An Assessment of the Pacific Regional Cancer Coalition: Outcomes and Implications of a Regional Coalition Internal and External Assessment

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Abstract

Significance: *The Pacific Regional Cancer Coalition (PRCC) provides regional leadership in the US Affiliated Pacific Islands (USAPI) to implement the Regional Comprehensive Control Plan: 2007-2012, and to evaluate its coalition and partnerships. The Pacific Center of Excellence in the Elimination of Disparities (CEED), aims to reduce cancer disparities and conducts evaluation activities relevant to cancer prevention and control in the USAPI.*

Purpose: *The PRCC Self (internal) and Partner (external) Assessments were conducted to assess coalition functioning, regional and national partnerships, sustainability, and the role of regionalism for integrating all chronic disease prevention and control in the Pacific.*

Methods: *Self-administered questionnaires and key informant telephone interviews with PRCC members (N=20), and representatives from regional and national partner organizations were administered (N=26). Validated multi item measures using 5-point scales on coalition and partnership characteristics were used. Chronbach's alphas and averages for the measures were computed.*

Results: *Internal coalition measures: satisfaction (4.2, SD=0.48) communication (4.0, SD=0.56), respect (4.0, SD=0.60) were rated more highly than external partnership measures: resource sharing (3.5, SD=0.74), regionalism (3.9, SD=0.47), use of findings (3.9, SD=0.50). The PRCC specifically identified its level of "collaboration" with external partners including Pacific CEED. External partners identified its partnership with the PRCC in the "coalition" stage.*

Principal Conclusions: *PRCC members and external partners are satisfied with their partnerships. All groups should continue to focus on building collaboration with partners to reflect a truly regional approach to sustain the commitment, the coalitions and the programming to reduce cancer in the USAPI. PRCC and partners should also work together to integrate all chronic disease prevention and control efforts in the Pacific.*

Background

The US Affiliated Pacific Islands

The US Affiliated Pacific Islands (USAPI) are comprised of three freely associated states (the Federated States of Micronesia [FSM], the Republic of Palau and the Republic of the Marshall Islands [RMI]), two US territories (American Samoa and Guam) and the Commonwealth of the Northern Mariana Islands (CNMI).[1] The area has been described as many small inhabited islands scattered over 2.5 million square miles in the Pacific Ocean comparable in area to that of the continental US.[2]

Significant geographic and cultural barriers to health care exist in the Pacific, resulting in poor health in many underserved island communities. For example, life expectancies in the USAPI are 9 to 12 years shorter than in the United States.[3] Factors that contribute to health disparities in the region are many. Among these factors are an insufficient number of trained health care providers in rural areas, skepticism towards western medicine, and myths and misperceptions about health practices and health concerns. Those with the least resources often live in extremely remote outer islands and are unable to travel to urban medical centers on the central island, and such isolation results in little, if no, access to healthcare.[4]

Cancer in the USAPI

Cancer is the second leading cause of death in the USAPI.[1] Available data from the USAPI show remarkably higher cancer mortality compared to the United States. Between 1998-2001, American Samoa, with a population of 65,500, had 152 deaths due to cancer.[5,6] In the United States with a population of about 300 million, the number of deaths due to cancer was 562,875 in 2007.[7] In 2002, the Marshall Islands, with a population of 52,000, had 11 deaths due to breast cancer while in the United States, the number of deaths due to breast cancer was 40,410 in 2005.[5,6,8]

Lack of prevention and treatment options along with a culturally incompatible western, American based model of health care for Pacific Islanders, contribute to the excessive cancer burden in the USAPI. Cancers that are potentially curable such as breast and cervical cancers are found in advanced stages because of a lack of resources to provide adequate prevention and screening services.[1]

The Pacific Regional Cancer Coalition

In June 2004, the Department of Family Medicine and Community Health (DFMCH), John A. Burns School of Medicine, University of Hawai'i received a Centers for Disease Control and Prevention (CDC) National Comprehensive Cancer Control Planning grant as the bona fide agent for the USAPI jurisdictions and territories. The Pacific Islands Health Officers' Association (PIHOA) is a non-profit association representing the health interests of the USAPI jurisdictions. For the past 20 years, PIHOA has served as the regional health policy body for the US affiliated Pacific Islands. PIHOA has associate, affiliate, and honorary members representing federal agencies and programs from around the Pacific region.

