administrative and clinical support and key position vacancies. NHHCS that were more successful at institutionalizing the protocol were more likely to have the commitment of leadership to support staff training, develop new programs (e.g., tobacco cessation and intensive intervention), and integrate the TUGS into client's medical charts. These NHHCS also were more likely to have a champion within the organization, who was motivated, competent, and engaged in coordination of care for clients that smoked and wanted to quit smoking.

Conclusions and Lessons Learned

Helping people to quit smoking will reduce disease burden.[22] Our protocol aimed to reduce tobacco use among Native Hawaiians by tailoring and adopting a best-practice.[12–13] Our findings suggest that development and institutionalization of a tobacco-cessation protocol in five health organizations requires a long-term commitment. We continue to work with each NHHCS to fully institutionalize the PAU protocol, supported by grant funds from the American Legacy Foundation. As we move forward, we share three important lessons that may benefit tobacco cessation advocates in other communities.

Champions are Critical, but Other Factors Play a Role

The literature suggests that successful programs have an identified "champion" who can motivate others and sustain momentum.[23–25] A good champion is recognized as competent by supervisors, peers, and the community. This champion assumes a leadership role and encourages others to action. When the PAU protocol was developed, there were only three identified champions across the five NHHCS: the Kaua`i tobacco coordinator who developed the TUGS; the Moloka`i/Lana`i psychologist who developed an intensive intervention; and the Hawai`i cancer coordinator (a former smoker) who was a certified instructional specialist in Brief Intervention. These individuals were key players in the development of the protocol, each contributing his/her expertise or product to the comprehensive PAU protocol. Designed as a capacity-building project, we wanted to support existing champions, develop new champions through skills building, and increase the number of supporters for each champion within his/her NHHCS.

New "champions" have emerged and evolved. For the Kaua`i NHHCS, the asthma educator assumed the cessation-provider role when the first tobacco coordinator entered medical school. This new champion (KA) is Western educated with a master's in public health degree and also is well connected in Hawaiian and Pacific communities (his ancestor was the first Hawaiian missionary to Ebon atoll in the Marshall Islands in 1860). He has been instrumental in maintaining and expanding the integration of this protocol within his organization, despite challenges of internal reorganization and re-direction.

For the O`ahu NHHCS, the Program Coordinator (a master's prepared nurse) and her research assistant have become champions. The research assistant had previously conducted a door-to-door survey in a rural Native Hawaiian homestead, an experience that helped prepare her for work one-on-one with NHHCS clients to identify smokers, provide Brief Intervention and follow-up, link clients to services, collect data, and complete documentation. Two barriers—reluctance of clinical staff to integrate the TUGS in the medical record and to prescribe NRT—are slowly being overcome with the diligence and advocacy of these two new champions.

The Maui NHHCS, which had no existing tobacco program or cessation provider, now has five champions. Two community health workers have become champions in their NHHCS, encouraging staff to use the TUGS and provide Brief Intervention. The Program Services Coordinator, in charge of data monitoring and tracking, has integrated the TUGS into the Maui's NHHCS database system and has conducted one-on-one training sessions with

appropriate staff from the other NHHCS to do the same. Finally, two Native Hawaiian doctors in the Maui NHHCS support the integration and provision of cessation services and programs, including NRT, which results in a comprehensive, systems-level approach within this NHHCS.

The Tobacco Treatment Specialist at the Hawai`i NHHCS (LS) has worked hard to upgrade her skills in tobacco cessation and in training and certifying others. In addition to delivering individual cessation services, she provides group counseling and education in the high schools, serves on the state Coalition for a Tobacco-Free Hawai`i Board of Directors, and has participated in local, national, and international forums to advocate for a Smoke-Free Pacific and Oceania. Disappointingly, the institution of this "champion" is at an unstable organizational point, which has presented a barrier to the use of the TUGS by other staff and its integration into the medical record.

Old and new champions at the Moloka`i/Lana`i NHHCS have been able to integrate the TUGS into the medical record, identify smokers, and provide Brief and Intensive Interventions. Organizational leadership showed support by assigning a nurse to supervise and assist the newly contracted Moloka`i tobacco coalition coordinator, who provides community outreach. However, quit rates are still lowest on these islands, where Native Hawaiians are the majority population and have the lowest per capita income and highest unemployment rates in the state.

