Healthcare Communication Tailored to the Health Needs of Alaska Natives and American Indians

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Table of Contents

Abstract........................................................................................................................................... 4

Chapter 1: Statement of the Problem........................................................................................................ 5
  Introduction and Background ................................................................................................................ 5
  Problem Statement .................................................................................................................................. 9
  Expected Outcomes ................................................................................................................................. 9

Chapter 2: Background and Project Description ....................................................................................... 10
  Review of Literature .............................................................................................................................. 10
  Conceptual Framework .......................................................................................................................... 19

Chapter 3: Project Design and Evaluation ................................................................................................. 21
  Project Design Framework and Methodology ......................................................................................... 21
    Data Collection Methods .................................................................................................................... 27
    Ethical Assurance ............................................................................................................................... 28
    Design Summary ................................................................................................................................. 29
    Data Analysis Methods ...................................................................................................................... 31

Chapter 4: Results ..................................................................................................................................... 32
  Objective Data Presentation .................................................................................................................. 32
  Discussion of Results ............................................................................................................................ 38

Chapter 5: Recommendations and Conclusions ...................................................................................... 44
  Discussion of Data Linked to Aims and Objectives ............................................................................... 44
  Outcomes Evaluation ............................................................................................................................ 47
  Project Facilitators and Strengths ........................................................................................................ 47
Abstract

Healthcare in Alaska has been challenging throughout history due to the size of the state, the remoteness of Alaska Native villages, and the uniqueness of the different indigenous tribes. Numerous federal and national reports acknowledge that culturally sensitive healthcare can be achieved through partnership with patients and their families to meet the unique needs of each individual. Lack of congruent cultural communication with American Indian and Alaska Native (AI/AN) populations have continuously put these vulnerable populations at the highest risk for adverse health outcomes. The participants for this culturally congruent educational session were healthcare providers that care for AI/AN patients in Anchorage, Alaska. Participants of the educational session included physicians, nurses, mid-level providers, and healthcare administrators. The assessment tool was a pre and post-survey that identified common themes such as a desire to learn more about AI/AN cultures and the lack of culturally congruent education. The results of the session post-survey indicated increased in participant perception and the knowledge of AI/AN culture and culturally congruent Patient and Family-Centered Care (PFCC) methods.

*Keywords:* Cross-cultural communication, Healthcare communication, Culturally competent care, Alaska Native health
Chapter 1: Statement of the Problem

Introduction and Background

Healthcare in Alaska has been challenging throughout history due to the size of the state, the remoteness of Alaska Native villages, and the uniqueness of the different indigenous tribes across the state (Foutz, Cohen, & Cook, 2016). The term Natives will be used throughout this paper to refer to the Alaska Native and American Indian populations. The indigenous people of Alaska are also known as Alaska Native, and the indigenous people of the contiguous states of the United States (U.S.) are known as American Indians (Peter, n.d.). In Alaska, in 1953, the first healthcare facility serving Native people opened its doors under the name of Anchorage Medical Center and was managed by the Alaska Native Service/Bureau of Indian Affairs from the Department of Interior. Two years later, the medical center was operated by the Alaska Native Health Service, Division of Indian Health from the United States Department of Health, Education, and Welfare until 1983. At that time, it started to function under the Department of Indian Health Service/Health Resources and Services Administration (Fortuine, 2013). In 1998, The Alaska Native Health Consortium (ANTHC) signed a contract that allowed tribal organizations to run their own healthcare facilities that were previously operated by the Indian Health System under the Tribal Self-Determinant Act (S. Res. H.R. 1167, 2000). This switch was a major step for Alaska Native healthcare that has evolved to the most sophisticated tribally-owned healthcare facility in the U.S. (Alaska Department of Health & Social Services, 2014).
Natives make up 15.4% of the total population in Alaska (Census Bureau, 2018), with the large majority living in villages throughout the state. Some of the villages are only accessible by plane or boat in the summer and sled dog or snow machine in the winter (Department of Commerce, 2019). Anchorage serves the largest number of Natives in the state, which accounts for over 175,000 people (Alaska Native Tribal Health Consortium [ANTHC], 2019). The large majority of Natives are served through the Native hospital in Anchorage, the Alaska Native Medical Center (ANMC) (2019). However, when a patient’s needs out-serve the services available by the tribal healthcare facilities, Native patients are referred to other hospitals for services throughout the city. Therefore, all hospitals in the city serve Alaska Native patients in one way or another (Alaska Department of Health & Social Services, 2014).

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is an anonymous survey conducted by the Center for Medicare and Medicaid Services (CMS) after patients are discharged from the hospital (Kunjir, Shah, Singh, & Wadiwala, 2019). The survey results are published publicly online via the CMS website. The HCAHPS survey is a pivotal indicator of patient satisfaction in care received and a major element of financial reimbursement for an organization (Stanowski, Simpson, & White, 2015). In 2018, the Native hospital in Anchorage, AK, had the lowest patient satisfaction star rating, compared to other local facilities, with a total of two stars out of a possible five (U.S. Center for Medicare and Medicaid, 2019, Hospital Results). A contributing factor to the low reported satisfaction scores may be due in part to healthcare providers not being familiar with Native culture and lack of cultural competence in healthcare delivery practices. A large body of evidence suggests that Native patients feel satisfied with the care received when their cultural values and norms are respected and acknowledged by the healthcare providers interacting with them (Barnhardt & Kawagley,
A CMS Report to Congress in 2012 suggested that culturally sensitive healthcare can be achieved through partnering with patients and their families to meet their unique cultural needs (Health Services Advisory Group [HSAG], 2015). Partnership with patients is key when providing safe healthcare practices throughout patient-centered care. A report submitted to Congress in 2015 emphasized that partnership with patients promotes a safer and more reliable hospital environment in the U.S. (HSAG, 2015). In this report, patient and family engagement is listed as one of the focuses of partnership with patients. This focus on engagement views the relationship between patients and families and healthcare providers as an integral component of improving health care, improving satisfaction with healthcare treatment, as well as reducing re-admissions to hospitals (Partnership for Patients [PfP], 2014).

The Multidimensional Deprivation Index (MDI) is a new research tool used by the Census Bureau to measure the poverty level. A report created by the U.S. Census Bureau shows that in the years 2016 and 2017, the MDI had the largest increase in Alaska, in which mostly Native populations were affected. By contrast, the MDI increased in only two states, decreased in thirty-two states, and the remainder of the states had no change in their MDI (Glassman, 2019). The poverty measure is calculated in six different areas which are: standard of living, education, health, economic security, housing quality, and neighborhood quality. For the purpose of the report, the higher the MDI, the higher the poverty level and deprivation of the six areas of poverty measurements (United States Census Bureau, 2019).
The MDI related social determinants of health are likely contributing to the fact that Natives have more fatality rates from preventable causes contributed to poorer health, lower education, and economic insecurity when compared to other ethnicity groups (Freemantle et al., 2015). Evaluation of patient values and preferences is warranted in collaboration with quality in the care provided to assist the patient in the healing process (Epstein, Fiscella, Lesser, & Stange, 2010). Partnership models such as the PFCC model involves the development of programs and practices that represent the voice of the patient and family to improve the health of patients (Fueling & McNulty, 2014). The PFCC model of practice has been adopted by the Indian Health Services (IHS) as a result of the Tribal Self-Determination Act (S. 1167, 1999) and supports the principles of tribal self-determination (ANTHC, 2018). The Tribal Self-Determination Act changed the term beneficiaries of the previous health system that was controlled by the federal government to the term self-determined.

This concept of self-determined care also aligns with The Institute of Medicine, which has listed Patient-Centered Care as one of six quality aims for improvement (Agency for Healthcare Research and Quality, 2016). Patient-Centered Care is driven by the principles of the PFCC Model, which consists of respect and dignity, information sharing, and participation and collaboration (Institute for Patient- and Family-Centered Care, 2018). Active engagement of patients and families has been found to be a central facilitator in the promotion of essential patient-centered care (Luxford, Gelb Safran, & Delbanco, 2011). Evidence supports the notion that patient engagement can lead to better health outcomes, improved quality, and safety, (Castroa, Regenmortelb, Vanhaechtd, Sermeusd, & Heckeď, 2016; Coulter & Ellins, 2007) as well as help to control healthcare costs (Carman et al., 2013). Charmel and Frampton (2008) propose the model of PFCC emphasizing patient engagement that outlines the various
levels that patient engagement can develop, ranging from consultation to partnership and shared leadership.

