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Adapting a Cancer Literacy Measure for Use among Navajo Women

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Abstract

Purpose—The authors designed a community-based participatory research study to develop and test a family-based behavioral intervention to improve cancer literacy and promote mammography among Navajo women.

Methods—Using data from focus groups and discussions with a community advisory committee, they adapted an existing questionnaire to assess cancer knowledge, barriers to mammography, and cancer beliefs for use among Navajo women. Questions measuring health literacy, numeracy, self-efficacy, cancer communication, and family support were also adapted.

Results—The resulting questionnaire was found to have good content validity, and to be culturally and linguistically appropriate for use among Navajo women.

Conclusions—It is important to consider culture and not just language when adapting existing measures for use with AI/AN populations. English-language versions of existing literacy measures may not be culturally appropriate for AI/AN populations, which could lead to a lack of semantic, technical, idiomatic, and conceptual equivalence, resulting in misinterpretation of study outcomes.

Keywords

health literacy; cancer literacy; American Indians; questionnaires; mammography

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Significant disparities in breast cancer morbidity and mortality are evident for Native American women. Although Navajo-specific data were not reported, Espey et al. (2007) found that the age-adjusted breast cancer incidence rate for Southwest female American Indians (AI) was significantly lower than that for Southwest non-Hispanic White women (NHW; 50.4 vs. 127.2). Nevertheless, AI/Alaskan Native (AN) women have the lowest survival rates for breast cancer compared with any other ethnic group (Clegg, Li, Hankey, Chu, & Edwards, 2002; Lee, Li, Arai, & Puntillo, 2009; Ward et al., 2004). The smaller proportion of localized breast cancers among AI/AN female patients compared with NHW or other ethnic minority women could partly explain their relatively low survival rates (Clegg et al., 2002; Espey et al., 2007; Lee et al., 2009; Ward et al., 2004). Among U.S. NHW women, 63% of breast cancers are diagnosed at a localized stage in contrast to 56% among AI/AN women (American Cancer Society 2004; Espey, Paisano, & Cobb, 2005).

These disparities in late-stage diagnosis and poor survival of breast cancer have been ascribed to the sub-optimal rates of utilization of mammography screening among AI/AN women (Clegg et al., 2002; Schumacher et al., 2008; Smith-Bindman et al., 2006). Espey et al. (2007) reported that the rate of mammography screening in the past 2 years among women aged 40 years and older was lower among AI/AN women for all IHS regions combined (69.0%, 95% CI 66.1%-71.7%) than among NHW women (76.2%, 95% CI 75.0%-76.4%), with the lowest AI/AN screening estimates for AI women in the Southwest (62.2%, 95% CI 55.4%-68.7%). Thus, it is critical to understand the psychosocial factors that influence AI women's screening behaviors, with the goal of developing interventions that will increase their screening rates. In that effort, the present study was designed to adapt an existing measure, Cancer Literacy Measure-Breast and Cervical Cancer (CLM-BCC), for use with Navajo women. The measure was adapted in the context of developing a family-based intervention that would complement existing screening promotion efforts.

The Navajo Nation Breast and Cervical Cancer Prevention Program (NNBCCPP) operates under the Navajo Division of Health, an agency of the Navajo Nation (Deasy, Wilcox, Hu, Joe, & Chino-Welch, 2007). Navajo women are scheduled for a mammogram by a provider from one of the hospitals and clinics located within the eight Navajo Area Service Units (some IHS administered, some now contracted). When women do not show to their scheduled appointment, the appointment is re-scheduled twice as needed. On average, 80% of Navajo women in these Navajo Area Service Units do not show to their first, second, or third scheduled appointments. Some service areas experience higher rates of no-shows. In contrast, across various non-Navajo populations and settings, studies report no-show rates ranging from 23–40% (Burack et al., 1989; Margolis, Lurie, McGovern, & Slater, 1993; McCoy, Nielsen, Chitwood, Zaverinik, & Khoury, 1991). Thus, interventions are needed to increase Navajo women's adherence to scheduled mammogram appointments.

