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***The Web Weaved by Culture: Telehealth in Native
America***

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Project Abstract

Telehealth, with its focus of addressing healthcare at a distance and being cost efficient, has been suggested to be a good fit in Native American communities. However, very little study has been done bridging the two; even less has been done attempting to analyze the unique ways telehealth can be utilized. In what way is telehealth shaped or adapted by cultural factors? This work not only exhibits the ways Native peoples' distinctive historical and political relationships to the U.S. Federal Government influence their health care, but also the unique cultural worldviews that seem to encompass their health practices. In this way, culture and health are examined in a variety of scopes to reveal that conceptions of healthcare can ultimately be altered.

Introduction

For the summer of 2012, I was a part of a very rewarding experience through an organization called *Native Health Initiative*. Based out of the state of New Mexico, *Native Health Initiative* has an internship program where one can live and work in a Native community. In addition to giving good will and loving service, the intern volunteers are able to establish relationships with others and learn many aspects of health and well-being not found in a regular clinical setting. In my placement, I lived in the Acoma Pueblo west of Albuquerque and worked for five weeks in the Acoma Senior Center. During my time there, my activities ranged from assisting the workers with jobs as small as cleaning the center, to jobs as big as becoming involved with their "Meals on Wheels" program and Service Care Plan for the elders.

While I noticed that the senior center provided a safe and welcoming space for the elders of the community where they could enjoy each other's company and be more active (following the tenet that both mental and physical health are important), I also noticed that many of them needed medical services on a weekly basis such as dialysis for diabetes treatment. The Acoma Pueblo along with the Laguna Pueblo do have a health center, the Acoma-Canoncito-Laguna (ACL) Hospital, however, a portion of the elders have to be driven to larger medical centers in Albuquerque every week for critical services like dialysis. Keep in mind, that Acoma Pueblo is approximately sixty miles west of Albuquerque, which is pretty far away to have essential health treatment.

My experiences with *Native Health Initiative* were the first time I began to ponder about certain health inequities that force certain groups or peoples to have to go to great lengths, both figuratively and literally, to get proper healthcare. A year later, when it came time to begin figuring out my senior project for college, I once again began to think about the ways distance, from any kind of health care, can become an issue. Considering I am both Pre-Medicine and an American Studies major with a focus in Native American studies, I wanted to find a way to bridge my two passions in such a way that would also involve what I had been pondering the past year. After an in depth search, I eventually came across a topic that really went well with my interests.

Telehealth, also commonly known as Telemedicine, is a very broad and overarching term for a type of health care that is becoming increasingly popular in the Information Age because of improvements in technology and the

prevalence of the Internet. The prefix, *tele-*, is used in words to denote ideas of “to or at a distance.” In reality, telehealth comes in many different forms, which I will cover more in depth later in this writing. However, at its broadest level, telehealth can be characterized as being able to create connections for the dissemination of health and medical information; which translate to things such as medical files, high quality images, patient reports, and much more. Similar to how telehealth operates by connecting many different people in addition to bringing healthcare to many spread out places is a very important concept of the Native American epistemology/worldview: the idea of the web as a way of visualizing the Universe and its entire existence—the web is a network of connections and relationships. These similarities between telemedicine and the web on a conceptual level inspired me to pursue this topic for my final project.

Before outlining the different chapters of this work and discussing their content, it is necessary to provide some foundational context and distinguish terms that are seemingly used interchangeably and congruously. For the most part, Native tribes in the United States have access to healthcare through the Indian Health Service (IHS). The IHS, which is a division of the U.S. Department of Health and Human Services, was started in 1955 with hopes of improving the healthcare of all tribes recognized by the federal government. They have established and staffed hospitals and health centers across many reservations and urban Native populations. Although it is possible for certain tribes to provide their own health services, such as the Choctaw, the IHS is much more prevalent. With that, readers should be aware that the Indian Health Service usually has

some sort of influence in many Native communities, and that much of this influence comes from the outside—in the form of the federal government. While it is true that there exists a very large discourse around the Indian Health Service, particularly in the field of Native American studies, the focus of this essay is not to delve into the dynamics and effects of the IHS in regards to Native peoples.

In this work, there is also the prevailing notion that the words “community,” “tribe,” and “nation” can be interchangeable when in reality they operate on completely different levels. A community is usually considered a collection of groups of people operating in a space, whether it is more conceptual like a “Christian community,” or more physical like a “college community.”

Communities can be contrasted with “tribe” because tribe has become more connected to notions of cultural identity. Tribe originally became used to distinguish different Indigenous groups in the world, usually on the basis of many cultural factors (language, society, location-base, etc.). Tribes can be imagined as a collection of individual communities. Nonetheless, a tribe is still small in comparison to “nation.” “Nation,” which can be considered a vast inclusion of many communities into one collective unit, seems to work on a giant scale—nations interact with each other, making up the world i.e. the common statement, “the nations of the world.”

But why would I focus on all these general definitions of these seemingly common words? If I did not distinguish them, then my usage of them to generally refer to various Native populations becomes problematic in the sense that the reader will have a harder time conceptualizing my ideas. This writing operates

on different levels of human interaction—meaning that each chapter seems to focus on different stratospheres of experience, which start out very large and become focused down to the individual. In each consecutive chapter, one word becomes more appropriate than the others. So when these three terms show up in the text, “nation” implies the largest organization of people (an interaction between nations, or international), “tribe” is a collection of communities operating under a shared culture, and “community” is the lowest of level of organization; think towns and neighborhoods.

This writing is divided into three chapters, with each being devoted to the intricacies of telehealth and its relationship to Native peoples:

Chapter One begins by giving a detailed look at the definitions and history of telehealth. Before any more analysis can be gained, it is absolutely necessary that readers understand what telehealth is commonly known as and the various aspects that go into its implementation. After foundational information is established, I begin to delve into the broadest ways telehealth has been a part of Native communities, how it is utilized, and tackle questions of its effectiveness. Then, the next stage is focused on a specific section of the *Affordable Care Act*, the most current and largest piece of healthcare legislation in the nation. In the act, there is a specific section solely dedicated to Native peoples called the *American Indian Healthcare Improvement Act*. For this section, I find places in the governmental text that mentions or implies telehealth, and analyze not only the implications, but also dissect the kind of language used, giving clues into the relationships between health, Native tribes/nations, and the U.S. Government.

Chapter Two takes a more focused approach towards examining telehealth in Native tribes. Based on interviews from individuals who are very active in telehealth services that are utilized by many Native peoples, I begin to uncover the ways telehealth implementation can be a form of self-determination. By using the historical associations between the U.S. Federal Government and Native communities as a basis, I explain how the dynamics of telehealth can be utilized to circumvent certain parts of a longstanding paternal and colonial relationship. I highlight factors such as geography (with its various forms) and tribal specificity that contribute to putting Native peoples in a more active position for their healthcare practices.

Chapter Three takes an even closer look at what kind of relationships are made between telehealth and Native individuals. After going into detail explaining why health education is also a very important aspect of telehealth, I introduce two Native people who use the Internet—more specifically, YouTube—for the purposes of health education. Arguing that even their work is an example of telehealth, I wanted to reimagine current conceptions of telehealth and reveal nuanced ways it could be used by Native American individuals. Through an examination of the approaches and content of these two Native Youtubers, I explore larger ideas such as decolonization, social media, traditional health, pan-indianism, and intertribalism. This is where I detail how telehealth can be purely on Native terms.

Ultimately, this project should be conceptualized as starting large and becoming more focused in regards to telehealth and Native Americans. From

chapter to chapter, the scope goes from broad definitions and governmental policy, to community dynamics, to specific individuals and their work. I chose this approach to fully explore the topic on multiple levels and to show the different ways it can exist. Through telehealth's utilization by Native peoples, we can begin to see the various ways culture informs many aspects of healthcare. Whether it is understanding the historical relationship between the U.S. Government and Native tribes in Chapter Two or seeing how culturally appropriate knowledge is disseminated via YouTube in Chapter Three, each section of this writing allows a unique perspective. All the chapters highlight various shades of culture (history, epistemology, practices, beliefs) and ways they are reflected and adapted into healthcare practices such as telehealth. Ultimately, I want to get closer to answering these questions: Is there such a thing as Native-centered telehealth? What would that look like? It is through this emphasis on culture and health that our (social-conscious individuals, American Studies scholars, Native peoples, medical professionals, and policymakers) perceptions of healthcare can change. And with a shift in perspective, an awareness of culture in health can begin to influence how healthcare is put into practice.

Chapter One

The Basics and the Language of Dependency: Telehealth, Native American Connections, & the *Affordable Care Act*

Since beginning the process of undertaking this project, and when other people have asked me what I am writing about, I always and consistently receive a perplexed stare and a question, “interesting, but what’s telehealth?”. Before beginning, even I didn’t know what this term was. Unsurprisingly, the term “telehealth” has only started to be a part of the English lexicon in the past thirty years because of advances in technology that make the world we live in more connected. Telehealth on a basic level refers to distance, coming from the prefix, “tele-“—in essence, providing health care service across distance. However, the definitions and terms of this essential practice have shifted and multiplied over the years because of the rise of new technologies and methods that have spawned new versions and conceptions of telehealth. In *Essentials of Telemedicine and Telecare*, A.C. Norris explains that “clinicians simply appropriated and began to use new technologies developed for other purposes as they became available. Take-up was therefore piecemeal and uncoordinated” (5). As I will reveal later, there are many different types of telehealth—which can also fall under the synonymous umbrella term “telemedicine”. But for the purposes of this project, I will utilize the word “telehealth” liberally to speak of the broadest and most general practice of using technology for health care services over a great distance.