Although we were very successful in developing and supporting champions at the direct-service level, we did not pay enough attention to developing supporters at the administrative level. We now realize that supervisor support of direct-service champions is essential. We learned that, champions need support from multiple levels, including leadership for policy implementation, administration for quality assurance implementation, and direct-service providers for operational implementation.

Systems Change Takes Time

Long-term studies have shown that systemizing a comprehensive smoking cessation intervention in an organized practice (such as the NHHCS) can result in major reductions in smoking prevalence.[26–28] Although the five NHHCS were established with the same legislation, began operations at the same time (1990), and received technical support from the same sources, it was a mistake to think that they would incorporate a new protocol at the same pace. Although the missions of the individual NHHCS are the same—to provide health promotion/education, disease prevention, and enabling services to include access to health care for Native Hawaiians and others—each operates independently with its own local advisory board, organizational structure, procedures, policies, and programs.

Thus, even though representatives from each NHHCS helped design the PAU protocol, we learned that each NHHCS was at a different stage of organizational readiness to adopt a new protocol for tobacco cessation. This is similar to other researchers who have reported mixed success of trying to institutionalize the AHQR protocol in managed care organizations and other health systems, finding that the guidelines often were partially implemented.[27–30]

We learned that champions needed help to bring his/her NHHCS to agreement about fully embracing the protocol and supporting its implementation. Additional funding was secured to allow *`Imi Hale* to continue working with the NHHCS. Movement has been facilitated by adhering to the principles of community-based participatory programming, which rely on face-to-face meetings that support open communication, the exchange of information, and sharing of lessons learned.[6,10, 24–25] Still, helping an organization reach agreement to change and then helping facilitate the change takes time, and discussions have had to consider the individual NHHCS's organizational culture, structure, and community.

We stress the importance of capacity building, broadly defined as the development of individual skills and competency, creation of enabling environments with appropriate policy frameworks, institutional growth, and outreach for increased community participation.[10] We learned that there is a need to continually offer training and certification in Brief and Intensive Interventions as new staff are hired and existing staff leave or change duties. We also notice that, as NHHCS workers receive more training, they may choose to pursue formal education and/or take more challenging positions in other organizations.

Don't Overlook Training and Technical Assistance in Program Evaluation/Data Management

Because evaluation is an integral part of programming, we developed process and outcome indicators and set targets for performance. We devoted a lot of resources to building NHHCS capacity in Brief and Intensive Intervention; however, we had not thought to concurrently assess and build evaluation capacity to assure that tobacco use and tobacco-cessation service utilization were captured in NHHCS databases to justify feasibility and sustainability of this program. In fact, we learned that the NHHCS had different charting systems, had different barriers to incorporating a new form into the patient record, and were at different levels of readiness with regard to electronic data systems. In hindsight, we should have included supervisors from medical records and data management in the planning and training phases of this project. Training and technical assistance for each NHHCS has since been added to help them incorporate core data elements into their electronic data management systems and become better at reporting outcomes and measures.

In summary, we verified the usefulness of using community-based participatory approaches to develop and institutionalize a comprehensive tobacco-cessation protocol across five indigenous health centers in Hawai`i. In the process of institutionalizing the protocol, however, we learned that more effort (and time) is needed to help each NHHCS overcome internal barriers to adopting a new protocol, facilitate support for tobacco-cessation champions among medical records and data management supervisors, and build evaluation capacity. These lessons may be useful to other organizations that want to institutionalize a comprehensive tobacco-cessation protocol.