The importance of group over individual values within the Navajo family and community as well as in its language, is a key factor to consider in developing interventions. The family is an important aspect of an AI woman's social network, influencing her perceptions of the importance of, and attitudes toward, mammography screening (Hodge, Weinmann, & Roubideaux, 2000; Manne et al., 2006). A major barrier for cancer communication within Navajo families is that commonly used Navajo translations of cancer-related terms are both

inaccurate and misleading, and have become entrenched after decades of use, including use by clinical translators. Most notable is the Navajo term for cancer, '*lhóód doo nádzihi*,' literally translated as "the sore that does not heal" (Csordas, 1989). As a result, cancer is often viewed as an incurable infectious disease, perpetuating misconceptions about its etiology (Csordas, 1989). Moreover, the cancer patient/survivor is often avoided and may become socially and psychologically isolated within her own family. Research among non-Navajo women highlights similar communication problems including silence, avoidance, or mutual protection around cancer (Kenen, Arden-Jones, & Eeles, 2004; Zhang & Siminoff, 2003). Other barriers to cancer communication in families include fear, distress, and the perceived stigma of cancer (Burhansstipanov, Dignan, Wound, Tenney, & Vigil, 2000; Guadagnolo et al., 2009; Hodge et al., 2000; James, Gold, St John-BlackBird, & Brown Trinidad, 2015; Kenen et al., 2004; Zhang & Siminoff, 2003). Thus, efforts toward cancer prevention and control have been compromised primarily due a lack of collectivistic approaches (i.e., including the family or community) and an inability to communicate cancer information accurately and meaningfully to those who need it.

Background

Building on the importance of group over individual values, the authors designed a community-based participatory research study to develop and pilot test a new family-based behavioral intervention to promote mammography screening among Navajo women. Part of this intervention involves measuring cancer literacy and assessing whether the intervention is effective at improving it. Cancer literacy is defined as cultural and conceptual knowledge about cancer. As there are currently no instruments assessing cancer literacy among Navajo, the authors adapted the breast cancer portions of the existing CLM-BCC for use in this intervention. Development of the CLM-BCC is described elsewhere (Buki, Yee, Weiterschan, & Lehardy, in press). This existing measure was designed to address components of cultural and conceptual knowledge of breast and cervical cancer including attitudes, beliefs, knowledge, and emotions, with values permeating throughout (Borrayo, Buki, & Feigal, 2005; Buki, Borrayo, Feigal, & Carrillo, 2004). The measure also assesses various aspects of general health literacy, to place the cancer literacy assessment in a broader context.

The objective of the present study was to adapt the breast-cancer portions of the CLM-BCC for use among Navajo women. The overall goal was to achieve semantic, technical, idiomatic, and conceptual equivalence (Beaton, Bombardier, Guillemin, & Ferraz, 2000; Flaherty et al., 1988) between the original English version (source) of the CLM-BCC and the Navajo version (target, which is called Cancer Literacy Measure-Breast Cancer-Navajo, CLM-BC-N). Semantic equivalence focuses on capturing the meaning and intent for each survey question rather than performing a literal translation. Idiomatic equivalence refers to relevance of colloquial terms or phrases in the target version. Technical equivalence refers to the data-collection method. This process also establishes content validity by asserting that the questionnaire covers relevant content and is deemed appropriate for the intended purpose (Striener & Norman, 2008).

Methods

The authors endeavored to achieve semantic, idiomatic, technical, and conceptual equivalence of the English and Navajo measures through expert review, a forward and backward translation process, and individual interviews and focus groups with women from the community. After obtaining approval by the Navajo Nation Human Research Review Board, the steps described below were followed.

Step 1. Prepare the CLM-BC-N Measure for Translation

Consistent with the approach used in prior adaptations of the CLM-BCC measure for various ethnic minority female populations (Mayfield, 2013), the measure was reviewed by the investigative team for relevance to Navajo women, the AI breast cancer screening literature, and sound survey design principles. The authors focused on three domains within the source CLM-BCC: Barriers to mammography, cancer beliefs, and cancer knowledge. They deleted all of the cervical cancer and Pap screening questions, as well as questions that were not applicable to the population of interest in the intervention. Some items were reworded in English at this stage to facilitate translation into Navajo.

As part of this initial step, the authors carefully examined the written and audio (CD) bilingual materials for the family-based intervention, which include a Susan G. Komen BSA/BSE shower card, Glossary of Basic Cancer Terminology in the Navajo Language (Cancer Glossary), a Susan G. Komen pamphlet on mammography, Susan G. Komen Young Women Talk about Breast Cancer brochure, an American Cancer Society brochure on Guidelines for the Early Detection of Cancer, and digital storytelling DVDs in which Navajo women and men relate their personal experiences with cancer. The authors verified that questions addressing information presented in the intervention materials were included.