In order to better understand telehealth, it is very worthwhile to examine the most common ways of how telehealth can be used and how it differs from our

normal conceptions of healthcare. The core types of telehealth are teleconsultation, tele-education, and telemonitoring (Norris 20). Teleconsultation involves information being sent from practitioner to practitioner or practitioner to patient through the utilization of telephone or videoconferencing. Tele-education usually involves online resources for many different types of communication for individuals to learn, and is utilized on clinical, academic, and public levels (21). Telemonitoring is the routine and repeated gathering of data or information on the condition of a patient where the environment is very variable and the technological is used more manually. It is also used when sending medical data from patient to practitioner, or practitioner to practitioner—an example would be sending a very high quality image of a catscan (22). Often used in conjunction with the term “telehealth” is “telemedicine.” Whereas telehealth is broad and encompasses not only the clinical side of healthcare, but also the educational and untraditional methods, telemedicine is more specific in that it entails specific subcategories for different types of ailments (24). For example, there exist many telemedicine programs for specific areas of medicine such as radiology and internal medicine (particularly diabetes)—these in essence are solely used for the treatment of patients.

To better understand telehealth, it is also beneficial to have a basic knowledge of its history and how it has been transformed to become the form we can recognize in present times. As history shows, telehealth is inherently tied to the technologies that are used over a large distance. The torch telegraph (fire signals), heliography (mirrors to reflect rays of the sun), and smoke signals used

by ancient communities were what eventually inspired the creation of the telegraph (Bashshur). With the great possibility and opportunities of communication from the telegraph, time moved into the ages where telephones, television, wireless transmission machinery, the digital revolution, and the Internet and World Wide Web all became a part of our everyday reality (Bashshur 68). Telehealth began to emerge as the world and its people became more interconnected through the networks enabling communication. The most recent push of strengthening these networks is outlined by Rashid Bashshur in *History of Telemedicine* as the establishment of grid computing: thousands of very fast super computers are connected on a grid (similar to the concept of an electric grid) in clusters for the purpose of “creating the ability to distribute large-scale process execution across a parallel infrastructure” (69). In this way, the current systems of telehealth connect various peoples in medical centers across large distances in conjunction with the connections on the Internet space, establishing a complex and strong network capable of providing a systematic health care service.

Believe it or not, one of the first telehealth programs, which used older telecommunications technology from the 1950s and 1960s, was dealing specifically with Native peoples. The Space Technology Applied to Rural Papago Advanced Health Care (STARPAHC) offered services to the Papago tribe in Arizona and assisted the doctors working there by being able to transmit important electrocardiographs and x-ray images to larger medical centers in more populated areas (Norris 6). It seems that from the beginning times of its

usage, telehealth has been seen or believed to be by those in charge an effective and ideal health care method for Native peoples because of the distance between community members and medical facilities, in addition to the lack of resources to provide regular and consistent person-to-person healthcare services, were common for Native populations. First off, I would like to bring attention to this belief and how it comes from an outside source. In other words, instead of Native peoples deciding on if it is a viable healthcare method for themselves, outsiders attempt to make the decision for them. As I reveal later in this writing, this notion has deep historical roots, and become very problematic. However, that aside, is there any viability or realistic basis to this years-old notion?

Research for the use of telehealth services in Native communities and populations is undoubtedly lacking, revealing a disjunction between the claim and belief that telehealth is theoretically a great method for Native peoples and the amount of research that actually supports the claim. I will highlight some of the research that has been done and what important areas have been neglected in studies. But before beginning this examination, it is necessary to mention the most prominent health ailments and issues for Native American populations. Knowing and understanding what telehealth services are able to address will help to focus the analysis of its usage in this very specific population of the United States. Amongst Natives, the most important issues of today are heart disease, cancer, diabetes, mental health, alcohol use, obesity, HIV/AIDS, teen pregnancy, and infant mortality (“Minority Health”). It was with these issues that I was able to provide a framework into what research has been done.

In the United States, there are many telehealth programs and services that are utilized by Native peoples. However, these organizations are much more focused on implementation than on research. From a search of telehealth and telemedicine services specifically provided for Native populations, one of the few well-established organizations that does research on telehealth is the Colorado School of Public Health's Centers for American Indian and Alaska Native Health. In addition to having a very grounded telehealth organization, the Center for Native American Telehealth and Tele-Education (CNATT), the mission statement showed a seriousness towards the study and service towards Native peoples because their approach follows a "framework that recognizes the unique cultural contexts" that are different from the majority American population ("Mission"). For their telehealth program (which also provides technical training, distance education, and clinical care), particularly interesting is the amount of research they have done in the field of healthcare.

Some of this research addresses both telehealth and Native communities. In "Characteristics of Telemental Health Service Use by American Indian Veterans," the very important issue of post-traumatic stress disorder (PTSD) and its associated complications for Native veterans is examined. What the study found was that veterans who were introduced to telemental services were more likely to continue utilizing health services for their wellness and betterment (Shore et al.180). This study is very interesting in that it suggests a possible benefit to telehealth—that it can entice or inspire those who use it to become more active in pursuing more health options and a willingness to care more about

their health. But more importantly, it exhibits that perhaps a more specific service to a specific population in Native groups is more likely to be effective.

But what is meant by “effectiveness”? The researchers at CNATT had similar questions, and in another study, “The Diffusion of Telehealth in Rural American Indian Communities: A Retrospective Survey of Key Stakeholders,” the researchers essentially explored the sociological implications of telehealth being established in Native populations for Native veterans with PTSD and other psychiatric conditions. In the study, which surveyed 39 different people (Brooks et al. 61) involved with various aspects of telehealth implementation (doctors, administrators, and community members involved with decision making processes, technological infrastructure, and the establishing of clinics), it was found that many expressed that there were many challenges towards a successful implementation: staffing and recruitment of workers, patient transportation, bureaucracy, community trust/acceptance, cultural differences, funding, etc (65). One cannot just say a telehealth service will be effective just because its methods work well for a specific health ailment. There exist a plethora of factors that a normal person would not readily account for.

Unfortunately, some of these factors still have not been accounted for, which can begin to bring about questions pertaining to telehealth’s effectiveness for Native peoples—essentially, in the view of Native groups, would telehealth even be worth adopting given many undetermined-important factors? In “The Socio-economic impact of telehealth: a systematic review,” the authors found over 4646 sources relating to telehealth, and thoroughly examined 294 sources

they felt were properly done—qualitative sources were rated on quality of evidence, and qualitative sources were rated on dependability, credibility, and transferability. Each source was separated into a specific category, and the researchers evaluated each for general trends and findings. Many of the categories, which dealt with specific services connected to telemedicine, were found to be effective in helping patients with their health and well being (Jennett et al. 312). There was even a whole category for Native peoples, which also revealed positive trends: improved access to healthcare, improved quality of life (especially for mental health), and effective computer programs (for education and assessing behavioral risk) (314).

However, a common problem across all areas was the lack and inconsistency (none exist for those dealing with Native communities) of economic studies involving the cost and financing of implementing telehealth services. The few economic studies that are circulating are imprecise and are from too many different perspectives—organization, infrastructure, patient’s perspectives, provider’s perspectives—to come to any distinct conclusions or explanations (317). This is a large issue, especially for Native peoples, who may not possess the assets and capabilities of providing such a service even though it may be effective in helping to address prominent health issues. A much broader outlook on telehealth is needed when analyzing it in conjunction with a population or community of people.

But why should I even examine these issues in conjunction with Native nations and individuals? What do I mean by “broader outlook”? One of the least

well-known aspects of many telehealth programs are the way they are financed/funded and how they are organized. Most literature on this subject has only been able to give general statements. On a smaller scale telehealth programs are financed by private investors or are started by different medical professionals. A certain number of these telehealth programs can additionally become eligible for reimbursements and grants through Medicaid (Miller 137). On a larger level, I will reveal in this chapter and in the next chapter that larger telehealth organizations can also be pushed by both state and federal governments.

How telehealth programs are pushed and financed can become connected to larger organizational issues, which is the “broader outlook” that must be further examined, especially with Native groups in mind. As explained by Edward Miller in “Solving the disjuncture between research and practice: Telehealth trends in the 21st Century,” “perhaps the greatest organizational obstacle to long-term integration has been the piecemeal development of the telecommunications infrastructure in healthcare” that leads to many high infrastructure costs. Considering differences in technology make it so various telehealth systems are not able to “speak to one another” (i.e. technological incompatibility), there can be a lack of connectivity between different areas (137). Readers must keep in mind that many Native groups that might benefit from a telehealth program live in poorer-rural areas and are a part of a healthcare system (the IHS) that comes from an outside source. If there is a maldistribution of telehealth services amongst Native populations, then this could mean costs

that completely outweigh the benefits—money used to try and establish a telehealth infrastructure that may not be able to connect to larger medical facilities, could be used for a more effective healthcare methods. Moreover, there would be the concern about who would be the main decision makers in its organization—would it be Indian Health Service officials or Native tribal leaders? Without a doubt, these extra and less-studied factors crucial to telehealth implementation are important to examine in relation to different populations, including Native Americans.

But, moving away from larger factors about organization, financing, and technological infrastructure, what about telehealth technologies and how they are utilized by people? Different studies have shown that telehealth technology is able to effectively treat certain conditions and provide a multitude of services—which has been suggested to alleviate Native American health concerns such as diabetes, where it can be appropriately monitored. However, the treatment is only one aspect of telehealth. An even bigger factor that needs to be considered in understanding notions of Native health care with telehealth's practice are the many human factors that are incorporated in its design. Determining what really drives telemedicine and telehealth towards successful implementation and continuance are the people that interact, contribute, and benefit from it. Telehealth relies heavily on the networks of people that are a part of its system.

The technological establishments that connect networks of people are inherently tied to telehealth's definition; meaning, that any conception of telehealth relies on/draws from the technologies and systems that are applied.