The phrase ‘Patient and Family-Centered Care’ is an expression to emphasize the importance of family within the Native culture (Indian Health Service [IHS], n.d.). To increase the patient perception of receiving culturally sensitive care under the PFCC model, healthcare providers need to cohesively collaborate with patients and families to promote healthcare that is culturally appropriate to meet the unique needs of Native populations. The body of evidence is growing, that indicates PFCC interventions are beneficial to patients, families, and the healthcare system (Goldfarb, Bibas, Bartlett, Jones, & Naureen, 2017).

**Problem Statement**

Low patient satisfaction CMS hospital rating scores showed that Native populations are not satisfied with the care they received within the Alaskan Indian Health Services hospital (U.S. Center for Medicare and Medicaid, 2019, Hospital Results). Furthermore, a recent U.S. Census (2019) MDI report shows that Alaska Natives are the largest group to be negatively affected by social determinants of health, leading to disparities. These findings indicate a likely need for enhanced culturally congruent care of this population. A body of evidence suggests that PFCC is a reliable approach to provide culturally sensitive healthcare (Norouzinia et al., 2016), leading to better quality care, higher patient satisfaction, more efficient care and improved health (Castroa et al., 2016; Coulter & Ellins, 2007). Improving healthcare providers’ knowledge of culturally congruent care methods guided by the PFCC model may help to close the gap in the healthcare needs of Natives in Alaska, thereby increasing satisfaction and reducing the health disparities that affect this population.

**Expected Outcomes**
The overarching goal of the project is to enhance culturally congruent care of Native people, thereby increasing care quality, patient satisfaction, and decreasing disparities.

**Project aim #1.** Assess participants’ current perception of their knowledge of Native culture and culturally congruent care methods.

*Objective #1.* Obtain a pre survey from participants.

*Objective #2.* Employ results from pre-survey as a baseline measure of participant perception of their knowledge of Native culture and culturally congruent PFCC model methods.

**Project aim #2.** Design and implement evidence-based education project.

*Objective #1.* Create learning objectives, including concepts of Native culture and culturally congruent PFCC Model methods.

*Objective #2.* Create evidence-based education content and methods aimed at meeting learning objectives.

*Objective #3.* Implement education project methods with participants.

**Project aim #3.** Re-assess (i.e., evaluate) baseline measures to determine how participant perception of their knowledge of Native culture and culturally congruent care methods changed following project intervention.

*Objective #1.* Distribute post-survey to assess participant perception of knowledge gained following project intervention implementation.

*Objective #2.* On post-survey, assess the likelihood that participants will implement the strategies learned with their Natives patients.

**Chapter 2: Background and Project Description**

**Review of Literature**
History of Alaska. Expeditions completed in the 1700s in Alaska confirm that the first people that came to Alaska came across the Bering Land Bridge over 15,000 years ago (Jordan, 2019). This bridge once connected Russia and Alaska and disappeared after the latest ice age, approximately 10,000 years ago, when the sea level rose as a consequence of the ice age. It is known that this first group of people crossing from Russia continued south to populate all of the Americas (Raff, Tackney, & O’Rourke, 2010). The second wave of people came 12,000 years ago and relocated to Alaska, populating northern Alaska, and Canada (Alaska Public Lands Information Center, n.d.). Soon after this second group crossed the bridge, the latest ice age occurred. Explorers in the 1700s continued, but Alaska was not colonized until the Russians settled in the region in 1784 (U.S. Office of the Historian, 2019). The U.S. purchased the territory of Alaska in 1867 from Russia and discovered gold on the land in 1872. This was when people from the continuous states started exploring the land of Alaska (Bureau of Land Management [BLM], n.d.). In 1898, President William McKinley extended the homestead law to Alaska, which yielded a large number of people arriving from the continental U.S. in search of gold and free land that continued through the next decades (BLM, n.d.). In 1959, Alaska became the 49th state of the U.S. (U.S. Office of the Historian, n.d.), and in 1968 oil was discovered in the northernmost portions of the state of Alaska (U.S. Department of Energy, n.d). Since that time, oil has become one of the major components of the economy of the state, along with the gas industry. Other components of the economy on a much smaller scale are tourism, fishing, and mining (State of Alaska, n.d).

Alaska Native People History. It is believed that the second wave of people crossing the Bering Land Bridge over 10,000 years ago populated the north part of the Alaska Territory (Jordan, 2019). There is no recorded history of the Alaska Natives’ way of living or
survival through the thousands of years prior to the colonization of the Russians in the 1700s (Raff et al., 2010). Alaska Native people are divided into regional ethnic groups and include several groups: (1) Inupiaq/Iñupiat; (2) Yup’ik/Cup’ik; (3) Athabascan; (4) Aleut; (5) Alutiiq; and (6) people of the southeast regions. The term Alaska Natives came into use with the passage of the Alaska Native Claims Settlement Act of 1971 in which all ethnic groups were included. Eleven distinct cultures that speak twenty different languages with more than fifty dialects emerged from these ethnic groups (Alaska Native Claims Settlement Act, 1971).

“Telling” (storytelling) has traditionally been a way of sharing information in the Alaska Native culture. Storytelling is a way of sharing information between the older and younger generations. The knowledge, skills, and standards of attainment required to be a meaningful member of an Alaskan Native tribe are passed down through the generations. From father to son, pass the same knowledge to their descendants when the time comes (Barnhardt & Kawagley, 2005). Storytelling has previously been identified as a reliable and culturally sensitive way to communicate healthcare-related topics with Alaskan Native people (Palacios et al., 2015). Ways of knowing are the form of communication within indigenous populations that provided tools for the tribe to succeed through history (HeavyRunner & Morris, 1997; George, Michaels, Sevelius, & Williams, 2019). Indigenous ways of knowing are a cornerstone of the way Natives give and receive information, and it is imperative for the PFCC “practice” model care.

“Build a fire when you get cold and move closer to stay warm” (David Jones, personal communication, Summer, 2018). This is an example of an analogy that keeps Natives close to each other during times of hardship and guides them during times of adversity. Constructive metaphors are passed down from elders and family members to younger generations, making family and culture key components to success and survival in Alaska by
Alaska Native people (Langdon, 2013). Heritage and family are inseparable as they provide coping mechanisms that are essential for a person’s wellbeing and has been a key aspect of Alaska Native survival through the generations. Traditionally, elders shared their life experiences with the people from the village. These experiences included coping mechanisms, which prepare younger members for coping with adversity (Napoleon, 1996). Family and the tribal community are strengths of Alaskan Natives that motivate individuals to recover from ailments and naturally motivate them to overcome physical illness. Family interactions provide values, mental stability, and physical wellbeing that have been part of traditional ways of healing for many generations (Strand, 2003).

Valladares and Moore (2009) found survey results from 2003 with 100,000 children from across the U.S. and noted that family and family rituals are strengths of economically disadvantaged families. Some of the traditions of such families included eating meals together (Valladares & Moore, 2009). Another study was done by HeavyRunner, and Morris (1997) found in Native families, the concepts of family, culture, traditional language, food, dances, and ceremonies are protective factors that promote one’s own ability to overcome disease. Natural cooperation among tribal members is one of the most important qualities of Native people. Their harmony with the tribe is key, and it is seen as not imposing one’s way on another individual (HeavyRunner & Morris, 1997). A culturally grounded pilot study between parent and youth participants from Native communities highlighted the importance of promoting a cultural foundation, community involvement, positive connections, and the effects of family on the wellbeing of young Natives (Goodkind, LaNoue, Lee, Freeland, & Freund, 2012).

**Alaska Native health care history.** In 1953, the Native hospital opened its doors to patients under the name of Anchorage Medical Center and was managed by the Alaska Native
Service/Bureau of Indian Affairs from the Department of Interior. Two years later, the hospital started to be operated by Alaska Native Health Service, Division of Indian Health from the Department of Health, Education, and Welfare until 1983 when it started to function under the Department of Indian Health Service/Health Resources and Services Administration (Fortune, 2013). In 1998, ANTHC signed a contract that allows tribal organizations to run their own health care facilities previously operated under the Indian Health System under the Self Determination Act (S. Res. H.R. 1167, 2000). This was a major step for Alaska Native health care that has evolved to become the most sophisticated tribally-owned health care facility in the U.S. (Alaska Department of Health & Social Services, 2014).