The DFMCH and PIHOA are Pacific regional partners who share resources and expertise to address the cancer burden in the USAPI (Figure 1). This partnership resulted after many years of concerted effort and commitment by key organizations.

The Pacific Regional Cancer Coalition was formed to address the cancer burden in the USAPI region. For regional meetings and decision-making, the PRCC is comprised of the CDC Comprehensive Cancer Control (CCC) program coordinators and chairs of each USAPI jurisdiction's CCC coalitions, and members of the Cancer Council of the Pacific Islands (CCPI). The CCPI provides the overall direction for regional CCC efforts, and the CCPI members from each USAPI jurisdiction are part of their jurisdiction CCC coalitions and steering committees. PIHOA serves as overall advisory to the CCC process (Figure 1).

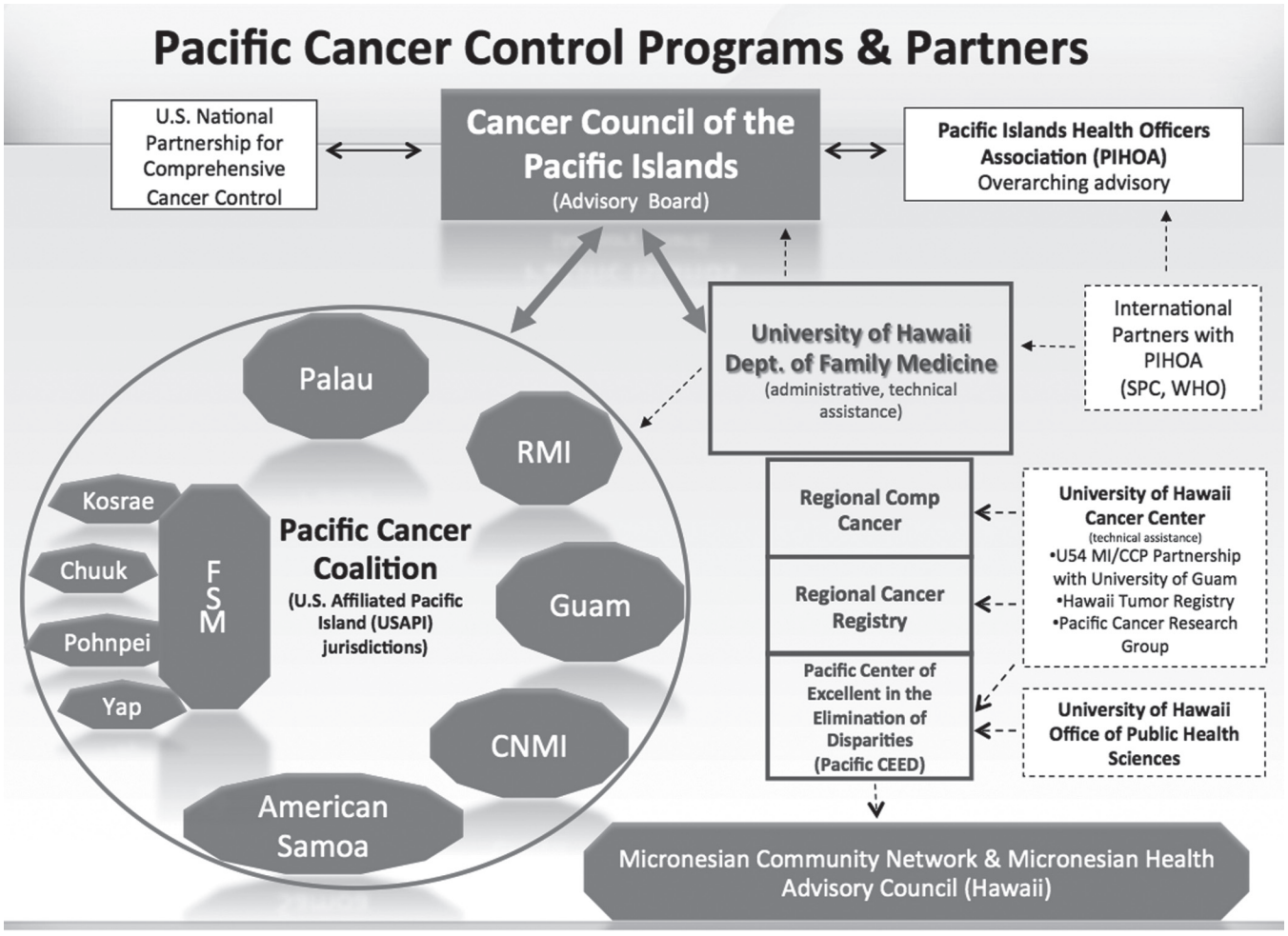

Figure 1. Pacific Cancer Control Programs and Partners

The CCC program is "an integrated and coordinated approach to reducing cancer incidence, morbidity, and mortality through prevention, early detection, treatment, rehabilitation, and palliation."[9] Partnerships or coalitions are formed to develop and implement CCC plans in geographic regions throughout the United States including in each of the USAPI jurisdictions.[10]

The PRCC has identified four goals to address cancer prevention and control in the USAPI: (1) Strengthen and expand regional collaboration, planning, and advocacy affecting all aspects of cancer control; (2) Diagnose cancer as early as technically possible within the region; (3) Improve the capacity to treat cancer effectively in the USAPI region; and (4) Collect, analyze, and report accurate cancer related data across the region.

Community Coalitions

Public health professionals engage the active participation of community representatives through community coalitions to achieve primary prevention and health promotion objectives. Coalitions are "groups of individuals, factions, and constituencies who agree to work together to achieve a common goal."[11] Coalition members and partnering organizations collaborate in formal, organized ways to address issues of shared concern by implementing interventions aimed at changing individuals and environments.[12] To effect changes in community health, coalitions aim to foster community capacity,[13-16] the ability of a community to identify, mobilize, and address public health problems.[17]