Because of this reliance, any kind of conceptualization of telehealth's history and usage will be more focused on the technological developments as they relate to telehealth and not the ways this particular method of healthcare affects the various contexts such as geography, region, culture, community, and medicine. Or rather, the ways in which these different contexts have shaped the ways telehealth has been implemented. There are many sociological undertones and influences (the human factors) that must be considered towards having a more well-rounded understanding of telehealth and its implications. Telehealth, as is the case with all healthcare, is ultimately based in interactions between people. So being able to make sense of telehealth and the ways different individuals influence its services to patients is a great service and responsibility to all those who are directly affected by it.

Considering the organization of telehealth is very complex with many different types of people needed for it to function—clinicians, technologists, physicians, engineers, computer specialists, administrative support personnel, managers of consulting, finance administrators, information systems workers and researchers—getting the various human components to work together effectively and succinctly alongside technological advancements is a very big challenge (Field 73). The practicalities of telehealth reveal this challenge in full extent. First off, there exist “problems with convenience, reliability, quality, and integrity of equipment,” (76) where it usually takes training (either advanced or minimal) to utilize effectively. Furthermore, there are issues of incorporation, where

inconveniences in finding physical locations for services in addition to time and patient management issues.

Yet, perhaps the most crucial human factor that must be addressed are through what is called “needs assessment,” because it is the largest gauge of how telehealth services can be provided to a specific area or community. There are several components of this assessment: (1.) health status, problems, and characteristics of the relevant population (2.) objectives, capacities, features of practitioners and health care organizations (3.) objectives, capacities, features of healthcare system (including insurance). An inadequate needs assessment, in which a failure to find out the problems the telehealth technology is attempting to address, translates to unrealistic or nonexistent telehealth services (Field 78). So in a theoretical situation, a Native community that wishes to adopt a telehealth service would have to contact an outside source such as a telehealth organizer or planner. If this outside source fails in addressing the needs of the community (keeping in mind that Native communities would have much different health needs than other American populations), then that would have huge implications—the community would not only still be suffering from the specific ailments telehealth was supposed to treat, but there would also be a burden on the community because of wasted costs on an inefficient system.

There are many challenges towards the implementation of this form of healthcare when societal factors are involved. Native communities, given that they possess less assets and may not have a similar infrastructure as other locations in the United States, bring up the question of how reasonable it would

be for communities to integrate something like telehealth on a larger nationwide scale. To help answer this question, a thorough examination of how the federal government views national healthcare and more specifically, Native American healthcare is required. There needs to be an examination of the policies that are able to shape telehealth services.¹

However, before there is any thorough examination and review of the current healthcare policies in the field of health care, the complex and often misunderstood dynamic between the U.S. Federal Government and Native tribes must be acknowledged. The relationship goes back centuries and reveals many consistencies that illuminate the often undesirable positions Native peoples have been put through. If this project is going to be examining Native Americans and their relationship to telehealth, then this relationship with the government must be established for the purposes of an honest and critical look into the project's focus. As I will argue with a thorough examination of the most current healthcare legislation in the U.S., a case can be made that telehealth is being planned and provided for, but is also very unclear in the direction it will take and how much involvement Native communities will have. Two Native American scholars in particular have been able to pinpoint this relationship: Joanne Barker and Donald Fixico.

In Joanne Barker's opening passage to her book *Sovereignty Matters*, the author establishes and outlines the foundation needed to explain the situation of

¹ Prior to the passing of the new healthcare legislation, the government did already rely somewhat on telehealth services as a part of their "Health Resources and Services Administration: Rural Health" division of the U.S. Department of Health and Human Services (<http://www.hrsa.gov/ruralhealth/about/telehealth/>).

Native nations in present times. She is able to do this by exploring the historical context defining the relationship between the U.S. Federal Government and Native peoples and their respective tribes. She explains how the *Marshall Trilogy* (three Supreme Court decisions during the time of Chief Justice John Marshall dealing specifically with Native tribes) would go on to frame this relationship:

Indians had been made “subject to the sovereignty of the United States.” these were well established facts, Marshall contended, of colonial law, which had treated Indians “as an inferior race of people, without privileges of citizens, and under the perpetual protection and pupilage of the government” on the basis that they were not in fully possession of the lands upon which they roamed and wandered. (7)

In essence, Native peoples and their communities became all-together “domestic dependent nations” (10), with their lands always under the influence and broader control of the U.S. government, which established a hierarchical-top-down dynamic where the Federal governmental policies shape the direction Native communities will take in the running of society. All of this brings into discussions about sovereignty, or rather, how much and to what extent Natives are able to shape and control what happens in their nations (and communities, if we are speaking about urban Native peoples).

Donald Fixico, in his writing “Federal and State Policies and American Indians” addresses not so much the relationship between the U.S. Federal Government and Native tribes and nations through history, but rather how the

government has approached their direct interactions with Native peoples. In characterizing their approach, Fixico notices and acknowledges “an oscillating pendulum with policy swinging between opposing poles” (379) where the government has moved between actions with good intentions to those with bad intentions. Nonetheless, whether it was war and conflict that took many lives or a desire to fully integrate/assimilate Native peoples into American society, the common-problematic trend was (and has been) that Native peoples are denied self-determination—being able to make their own decisions on their own terms and own best interests in mind.

One could argue that this fact is impeding any true progress in the growth and well-being of Native nations. Ultimately, Native peoples who share the same culture and worldviews different from the rest of American society have a better sense of what is needed in their own nations. If an outside source—without any knowledge or insight into the needs or issues of Native peoples, doubled with an ignorance of Native peoples’ history in the United States—comes in to try and influence/affect Native society, it becomes patronizing and paternalistic to the point that Native nations are not able to grow on their own terms. And if they are not able to grow on their own terms, then the harmful problems that pervade Native society via the colonial legacy remain.²

² The idea of “colonial legacy,” is a very big topic in Native Studies. It is so large that scholars study the ways in which very bad effects and occurrences from history in the United States have left many Native peoples in bad positions. I recommend anyone who wants to learn about this further to find works that speak of “intergenerational trauma” in relation to how Native peoples have been negatively affected by the growth of the United States as a nation-state.

In looking at the role of telehealth and telemedicine in a particular nation, it is very important that the analysis not only focus on the particular individuals, organizations, networks, etc., but to also acknowledge the bigger forces and gain an understanding of how they are involved. Considering specific aspects of healthcare, including telehealth, are driven by governmental policy on a larger scale, it is very important to thoroughly inspect and engage with the legislation (the original sources) that can frame and implement health care methods/practices into the real world. With the comprehension that government policy can shape the specific practices such as telehealth, having knowledge of the greatest contexts of a particular health care practice can give insights into the direction, longevity, logistics, functions, and applications of that practice.

Given that this project wishes to focus on the present developments in health care, a focus must be taken on the legislation that is meant to shape the healthcare of the entire nation: the massive healthcare reform by President Barack Obama's administration, the *Affordable Care Act* (ACA). The ACA, which in itself is a gigantic proposal, contains many subdivisions towards more general areas of healthcare. Undoubtedly, because the focus of this work is with Native communities, the most pertinent subdivision of the ACA to examine is the *Indian Health Care Improvement Act*. With an analysis of four separate subchapters of the *Indian Health Care Improvement Act*, I will reveal different ways telehealth is being planned and provided for in addition to how Native nations have a very unclear role in its implementation.

In Subchapter I titled “Indian Health Professional Personnel”, two sections speak of the Federal Government planning to provide programs, resources, and funding for Natives (both doctors and nurses) to transition into the healthcare field. “Section 1615. Continuing education allowances” (U.S. House 442), addresses programs and allowances for: 1. licensing, board/certification examination assistance and technical assistance 2. professional consultation, management, leadership, and training. “Section 1616. Community Health Representative Program” (443), details a specific program meant for training para professionals (stage below professional) for healthcare, health promotion, and disease prevention in Native communities—education in healthcare theory with practical experience and instruction.

These sections in essence are illuminating in the sense that they show steps being taken to integrate more Native peoples into the healthcare profession—to make them active participants in the system that directly affects them. Based on other articles written for telehealth, such as Dimmick et al.’s “A study of a rural community’s readiness for telehealth,” the community must also be active participants. In an attempt to understand the different factors in the implementation of telehealth, the community was revealed to possess different types of readiness for and a willingness of adopting telehealth. These subsections of the *Indian Health Care Improvement Act*, which are pushing for health care providers to be Native, would give incentives to Native communities to be more willing to approve or accept a telehealth program if possible. Nonetheless, these subsections fail to provide specifics towards which tribes will

better able to be supported by these projects, and how tribal government will play a role in its implementation.

In Subchapter II titled “Health Services,” a specific section, “1621. Indian Health Care Improvement Fund,” a very important aspect of telehealth and telemedicine services is engaged. As already mentioned in Jennett et al.’s “The Socio-economic impact of telehealth: a systematic review,” the biggest questions failed to be addressed for the adoption of telehealth services are the cost of implementation, and what financial considerations need to be taken into account. From the onset, the document makes reference to telehealth and telemedicine in explaining the use of funds: “Meeting the health needs of Indians in an efficient and equitable manner, including the use of telehealth and telemedicine when appropriate” (458). In subsequent parts of the section, the allocation of the funds, prevention and treatment programs, and crediting and reimbursement strategies are explained. In comparison to the studies that found little detail into how the costs of telehealth are addressed, this act establishes a plan.

However, although a framework is provided, no specifics are given. This of course raises questions about what technologies will be used in the programs being implemented, where they will be used, what is defined as “appropriate” mentioned at the beginning of section 1621, and how the programs will be efficiently and effectively implemented. Moreover, very interesting is the hierarchy they unconsciously establish in the language of the document. In many instances where the allocation of funds and reimbursements is being discussed, the money is portioned in a top-down direction: first the service unit

(government organization), then the specific tribe, and finally the tribal organizations. This leads to further questions of what kind of a role Native communities will have in managing their health care. With the exception of the mental health prevention and treatment services mentioned in “1621h” (466), which focuses very much on community involvement, the hierarchy is present—revealing that there is still a narrative of dependency, where Native communities have to rely more on the federal government than themselves, which would be problematic for an embrace of any novel health care services. Even the ACA, which provides a cushion of healthcare for all Americans, can be seen as a fundamentally paternal legislation when examining the relationships between Native nations and the U.S. government. By seeing that Native nations become reliant on governmental services suggests that other Americans do as well by the fact that the *Indian Health Care Improvement Act* is a small part in the larger ACA.