Most of the cancer belief items from the source CLM-BCC were retained, although many were modified slightly based on the translatability review. A few items capturing cancer beliefs unique to Navajo culture were added. For example, “If one lives a harmonious life, one will not get cancer” references a strong cultural belief that illness results when a person is out of balance and that restoring balance or harmony will improve the person’s health. The resulting measure also included existing items to assess health literacy and numeracy, and new items that were created to assess self-efficacy, communication about cancer, and family support for screening. In summary, the CLM-BC-N includes eight key sections: cancer beliefs, cancer knowledge, barriers to mammography, health literacy, numeracy, self-efficacy, communication about cancer, and family support for screening.

Step 2. Translate the English CLM-BC-N into Navajo

The family-based intervention was offered in either English or Navajo based on the participant’s preference. Even if a woman prefers one language, it is common for individuals in this population to switch between English and Navajo within a conversation. In order to standardize the way questions are asked in each language, a bilingual Navajo and English interview script was prepared. An experienced Navajo research translator and Navajo language professor (MAG) performed a forward translation from English to Navajo. The

Cancer Glossary was consulted when translating health and medical terms in the CLM-BC-N from English to Navajo. Two bilingual individuals independently performed separate back-translations from Navajo to English without seeing the original English version. Experts in the Navajo culture, health literacy, and cultural adaptation of self-report measures reviewed the back-translations (MB, LPB, KJY). A list of all potentially meaningful differences between the original and back-translated English versions was made. Some of the differences were reconciled by making minor changes to the English CLM-BC-N to allow a more nearly parallel translation in Navajo. All differences were referred to a Community Advisory Committee (CAC) for discussion and resolution.

Step 3. Review of the Translated CLM-BC-N by the Community Advisory Committee

The CAC consists of several Navajo women who are completely fluent in both English and Navajo and have extensive experience working in local health services organizations as interpreters for Navajo patients and non-Navajo medical providers. The group carefully discussed each translation difference to see whether there were simple ways to modify the Navajo version to be closer to the English. When that proved difficult, they returned to the original intent of the question and generated other suggested wording in Navajo to solicit responses consistent with that intent. That process led to wording changes in the English version so as to better align with the improved Navajo version of the question, a process of decentering. The CAC recommendations were reviewed by the original Navajo translator (MAG) and research staff (MB, LG) to create the final version.

Step 4. Cognitive Interviews and Focus Groups

A bilingual research assistant (LG) conducted two rounds of qualitative research with Navajo women to assess respondents' understanding of the survey questions and answers, to identify problematic questions for deletion or revision, and identify important constructs not yet addressed. Women were eligible to participate if they were 40 years of age or older and were bilingual in Navajo and English. The research assistant first conducted in-depth individual cognitive interviews with community-dwelling women. The measure was revised based on their feedback. She then conducted two focus groups to ascertain meaning and cultural acceptability of the revised CLM-BC-N.

Results

Participant Demographics

Seven women participated in the individual interviews. These women ranged in age from 52 to 73, all were fluent in Navajo, and had the following educational attainment: Missing (1); 9th grade or less (3); some college (3). A total of 9 women participated in the two focus group. They ranged in age from 41 to 77, and all women were fluent Navajo speakers. Educational attainment of the 9 focus group participants was as follows: Missing (7); 9th grade or less (1); college graduate (1). Their spoken English proficiency ranged from 'excellent' to 'passable' as judged by the research coordinator and other investigators who reviewed the recordings. The focus groups were conducted in a mixture of Navajo and English. The research assistant would first read a question in English and then repeat it in Navajo. The focus group discussions went back and forth in both English and Navajo, which

is common in spoken conversation in this community. Only minor modifications were subsequently made to the survey following the focus groups.

Through an iterative process of engaging Navajo women and a multi-disciplinary advisory council, the resulting CLM-BC-N was deemed by both patients and the CAC to have good content validity, and to be culturally and linguistically appropriate for use among Navajo women. This adaptation, however, was not without some challenges. The most critical revisions made to the English CLM-BC-N to ensure content validity and equivalence with the revised Navajo version are summarized below.