The ability of a coalition to function depends on the participation of coalition members. Coalitions share existing and potential resources available from its members and partners.[18,19] Coalition members work together and provide their commitment, expertise, and other assets to reach their community health promotion goals.[18]

Coalition assessments help a coalition determine its progress according to its objectives and whether the coalition remains on track and may be sustained in the future to address the community's health priorities. A coalition assessment is a type of evaluation because systematic information is provided to strengthen the partnership during implementation. The collection of outcome data may also be included to assess the extent of change among participants or within systems. The development of community coalitions generally takes place over time according to phases that are conducive to measurement, for example: (1) processes that maintain the partnership infrastructure and function, (2) the implementation of activities and programs intended to accomplish a partnership's goals, and (3) changes in health status or the community directly attributable to the work of a community coalition. Data to be collected to evaluate each phase of a coalition would involve: (1) conducting a member survey to assess satisfaction with how a coalition functions, (2) evaluating a program or activity that the partnership conducts, and

(3) collecting community data on key health indicators. Such data would inform the extent of a coalition's effect on the priority health problem.[18]

CDC Coalition Assessments

Community coalitions and community-based participatory approaches are the cornerstone of the CDC Racial and Ethnic Approaches to Health (REACH) US and CCC programs. REACH US and CCC programs require grantees to implement an assessment of strengths and weaknesses of their community coalitions during their five-year cooperative agreements.[20,21] Both CDC programs also promote adherence to Partnership Principles.[21,22] The literature on community coalitions and collaboration offers various methods for coalitions and/or partners to either self-assess their role and functioning and/or to assess the viability of their relations with other partners and stakeholders.[18]