For Subchapter III titled “Health Facilities” and Subchapter V titled “Behavioral Health Programs,” more infrastructural planning, projects, and programs for healthcare are introduced in such a manner that attempts to acknowledge or assume (if interpreted this way) specific challenges that need to be addressed in regards to Native health while at the same time leaving open the possibility for telehealth applications. For both Subchapters, two sections each in particular show this possibility and acknowledgement. In Subchapter III, “Section 1637. Indian Health care delivery demonstration projects” speaks of establishing projects that provide “alternative means of delivering health care and services to

Indians through facilities.” These facilities are outlined as being able to provide “convenient care service[s]” with “alternate settings” and “hours other than regular work hours” (485). Moreover, in “1673g Equitable integration of facilities” of the subsection, the facilities are said to be systematically unified (486). In the next subsection and two subsections of Subchapter V, the outlined programs detail ways of providing healthcare over a large distance and specifically imply telehealth. “Section 1638f Indian Country modular component facilities demonstration program” and “Section 1638g Mobile health stations demonstration project” (490) plan for portable facilities to be moved around for providing services over a large area. “Section 1665d Mental Health technician program” (515) and “Section 1667b Indian Youth telemental health demonstration project” (523) arrange for opportunities to allow Native peoples to become directly involved with healthcare technology and an actual telehealth service respectively.

With the sections I have outlined in Subchapters III and V, one can see that the U.S. Federal Government does seem to have plans for healthcare that will be designed to specifically address the issues that telehealth and telemedicine focus on: distance, availability, time constraints. These sections also demonstrate that the government sees alternative and more nuanced ways of healthcare worthwhile to pursue. Hints and implications of their seriousness are revealed in that they intend to make many of these programs a unified system—establishing a serious form of healthcare infrastructure shows a lot of commitment because of all the funding and planning that will be necessary.

Instead of the Federal Government attempting to define what health problems Native peoples suffer from, there may be a more back-and-forth relationship going on where the Native groups are actively communicating their tribes'/nations' needs and the government is actually listening. As I mentioned earlier, there was a whole category, "mental health prevention and treatment services" where power and control is invested in Native communities. Mental health issues (particularly depression, suicide, alcoholism, anger, etc.) are a big source of discussion in Native Studies as many scholars will connect them to intergenerational trauma—trauma that is passed from one generation to the next and continuing cycles of violence, self-destruction, and other problems.³ That the government gave Native communities the direct ability to affect their mental health treatment, considering that it is a very large health matter for Native peoples as a whole, suggests that there is some reciprocation from the government.

After taking a close look at the broadest definitions and dynamics of telehealth in addition to a national context of its implementation in Native American communities, the question of self-determination becomes an interesting issue. Considering the language of dependency and an unclear role of Native communities in telehealth adoption found in the *Indian Health Care Improvement Act*, a deeper investigation is necessary into how telehealth and telemedicine is actually being approached by Native governments, medical center, community organizations, etc. In what ways are Native peoples actively

³ More on this in Chapter 3.

engaging with this health care method? How are these interactions and actions within the system of telehealth reflective of taking an active role in American society? Does this reflection alter different perceptions about health and healthcare methods and/or changes? An attempt to answer these questions would further give clues into how culture informs health care practices—specifically, how telehealth being actively used in Native communities reflects this notion. By being able to come closer to these questions of culture and healthcare through an example of telehealth, it can become possible to address certain medical problems or implement better health methods that take into account various patients' differences—their backgrounds in addition to their beliefs and worldviews.

Chapter Two

Self Determination & Taking an Active Approach: Telehealth in Native Communities

Since the beginnings of its conception, a large role of Native American Studies has been to focus on Native American peoples' self-determination and active role in American society. As I mentioned in Chapter One when examining the *Indian Health Care Improvement Act* and attempting to uncover how much and what kind of power is invested to Native nations for telehealth implementation, self-determination becomes the center of attention. Telehealth, which requires a lot of planning to establish and keep running, explicitly demonstrates the need for an organizational framework—self-determination gets to the root of organization as it asks the questions of who is involved, and to what extent?

To better understand this term “self-determination,” it is helpful to understand some history. Harkening back to the first relations between Native and European peoples that occurred during the Age of Exploration when European colonies were being established in the Americas, in addition to into the Twentieth Century⁴, the academics who studied and then created an image of Native individuals for American society were only interested in anthropological explanations. Drawing much from a focus on social evolution where observations about the physical appearance and the communities of Native Americans were very important, many Americans “saw Native Americans and

⁴ Even in more modern times, professors/academics and historians in the United States were criticized by Native peoples as controlling how their history was being told and passed to the rest of the world. For those more interested in this subject, there are many works that speak of the “decolonization” of archaeology, anthropology, and history.

other indigenous peoples as representing lower stages of social history” (Thornton 91). Moreover, many of these academics had a “longstanding interest in the visible signs of ancient Native Americans” such as artifacts and burial grounds (Thornton 92). These notions became very problematic for Native peoples because an inaccurate image of themselves influenced not only policymaking, but also long-standing discriminations. Native American individuals were given a harmful image from the onset of having a lower human status that became passive victims to modern processes, only living in the past with no presence in present times or in the future.

Nonetheless, in the tumultuous decades of the 1960s and 1970s, when the United States was undergoing many changes in culture, many minority groups (Native students especially) began entering the various colleges and universities in the country. Although they had been given great opportunities to enter higher education and learn more about the world they live in, the students came into a system where knowledge and teaching was controlled by the majority culture. Instead of academics teaching and approaching the subject of Native culture and society from a Native American standpoint, it was biased towards teaching the dominant American culture’s viewpoint. As such, what Native students were being taught and noticing in school was at complete odds with how they were raised and what they have experienced as a minority in the U.S.. Seeing this problematic image of themselves and their people, the students began to formulate overtime their own field of study to begin to solve these problems—setting the foundations for a conception of self-determination.

The Native academics came in for the purposes of altering the previous models and “reacted against the neglect of Native American societies and cultures by other disciplines in the social sciences and humanities” (Thornton 94). They focused on history that went “beyond the traditional anthropological approach, recognizing that Native Americans were real people with significant pasts and futures” (95). And around the same time, many activists and supporters of the Red Power Movement (Native social justice in the late 1960s, early 1970s) pushed for more rights and control to be invested in Native nations and communities in all aspects of life—leading to newer political realities such as the *Self-Determination Act* of 1972. This is where the terms “self-determination” and “active role” come in to this discourse: in order to undo hundreds of years of a harmful image showing Native peoples as passive players in the United States, one aim of Native American Studies is to continue the process of illuminating the many active engagements by Native peoples in American society.

But what does all of this talk of self determination and having an active role in American society have anything to do with healthcare or telehealth? To continue the conversation coming from the *Indian Health Care Improvement Act*, where there was the issue of figuring out what kind of role Native communities play in the adoption of telehealth⁵, it becomes important to investigate in what specific ways the engagement with telehealth informs questions of self

⁵ It is unclear from the Indian Health Care Improvement Act whether the Native nations have a choice in implementing telehealth or if the government requires the services to be established. Though, as revealed later in this chapter, certain nations would have a choice if they are eligible for the services. Nonetheless, there is still the question of, who is eligible? And why?

determination in regards to healthcare. In what ways are Native communities able to direct their own healthcare services? In what ways are they able to affect them? What decisions are they able to make?

In order to make these examinations, I interviewed two different people actively involved in the utilization of telehealth services that are used in Native communities. Candance Shaw, the Assistant Vice Provost of the Academic Technology and Telemedicine department of the University of Oklahoma Health Sciences, works with the Heartland Telehealth Resource Center (HTRC) that provides telehealth programs for Kansas, Missouri, and Oklahoma. Dr. Ana Maria Lopez, an oncologist in Arizona, is the medical director for the Arizona Telemedicine Program, which also works in the Four Corners Telehealth Consortium (telehealth network across Utah, Colorado, New Mexico, and Arizona). While it is true that these individuals are not completely engaged in Native tribes' decision-making with regards to telehealth (they are providers that help Native nations telehealth aspirations become realized) and that there is a tension between the government planning telehealth services versus Native nations own direction, what I found is that the telehealth network and dynamic seems to have an interesting position. Native nations may not be able to completely transcend the domestic dependent status from the U.S. Federal Government, but through the telehealth network and dynamics, they are still able to be actively involved with their healthcare. The conversations touched on how geography (tribal status, jurisdiction, and boundaries) and tribal specificity contribute to this active role.

With healthcare becoming a national initiative for President Obama's administration, Native community health becomes inherently tied to the national. Meaning, that at some point the government becomes involved in the process of planning for health care in Native communities (including telehealth). How the government interacts with Native tribes and nations depends largely on geography. In his writing "The Deception of Geography" by Fred L. Ragsdale, Jr. in *American Indian Policy in the Twentieth Century*, the author characterizes the interactions between Native tribes and nations with the U.S. Federal Government as being tied to tribal status and jurisdiction (boundaries)⁶. Despite the fact that the author focuses on law and the legal system in his writing, these ideas can still be applied to telehealth adoption. Both the legal process and healthcare rely on public policy, so the basis of geography as a means of defining the interactions between the tribes and the government would still be applicable.