Confidence

Several questions asked for ratings of “confidence” (e.g., *How confident are you that you could get a mammogram in the next 3 months?*). The initial translatability review identified the phrase “how confident” as difficult to translate, and an equivalent construct in Navajo that seemed natural proved elusive. The investigative team and CAC discussed these questions on different occasions due to the importance of “confidence” when assessing self-efficacy and subjective health literacy. One recommendation was to change “how confident” to “how sure.” However, discussion of this solution led to concerns that “how sure” a person is would be perceived in this population to only be reported with a “yes” or “no” answer rather than being amenable to a range of answers. Furthermore, the concept of “sure” in the self-efficacy question back-translated from Navajo to English indicated the intended concept was not retained; both back-translators interpreted the Navajo self-efficacy question as addressing behavioral intention rather than self-efficacy. Unable to come to a resolution, the item remained written as *“How sure are you that you could get a mammogram in the next 3 months?”* However, to ensure that the measure would adequately capture self-efficacy, the authors added the following question with wording suggested by the CAC and lead translator (MAG): *“If you want to get a mammogram, how difficult would it be for you to get one in the next 3 months?”* As with the previous example, the English phrasing of “how difficult would it be” proved closer to the corresponding Navajo conceptualization of the intent of these questions.

Comfort

Some questions asked for level of “comfort” with a difficult or unpleasant task (e.g., *“In general, how comfortable are you when it comes to talking about cancer?”*). This wording seemed contradictory and was noted as a potential problem in the Step 1 translatability review. The back-translations used words such as “uneasy” and “stressful” indicating that this concept was better conveyed in negative than positive terms. Therefore, questions of this type were changed to reflect a negative rather than a positive sentiment (e.g., *“In general, how difficult is it for you when it comes to talking about cancer?”*).

Family

The concept of family in the Navajo culture is different than in the dominant Anglo-American culture; the word “family” can result in different translations into Navajo depending on intent and context, and these were explicitly discussed with the translating team. The intent of one key question about family was to determine whether women’s

difficulty in talking about cancer differs when speaking to family members as opposed to others. However, because the distinction among immediate family, extended family, and other members of the community was not consistent across all respondents, this question was dropped. Other questions referring to “family” or “relatives” were carefully scrutinized and reworded as needed. The reworded questions performed well in the interviews and focus groups.

Response Categories

Many questions on the English CLM-BCC have 4- and 5-category response scales, yet participants in the individual interviews had difficulty distinguishing nuances between adjacent response categories. They felt that 3 categories were often sufficient to capture the range of possible responses; therefore, a change was made to reflect a 3-item response scale in the measure.

Health Literacy and Numeracy

Subjective health literacy and subjective numeracy are potentially important predictors of mammography use. Two standard questions were used to assess participants' skills in a health context related to reading (i.e., help reading instructions, pamphlets, or other written material) (Morris, MacLean, Chew, & Littenberg, 2006) and writing (i.e., confidence filling out forms) (Chew, Bradley, & Boyko, 2004). One standard question was used to assess general numeracy (Fagerlin et al., 2007). All three questions needed to be reworded in English to facilitate translation. For instance, discussions of the reading skills question, “*How often do you need to have someone help you when you read instructions, pamphlets, or other written material from your doctor or pharmacy?*” (Morris et al., 2006), focused on the “how often” frequency construction. Having to read materials from a doctor or pharmacy is likely a rare task undertaken in a population with low healthcare utilization. Furthermore, the forward and back-translations indicated that this skill would be better captured using a difficulty question. Thus, the question was changed to “*How difficult is it for you to read instructions, pamphlets, or other written material from your doctor or pharmacy?*”

A greater challenge was faced adapting the numeracy question: *When people tell you the chance of something happening, do you prefer that they use words (“it rarely happens”) or numbers (“there’s a 1% chance”)? Would you say you 1=always prefer words, 2=you always prefer numbers, or 3=that you have no preference* (Fagerlin et al., 2007)? The intent of the question was difficult to convey to the translators and to members of the CAC, and there was an overwhelming sense that communicating risk or chance of a future event was not commonly done in the Navajo community. However, the authors were unable to identify or develop an alternate numeracy item with better acceptability among the participants or the CAC. Thus, the standard numeracy question was simplified and reworded as follows: *Which do you prefer: Words like “it rarely happens” or numbers like “there’s a 10% chance”? Would you say you 1=always prefer words, 2= you always prefer numbers, or 3=that you have no preference?* Example questions for each of the eight key sections of the CLM-BC-N are summarized in Table 1.

Discussion and Conclusions

The authors employed a rigorous translation and cultural adaptation process to develop a measure of cancer literacy for use among Navajo women. The process included a translatability review, forward and back translation, expert panel review, and qualitative feedback from potential respondents (Squires et al., 2013). The issues that arose in the cultural adaptation of the measure point to the need to employ careful methodologies to ensure relevance and comprehension in the adapted versions (both English and native languages) for the intended audience. Adapting the CLM-BCC without rigorous attention to cultural tailoring would likely elicit data with questionable validity and applicability in the intended population. Thus, the significant investment in the translation, back translation, and the overall cultural adaptation process should enhance the validity and reliability of the CLM-BC-N. Furthermore, the authors will rely on the CLM-BC-N to provide important metrics to assess the efficacy of a family-based intervention aimed at increasing screening mammography among Navajo women. Through attention to linguistic and cultural adaptation of the measure, the authors hope to minimize measurement error in the evaluation of the intervention's efficacy with this population.