A number of CCC and REACH US grantees have adopted recommendations and tools from the literature to carry out their own assessments, for example B-Free CEED (Center of Excellence in the Elimination of Disparities) at New York University.[23] The PRCC is a regional coalition representing multiple sectors among USAPI organizations. The PRCC is unique among CCC and REACH US supported community coalitions, and the unique features of this regional coalition needed to be adequately addressed in the design of the assessment tools. For example the concept and practice of "regionalism" was defined and valid questions for assessing the PRCC members' and partners' perceptions of regionalism and PRCC's role and/or function in this regard were developed. "Regionalism" was defined in this project as the extent that regional organizations and partnerships that address concerns in the USAPI region perceive their efforts to be directed toward common goals. In a geographically expansive environment with extremely limited resources, the concept and active practice of regionalism may be as critical as community capacity to effect and sustain changes throughout the Pacific region.

Purpose

The purpose of the PRCC self-assessment (internal) and regional and national partner assessment (external) was to evaluate the progress and potential for regional coalition and partnership building of the PRCC and its regional and national partners. This partnership assessment addressed goals of CDC-funded programs in the USAPI that work in partnership to address cancer prevention and control in the Pacific: (1) CCC and REACH US Coalition and Partnership Principles, (2) Regional CCC 5-year Plan, 2007-2010, and (3) regional objectives for the Pacific Cancer Programs. The PRCC evaluation examined the partnership characteristics and processes that would maintain the coalition infrastructure and functioning. The regional coalition assessment was comprised of an internal self-assessment of the PRCC membership and an external assessment of the partnering relationships with the PRCC's regional and national partner organizations.

Methods

A CCPI self-assessment and partnership assessment ad hoc workgroup was formed with representation from the PRCC, the Pacific Center of Excellence in the Elimination of Disparities (CEED), and the three CCPI executive officers. Pacific CEED is a REACH US funded program addressing breast and cervical cancer prevention and control in the USAPI and the evaluation of such initiatives (Figure 1). The CCPI executive officers also selected CCC coordinators to provide feedback on measures and questions to help develop the assessment tools.

Sample and Recruitment

All members of the PRCC (N=27) from each USAPI were invited to participate in the PRCC self assessment. PRCC members were initially invited to complete the self-administered questionnaire electronically via a letter from the CCPI president. Ultimately, most PRCC members were recruited and completed the self-administered questionnaire at a semi-annual CCPI meeting held in Honolulu.

Representatives from nine Pacific regional and national partner organizations (N=36) were invited to participate in the PRCC partner assessment via email invitation from the CCPI president. The partner organizations were American Cancer Society, Asian and Pacific Islander American Health Forum, C-Change National, CDC REACH US, Intercultural Cancer Council, Pacific CEED, Pacific Regional Central Cancer Registry, Pacific Island Health Officers Association, and University of Guam.

Data Collection

The PRCC self-assessment involved a self-administered questionnaire followed by telephone interviews. PRCC members who had completed their questionnaires were scheduled for a 15-minute telephone interview via an email request with the interview guide attached. The response rate for the PRCC self-administered questionnaire was 70% (n=20), and the response rate for the follow-up telephone interviews was 27% (n=3).

The PRCC partner assessment involved an online self-administered Survey Monkey questionnaire. Two reminder emails were sent before the response deadline. The response rate for the partner assessment survey was 55% (n=20).

Measurement and Instrumentation

Measures were obtained from validated scales and measures on coalition functioning and levels of collaboration. Measures related to coalition functioning and satisfaction were obtained from a national REACH US coalition evaluation led by Nancy Van Devanter, DrPH from the New York University B-Free CEED. The PRCC assessment workgroup added measures not used for the REACH US coalition evaluation to address the unique regional status in the Pacific of the PRCC. The additional coalition and partnership measures were derived from Butterfoss' Coalition Effectiveness Inventory and Bright's Community Organizational Assessment Tool.[24,25] A 5-point Likert scale from "strongly disagree" to "strongly agree" provided the response options for these additional measures. Levels of Collaboration Scale (Frey, et al[26]) was also included to assess the degree of collaboration between the PRCC and its partners. Response options ranged from "no interaction" reflecting that coalition members and partners did not think that they collaborated at all with particular a partner organization to "collaboration" reflecting that coalition members and partners felt that they were highly collaborative with a particular partner belonging to one regional or national system.[26] Table 1 describes the measures used in the questionnaires and their sources.