When the United States of America was beginning to address questions of its own nationhood after the Revolutionary War, it began to identify itself in relation to indigenous populations. As mentioned in the first chapter, the Marshall Trilogy consisted of three supreme court cases that went on to define Native tribes and nations as domestic-dependent nations under the U.S. Federal Government. What Ragsdale brings to light however, is that the Marshall Trilogy occurred at a different point in American development, and has since caused some confusion in tribal status—that there is a "historical chasm that exists between the concept of the United States as a struggling new democracy to the

⁶ "Jurisdiction" traditionally means the official power to make legal decisions and judgments. How this power is invested is largely determined by geographical boundaries.

contemporary United States which is the superpower of the world” (64). In essence the legacy of the Supreme Court cases that puts Native peoples in a dependent position has been upheld in American society since before the U.S. became a global superpower. This historical chasm that is explained becomes a very tricky issue as both the Federal and Tribal governments become unclear in what powers they hold in relation to each other, and how much involvement either can have in actual Native communities.

Nonetheless, based on the interviews with Candace Shaw and Dr. Ana Maria Lopez, the unclearness coming from tribal status can be bypassed in the process of telehealth adoption and implementation. The telehealth network is able to do this because it relies greatly on cooperation between Native communities and those who administer the network. Based on the conversation with Dr. Lopez, the Arizona Telehealth Program began statewide in 1995 when Western Arizona Council of Governments officials came to the decision that access to healthcare was a problem⁷. With that as a priority, the state legislature approved of a program (not a government program and not under supervision of government) that would set up a telehealth network across the state. The network functions by way of chapter houses, which are smaller medical centers scattered throughout the state that provide telehealth and telemedicine services for community members. These chapter houses are in full cooperation and

⁷ This council is a governmental non-profit that is a voluntary association of local governments (including Native American) in the Western Arizona—they work towards improving vulnerable communities. Although the Western region initially suggested it, the whole state of Arizona took up telehealth.

coordination with larger medical centers (think of main hubs) with medical professionals able to handle telemedicine treatments from a distance.

In this sense, the connections between these various hubs, many of which permeate Native communities act in a uniform manner. Each chapter house and medical center has its own roles and responsibilities under the network of the Arizona Telehealth Program—tribal status does not matter, as the uniform responsibilities are the same wherever one is in the state. The watchful eye that the Federal Government puts on Native communities' healthcare through the IHS because there is tribal status—something that makes blatant distinctions between Native peoples and other Americans—becomes nullified by the uniformity from how telehealth is done. Considering Native peoples become involved in a process that also includes all other Americans, there exists a subversion of the characteristic relationship between tribes and the government.

In another way, both Dr. Ana Maria Lopez and Candace Shaw explain that telehealth is very much community based because of a needs assessment⁸, which additionally transcends tribal status. Candace Shaw recounts the development in Oklahoma, and explains how telehealth began in the state. During the year of 1994, Governor David Walters and the Oklahoma Department of Commerce focusing on infrastructures and networks established a five million dollar grant for 145 rural hospitals with additional service areas for the establishment of telehealth services. Shaw explains that the evaluation and its

⁸ A needs assessment does not necessarily mean that there is a prioritization of undeserved people, but rather is a custom marker that each community must make clear if they desire a telehealth program.

utilization for a specific community are very important for a telehealth program. The program that organizes the services and the community are both intended to have very close relations. The two groups in a proper telehealth service must have a strong partnership and full cooperation with each other, where things such as clinical support, technical help, and a clear understanding of the needs of the community become essential.

Lopez echoes this in explaining how each individual community must communicate with the telehealth provider: they must understand what healthcare questions/concerns must be addressed and answered, must understand logistical issues unique to where they live (distance from a medical center, costs of technology), and must figure out how it will be paid for (either with own money or applying for grant funds). One may say that this is no different from the IHS aims and services, however, unlike the IHS, telehealth organizations are their own entity that are not connected to the politics of the U.S. Government that pushes tribes into a dependent position. Moreover, considering what Shaw said about the cooperation between the organizations and Native communities, Native peoples are given the power to decide what they need and want and how to implement it (allowing for more culturally specific healthcare) whereas the telehealth organizations are able to assist with the logistics and actually bringing the services in.

One may ask, “but how is tribal status pertinent to this discussion about separating the government from non-political entities?”. When Ragsdale spoke of the Marshall Trilogy and how it undermined the autonomy of Tribal governments,

tribal status becomes connected to the question of nationhood. The U.S. Federal government, in order to justify the domestic dependency, had to frame its own definition of nationhood. This conception included the United States and excluded Native tribes and nations; this ultimately affected policy decisions such as healthcare, where most Native communities were not given control of how it was being managed because of the IHS influence. However, in the process of telehealth, which involves a community cooperating with a group not directly affiliated (such as Heartland Telehealth Resource Center, which is essentially its own company) with the government, questions of nation and status are not important. The community becomes in full control of what needs and services are required for its people, and the telehealth program circumvents the government's determination of what constitute healthcare in Native communities—it gives the communities a much more active role.

Ragsdale in “The Deception of Geography” also details the other important interaction between Native tribes and nations and the Federal Government as being an issue of boundaries and jurisdiction. Over the course of history for Native peoples, the United States developed many policies that “represented either a wish to assimilate or to facilitate the assimilation of Indians into American society. But at the heart was the transferring of Indian assets to non-Indians” (63). To put it bluntly, European Americans took, either by force or by treaties, the lands previously inhabited by many Native peoples. This required that borders needed to be drawn and redrawn over the decades. Because of this, in modern times, “Indian ‘reservations are deceptive when viewed on a map. On

maps, great areas of land are delineated as reservations, which give the impression that Indians own much more land than they do. All maps show are boundaries of reservations, not the ownership of land” (74).

This deception of reservation boundaries mentioned by Ragsdale can end up causing many difficulties in determining sovereignty between those in Native areas and those outside in the larger U.S. geography. The Federal Government, by advocating the legacy of the Marshall Trilogy that precludes Native nations from making their own autonomous decisions and policies, can only decide in conjunction with Tribal governments how policies are to be handled even with the extremely convoluted relationship between geography and jurisdiction. Indeed, what Ragsdale states holds true, including for Native healthcare: “Indian country is an incredibly complex jurisdictional issue disguised in a colorful phrase” (69). But just like with the problems associated with tribal status, telehealth can circumvent jurisdiction and boundary issues that characterize interactions with the federal government by how its network operates and the role telehealth organizations play as an organizational middleman.

Telehealth programs give the possibility of going beyond recognized boundaries with its network. Looking at [Figure 1](#) (p. 47), one can see a map of the Arizona Telemedicine Program network, the same organization Dr. Ana Maria Lopez works under. Keep in mind, Arizona alone has twenty-two federally recognized Native American tribes. In particular, what is unique about telehealth in contrast to other forms of healthcare in terms of Native communities is that the web made possible by information technology can connect the different Native

communities. Instead of being treated as individual units where workers from IHS are allocated on the basis of each tribe, various Native communities can become a part of a much larger system with many different types of workers⁹ on many different levels. Candace Shaw said that for many tribes, this allows for them to hire Native people in their own communities to run the telehealth centers that can be connected to healthcare professionals overseeing the larger network.

Of course, these networks can become even larger: the Four Corners Telehealth Consortium (Arizona, Utah, Colorado, New Mexico) and Heartland Telehealth Resource Center (Kansas, Missouri, Oklahoma) consist of a connected network that include not only many Native American tribes, but also are able to transcend state boundaries and jurisdictions. Whereas communities close to (or across, if we are speaking of the Navajo Nation, which lies on the NM-AZ border) borders normally give many issues for policy decisions and for laws, a collaborative telehealth network between various states would ease the process of healthcare service—in place of states becoming entrenched in healthcare jurisdictional problems because of official borders, which I have explained to be problematic for Native communities, telehealth has the potential to make a regional network that can facilitate communication, decision making, and action in the health field.

Problems associated with jurisdiction and boundaries can also be avoided when telehealth organizations act as a buffer between Native tribes and the U.S.

⁹ Workers do not just include medical professionals and healthcare workers, but also entail administrators, technicians, engineers, organizers, etc. that are able to have their careers in the largest of hospitals and the smallest of medical center a part of the network.

government. Ragsdale explains that it is never clear whether tribes are treated as “sovereign nations or conquered peoples. This binary approach means that neither tribes nor the governments with whom they have relationships can never really understand the true nature of the [jurisdictional] issues in question” (79). The power dynamics between the different governing bodies can be seen as in a constant movement, where it becomes unclear which side makes the decisions and follows through with policies---this is still the antithesis of Native tribes having an active role and presence. The government, primarily acting through the Indian Health Service, usually works directly with tribes for planning healthcare practices and services for Native communities.

Nevertheless, a telehealth organization can work in between the two forces as a sort of middleman. It is true that policies such as those in the *Indian Health Care Improvement Act* are a large directive that shapes tribal healthcare across the nation, yet recalling back to what both Candace Shaw and Dr. Ana Maria Lopez said, telehealth organizers become very cooperative and collaborative with communities, helping them drive their own health plans and services with regards to telemedicine. As these programs are more corporate in nature (companies that gain their own revenue) or come from a state’s directive (which in the U.S., can be separated politically from the federal), there is a way to obstruct the connection that defines a complex relationship with the Federal Government. Telehealth can make it possible for Native communities to become less restricted and more active in determining certain facets of healthcare for their people.

Tribal specificity and its relation to telehealth also allows for an active role in healthcare management for Native communities. Before any analysis, it is helpful for readers to understand what is meant by “tribal specificity.” Prior to any arrival by European peoples, there were many different groups Indigenous to the Americas, with their own identity, culture, language, etc. In present times, there are over five hundred federally recognized Native tribes, in addition to hundreds more that are not federally recognized. It is important to emphasize that in many ways, each tribe and community is unique to each other—unlike the common American perception, there is no one “Indian” ethnicity or culture. Just as the Russians are very different from the Spanish in Europe, so are the Iroquois and the Sioux. Although every federally recognized tribe is eligible for the Indian Health Service, it is worth noting that they are not limited to that service and are able to provide healthcare to their people in any way they see fit—if possible, there is an Indigenous option towards healthcare, and this can include telehealth.