**Patient engagement.** Definitions of patient engagement vary. Terms are used interchangeably, such as patient engagement, patient activation, and patient and family-centered care. The definition proposed by Carman et al. (2013) is, “patients, families, their representatives and health professionals, working in active partnership at various levels across the health care system-direct care, organizational design and governance and policy making-to improve health and health care” (p. 224). This type of engagement between the healthcare provider and the patient is an important strategy in the PFCC model partnership. Recent research emphasizes that engaged patients and families in healthcare are key for better patient health outcomes. Allowing patients and families to decide on better treatment and communication methods promotes shared decision making with greater patient and family satisfaction with the healthcare team (Hibbard & Greene, 2013).

The Affordable Care Act (ACA) (2014) recognizes that patient engagement is the most important feature of a successful healthcare system. Some of the features of patient engagement are the knowledge and scientific expertise that healthcare providers bring to the continuum of
care and the ability to provide the patient with intervention options. The personal knowledge that patients and their families bring to caregivers is key for creating meaningful engagement in healthcare delivery. The provider can communicate at a level the patient and family understand in order to assist in the selection of the best treatment options (Institute of Medicine, 2013).

One study tested an intervention in adult critical care to promote PFCC. The researchers conducted focus groups to find out how families wanted to be actively involved in their loved ones’ care. They then studied an intervention where families actively participated in fundamental aspects of the patient’s care. This family centered intervention group resulted in higher scores on a family-centered care survey (Mitchell, Chaboyer, Burmeister, & Foster, 2009). In the Neonatal Intensive Care Unit (NICU) setting, a family support program had a positive impact on the stress level, comfort level, and parenting confidence of families. It also enhanced the receptiveness of staff to the presence of families as an integral partner in care, as well as the benefits of PFCC (Cooper et al., 2007). In an adult surgery population, Debra et al. (2008) studied the effectiveness of patient-centered interventions. Nurses trained in PCC called patients via telephone 24 to 48 hours prior to admission to the healthcare facility to determine their expectations during their hospital stay. The same nurses cared for these patients during their stay. The PCC group had higher satisfaction and ratings of quality of care received than the control group (Debra et al., 2008).

**Provider communication and patient satisfaction.** Patient perception of effective health provider communication has been linked to positive patient satisfaction with care received (CMS, 2018). To track satisfaction with care received, the CMS health grades report, for example, published some of the questions as indicators of how patients perceive healthcare communication. One of the questions was, “The health care provider explained things in a way I
could understand” (Kunjir, Shah, Singh, & Wadiwala, 2019). Furthermore, a cross-sectional study done by Rebecca and Associates (2017) found a direct relationship between nurse communication and patient-reported understanding of medications at hospital discharge (Bartlett Ellis, Werskey, Ofner, & Bakoyannis, 2017). Other studies highlight the importance of effective provider communication and the relationships of higher patient satisfaction scores and low mortality rates (Kennedy, Tevis, & Kent, 2014).

**Cross-cultural communication.** Communication is the exchange of information or thoughts from one person to another and is influenced by cultural, situational, developmental and physical components (Beebe, Redmond, Geerinck, & Salem-Wiseman, 2015, p. 2). Cultural factors that affect the efficacy of interpersonal communication are (a) language (b) belief systems (c) morality (d) perspective and (e) customs (Beebe et al., 2015, p. 81). Cross-cultural training has been suggested since 1969, when Mitchell and Foa (1969) did a double-blind study with 64 students and found a relationship between multi-cultural skills and relationships in the workplace. Close to twenty other similar studies were completed over the following twenty years. In 1990, two university professors completed a literature review of cross-cultural education and developed a framework to guide future cross-cultural studies and training (Black & Mendenhall, 1990). Cross-cultural communication is an important aspect to consider when communicating with indigenous people. Evidence shows that Native patients perceive communication with healthcare providers in different forms from what the providers intend to communicate (Colclough & Brown, 2013).

**Culturally sensitive communication and health outcomes.** There have been numerous studies highlighting the importance of culturally sensitive communication to yield positive health outcomes in Alaska Natives (AHRQ, 2016). New research methods are inclusive of the
incorporation of Native ways of communication, such as in the case of storytelling (George et al., 2019). Through storytelling, hundreds of Native generations shared their knowledge. Now through participatory research methods, participants use storytelling where researchers dictate and document this cultural value and way of knowing in indigenous populations into the western way of knowledge (Chilisa & Tsheko, 2014). A study published by a tribal organization in Anchorage, Alaska, conducted focus groups composed of Alaska Natives in which investigators concluded that healthcare providers must tailor communication to the cultural ways of the target population (Lillie et al., 2019). A study done by Dr. Wexler (2014) highlighted the need to further tailor healthcare communication to not only the culture of the person receiving the information but also to their generational needs. Dr. Wexler came to this conclusion after conducting a community-based participatory research study with Alaska Natives in which participants from different generations (elders, adults, and youth) were able to meet and have a dialogue exchange. For this study, she was able to recruit seven elders, seven adults, and eleven youth participants.

Studies through surveys and interviews in hospital settings of patients and caregivers found that it is necessary to assess and establish verbal communication in a way patients can understand to address patient problems better. One study found that unfamiliarity with patients’ cultures and ways of communication are a major barrier to daily communications (Norouzinia et al., 2016). Similarly, Dr. Noe et al., (2014) investigated the need to provide culturally sensitive communications to reduce health disparities in Natives. His research was conducted in the years 2011 to 2012 through a survey sent to twenty-seven Veterans Affairs (VA) facilities in the west region of the U.S.. The findings from this research revealed that VA staff did not believe they were adequately meeting the needs of Natives. Furthermore, the staff
did not believe that any of the associated facilities were planning on implementing programs that were sensitive to the culture of Natives to close the gap in health disparities affecting Natives (Noe, Kaufman, Kaufmann, Brooks, & Shore, 2014).

Being culturally competent is one of the most important skills healthcare providers should maintain. As noted in Tang et al. (2018) quantitative empirical research, cultural competence is imperative to generate patient trust and for the patient to be satisfied with the care received. His research was conducted with almost six hundred hospitalized patients on a face-to-face structured questionnaire. The researchers concluded that it is necessary to improve healthcare provider cultural competence to promote behaviors that were trust-building and for the patients to be active participants in their healthcare decisions (Tang et al., 2019).

The American Nurses Association proposes a paradigm change in the way cultural competence is taught as a strategy to address cultural inequalities in the U.S. (Campinha-Bacote, 2019). Cultural “competemility” is the process in which cultural humility and cultural competence interconnect. Dr. Campinha-Bacote (2019) argues that a healthcare provider must have a humbling cultural attitude when learning others’ cultures. This would prevent the healthcare provider from being perceived as culturally superior to the patients’ culture. She goes on to suggest that cultural “competemility” must also be adapted at the organizational level to close the gap in organization culture and individual patient culture. By making the entire organization culturally humble and culturally competent, health care disparities affecting unique individuals from different cultures will be more equitable.

**Summary.** An extensive review of available literature on Native populations show that there is a need for healthcare providers to be educated in the cultural differences of Natives and strategies to communicate with this underserved group. Engagement in healthcare practices, in
addition to the importance of family engagement, is an important factor when providing healthcare services tailored to the unique needs of Native populations. Lack of understanding and lack of properly communicating with Natives in a culturally sensitive way that is perceived as caring has increased the adverse health outcomes of the populations. While there have been numerous studies in healthcare around PFCC models, there have been minimal efforts to address the apparent indigenous communication issues in Alaska. Efforts to improve communication with the indigenous people is imperative as this population inhabits the land of the first people in all Americas and is one of the most resilient societies throughout history. The use of an educational session for healthcare providers to learn culturally sensitive strategies guided by the PFCC model is imperative to enhance culturally congruent care of Native people, thereby increasing care quality, patient satisfaction, and decreasing disparities.

**Conceptual Framework**

The overarching project goal was to enhance culturally congruent care of Native people, thereby increasing care quality, patient satisfaction, and decreasing disparities. Project objectives aimed at accomplishing this overarching goal were framed within The *Patient and Family-Centered Care Model*, which empowers healthcare providers to partner with patients to improve healthcare delivery (PfP, 2014). The project design was also guided by *Malcolm Knowles’ Six Adult Learning Principles* (Knowles, 1973). In addition, the project education session was structured using the concept of *andragogy*, which incorporates seven elements of effective adult learning (Malcolm, 1958).