Table 1. Partnership Measures and Sources	
Measure	**Source**
1) Satisfaction	B-Free CEED, Van Devanter. 2010
2) Organization	
3) Communication	
4) Decision making	
5) Use of findings	
6) Sustainability	Butterfoss, 1998. Coalitions Work, Coalition Effectiveness Inventory Self Assessment Tool
7) Regionalism	Bright, 1998. Community Organizational Assessment Tool
8) Levels of collaboration	Frey, et al., 2006. Levels of Collaboration Scale

The PRCC self-assessment survey contained 47 close-ended items. The PRCC partner assessment survey contained 38 close-ended items, and 6 open-ended questions. Questions concerning internal coalition satisfaction and functioning were not included in the partner survey because respondents were being surveyed about their partnering relationship with the PRCC, ie, external assessment.

The PRCC telephone interview guide was developed to obtain descriptive data to supplement the PRCC self-assessment questionnaire. The interview guide contained 18 open-ended questions developed with feedback and approval from the CCPI president. Questions addressed the role of the PRCC member, perceptions on the PRCC, communication with partners, goals achievement, partnership with PRCC member's own jurisdiction, and participation in CCC evaluations.

Data Analysis

Data from the surveys were entered into SPSS. Items for each scaled measure were aggregated to create a single measure. Chronbach's alphas were computed for each aggregated measure to indicate the strength of its internal consistency or reliability with a value of "1.0" representing perfect reliability of single items aggregated to create one measure. Means of the scaled measures were computed.

Results

Results from the PRCC self-assessment (internal), PRCC partner assessment (external), and comparison results of these two assessments are presented in Tables 2-4. Figures 2-5 provide the graphed results, including results on levels of collaboration. Overall, the coalition and partnership measures indicated strong internal consistency. The PRCC self-assessment contained 9 multi-item scaled measures on coalition and partnership functioning. Chronbach alphas ranged from a 0.670 for "decision making" to 0.912 for "satisfaction" (Table 2 and Figure 2). The PRCC partner assessment contained 6 multi-item scaled measures with Chronbach alphas ranging from 0.690 for "satisfaction" to 0.840 for "resource sharing" (Table 3 and Figure 3).

PRCC Functioning and Satisfaction

For the PRCC self-assessment, the lowest ratings were for "decision making" (mean=3.5, SD=0.63) and "resource sharing" (mean=3.5, SD=0.74) (Table 2 and Figure 2). The PRCC members who were interviewed explained that decision-making was a challenge due to diversity.

Table 2. Mean Scores for PRCC Internal Self Assessment					
Characteristics	**n**	**Mean**	**SD**	**# of items**	**alpha**
Communication	20	3.9	0.56	6	0.833
Respect	20	3.9	0.60	6	0.905
Partnership	19	3.8	0.53	7	0.870
Organization	20	3.8	0.77	5	0.804
Satisfaction	20	3.7	0.71	5	0.912
Regionalism	20	3.6	0.50	4	0.702
Sustainability	17	3.6	0.46	7	0.780
Decision-Making	20	3.5	0.62	3	0.679
Resource Sharing	19	3.5	0.73	4	0.816