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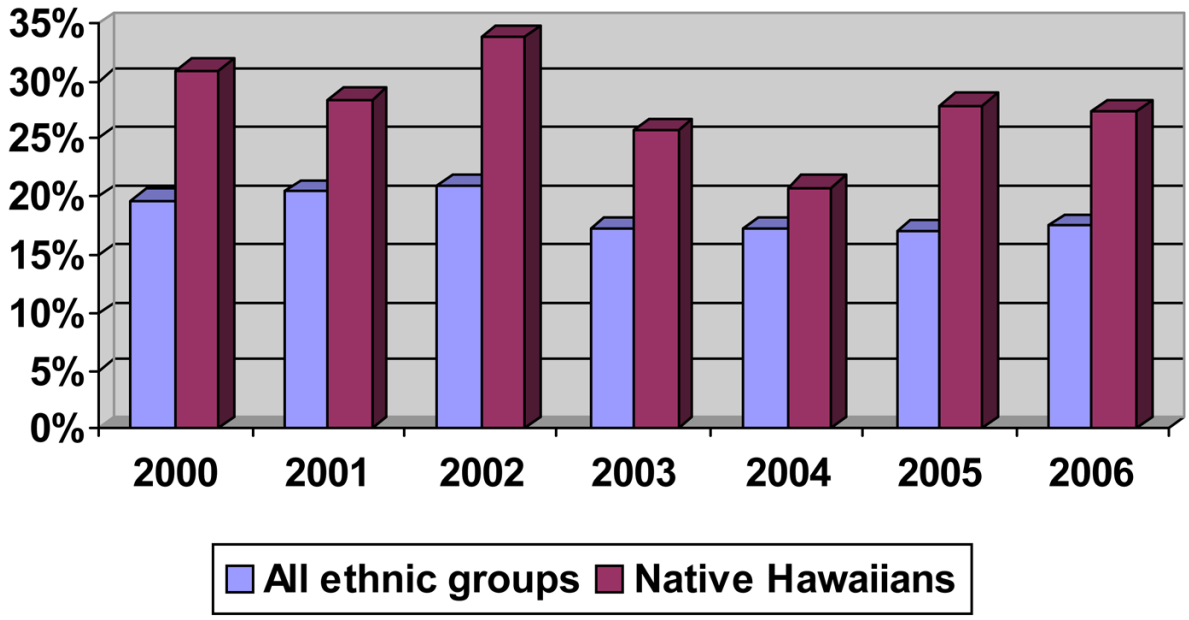

Figure 1.
Trend of current smokers in Hawai`i. (Source: DOH BRFSS)