The four core principles of the PFCC model of healthcare include practice, partnership, leadership, and innovation. These concepts align with the values of Native cultural groups that seek Alaskan healthcare services. Practice within the PFCC model is defined as providing health
care that is structured with each patient’s individualized values and needs. Partnership within the PFCC model is defined as a combined force between each patient and the nursing staff in order to mutually identify and strive toward the achievement of healthcare goals. Leadership within the PFCC model is defined as the collective drives of the provider and patient in the change of improving healthcare delivery. Innovation within the PFCC model is defined as a collaborative approach for creating a partnership for improvement between providers and patients and his/her families.

![Figure 1. Patient and Family-Centered Care (PFCC) concept implementation.](image)

**Malcolm Knowles’ Six Adult Learning Principles**

Malcolm Knowles’ (1973) six principles of adult learning are concepts that teachers should incorporate when teaching adults. These principles were used to guide the content of the project to enhance participants' learning. Knowles’ principles of adult learning are as follows: (1) learners are self-motivated and self-directed, (2) use their previous life experiences to make decisions, (3) are goal-oriented, (4) are relevancy oriented, (5) are practical, and (6) likely to be respected (Knowles, 1973). The six principles serve as a guide to help the instructor prepare the content of a teaching session based on the needs of the adult learner. This method removes the
presenter or instructor as an authority and makes him/her a guide to help the learner or participants apply something new to their own practice (Knowles, 1973, p. 27-28).

The project was also guided by the seven phases of the andragogical (adult learning) design, also proposed by Dr. Knowles (1973). The seven phases are conditions that promote adult learning, which are based on a process of how adults learn, rather than content required to learn as it is in the case of pedagogy (child learning) (Knowles, 1973 p. 57). The phases or elements of adult learning are: (1) creating an environment that is conducive to learning, (2) involving learners in educational plans, (3) involving participants in finding their personal learning needs, adjusting teaching methods based on what the learners want to learn more of, (4) involving learners in creating their own learning goals and objectives, (5) involving learners in creating a learning plan by multiple methods, (6) help learners carry out their learning plans, (7) involve learners in evaluating their learning (Knowles, 1973 p. 57). The concept of andragogy has its early development from philosophers of the 1950s, such as Norman Malcolm’s symposium in 1958 at the University of Vermont. In the symposium, Dr. Malcolm argues that adults learn in several different ways as the result of life experiences. He provided a list of principles, but there was no attempt to create a learning theory (Malcolm, 1958). It was in the 1970’s when Dr. Knowles unified the knowledge published by philosophers and researchers in Europe and North America during the 1950s and 1960s. He named the adult learning theory andragogy based on the Greek word- anēr (with the term andr-), meaning “man or adult” as opposed to “boy” (Knowles, 1973 p. 42). The Greek word- agogy means leader, which in Greek times the -piadagōgos were the ones who led the kids to school (Merriam, 2001).

Chapter 3: Project Design and Evaluation

Project Design Framework and Methodology
The overarching project goal was to enhance culturally congruent care of the Native population, thereby increasing care quality, patient satisfaction, and decreasing disparities. The PFCC model guided the project’s implementation phase, which was focused on patient and family engagement in healthcare delivery education. The implementation steps were guided by the seven elements of adult learning (Knowles’, 1973). Each of the elements were linked to the aims and objectives of the educational session to ensure successful participant learning. According to Knowles (1973), adults learn based on “a need to know”. Therefore, the educational session was offered to healthcare providers and employees, such as administrators, nurses, and physicians that work with Native patients on a regular basis. Again, the project consisted of three aims with the objectives listed below.

**Aim #1.** Assess participants’ current perception of knowledge of Native culture and culturally congruent care methods.

**Objective #1.** Obtain a pre-survey from participants.

**Methods.** This action correlates with phase three of Knowles’ (1973) andragogical process in which participants are involved in identifying their own learning needs. This also correlates with Knowles’ learning principle two in which adults use their own experiences to learn. The pre-survey assisted participants to recognize areas of strength and opportunities for growth. In this phase, participants were able to understand the goals of the educational session and establish personal goals from the session content. Participants that met the project inclusion criteria were given a five-point Likert scale survey (see Appendix B) after they were provided with and verbalized understanding of the project informational handout (see Appendix D). The pre-survey took five to ten minutes of participants’ time to complete.
**Objective #2.** Employ results from pre-survey as a baseline measure of participant perception of knowledge of Native culture and culturally congruent PFCC model methods.

**Methods.** Learning Native culture is presumed to be relevant to participants’ daily interactions in healthcare. Therefore, this objective correlates with Knowles’ (1973) principle four in which adults are relevancy oriented and principle five in which adults are practical in the application processes. Participants of the educational session were all employees of health systems that provide care to Native patients. Therefore, the content of the educational session had the potential to directly impact their daily communication with patients and families. This objective also correlates with Knowles’ (1973) principle six that adults learn by intrinsic motivation.

Methods were aimed at increasing participants’ knowledge. Therefore, results were not discussed but rather used as a baseline measurement of participants’ perception of knowledge prior to the educational interventions. Data analysis was completed after the project implementation phase when writing project results. In order to protect participants’ privacy, there was no way to associate survey results with individual participants.

**Aim #2.** Design and implement evidence-based education project.

**Objective #1.** Create learning objectives, including concepts of Native culture and culturally congruent PFCC model methods.

**Methods.** This objective correlates with Knowles’ (1973) principles one (i.e., the learner is self-directed) and principle three (i.e., adults seek answers to solve a specific problem). The learning objectives of the education session were aimed at increasing knowledge of Native culture to promote congruent care of Native people. By providing congruent care tailored to the
needs of Native people, it is expected that patient satisfaction with healthcare delivery will increase and that health disparities that disproportionally affect Native populations will decrease.

**Objective #2.** Create evidence-based education content and methods aimed at meeting learning objectives.

**Methods.** The PFCC model guided the class content while the phases of andragogy theory (Knowles, 1973) guided the class design. This objective correlates with element one of Knowles’ (1973) theory which involves setting an environment that is conducive for learning. In this step, attention was given to the physical environment, creating mutual respect, privacy, and supportiveness. Therefore, the project was held at one of the meeting rooms at the public library. This objective also correlates with phase two of Knowles’ (1973) theory of involving learners in mutual planning and phase three in assessing participants’ own learning needs. This objective also correlates with principles one, learner is self-directed; principle two, in which adults use their own experiences to learn; principle three of involving participants in identifying what they need to learn; principle four relevancy of content; principle five, the content is practical to the participant’s daily life; and principle six which uses participants' input as a demonstration of respect of their input and ideas. Thus, after the pre-survey was provided at the beginning of the session to assess participants’ own knowledge of culturally congruent healthcare, the methods were adjusted based on what the learners wanted to learn most. Knowles’ (1973) six principles of adult learning were further implemented by allowing participants to be able to identify how educational goals would benefit their career goals through the pre-survey.

Guided by the learning needs and goals of participants, the evidence-based learning session content included evidence regarding (a) Native culture and history to educate participants about possible cultural differences between their cultures and that of Native culture, (b) strategies
for interactions that promote PFCC and (c) the importance of family in the Native population for resilience. An extensive literature review on associated topics was conducted using EBSCO, Medline, PubMed, academia.edu, and Mookini Mega search over the course of six months prior to project implementation. To engage participants, short clips of Native storytelling and exchange of communication strategies were also used. Real-life examples were also discussed to recreate situations in which newly learned communication strategies could be implemented.

**Objective #3.** Implement education project methods with participants.

**Methods.** This correlates with phase four of Knowles’ (1973) theory of involving learners in creating their own learning goals and phase five in which the learner is involved in the creation of their learning plan. This objective also uses Knowles’ (1973) principle three in which participants are goal-oriented; principle four in which participants learn something relevant to their daily work; and principle five in which the learning material will be practical for their daily interactions with Natives. To involve participants in creating their own learning goals, emphasis was placed on the areas that participants wanted to learn about based on previous experiences. The project implementation phase took place at the Anchorage Public Library conference room, which had the capability to host up to thirty people. The educational session took a total of forty minutes and included the information from Aim #2, Objective #2.

**Aim #3.** Re-assess (i.e., evaluate) baseline measures to determine how participant perception of their knowledge of Native culture and culturally congruent care methods changed following project intervention.