Several challenges became evident in the process of adapting the measure. One issue was related to measuring the concept of self-efficacy in obtaining a mammogram within the next 3 months. Self-efficacy refers to a person's perceived capability to produce a given attainment (Bandura, 2006). There is no standard scale for assessing self-efficacy. Rather, self-efficacy questions should be tailored to the specific tasks of interest. For the family based intervention, the investigators hypothesize that self-efficacy regarding screening will be a significant predictor of mammography behavior (Becker & Foxall, 2006). Thus, being able to appropriately measure this self-reported construct among Navajo women is a critical aspect of the intervention study. Questions measuring self-efficacy do not ask if a person "will" do a certain task or behavior, which assesses behavioral intention, but rather whether they think they "can" do it (Bandura, 2006). A common construction for self-efficacy questions is to ask "how confident" one is in doing the task (Champion, Skinner, & Menon, 2005). The authors found limited evidence in the literature of other qualitative research addressing the concept of self-efficacy and/or confidence in AI/AN populations. Tolma and colleagues conducted a qualitative study of mammography attitudes and beliefs among AI women in Oklahoma (2012). Their interview questions related to self-efficacy were phrased in the context of "difficulty" rather than "confidence;" the latter is the standard phrasing recommended by Bandura (2006). However, it is not clear whether the use of "difficulty" in their study was based on a known or suspected problem with the concept of "confidence" in that AI population.

Because the intervention study involves a family member, careful attention to questions related to family networks is important. In Navajo culture, kinship structures are more complex, intricate, and applied to more people in a person's life than in Anglo-American culture. Beyond the biological and marital family ties are larger clan structures. Traditionally, one relates to other Navajo individuals by identifying the clans they are related to and how those are related to one's own clans. Each person has a relationship with four different clans: their mother's clan they belong to, the father's clan they are 'born for', the

mother's father's clan is the maternal grandparents, and the father's father's clan is the paternal grandparents. When two individuals meet for the first time, it is possible for them to identify common alignment with one of those four clans and to be recognized as that kind of relative. This extension of kinship relations beyond the biologically-identified family makes it more challenging to frame questions that are meant to refer strictly to immediate family and in-law relatives. Given this complexity of kinship structures, it is not surprising that some issues arose in the process of translating questions referencing the concept of "family."

Others have studied print literacy and numeracy in AI/AN populations (Brega et al., 2012; LaVallie, Wolf, Jacobsen, Sprague, & Buchwald, 2012); however, they used existing English language measures (e.g., S-TOFHLA, (Baker, Williams, Parker, Gazmararian, & Nurss, 1999)) or screening items (Chew et al., 2004; Morris et al., 2006), that include the assessments of "confidence" and questions about risk (e.g., percent chance, probability). As this research demonstrated, some wording of existing English language measures of print literacy and numeracy presented challenges even to English-speaking Navajo women. Thus, these findings underscore the need to employ a careful process of cultural adaptation of a measure to ensure its relevance for the intended population.

This study is not without limitations. There was only one forward translation of the CLM-BCC from English to Navajo, although the guidelines recommend having at least two independent forward translations (Beaton et al., 2000). Furthermore, the back-translation was conducted by Navajo English speakers, although it should ideally be conducted by someone who is a native English speaker also fluent in Navajo. In addition, few Navajo individuals are fluent in written Navajo as it remains a predominantly spoken language.

Another limitation is that the authors did not assess the psychometric properties (reliability, construct validity, criterion validity) of the adapted measure. This manuscript focuses on content validity as well as cultural and linguistic adaptation of the survey questions; its measurement properties will be explored using with pilot data currently being collected.

As demonstrated in this study, it is important to consider culture and not just language when adapting a measure for use in AI/AN population. English versions of existing surveys or questionnaires may not be culturally appropriate and could lead to a lack of semantic, technical, idiomatic, and conceptual equivalence, resulting in misinterpretation of key study outcomes. The adapted CLM-BC-N is currently being used in the intervention pilot study. The results of this adaptation also have direct clinical implications. The concept of self-efficacy is commonly used in clinical practice. For example, a clinician may be interested in understanding a patient's confidence in his or her ability to follow instructions for taking a new medication. In the Navajo community, clinicians should avoid phrasing the inquiry in terms of confidence, and should instead use terms such as ease or difficulty.