It became evident from my conversation with Candace Shaw that tribal specificity can play into telehealth implementation. In Oklahoma alone, there are large number of tribes that were forcefully moved from their homelands in the Southeastern United States in the early 19th Century. Bigger tribes such as the Cherokee, Chickasaw, and Choctaw for example are based in the Eastern half of the state, while numerous smaller tribes populate the west. In terms of telehealth, the larger and more organized Choctaw are “very wired” in Internet services and have the Chief Gregory Pyle, who is very knowledgeable about information technology infrastructures. Their willingness, readiness, and accessibility

towards getting a plethora of telehealth services is much greater than the smaller, less organized, and less wired tribes of the West. In this way, we can see that differences in tribes such as economic assets and size become essential when examining healthcare.

Tribal specificity allows each Native community to claim an active role in telehealth services, and subsequently their healthcare. For example, whereas the Cherokee rely on Indian Health Services for their health insurance and to set up a web system, the Choctaw and Chickasaw are self-insured and have invested in their own technological infrastructure to support telehealth.

Depending on the resources available to them, which seems to be dependent on the specific tribe, a Native community can decide on which type of telehealth service would be of best use to them: it could be larger programs that focus on mental health or substance abuse, or it could be smaller programs focusing on education, cardiology, radiology, diabetes, etc. Regardless on what the national directive is on healthcare and what that means for IHS services, Native communities are able to be active in the kind of healthcare they want in tribally specific ways. With these differences, the idea of tribal specificity and the unique nature/situation of each Native community can shape healthcare services.

Nonetheless, while what I have outlined above are more of the infrastructural and financial distinctions that tribes can have, tribal specificity is most commonly used in distinguishing Indigenous cultures. Where the cultural factors can come into play is not so much with the initial implementation of telehealth, but rather, what comes later. The infrastructure and assets of a tribe

that can be utilized for telehealth are the foundation towards what they can do with the services—given the active role they assume, there is the possibility for tribes to reshape and take more cultural liberties with their telehealth. Of course, a tribe with a higher degree of assets would have more opportunities than one with a lower degree. But the methods towards health and healing in the way telehealth can be used can certainly be tribally specific.

Without a doubt, for many years Native peoples have had to deal with problems of stereotypical-harmful images that portray them as living in the past or endangered in American society. However, unbeknownst to many who succumb to believing these images, Native peoples are still thriving to this day. Native American Studies makes a large effort to examine the different ways Native peoples are active in this modern time; and what telehealth reveals is promising. Given my conversations with two active members of telehealth organizations that provide services for Indigenous communities, there seems to be an active role in determining healthcare that transcends issues of domestic dependency to the U.S. government. With an analysis of geographical aspects such as tribal status, jurisdiction, and boundaries, in addition to tribal specificity, telehealth services has brought to light many instances and possibilities of self-determination in Native communities. This chapter has exhibited the ways telehealth can operate on a community level. Nonetheless, there is still the question as to what ways Native individuals are using telehealth. In order to understand how broad applications of telehealth can exist and the connections

between healthcare and culture, it becomes essential to work towards questions of what Native-centered telehealth would look like.

ARIZONA TELEMEDICINE NETWORK

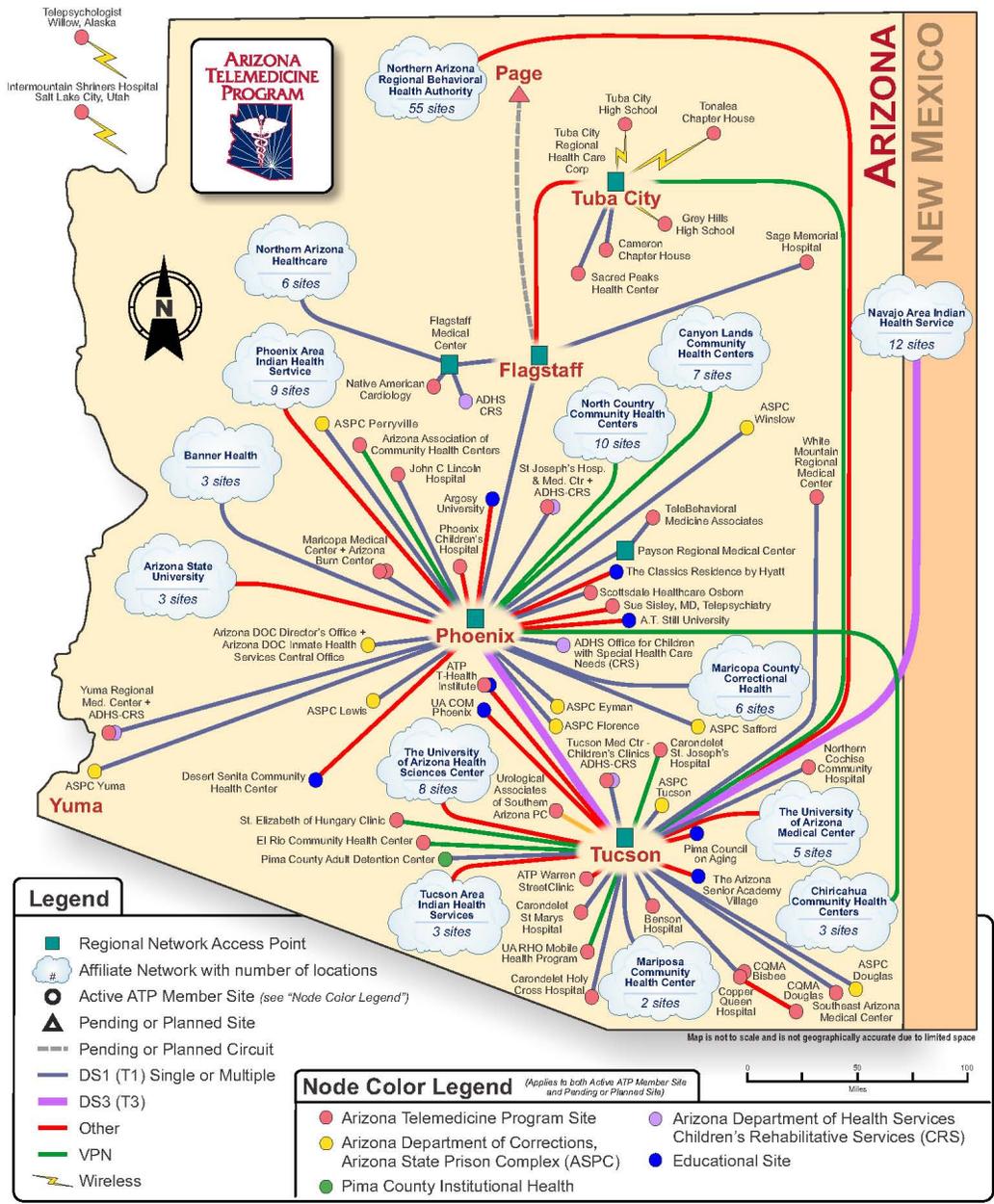


Figure 1
<http://telemedicine.arizona.edu/applications-network/home>

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Chapter Three

Rethinking Telehealth: Native YouTubers and their Dedication to Native American Health & Wellness

What are the ways that health information can be disseminated and used? If telehealth is able to deal with health information, what exactly does that entail? In what ways do health education and Native-centered telehealth intersect? How can telehealth be reimagined? After asking Dr. Ana Maria Lopez if culture is considered in the implementation of telehealth—with the valid assumption that Native American culture and worldviews are different from other American populations—she replied that as a director of telehealth, she has always been concerned about cultural dissonance with telehealth. Meaning, that there is the idea that cultural worldviews, customs, and beliefs can play into the acceptance of a healthcare practice—sometimes, there can be an agreement or disagreement between them. However, she said that virtually all patients in the program (regardless of their background) who were using telehealth methods such as tele-videoconferencing (healthcare where patients can interact with their doctors) equated the whole process as seeing their doctor on TV. From this specific example, television, which seems to be a big part of every American household, appeared to ease the telehealth process of giving information about health, even when cultural sensitivity is taken into account.

Thinking about how visual media such as video may have an impact on people becoming more aware of their well-being, I began to think of ways that telehealth can be reimagined by Native peoples. In the present time, most conventional conceptions of this type of health practice deal with medical

professionals (most of whom are far away and of a completely different background than who they serve) interacting with Indigenous patients under the approaches established in Western medicine. However, I began to search for ways in which Native peoples are able to engage with the same principles of telehealth on their own terms, while at the same time using information technology for the purposes of bettering Native health and well being.

Now what do I mean by “principles of telehealth”? Believe it or not, a very large and important aspect of telehealth is health education for improving ones wellness and lifestyle. Both Candance Shaw and A.C. Norris’ *Essentials of Telemedicine and Telecare* reaffirm this, and assert that tele-education uses online resources for different types of communication (clinical, academic, public, personal, etc.) for the spread of health knowledge (Norris 21). Given that education can come in many forms in addition to the utilization of information technology having many possibilities, I began to search for ways in which Native peoples have used one of the most promising venues of expressing different types of health information they feel is important for Native communities to learn about and understand: the Internet.

What I found were intriguing examples of Native individuals using the different forms primarily used in the Internet to take a stance on health education that is not found with conventional telehealth programs found in medical centers across the country. Unlike the first two chapters of this work that focused on common ways that telehealth is put into effect, I wish to show that the approaches of Timoteo Montoya’s *Primal Natives* and Dr. Evan Adams’ *Dr. E*

Online expand and reimagine the ways we understand telehealth's usage. Montoya and Adams, with both their own respective approaches to what type of health information they want to disseminate in addition to the commonalities they share, reveal the various ways telehealth can be used for Native American health and wellness.