**Objective #1.** Distribute post-survey to assess participant perception of knowledge gained following project intervention implementation.
Methods. This objective correlates with phase six of Knowles’ (1973) theory of helping the learner carry out their learning plans and phase seven of involving the learner in evaluating their learning plans. The post-survey was distributed at the end of the educational session and consisted of the same questions from the pre-survey. Completion of the post-survey took five to ten minutes of participants’ time. The post-survey was coded in a way that made it impossible to link a participant with a survey or results.

Objective #2. On the post-survey, assess the likelihood that participants will implement the strategies learned with their Native patients.

Methods. This correlates with phase six of Knowles’ (1973) theory in which learners are helped to carry out their plans of applying learned material and phase seven in which learners will evaluate what they have learned. This was done through the post-survey that was given to participants to reassess their acquired knowledge regarding culturally congruent communication methods. Question number ten on the post-survey was analyzed to assess participants’ intent to implement learnings into daily practice. This was included in the post survey time and did not link the responses to participants. Responses to this question was also used as a method to evaluate the efficacy of the educational session and provided feedback for future educational interventions.

Participants

Inclusion criteria. Adult health care workers (at least 18 years of age) that work with Native populations in the state of Alaska. Participants had to be able to read and write in the English language and have the ability to complete a survey. Participation in the project was voluntary and at no cost to them.
**Exclusion criteria.** Adults with impaired mental status (such as confusion and delirium or under the influence of drugs or alcohol) were excluded from the project. People under the age of 18 years of age or adults that qualified but did not want to not participate in the project were excluded.

**Setting**

The project setting was at the Anchorage Public Library, Z. J. Loussac Public Library, which provides multiple meeting rooms for an hourly rental fee. The selected project area was one of the Loussac Public Library meeting rooms with a maximum capacity of 30 persons and with a cost of fifty dollars per hour.

**Data Collection Methods**

Participants were provided a 5-point Likert scale survey with ten questions (see Appendix B) to measure the perception of their knowledge of Native culture and culturally congruent care methods. The methods used to develop these surveys included an extensive literature review of what indigenous populations perceive as caring and respectful as well as strategies used by indigenous populations to thrive through history. Tribal elders and experts in indigenous populations were consulted in the development of the survey. The Likert scale is a valid and reliable scale used by many researchers during the last twenty years (Preston & Colman, 2000).

The survey questions were: (1) I am prepared to anticipate the needs of Alaska Native patients; (2) I understand my role as a listener; (3) I am confident that my communication skills are effective when I communicate with Native patients; (4) I have the necessary knowledge and skills that are essential to provide healthcare that is sensitive to my Native patient’s culture; (5) I am prepared to implement an individual plan of care incorporating the Native patient’s current life styles; (6) I am comfortable in using the cultural ways of sharing knowledge
to promote Patient and Family Centered Care; (7) I have the necessary organizational skills to provide Patient and Family Centered Care in a timely and efficient manner; (8) I understand the importance of communicating with Native patients and family in a way they perceive as respectful; (9) I am committed to continuing my own learning and growth as a cultural sensitive healthcare professional; and (10) I am confident the learnings from this session will improve my communication with Natives.

**Ethical Assurance**

Project participation was voluntary, and no personal identifiers were collected. To protect project participants, the project was approved by the University of Hawaii (UH) System Institutional Review Board (IRB) (see Appendix E). The project was also approved by the University of Hawaii at Hilo (UHH) School of Nursing (SON) (see Appendix F), and once approval from the UH IRB was obtained, the project took place. Participants were provided the opportunity to opt-out of the survey and/or project at any time.

**Project Personnel**

The project chair, Dr. Patricia Hensley, oversaw the project implementation. The student investigator, Elkin David Arteaga, coordinated and implemented the project. Mr. Arteaga has many years of experience living and working with the Alaskan Native population. He is a Doctorate of Nursing Practice (DNP) graduate student and was supported by a committee from the UHH. Committee members included Dr. Katharyn Daub, who was one of the UHH SON DNP Coordinators and a trans-cultural scholar, and Dr. Joan Thompson-Pagan, who is the UHH SON Director. The committee members have extensive experience teaching and conducting research and/or doctoral projects in Hawaii and have a wealth of knowledge of teaching and interacting with people from different cultures. Mr. Arteaga was responsible for planning,
recruiting, and implementing the project with UHH SON Committee guidance.

**Budget**

The project costs included fifty dollars for the one-hour public library meeting room rental, fifty dollars to print flyers, and ten dollars for transportation. All costs associated with the project were funded by David Arteaga, student investigator, and DNP candidate.

**Design Summary**

The project assessed participants’ baseline perception of their knowledge of Native culture, including communication styles through a pre-intervention survey (see Appendix B). The project education session content included communication strategies to provide culturally sensitive healthcare. At the end of the educational session, participants were able to rate their confidence level and likelihood of implementing culturally sensitive strategies in their care delivery (see Appendix B). This project explored the concept of patient engagement to drive healthcare communication with patients and families. The project was conducted with healthcare providers caring for Natives in the state of Alaska. Culturally appropriate care delivery includes communication methods and knowledge of integrating Native values, experiences, and perspectives. The pre and post-survey tools were 5-point Likert scale surveys in which participants were to circle a number from one to five that best reflected their answer to the question (see Appendix B). Participants were able to contact the project coordinator at any time. Once this pre-survey was completed, participants were asked to introduce themselves and talk freely about their experiences caring for Natives in their careers and interactions outside of healthcare facilities. The pre-survey aided the student investigator and participants’ assessment of their own knowledge of the indigenous Native population, which is one of the principles of adult learning (Knowls, 1973). The pre-survey also provided an opportunity for participants to
learn from each other’s’ experiences, which correlates with Knowles’ (1973) learning principle of respecting learners’ opinions.

Participants were recruited through a flyer (Appendix A) posted at the Anchorage public library’s communication board and through direct invitation by the student investigator. Any healthcare provider, nurse, physician, nurse practitioner, healthcare administrator, or nursing assistant that was over the age of eighteen years old and able to read and understand the informational consent were invited to participate. When participants presented to the project meeting room and met the project inclusion criteria, an informational handout was given to the participant (see Appendix D). Completion of the project surveys served as consent to participate in the project. Survey completion took approximately five to ten minutes, and the data was collected by the project coordinator/student investigator. Participants were able to attend at no cost to them.

During project implementation, the project coordinator utilized Knowles’ (1973) seven phases of andragogy as follows: Element one is creating an environment that is conducive to learning (Knowles, 1973, p. 59). Thus, the location of the project was conducted within the public library domain in a meeting room designed for presentation purposes. Element two was structuring the presentation in a way that participants were included in the planning. During this phase, recruited participants were able to contact the presenter to discuss location or any other recommendations to include in the presentation material. The target population included healthcare providers that provided care to Natives, including nurses, physicians, assistants, and other members of the healthcare team. Element three included involving participants so they could identify what they needed to learn. For this phase, participants completed a pre-survey prior to the educational session.
Element four was the inclusion of the learner in identifying their own learning goals. In this phase, participants were able to rate their level of knowledge on a scale of one to five in which one indicated strongly disagree, and five indicated strongly agree. Element five included involving participants in the creation of their own learning plans. During this phase, real-life examples were provided in which participants could assist in the development of plans for how to solve similar Native care problems. Throughout implementation of the project, participant discussion and feedback was encouraged. This allowed participants to better identify areas of needed improvement for future culturally congruent communication in order to meet the needs of Natives and increase patient and provider perception of culturally congruent healthcare communication.

Element six was helping learners execute what they had learned. For this phase, the participants were provided with point-of-care tips to remember when interacting with Natives in their daily life. Element seven was the evaluation of the learning. This occurred when the participants received the post-survey, which included an assessment of the likelihood of using the strategies learned during the session when interacting with Natives.