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Table 1
Key Constructs and Example Questions from the Cancer Literacy Measure-Breast Cancer-Navajo (CLM-BC-N).

Key Construct	Number of Questions	Context/Instructions	Example Question		Response Scale	
			English	Navajo	English	Navajo
Barriers to mammography	10	What would you say were the main reasons you were unable to make your appointments for a mammogram?	You did not think you needed a mammogram.	Abe' bighá, dídla' go bee na 'alkaah doo shá ádoolnít da nínizin.	Yes/No	Aoo' /Nidaga'
Cancer beliefs	9	Please tell me whether you Strongly agree, Agree, Disagree, or Strongly disagree with each statement.	Talking about cancer is dangerous.	Dí' ats 'íis bit' 'óol dah díníísééh áádóó ba'át'e' hólo yíleehígí t'óó baa yáífti' go ndi báahádíid.	Strongly agree/ Agree/ Disagree/ or Strongly disagree	T'áá nanít' Aoo' / Dooda/ T'áá íyisít dooda
Cancer knowledge	14	For each statement, tell me if you think the statement is true or false.	A lump found in the breast is a definite sign of cancer.	Abe' bii' nít' alts' t' nít' izgo si' á éf doodago dí' t' h yíleehgo éf t' áá aanít' ats' 'íis bit' 'óol dah díníísééh áádóó ba'át'e' hólo yíleehígí habe' bii' díníísééh.	True/ False	T'áá ákót' é/ Doo ákót' éeda
Health literacy	2	For each of the following questions, please select what best reflects your answer.	How difficult is it for you to fill out medical forms by yourself?	Azee' ál' áídege' naaltsos t' áá ní hadléehgo hai' éego ná nanít' ah?	Not at all difficult/ A little difficult/ Very difficult	Doo shá nanít' ah da/ T'áá áts' 'íisigo shá nanít' ah/ Ayoo shá nanít' ah
Numeracy	1	For each of the following questions, please select what best reflects your answer.	Which do you prefer (like "it rarely happens") or numbers (like "there's a 10% chance")? Would you say you always prefer words or you always prefer numbers, or that you have no preference?	Háájigo lá baa tsádkos t' áá saadigo (doo ákónát' 'íhda) éf doodago numberjigo (t' áá'á' t' doot' 'izh bighahgo ákóhodoonít) ha' nít'í daats' í? Saad éf doodago numboo doot' 'izh bighahgo ha' nínígí daats' í choo' nít' t?	Always prefer words/ Always prefer numbers/ No preference	Saadí/ numboojí doot' 'izh bighahgo ha' nít'í/ Doo háájida
Self-efficacy	2	None	If you want to get a mammogram, how difficult would it be for you to get one in the next 3 months?	Shibe' shá bighadí' dooldla' nínizí' go, hai' éego ná nanít' ah dooleel kodóo táá' nínáádeezidj'?	Not at all difficult/ A little difficult/ Very difficult	Doo shá nanít' ah da/ T'áá áts' 'íisigo shá nanít' ah/ Ayoo shá nanít' ah
Communication about cancer	2	None	In general, how difficult is it for you when it comes to talking about cancer?	Dí' ats 'íis bit' 'óol dah díníísééh áádóó ba'át'e' hólo yíleehígí baa yáífti' goish t' áá ná nanít' ah?	Not at all difficult/ A little difficult/ Very difficult	Doo shá nanít' ah da/ T'áá áts' 'íisigo shá nanít' ah/ Ayoo shá nanít' ah
Family support for screening	5	Please answer Yes or No to each of the following questions.	In the past three months... Has your family member talked with you about cancer screening or mammograms?	T'áá' nideezid dóó hóshdege' da' ní'k' éf dóó bíháníjeé' ... Ní'ch' t' yádaaht' go dí' ats 'íis bit' 'óol dah díníísééh áádóó ba'át'e' hólo yíleehígí t' áá bítséedi bee ádaa áháyágo naho' díkaah éf doodago	Yes/ No	Aoo' /Nidaga'

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Key Construct	Number of Questions	Context/Instructions	Example Question		Response Scale	
			English	Navajo	English	Navajo
				habe' bighá' dildla' go bee naalkaah yee nich 'j' yádaátti'.		