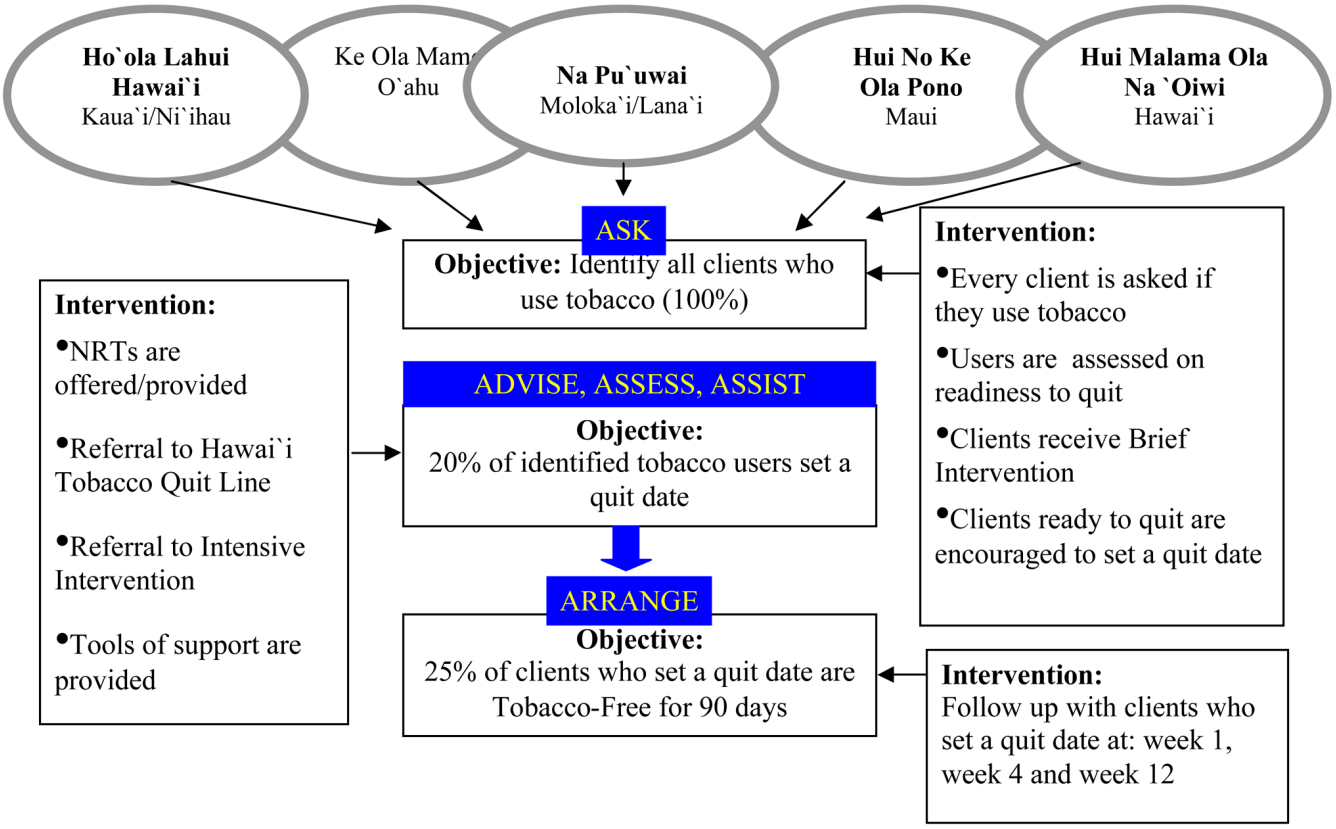

Figure 2.
PAU: Comprehensive Tobacco Free Protocol

Table 1

Tobacco-related trainings provided to NHHCS, 2005–2007

University of Arizona HealthCare Partnership Training and Certification Programs (Brief and Intensive Intervention)	**2000–2005 DOH**	**2005–2008`Imi Hale (in collaboration with DOH and other groups)**
Trainings:		
-Basic Tobacco Intervention Skills (Brief Intervention)	96	10
-Basic Tobacco Intervention Skills Instructor	1	4
-Basic Tobacco Intervention Skills Instructional Specialist	0	2
-Tobacco Treatment Specialist (Intensive Intervention)	1*	3
-Tobacco Treatment Specialist Instructor	0	1
-Tobacco Treatment Specialist Instructional Specialist	0	1
-Health Literacy and Health Materials Design		2
Trainees Certified in the Native Hawaiian Health Care Systems (NHHCS)		
-Basic Tobacco Intervention Skills (Brief Intervention)	8	85
-Basic Tobacco Intervention Skills Instructor	4	12
-Basic Tobacco Intervention Skills Instructional Specialist	0	2
-Tobacco Treatment Specialist (Intensive Intervention)	1*	9
-Tobacco Treatment Specialist Instructor	0	9
-Tobacco Treatment Specialist Instructional Specialist	0	9
NHHCS with cessation programs in place	2	5

* Tobacco Cessation Specialist Training by University of Massachusetts

Table 2

NHHCS Compliance with Protocol, June 2007

NHHCS	1	2	3	4	5
Consistently using the TUGS with each client and filing it in the patient's chart	Y	N	N	Y	N
Percent of NHHCS clients asked about tobacco use (Goal: 100%)	100%	100%*	100%*	97%	80%*
Percent of clients who smoke that received brief intervention and asked about readiness to quit (Goal: 100%)	90%	57%	67%	100%	74%
Number of clients receiving brief intervention who set a quit date (Goal: 20%)	7/27 (26%)	10/17 (59%)	4/20 (20%)	17/17 (100%)	12/25 (48%)
NHHCS linkage of ready-to-quit smokers with:					
• Quit Line	Y	Y	Y	Y	N
• NRT	Y	N	Y	Y	Y
• Intensive Intervention	N	Y	Y	Y	Y
Number of clients completing the intervention who remained tobacco free for 3 months (Goal: 25%)	3/7 (43%)	0/10 (0%)	1/4 (25%)	1/17 (6%)	1/12 (8%)

*Per progress notes and encounter forms, as no TUGS in charts.