1-5 = strongly disagree – strongly agree

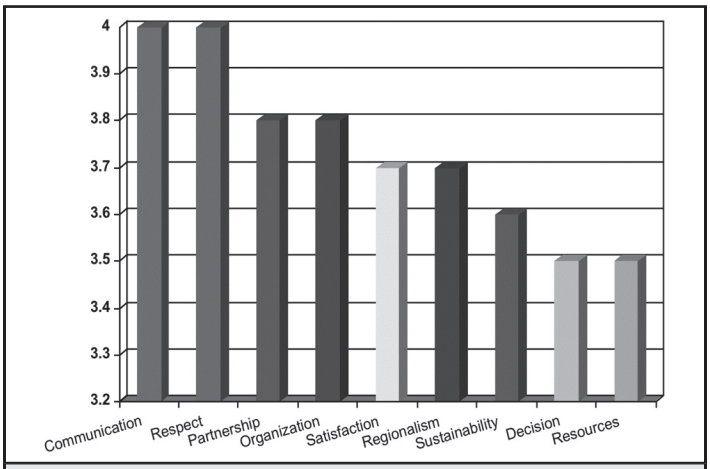

Figure 2. Mean Scores on Characteristics for PRCC Internal Self-Assessment

1-5 = strongly disagree – strongly agree

"I think the greatest struggle is how to balance all this while developing and implementing programs, how to accommodate all the choices and address the needs of the diverse member jurisdictions, considering the mismatched differences. A good open and honest communication is very important. Sometime we have to make very difficult decisions."

The interviews also discussed that obtaining resources was seen as a challenge since the ability to acquire resources is required in order to achieve cancer prevention and control goals that have not been met.

The highest ratings were for "communication" (mean=4.0, SD=0.56) and "respect" (mean=4.0, SD=0.60). The PRCC interview results indicated that respondents thought that communication and respect were strong. Respondents explained areas where they thought the PRCC excelled.

"[The PRCC excels at] respect for other different coalitions within the region and within different jurisdictions."

"[The PRCC excels at] coordinating with partners to help to integrate and coordinate the efforts. With the limited resources, communications are the key."

PRCC Partner Characteristics and Satisfaction

For the partner assessment, the lowest ratings were for "use of findings" (mean=3.9, SD=0.57) and "regionalism" (mean=3.9, SD=0.50).

Table 3. Mean Scores for External Partner Assessment					
Characteristics	**n**	**Mean**	**SD**	**# of items**	**alpha**
Satisfaction	10	4.2	0.48	4	0.690
Resource Sharing	10	4.0	0.63	8	0.849
Partnership	10	4.0	0.52	3	0.764
Sustainability	10	4.0	0.56	5	0.758
Use of Findings	10	3.9	0.47	3	0.699
Regionalism	10	3.9	0.50	5	0.705

1-5 = strongly disagree – strongly agree

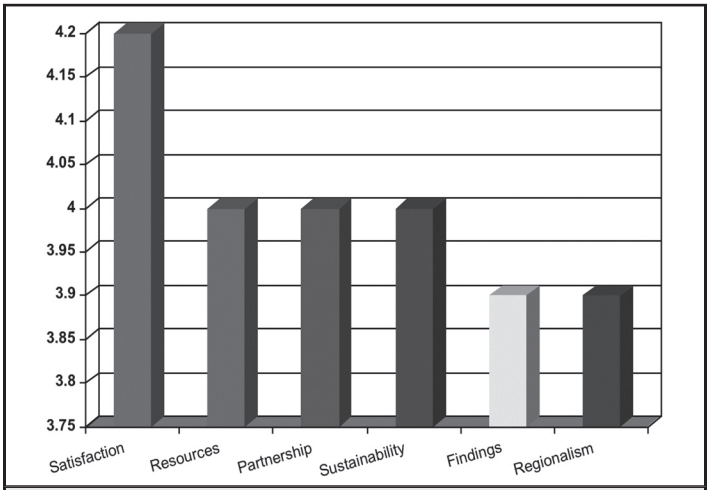

Figure 3. Mean Scores on Characteristics for PRCC External Partner Assessment

1-5 = strongly disagree – strongly agree

This may be related to responses on open-ended questions that report the partner representatives did not think collecting, analyzing, and reporting on cancer data either has been accomplished or was still in progress. Partners who commented on the extent that the goal, "Collect, analyze, and report accurate cancer related data across the region" has been accomplished as a result of their partnership with the PRCC explained that this goal was either in progress or has not been accomplished. Regionalism may have been rated lower because PRCC members do not think that the regional goals to diagnose and treat cancer have been achieved yet.