Before I begin to analyze Montoya and Adams' work, there are some aspects of my argument that must be addressed and elaborated upon; particularly, certain ideas I will mention that may seem problematic to readers in addition to one of the goals of trying to reimagine telehealth. By illuminating these facets that are problematic, I also hope to reveal the ways telehealth can be reimaged. And I want to bring attention to my usage of "reimagined," as opposed to "reshaped." Whereas "reshaped" implies an actual shift or change in the way telehealth operates, "reimagined" implies new ways telehealth can be thought of and processed as a concept—instead of having readers think that these ideas are a proof of what has actually happened in telehealth as an overall system, I wish to utilize these examples to bring to light ways telehealth could be rethought of with cultural considerations.

One of the criticisms of this particular chapter will undoubtedly be directed towards the fact that Evan Adams is a Canadian Native and works out of Canada. In the previous chapter, I explained how telehealth could be tied to jurisdictions and boundaries. A critical reader would come to see both from Chapter Two and from the figure of the Arizona Telehealth Network that the connections between medical facilities, despite the fact that they do cross state lines, do not cross

national boundaries. One complaint would be, how could this even be telehealth if it is in another country and is not able to cross national boundaries? As I will explain later, ideas such as intertribalism helps in transcending national boundaries. However, one thing that must also be acknowledged is that the Internet connects people from around the world. The knowledge and health information that comes from Evan Adams is considered a public source (not privately funded or financed) for anybody who has the Internet to consume. This can be seen as a reimagining of telehealth, where it is possible to provide health information, even across national boundaries.

The next retort that would come from a critical reader would be understandable confusion: “How is that telehealth? Aren’t Montoya and Adams just Natives using social media?”. That is precisely what I want my readers to try to rethink: social media that is utilized for the purposes of health education can be a form of telehealth. Earlier in this chapter, I stated that a very important aspect of telehealth is health education. Education, unless it is clearly defined, can be a broad term that encompasses many ways of passing knowledge or information between people(s). With that said, Montoya and Adams are providing health information for a Native audience with their concerns and questions in mind. Although it may not be coordinated by a telehealth organization or a very comprehensive system, the work by Montoya and Adams still demonstrates the precepts of telehealth—healthcare at a distance. Using social media as a new way of providing health information and education can be conceived as an alternative form of telehealth itself.

To start off with, Montoya's *Primal Natives* comes out of an even larger organizing body that started at the beginning of the year 2013, *Urban Native Era*. *Urban Native Era* was inspired by an even larger movement, *Idle No More*, which was launched in December 2012 by four Indigenous Canadian women who opposed Canada Prime Minister Harper's bill (c-45) that infringed on Native peoples rights by denying treaties—this movement spread throughout the world and went on to create an International Indigenous consciousness. As such, *Urban Native Era* consists of young Indigenous individuals focused on educating all about what happens around the world surround Indigenous peoples through news, clothing, artwork, music, the Internet, etc. According to its members, the name of the movement represents their ambitions: "it is our time to rise up as Indigenous peoples to teach, learn, and educate all peoples about our lifestyle, our ways, our culture, and our history." They add on that they wish "to call all peoples to learn and educate ourselves about our culture and for us to use what our ancestors has taught us to help us in this life" ("About"). Both of these tenets would go on to inspire Montoya's *Primal Natives* as his focus is centered on health issues centered on Native peoples, insists on teaching others, and for going back to Native culture and history for education.

Before going into how Montoya primarily approaches his work, it is best to give a background of how his work began. His project stems from the thesis he wrote as an undergraduate student that focused on food security in Native American communities. After discovering that Native Americans experience the worst health disparities of any community in the nation, Montoya asked why this

is the case and what things are being done to improve it. Montoya states that he had been overweight since he was 7 years old, and became very interested in dieting. At first, he explains that he calorie counted, but did not really like it, and began to research about his ancestors' diet and incorporated what he calls the "Paleo diet": which consists of meals rich in meat and vegetables. With the switch, Montoya was able to lose around eighty-six pounds, started *Primal Natives*, and has continued to do more research on food health and Native peoples ("What is Primal"). Most of his content is found on *Urban Native Era's* YouTube channel, where he talks about nutrition and why he became interested in the movement.

Montoya's main approach to his content is primarily one of decolonization. Decolonization, a term which has become very prominent in Native American Studies discourse, on a very general level refers to the process of undoing or complicating structures, ideas, institutions, conceptions, etc. that have been established in the lives of Native individuals since others began coming to the America's around 500 years ago and colonizing the continents. In essence, it is a reclaiming of Indigenous methods and ways of living that would be more beneficial for Native peoples in the modern world. Montoya himself has stated that he has always been interested in food security in Native communities—he has found from his studies that Native communities have very poor food security, where cheap, un-fresh, and unhealthy-processed foods are very prominent because of the system of distribution set up by the U.S. Government. Because of this, Native peoples are unable to have proper food security and unable to

grow their own fresh foods leading to many health problems where the diet is far from ideal. Montoya wants to educate others and work towards undoing and improving on the current food system in many Native communities for the sake of peoples' wellness. He wants to gradually decolonize both food consumption and diet for Native peoples—to upturn the status quo that brings about unhealthy communities (“Native American...Revolution”).

In his first video “Native American & Indigenous Health Revolution: Introduction” Timoteo establishes the focus of his work being towards decolonization, and gives new meaning to the utilization of telehealth. As stated in his writing on the Urban Native Era website, he wants to help “Natives recognize their ability to self-determine their communities, whether it be at a round dance or on a dinner plate” (“What is Primal”). This is directly in line with the introductory video, which shows Montoya expressing the wish to change notions of food for health education and for further research by Native Americans. Interestingly enough, Montoya wants viewers to become aware of the historical trauma of Native peoples in addition to the imposed system by the U.S. Government. As mentioned in *Healing and Mental Health for Native Americans: Speaking in Red*, historical/intergenerational trauma is “cumulative emotional and psychological wounding, over the lifespan and across generations, emanating from massive group trauma experiences” (NebelKopf and Philips 7) such as genocide, displacement, assimilation, and war.

Although the most common health problems such as substance abuse, mental illness, and violence are associated with this kind of trauma, Montoya

declares that it is also connected to the current food system and unhealthy diet as well. The food system has been imposed as a result of the above colonial process, and they can therefore be linked. This is the process of decolonization, where Montoya is revealing unknown interconnected factors that must all be taken into account for the purposes of improving health. While it is true that certain aspects of a community are examined in implementing telehealth such as a needs assessment that takes into account the most common health issues and infrastructural data, it would be rare to find one that also takes into account specific cultural histories and awareness. Nonetheless, Montoya proves in his approach that telehealth can indeed be used to not only give health information to help specific individuals, but also to use it as a tool for expanding notions of health on a larger level—coercing Native viewers to look at their health and how it is affected by the history and/or processes of their culture and community.

Dr. E Online comes from Dr. Evan Adams, and just like Montoya, a background becomes essential before any analysis. Evan Adams, who is Coast Salish of the Sliammon Band in British Columbia, Canada, did not originally start as a doctor. In fact, most people would recognize him as Thomas Builds-The-Fire, the eccentric sidekick to famous Native actor Adam Beach's character in Chris Eyre's 1998 *Smoke Signals* (based on Sherman Alexie's novel). Nonetheless, aside from his acting career, Evan Adams was a premed at University of British Columbia (UBC), received his medical degree from the University of Calgary, and was a part of the family practice residency (the chief resident) in the Aboriginal Family Practice Program at St. Paul's Hospital in

Vancouver, British Columbia. Since then, Adams has become even more involved in the health field: he was the president of the Indigenous Physicians Association of Canada, is the Director of Division of Aboriginal Peoples' Health at the Department of Family Practice in UBC, and has the current position of Deputy Provincial Health Officer (DPHO) for Aboriginal Health ("About").

Although Canadian, his background as both a Native person and doctor lends itself towards an Indigenous (known as "Aboriginal" in Canada) peoples' utilization of telehealth. As is the case for many Native communities in northernmost or southernmost regions of the United States, tribes are cut by national borders. For example, certain groups of the Haudenosaunee (also known as Iroquois) have communities in both the United States and Canada, yet still recognize themselves as one group. Even though each tribe is very unique in its own way, there is a collective Indigenous experience in both the United States and Canada as a result of colonial legacies—all of the different experiences lend themselves to Native American Studies. With that said, Dr. Evan Adam's work is just as applicable to this study even if he was considered an American citizen, and his work as a health care professional gives it even more substance.

Dr. Evan Adam's work on *Dr. E Online* began only recently in 2013 as a result of him becoming Deputy Provincial Health Officer. It started as some YouTube videos on his channel speaking on "cultural competency,"¹⁰ but has since grown into a whole website, a Facebook page, and a Twitter. Aside from

¹⁰ < <https://www.youtube.com/user/doctoreonline/videos> >

his first few videos on “cultural competency,” Evan Adams has recently added a video that is half health education-half television show—more on that later. For his Facebook page and Twitter, Dr. Adams gives his followers up-to-date health news and information relating to Indigenous peoples. In essence, Dr. Evan Adams has been relying very much on social media for his work. *Dr. E Online*, with its various social media resources as its approach, gives a very nuanced method of telehealth for educational purposes.

Dr. E Online shows that its approach of using social media can help make health information more engaging and more inspiring for those who view it. In a study done by Carleen Hawn, “Take Two Aspirin and Tweet Me in the Morning,” the author focuses on a Brooklyn-based primary care practice called “Hello Health” that utilizes Web-based social media as a communication tool for healthcare purposes. What was found is that the various patients became much more engaged and empowered with the information that was given. The social media tools allowed for the patients to be much more involved with their own health, especially if what was being shared pertained specifically to them, and the information that was given gave a sense of inspiration—the author writes that it can “help those who wish to innovate in health care spread their ideas more widely and effectively” (365). This is definitely in line with Dr. Evan Adams approach, as all of the information he provides on his websites, whether if it is about the benefits of eating certain foods or providing information about new breakthroughs in the health field, his work can work can both inspire and engage.