**Data Analysis Methods**

Pre and post-survey scores were analyzed after implementation of the project using simple statistical analysis. Survey question ten, I am confident the learnings from this session will improve my communication with Natives, was analyzed closely to determine if the educational session was successful. Question ten assessed the likelihood the participant would implement learning from the session in future interactions with Natives. Survey results were presented on a histogram to provide a visual progression of each of the answers.
The project is a data-driven improvement action plan that is aimed at enhancing culturally congruent care of Native populations, thereby increasing care quality, patient satisfaction, and decreasing disparities. Patient satisfaction, as publicly reported by CMS (2019), has identified room for improvement on Natives’ perception of the care they receive. Improvement of culturally sensitive patient engagement in healthcare has been a significant factor in increasing satisfaction with care received (Barnhardt & Kawagley, 2005; Blue Bird Jernigan et al., 2015; Grandbois, Warne, & Eschiti, 2012; Lillie et al. 2019; Norouzinia, Aghabarari, Shiri, Karimi, & Samami, 2016). It is also known that when people’s cultural values and traditions are taken into account when being cared for, they have an increased likelihood of recovering from illness (Oikarainen et al., 2019; Tang et al., 2019; Zarei, Salmabadi, Amirabadizadeh, & Vagharseyedian, 2019). With the aid of the pre and post-survey, it was the goal of the project investigator to evaluate participants’ knowledge and perceptions of Native culture and the likelihood they would implement the strategies learned in their care of Native people. Knowing how to communicate with Natives in a way that they perceive as caring, respectful, and acknowledging their cultural values was at the core of the project's learning objectives.

**Chapter 4: Results**

**Objective Data Presentation**

The overarching goal of the project was to enhance culturally congruent care of the Native population, thereby increasing care quality, patient satisfaction, and decreasing disparities.

**Aim #1.** Assess participants’ current perception of their knowledge of Native culture and culturally congruent care methods.
**Objective #1.** Obtain a pre-survey from participants.

**Objective #2.** Employ results from pre-survey as a baseline measure of participant perception of their knowledge of Native culture and culturally congruent PFCC model methods.

**Results.** Aim #1 objectives involved obtaining a pre-survey from participants to use as a baseline. This was an important step because, according to Knowles’ (1973) 6 principles of learning, adults learn by personal experiences. Therefore, knowing participants’ perceptions of culturally congruent care methods was important to evaluate the efficacy of the session and for participants to evaluate their progress. The survey results also allowed participants to use their pre-survey scores to assess their baseline knowledge of the various survey question topics. This also allowed participants to establish their own learning goals within the session’s learning goals. The average on the pre-survey was 3.51 on a 5-point Likert scale.

![Pre Survey graph](image)

*Figure 2.* Averages for each of the ten pre-survey questions using a 5-point Likert scale

**Aim #2.** Design and implement evidence-based education project.
**Objective #1.** Create learning objectives, including concepts of Native culture and culturally congruent PFCC model methods.

**Objective #2.** Create evidence-based education content and methods aimed at meeting learning objectives.

**Objective #3.** Implement education project methods with participants.

**Results.** Aim #2 involved implementation of the evidence-based educational session in which Native congruent communication methods were discussed. The first objective of this aim was to create learning objectives that aligned with objectives of the participants based on their self-assessment on the pre-survey. In this step, the emphasis was placed on what PFCC methods are and how every person perceives communication differently. Participants were allowed to ask questions and expressed their desire to learn more about any specific concept they found important to learn based on the pre-survey. This objective aligned with Knowles’ (1973) learning principle that adults are problem-oriented.

The second objective was to guide the education session, focusing on what the participants expressed a desire to learn more about. This was based on participant responses from the pre-survey and intrinsic learning goals prior to volunteering to be at the educational session. This step was important as the elements of adult learning suggest that adults like to be involved in learning plans, like to be involved in identifying their own learning needs, and to set their own goals (Knowles, 1973). Some of the participant learning goal themes that guided the session were Native ways of knowing and how information was passed down through generations through storytelling. Many participants stated that they drew from their own past experiences as healthcare providers to guide how they communicate with Native people to
provide healthcare services. This aligned with Knowles’ (1973) principle that adults learn from past experiences.

Objective three focused on how the content was delivered to the participants. To fulfill this objective, the session content was presented on a PowerPoint with some clips in which Alaska Natives discussed their culture and challenges. Participants were able to interrupt at any point during the presentation to encourage a collaborative discussion that took place amongst all participants to enhance learning. This aligned with Knowles’ (1973) elements of adult learning by providing visual, auditory, and kinesthetic teaching methods. This also aligned with the element of helping adults carry out their plans to change the way they communicate with Natives by discussing real examples of situations in which PFCC methods could be used.

**Aim #3.** Re-assess (i.e., evaluate) baseline measures to determine how participant perception of their knowledge of Native culture and culturally congruent care methods changed following project intervention.

**Objective #1.** Distribute post-survey to assess participant perception of knowledge gained following project intervention implementation.

**Objective #2.** On the post-survey, assess the likelihood that participants will implement the strategies learned with their Native patients.

**Results.** Objective one included distribution of the post-survey to evaluate the participant perception of knowledge gained after the educational session. This objective correlated with Knowles’ (1973) element of adult learning in which learners are involved in evaluating their own learning, and it also correlated with the principle of helping adults carry out the learned content. The post-survey average was 4.35 on the 5-point Likert scale.
Figure 3. Averages for each of the post-survey questions using a 5-point Likert scale

Objective two was to assess the likelihood that participants would use the knowledge learned to make changes to the way they provide patient and family-centered care. This objective was met through pre and post-survey questions five and six. Question five asked participants if they felt prepared to implement an individual plan of care, incorporating the patients’ current lifestyles. Similarly, question six asked participants if they felt comfortable in using the cultural ways of sharing knowledge to promote PFCC. These two questions did not only evaluate the participants’ perception of knowledge gained after the session but also helped to evaluate the efficacy of the educational session. These two questions had the biggest percentage change between pre and post-surveys.
Figure 4. Question #5 had a 52% increase between pre and post-survey.

Figure 5. Question #6 had a 65% increase between pre and post-survey.
Discussion of Results

Overall, when comparing the pre and post-surveys, the results showed an increase in participants’ perceived cultural congruence. Some questions were aimed at assessing different areas, such as question five which asked if participants were prepared to develop a plan of care based on patients’ current lifestyles, and question six in which participants were asked how comfortable they felt using Native cultural ways of knowing when communicating with Natives. Some other questions, such as question nine, had a minimal 4% increase between pre and post-survey results. Question nine was aimed at assessing participants’ commitment to learning how to better communicate with Natives. This result reflects that participants were likely already highly committed to continuing learning culturally congruent care methods. This makes sense in light of the fact that participants volunteered to partake in the educational session.

![Pre and Post survey results with percentage changes](image)

**Figure 6.** Pre and post-survey results with percentage increases

Questions one, two, and eight had the lowest percentage increase from pre to post-survey with a 14% change. Question one asked about participant preparedness to anticipate the needs of Alaska Native patients. This question was a broad introduction to the survey as it reflected the
focus of the survey and educational session that was focused on the needs of Native patients and their families. Question two asked participants if they understood their role as a listener. This question was generated with the intention to assess participants’ own cultural traditions relative to listening. For Native cultures, listening to older community members is an act of respect and tradition (Palacios et al., 2015). However, in a healthcare setting, a young provider might be giving orders or guidance to an elder. Question eight asked if participants understood the importance of communicating with patients and families in a way they perceive as respectful. This question was subjective to each participant, and results showed that all participants perceived themselves as respectful when communicating with their patients. When developing this question, tribal elders suggested that there might be a gap in what providers perceive as respectful and what tribal members perceive as respectful.

![Questions 1, 2, and 8](image)

Figure 7. Questions #1, #2, and #8 had the same percentage increase
Question three had a 37% increase in participants’ perceived cultural congruence on the measure following project implementation. This question assessed participants’ perception of their skills when communicating with Native patients. There was a noted increase of 1.1 points between pre- and post-survey assessment.

![Figure 8](image)

*Figure 8. Question #3 pre and post-survey results with percentage increase*

Question four had a 28% increase from pre to post-survey. Question four assessed participant skills obtained in PFCC methods before and after project implementation.
Figure 9. Question #4 pre and post-survey results with percentage increase

Question five, as depicted below, had the second-largest percentage increase after the project implementation at 52%. This question was aimed at evaluating the project efficacy by assessing the likelihood that participants would incorporate patients’ lifestyles when communicating with them about their care plans. This is significant since evidence suggests that patient lifestyles must be incorporated when making a patient-centered plan of care.
Figure 10. Question #5 pre and post-survey results with percentage increase

Question six had the highest percentage increase following the project implementation. The question also assessed the efficacy of the educational session by assessing participants’ likelihood of using traditional ways of sharing knowledge to promote PFCC. This included storytelling, trying to incorporate humor when communicating, and explaining things by talking about examples of how patients can follow instructions when they return to their home or village.