The highest rating was for "satisfaction" (mean=4.2, SD=0.48) (Table 2 and Figure 2). Partners indicated that they accomplished several cancer prevention and control projects, and this may be attributed to their satisfaction with their partnership with the PRCC. PRCC partners noted a variety of projects accomplished as a result of their partnership with the PRCC. Many of these projects also address the cancer prevention and control continuum.

"Establishment of functional cancer control coalitions and cancer control program coordinators in each of the jurisdictions"

"We have been able to provide in person capacity building assistance and trainings to American Samoa, Guam, and CNMI"

"Development of a Pacific Regional Cancer Registry"

"Introduction of quality improvement components into local cancer program activities"

"Through our collaboration with PRCC, there have been cancer survivors highlighted in our Book of Hope and then many of the PIJs [Pacific Island jurisdictions] are now in process of developing their own versions of the Book of Hope."

Levels of Collaboration Between Partners

Levels of collaboration were measured between the PRCC and its partner organizations, and partner organizations' perception of collaboration with the PRCC. Figure 4 depicts the PRCC members' response regarding the extent they collaborate with their regional and national partners. Members of PRCC identified that two partner organizations were in the "collaboration" phase with them. Figure 4 depicts the responses of the PRCC partners regarding the extent to which they collaborated with the PRCC. Partners of PRCC as an aggregate rated the level of collaboration with the PRCC in the "coalition stage" defined by "Shared ideas, shared resources, frequent and prioritized communication, all members have a vote in decision making."[26]

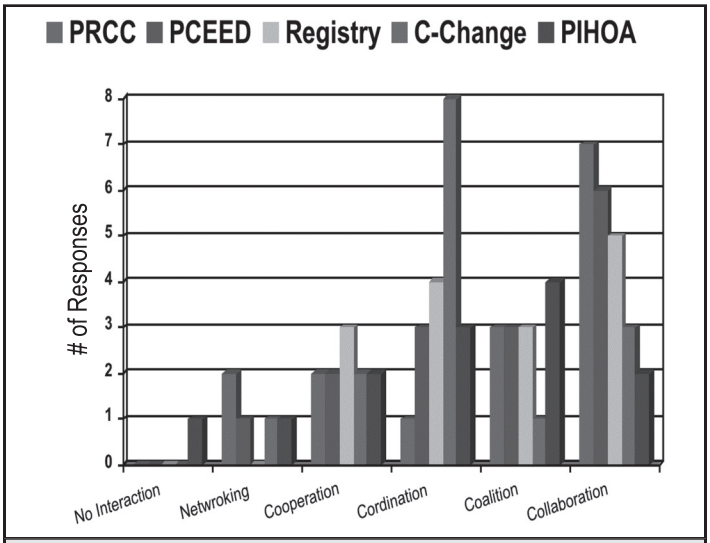

Figure 4. PRCC Levels of Collaboration with Partners

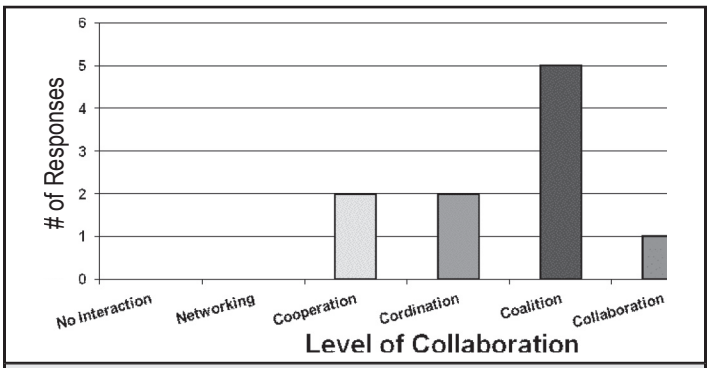

Figure 5. PRCC Levels of Collaboration with PRCC Members

Comparison of Internal and External Coalition Assessment Measures

Table 4 compares the results of coalition measures that were used for both the internal and external assessment. Four measures of coalition characteristics were common for both the PRCC and its partners. Overall the PRCC partners rated their partnership characteristics higher than the PRCC members rated themselves.