Consider his video, “VCH Cultural Competency: What you Should Expect.” In the video, Dr. E makes a message to all of his Native viewers, by informing them of what attributes they should be looking for in the health professionals that serve them, in addition to certain things they should be aware of. Showing a video of a Native woman being treated by a doctor, Dr. E explains various bullet points that should be noted when going to a medical facility: “a) Dignity and Respect. b) Culture and history are a factor in your health. c) Health care workers should have a basic understanding of this.” In this way, Dr. E is indeed putting empowerment in the viewers’ hands—a Native patient going to a healthcare facility will need to recall the information in the video if they wish to receive the best possible health treatment.

Moreover, Dr. E’s video allows viewers to become engaged in the process. The viewer may find the information given interesting and want to apply it when he or she goes to get medical treatment, or they may expand on the information to include other things to be aware of—which only adds to the larger discussion of culture and healthcare. In conventional telehealth, where a diabetic may be keeping track of their insulin levels, there is no room for an engagement beyond the particular ailment. However, with social media, the particular ailment is expanded into a broader consciousness of one’s health in addition to many aspects of healthcare itself. The approach *Dr. E Online* takes with social media, with its accessibility of allowing both an engaging and empowering process, exhibits that telehealth can indeed connect Native patients to health in alternative ways.

Up until now, I have spoken on the two different approaches Montoya and Adams have taken for their online material¹¹. But now, it becomes useful to look at the common aspects they share with regards to telehealth. By examining the commonalities between the two, a deeper understanding is gained of how telehealth can be reimagined by Native peoples. We will be able to notice what specific things related to Native America are in focus by both Montoya and Adams, and how they are very much applicable to Native health and wellness. We will also be able to see how telehealth, with its emphasis on information technology (the world wide web), is a medium that allows for the intersections between Native health and culture.

For both Timoteo Montoya and Dr. Evan Adams, a focus on traditional ways for health in modern times become very important to their material. One may be asking, what exactly is traditional Native health? Without a doubt, if “traditional Native health” cannot be conceptualized, then no analysis can be done in this case. However, this concern can be addressed by looking at Gregory Cajete’s *Native Science: Natural Laws of Interdependence*. In his book, which analyzes Native American perspectives on science and ways of viewing the world, Cajete has a section devoted to Native health and healing. Cajete explains that healing and disease were always related to the relationships with the environment and world: “among Indigenous people, this understanding

¹¹ I will acknowledge that my argument does fall under the assumption that all Native peoples have access to the Internet, when in fact, there are populations on reservations that have little to no Internet. But one must also remember that telehealth requires information technology and a network above all else. With that in mind, the ideas of this chapter are more geared to those Native individuals who live in areas with Internet network capabilities.

included all aspects of one's world and did not overlook the woven threads of the fabric of health. This is why Indian people honor their heritage and knowledge and deeply appreciate that balance and harmony with the natural environment" (117). With that in mind, Native peoples have had many ceremonies and activities that follow this philosophy of balance. What Cajete seems to be implying is that health becomes a lifestyle, and is something that is lived on a daily basis for the purpose of harmony—harmony for both the physical body and its surroundings. Both Montoya and Dr. Adams focus on the traditions that revolve around lifestyle.

In *Dr. E Online*, Dr. Adams focuses on traditional activities of his own people, the Sliammon. In one of his more recent videos, "Hunting & Fishing," Dr. Adams takes viewers on a journey through lands near his hometown with none other than his own father and his nephews. In the video, he explains that these were the activities that he did as a kid and have been a part of his peoples' lives for generations. Along the way, we see him joking around with his relatives while they hunt and fish on Sliammon land, giving important and interesting nutritional information along the way about the food they were getting. At the end of the video, Adams makes the statement to his father: "We're trying to encourage young people to go back to some of their physical activities, like hunting and fishing."

What he says really frames the video in a way that makes lifestyle health very important. The video itself is very holistic as it focuses on entertaining viewers while at the same time giving the message that having an active lifestyle,

getting traditional foods (which he shows are healthy in the video), and being close to your own family and community are all very important. Moreover, it is significant that all of these aspects are put together with the backdrop of traditional Sliammon lands, supporting the ideas put forward by Cajete that connects Native health with the surrounding environment. In this way, telehealth is taking place and uses YouTube as a format of teaching Native individuals that their health is ultimately connected to their culture and traditions.

Montoya does the same thing in his videos as well, and is very much interested in the traditional foods that Indigenous used to eat prior to a radical shift in diet. Montoya explains in the inspiration for Primal Natives that “[he] refused to believe that [they] lived in this great land with all its bounty and lived with crippling disease on all of [their] families’ doorsteps” (“What is Primal”). Montoya is ultimately focused on reclaiming the diets that were normal for Native peoples—going back to traditional foods and diet in the present for the purposes of getting healthier. There is evidence of his focus coming in the form of one of his videos. For “Don’t Fear the Fat,” in addition to giving educational information about what fat is on biochemical terms and its role in the human body, Montoya explains the differences between Native and European views on fat and wants Native people to rethink of their relationship with fat, especially saturated fat. He explains that Europeans had been agriculturists for a long time, and imposed their food system in North America—the theory being that a loss of traditional knowledge and traditional diet has caused more to be sick.

Similar to Dr. Evan Adams, Montoya employs YouTube as a way of connecting tradition and health. Montoya's concern is that because the lifestyles of Native peoples have changed so much over the past hundred of years, that chronic illness has become more rampant. To try to educate others, Montoya utilizes telehealth to reveal the ways in which traditional diet and foods can contribute to one's health for Native peoples. Also like Adams, Montoya's ideas are interested in influencing the lifestyle practices of viewers—an improved diet for a better day-to-day health. Instead of telehealth being thought of as a way of treating specific illnesses, Montoya shows that it can be conceptualized as a way of addressing lifestyle health and as a way of revealing connections between tradition and health.

An anticipated complaint against *Dr. E Online* and *Primal Natives* and their connection to telehealth coming from those interested in Native American Studies are that they are too entrenched in pan-Indianism. Pan-Indianism, which became a popular term in the middle of the Twentieth Century, grew in usage because many Native peoples across the country began living in urban areas due to termination and relocation policies by the U.S. Federal Government—many Natives from a variety of tribes coming to different cities. Being one of many minority groups in these new urban areas, the newest arrivals came together and began identifying and organizing themselves under the umbrella term of “Indian” as a type of ethnic identity. However, the concern arose that the urban Natives were adopting an identity non-existent before the arrival of Columbus and that they were abandoning their specific tribal identities in favor of

something that would have negative implication for Native peoples. Indeed, Bob Thomas of the Cherokee Nation even called it “internal colonialism” (qtd. in Lobo 85).

It can be said that Montoya and Adams are supporting approaches that universalize rather than embracing tribally-specific parts of culture that are essential for health and healing: Montoya makes the generalization that every Native individual regardless of tribe could benefit from a different diet, and Adams’ videos are not addressed to any specific group and are very broad in scope. And with telehealth being seen as something that is very specific to each community, as I discussed about my conversations with Candace Shaw and Dr. Ana Maria Lopez in the previous chapter, pan-Indianism would devalue telehealth as a process because it goes against the idea of tribal specificity.

However, despite that accusation, *Dr. E Online* and *Primal Natives* use telehealth as a way of intertribal communication that does not necessary fall under the assumptions of pan-Indianism. In “Retribalization in Urban Indian Communities” by Terry Straus and Debra Valentino, the authors understand the popularity of the term “pan-Indian” and understand its implications, they also assert that “intertribal exchange of items, ideas, and individuals occurred long before European presence...Native peoples on reservations as well as urban areas identify as Indian and as members or affiliates of a particular tribe or tribes. These variant identities are situationally determined and differ at different points in the life cycle” (87). The whole idea is that a strong sense of unity and consciousness can still lead to a reinvented tribal identity (94). This tribal identity,

which combines both an embrace of one's own tribal background and a Native American solidarity in what is typically referred to as "intertribalism," differs fundamentally from pan-Indianism. One would think the two are the same because they refer to Native-to-Native relationships and ways of approaching self-identity, but intertribalism espouses more realistic philosophies that harken back to the fact that there are hundreds of tribes in United States each with their own identity and culture. Whereas pan-Indianism flat-lines and disregards the unique nature of every tribe, intertribalism fosters appreciation of the tribal differences and communication between them.

This is essentially what Montoya and Adams do as well. For the purposes of improving health amongst Native peoples, the two Internet media providers are trying to educate and spread ideas—establishing connections between different individuals from vastly different tribal backgrounds. It is true that their messages are generalized, nonetheless they still acknowledge their own tribal identity while at the same time operating under a larger Native sensibility: Adams does a whole video dedicated to his Sliammon hometown, and Montoya always makes it known that he is Lipan-Apache from Texas. And both of them frame their videos in ideas in such a way that they are speaking to all Native peoples (both in the U.S. and Canada) who would find the health information they give relevant. Telehealth can be rethought of in this way as well, where each community may need a specific type of health education, but the spread of different ideas and information over a large distance allows specific people to decide what it relevant and/or useful to them.

Most don't realize that an extremely important aspect of telehealth is its utilization of health education. With the World Wide Web being a very accessible medium for health education, it seems that telehealth's definition and conception can be expanded and reimaged in new ways. Timoteo Montoya's *Primal Natives* and Dr. Evan Adams' *Dr. E Online*, two different Internet projects focused on Native health and wellness, reveal that there could be a Native American centered way of using telehealth. The approaches of decolonization by Montoya and of social media by Adams allow for Native peoples to become more aware of broader issues in health and the many implications with those issues. Moreover, both focus on traditional Indigenous facets of health and reenact intertribal communication to exhibit that there can be a strong cultural component in telehealth unlike its conventional services. One may not think that culture plays a role in the dissemination of health information, however Montoya and Adams show that telehealth can be adapted from a Native perspective.

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