Figure 11. Question #6 pre and post-survey results with percentage increase

Question seven had a 21% increase following the educational session.
Question nine had the lowest percentage increase at 4%. This lower percentage could be attributed to the fact that the pre-survey score of 4.8 was already high. Since all participants in the educational session were healthcare professionals that volunteered to participate, the results seem to reflect participants’ commitment to learn about the Native population they care for including their culture and appropriate ways to serve them.
**Figure 13.** Question #9 pre and post-survey results with percentage increase

Question ten had a 20% increase in which participants expressed their confidence that the education session would benefit their communication with Natives. This question is similar to question nine and already had a high pre survey score average of 4.1. This means that participants were increasingly confident that the content from the educational session would improve their communication with Natives. This also reflects that participants were volunteers and were likely ready to learn ways to improve their practice.

**Figure 14.** Question #10 pre and post-survey results with percentage increase

**Chapter 5: Recommendations and Conclusions**

**Discussion of Data Linked to Aims and Objectives**

The project was a successful intervention aimed at enhancing culturally congruent care of Native people by increasing provider confidence in applying culturally congruent communication methods to promote healthcare that is patient and family centered. The overarching goal of the educational session was mainly evaluated through question number five which showed a 52% increase in the likelihood that participants will incorporate patients’ lifestyles when talking with patients and creating care plans, and question six which showed a
65% increase in participants’ perceived comfort in using traditional native ways of sharing knowledge. These two questions showed the largest percentage increase when comparing the pre and post-surveys. The results are linked to the specific aims and objectives below.

**Aim #1.** Project aim #1 assessed participants’ baseline perception of their knowledge of Native culture and culturally congruent care methods. This was achieved through *Objective #1* via the pre-survey gathered at the beginning of the educational session and through *Objective #2*, which involved using results from the pre-survey as a baseline assessment/measure of participant perception of their knowledge of Native culture and culturally congruent PFCC model methods. The questions that were generated by participants during the pre-survey gathering stage were a springboard for successful project implementation. Some participants shared that there were limited educational opportunities currently available to educate healthcare providers new to the area and new to working with Native populations. As an example, all participants agreed that they never had a class to help them understand how Native people communicate. A key question in the surveys was question nine, which asked participants to rate their commitment to learning about the communication methods of Native people. This question had the lowest percentage change from pre and post-survey with a 4% increase, demonstrating that participants were likely already committed to learning more about the Native population they care for. This project seemed to help meet those learning needs.

**Aim #2.** The focus of Aim #2 was on the design and implementation of the project. This was achieved through three objectives. *Objective #1* included the creation of learning objectives based on the perceived learning needs of participants. Some participants expressed that the pre-survey was applicable to scenarios they had encountered during interactions with Natives. Therefore, the pre-survey helped participants reflect upon present issues that affected their daily
interactions with Native patients. The questions or suggestions made by participants helped to shape and develop Objective #2, which was the development and completion of an evidence-based educational session. The comments and questions participants made after completing the pre-survey triggered personal learning goals for the educational session. In other words, these were participants’ individual learning goals regarding how to provide culturally congruent healthcare which aligned with the project goal of enhancing culturally congruent care of Native people. Therefore, it was noted that participants intrinsically had a desire to learn how to provide healthcare communication that was congruent with the needs of the Native patients they care for in their daily care interactions. Objective #3 was the implementation of the educational session through the PowerPoint presentation; this was aimed at providing healthcare communication strategies tailored to the needs of Natives utilizing learning strategies recommended by Knowles’ (1973. After combining participants’ personal learning goals and goals of the project, it was evident that the presenter and participants had the same goals, which was key to the success of the educational session.

Aim #3. Project aim #3 focused on re-assessing or evaluating baseline measures to determine how participant perception of knowledge of Native culture and culturally congruent care methods changed after the project implementation. This was achieved through two objectives. Objective #1 was met through the distribution of the post-survey, which was essentially the same as the pre-survey. This was done to be able to compare how the same measures changed after the session and to ensure consistency of results. Simple statistics were entered into an excel code book where graphs and charts were automatically generated by the program to reflect the project outcomes. Objective #2 was to assess the likelihood that participants would implement the learned communication strategies in their own
healthcare practices. This was evident with the results of questions five and six, which showed participants had a 52% increase in the likelihood that they would incorporate patient lifestyles when talking to patients and creating a plan of care. Question six, which had the highest percentage increase at 65%, was assessed for participants’ perceived comfort of using cultural ways of sharing knowledge to promote PFCC. The large percentage increase in this key question reflects the success of the project that had the overarching goal of enhancing culturally congruent care of the Native population.

**Outcomes Evaluation**

The overarching goal of the project was to enhance culturally congruent care of Native people by promoting PFCC. Providing culturally congruent, PFCC healthcare that meets the needs of Natives should improve healthcare quality, patient satisfaction, and improve health outcomes. As noted by CMS (2019), patient-centered care provides more efficient care and improved health by ensuring patients and their families understand the plan of care and can follow through with healthcare instructions. This was indirectly achieved through this educational session by increasing healthcare provider participants’ perceived knowledge regarding culturally congruent ways of sharing knowledge and traditions of the Native patients they care for. More efficient care can be achieved as participants practice PFCC communication and increase their confidence when interacting with Natives. Improved health for the Native population can be achieved as patients follow providers’ instructions and recommendations when they are delivered in a way that is central to their understanding and communication needs.

**Project Facilitators and Strengths**

The project was a necessity in Anchorage, AK, where the largest concentration of Natives live in the United States. The project applied to a large variety of healthcare providers
since all providers in the city interact with Natives on a daily basis while providing healthcare services. Another facilitator was the public Anchorage library, which has multiple conference rooms that can be rented by the hour for private events. This facilitated the project as it was necessary to implement the project in an area that had an environment that would promote learning and that did not require an Affiliation Agreement.

**Project Barriers and Limitations**

One of the main project barriers was the inability to reach an Affiliation Agreement between the University of Hawaii and the tribal health consortium in Anchorage. The educational session had the potential to enhance cultural congruent communication methods by reaching hundreds of healthcare providers that work for the tribal organization. However, without the Agreement, the project was limited to a public center and volunteer participants that were able to attend at the specified date and time. Thus, results were limited to the pre and post-survey responses from ten participants. Finally, the project location may decrease the generalizability of results to any other geographical location outside of Alaska, where the number of Natives could be lower.

Another project barrier was the delay in UH IRB approval. The UH IRB meets once a month, and coordinating the project for IRB submission and approval was greater than two months. This imposed a critical and pivotal point in time between the university semester timeframe and doctoral defense deadlines.

**Implications for Practice**

Healthcare professionals often interact with several patients per day, many of whom come for different cultural backgrounds and speak different languages. This project demonstrates that a culturally grounded educational session aimed a meeting the cultural communication needs
of the population served is a successful training strategy to promote healthcare that is congruent to the cultural needs of the population. Participants voiced, after completion of the pre-survey, that there was limited orientation into cultural congruent communication methods. This was a common theme among all participants that relocated from different areas within the United States to Alaska. Another implication for practice voiced by many participants was that there is limited support from healthcare facilities to accommodate cultural learning, not only for new employees, but also for those already practicing for a number of years.

Implications to current practice relative to these findings include that policies can be altered within healthcare organizations to ensure proper training is provided to reinforce the importance of providing healthcare communication that is central to the cultural needs of the population served. Another practice implication is a change in teaching methods. The survey results show that framing an educational session utilizing an adult learning theory is an appropriate way to ensure the goal of the session is achieved. The content of the educational session was successful at Increasing provider confidence in communicating with patients in culturally congruent ways. An indirect benefit of providing culturally congruent healthcare is the Reduction of disparity prevalence by ensuring patients understand the plan of care. As stated by CMS (2019), providing PFCC to every patient and their family leads to a better quality of care, more efficient care, and improved health of the population.

**Need for Future Projects**

The project was limited to ten participants, but it has the potential to be implemented on a larger scale and as part of an educational series at a healthcare facility. Based on the positive results from this project, it is recommended that future presenters use an adult learning theory and frame the educational session to meet the needs of the learner as well as the needs of the
organization. This is an important step in developing educational sessions for adults as they are matured and able to conceptualize issues based on their own experiences and learn based on what affects their daily functions (Knowles, 1973).