Table 4. Comparison of Common Coalition Measures Between PRCC and PRCC Partners								
	PRCC Members (internal)				PRCC Partners (external)			
Characteristic	# Responses	Mean	SD	# items	#Responses	Mean	SD	# items
Satisfaction	20	3.7	0.71	5	10	4.2	0.48	4
Regionalism	20	3.6	0.51	4	10	3.9	0.50	5
Sustainability	17	3.6	0.46	7	10	4.0	0.56	6
Resources	19	3.5	0.73	4	10	4.0	0.63	9

Discussion

Coalition and Partnership Measures

The lower Chronbach's alpha values were likely the result of items that required responses in the negative direction, eg, "It takes too long for the PRCC to reach a decision" while most response categories were positively scaled, ie, strongly disagree-strongly agree. Although measures were obtained from validated sources, some groups may not respond well to reversed patterns in a survey. PRCC members are bilingual or multilingual with English as their second or third language.

"Satisfaction" had the highest Chronbach's alpha for the PRCC self-assessment, and lowest for the PRCC partner assessment. An example of a question measuring "satisfaction" within the PRCC was "I am satisfied with the types of projects/proposals that the Pacific Regional Cancer Coalition has proposed." An example of a question measuring "satisfaction" of external national and regional partners was: "I am satisfied with the progress that has been made with the PRCC to implement the CCC program." Validated measures to evaluate satisfaction of external partnerships were not found in the literature. The Chronbach's alpha for the "satisfaction" measure on the partner assessment was low because the validated internal measures for "satisfaction" was adapted to attempt to address satisfaction with the external partner.

Recommendations

The PRCC will undoubtedly continue to focus on both internal coalition strengthening, especially decision making, and ways to foster direct communication given that face to face and even telephone contact is not always reliable. Externally the PRCC may continue to focus on building its external partnerships and resource sharing to continue to build the PRCC's capacity to treat cancer in the region. PRCC partners may also focus on working with the PRCC to foster a truly regional initiative. The PRCC and its partners should also work together to integrate all chronic disease prevention and control efforts in the Pacific.

The coalition assessment methodology may be applied again in a few years. The sample sizes for the PRCC interviews and the partner assessment should be increased. Most of the Pacific Islands jurisdictions are one day and several hours ahead of Honolulu, and arranging telephone calls is challenging. The coalition assessment workgroup agreed on this approach because there was no opportunity to conduct in person interviews during the time when this assessment was being conducted.

The extent that key informant interview results are representative of the PRCC is unknown because only three interviews were conducted. A purely qualitative evaluation comprised of interviews of a larger sample of PRCC members is recommended at an opportunity when members may be interviewed in person instead of over the phone, eg, biannual face to face meetings. This qualitative evaluation will add further context and description to the quantitative findings on PRCC members' perception of their coalition and partnerships, and ability to address cancer prevention and control goals in the Pacific

The development of community coalitions, their accomplishments, and impacts in a community takes place over time according to phases.[18] This assessment documented the process of coalition functioning of the PRCC and partnership building with its regional and national partners. The next phase of assessment would be to document the implementation of PRCC activities and programs intended to accomplish its goals on cancer prevention and control. Results from this latter evaluation will ultimately inform the final assessment phase, ie, the extent that the PRCC has achieved changes in cancer related outcomes.

Conclusions

The results of the PRCC self-assessment indicate that the coalition is functioning well internally. Also, PRCC partners are satisfied with their partnership with the PRCC and their accomplishments as a result of the partnership. This assessment has informed PRCC members of the progress of their partnerships and next steps to continue to strengthen and maintain regional partnerships to reduce cancer in the Pacific.

This is the first coalition and partnership assessment of the PRCC. The results show that overall the instrumentation and measures were reliable. This evaluation demonstrates that a unique regional coalition which aims to address cancer across a vast, geographically dispersed region may be adequately assessed to provide findings on progress. Results will be used to provide recommendations to strengthen the regional coalition by fostering regionalism and to sustain the regional cancer prevention and control initiatives.

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