**Dissemination Plans**

The project will be submitted to the University of Hawaii at Hilo as a partial requirement for the Doctor of Nursing Practice degree. It will be submitted to the university database for future reference and projects. The final project will also be shared with peers and colleagues for the dissemination of results and strategic presentation methods by request form the interested peers.
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CULTURE AND HEALTHCARE

Closing the gap between how Alaska Native and American Indians perceive communication and how healthcare providers deliver it

OCTOBER 14, 2019 AT 2PM
LOUSSAC LIBRARY (MOOSE ROOM)

Presented by David Aretaga DNP-student
T: 201-0525 email: earteaga@hawaii.edu

The goal of the educational session is to highlight culturally unique actions that healthcare providers can take to promote culturally appropriate health care
Appendix B

Pre and Post Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>Rating Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am prepared to anticipate the needs of Alaska Native patients.</td>
<td>Strongly Disagree 1-----2-----3-----4-----5- Strongly Agree</td>
</tr>
<tr>
<td>2. I understand my role as a listener.</td>
<td>Strongly Disagree 1-----2-----3-----4-----5- Strongly Agree</td>
</tr>
<tr>
<td>3. My communication skills are effective when I communicate with Native patients.</td>
<td>Strongly Disagree 1-----2-----3-----4-----5- Strongly Agree</td>
</tr>
<tr>
<td>4. I have the necessary knowledge and technical skills that are essential to provide health care that is sensitive to my patients culture.</td>
<td>Strongly Disagree 1-----2-----3-----4-----5- Strongly Agree</td>
</tr>
<tr>
<td>5. I am prepared to implement an individual plan of care incorporating patient current life styles.</td>
<td>Strongly Disagree 1-----2-----3-----4-----5- Strongly Agree</td>
</tr>
<tr>
<td>6. I am comfortable in using the cultural ways of sharing knowledge to promote Patient and Family Driven Care.</td>
<td>Strongly Disagree 1-----2-----3-----4-----5- Strongly Agree</td>
</tr>
<tr>
<td>7. I have the necessary organizational skills to provide patient and family centered care in a timely and efficient manner.</td>
<td>Strongly Disagree 1-----2-----3-----4-----5- Strongly Agree</td>
</tr>
<tr>
<td>8. I understand the importance of communicating with patients and family in a way they perceive as respectful.</td>
<td>Strongly Disagree 1-----2-----3-----4-----5- Strongly Agree</td>
</tr>
<tr>
<td>9. I am committed to continuing my own learning and growth as a cultural sensitive healthcare professional.</td>
<td>Strongly Disagree 1-----2-----3-----4-----5- Strongly Agree</td>
</tr>
<tr>
<td>10. I am confident the learnings from this session will improve my communication with Natives.</td>
<td>Strongly Disagree 1-----2-----3-----4-----5- Strongly Agree</td>
</tr>
</tbody>
</table>

*Thank you for completing this assessment as this information is very important as we develop Alaska Native/American Indian Patient and Family Centered Care Nursing September 2019*
Appendix C

Permission to Reproduce PFCC Model

From: institute@ipfcc.org
Subject: Re: Permission to reproduce PFCC model
Date: September 19, 2019 at 3:29 PM
To: Arteaga, E.David <edarteaga@anhc.org>
Cc: edarteaga@hawaii.edu

Hi Dave - That is fine. Please cite the Institute for Patient- and Family-Centered Care. Good luck with your presentation.

Marie

www.ipfcc.org
Join PFCC.Connect, our free online learning network, today!
Expand Knowledge - Connect with Peers - Increase Your Impact

On Thu, Sep 19, 2019 at 8:08 PM Arteaga, E.David <edarteaga@anhc.org> wrote:

Hi I am a graduate student from the University of Hawaii Hilo and would like to reproduce the PFCC model to do a presentation on PFCC.

Thank you
E. David Arteaga
Appendix D

University of Hawaii Informational Handout

University of Hawai‘i
Consent to Participate in a Research Project
Elkin David Arteaga, Principal Investigator

Project title: Healthcare Communication Tailored to the Health Needs of Indigenous People of Alaska

Hello! My name is Elkin David Arteaga and you are invited to take part in a doctoral project. I am a graduate student at the University of Hawai‘i at Hilo in the Department of Nursing. As part of the requirements for earning my graduate degree, I am conducting an educational session to improve the health of Alaska Natives and American Indians living in Alaska.

What am I being asked to do?
If you participate in this project, you will be asked to participate in an sixty minute educational session in which twenty minutes are designated at completing a pre and post survey to assess the efficacy of the session.

Taking part in this study is your choice.
Your participation in this project is completely voluntary. You may stop participating at any time. If you decide to stop participating in the project, there will be no penalty or loss to you.

Why is this study being done?
The purpose of the project is to enhance culturally congruent care of American Indian and Alaska Native people thereby increasing care quality, patient satisfaction, and decreasing disparities.

What are the risks and benefits of taking part in this project?
I believe there is little risk to you for participating in this project or for completing the survey. You can also stop completing the pre or post survey or you can withdraw from the project altogether at any time.

Privacy and Confidentiality:
You will not be asked for any personal information, such as name or address. Please do not include any personal information in the survey responses. The surveys will be gathered by the student investigator to analyze results and complete graduation project. Other agencies that have legal permission have the right to review research records. The University of Hawai‘i Human Studies Program has the right to review research records for this study.

Future Research Studies:
The data from this project will not be used or distributed for future research studies. The surveys are not coded so there is no way to link survey responses with participant.

Questions:
If you have any questions about this project, please call or email me at (907) 729-2244 edarteaga@anthc.org. You may also contact my faculty advisor, Dr. Patricia Hensley, at (808) 932-7054 or hensleyp@hawaii.edu. You may contact the UH Human Studies Program at 808.956.5007 or uhhsresearch@hawaii.edu to discuss problems, concerns and questions, obtain information, or offer input with an informed individual who is unaffiliated with the specific
Appendix E

University of Hawaii IRB Approval Letter

October 22, 2019
Hensley, Patricia, DNP, University of Hawaii at Hilo, School of Nursing
Pagan, Joan, PhD, University of Hawaii at Hilo, School of Nursing, Arteaga, Elkin, BSN, University of Hawaii at Hilo, School of Nursing
Rivera, Victoria, Dr., Ofc of Resch Compliance, Social&Behav Exempt Healthcare Communication Tailored to the Health Needs of Indigenous People of Alaska
2019-00795
October 22, 2019

This letter is your record of the Human Studies Program approval of this study as exempt.

On October 22, 2019, the University of Hawaii (UH) Human Studies Program approved this study as exempt from federal regulations pertaining to the protection of human research participants. The authority for the exemption applicable to your study is documented in the Code of Federal Regulations at 45 CFR 46.101(b) 3.

Exempt studies are subject to the ethical principles articulated in The Belmont Report, found at the CHRP Website www.hhs.gov/ohrp/humansubjects/guidance/belmont.html.

Exempt studies do not require regular continuing review by the Human Studies Program. However, if you propose to modify your study, you must receive approval from the Human Studies Program prior to implementing any changes. You can submit your proposed changes via the UH eProtocol application. The Human Studies Program may review the exempt status at that time and request an application for approval as non-exempt research.

In order to protect the confidentiality of research participants, we encourage you to destroy private information which can be linked to the identities of individuals as soon as it is reasonable to do so. Signed consent forms, as applicable to your study, should be maintained for at least the duration of your project.

This approval does not expire. However, please notify the Human Studies Program when your study is complete. Upon notification, we will close our files pertaining to your study.

If you have any questions relating to the protection of human research participants, please contact the Human Studies Program by phone at 956-5007 or email uhirb@hawaii.edu. We wish you success in carrying out your research project.
Appendix F

University of Hawaii Hilo Scientific Review Approval Letter

Student’s Name: David Arteaga

Title of Proposal: Healthcare Communication Tailored to the Health Needs of Indigenous People of Alaska

Name of Committee Chair: Patricia Hensley

Date Submitted: 9/28/2019

Department Scientific Review Decision

Approved: ☑

Not Approved: ☐

Comments:

Signature of SRC Chair: [Signature]

Date: 9/27/2019

IRB

Date Submitted: October 22, 2019

Committee: Social & Behavioral ☐ Biomedical ☐

Type of Review (check one)

☑ Exempt

☐ Expedited

☐ Full Review

Approved ☑

Not Approved ☐

Comments:

Attach a copy of the IRB approval letter to this form
Appendix G

Pre and Post Survey Codebook

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