

DESCRIBING BARRIERS TO HEALTHCARE ACCESS IN THE HOMER AREA, ALASKA

A
PROJECT

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By

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Abstract

Data on healthcare access barriers are lacking for any location in the state of Alaska. The current project set out to describe the barriers to healthcare access experienced by people living in the rural Homer Area of southcentral Alaska. Of the 124 surveys returned 50 (46%) of the respondents identified cost, lack of specialists, transportation, time, and mistrust/dislike of providers as barriers that had kept them from accessing local healthcare in the previous 12 months. Improving healthcare access for this rural population will require a paradigm shift in how we think about healthcare. Novel approaches to when, where, and how healthcare is delivered will need to be considered if healthcare access is to be improved in the region.

Keywords: rural healthcare, healthcare access, barriers, unmet healthcare needs

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Introduction

The nursing process embodies the concept of relationship in its interactions between the nurse and patients. Since its beginning, the nursing profession has seen many changes in how and where care is delivered. From the battlefields of Florence Nightingale's nursing experiences, to the ever higher technological world of contemporary hospital nursing, nurses have been required to flex and grow and redefine their roles as care providers in order to continually improve patient care. Part of a nurse's growth comes from the learning gained through life experience and relationships with patients. Ideally, the nurse takes experiences from interactions with patients and the world, and integrates them into new ways of caring for patients. The idea of integration of experience into the nursing process is originally embodied in Paterson's and Zderad's (1976) *Humanistic Nursing Theory*, and it is my nursing and world experiences that have engendered the development of this project.

In her review of *The Humanistic Nursing Theory*, Kleiman (2010) suggested that the theory is based on a "call and respond" (p. 339) dialogue between patient and nurse. That is, nurses hear the needs of their patients and respond by actions or interventions that address those needs (Kleiman, 2010). By applying the theory at the community level, this project aims to elicit a call of need from the community. In turn, the graduate student, as a Family Nurse Practitioner (FNP), will integrate the new information and respond through development of an intervention or interventions to improve the community's access to healthcare.

A conversation similar to what Paterson and Zderad (1976) might envision has been taking place for decades at the national level in the United States. People have spoken out about the need for improved access to healthcare. In response, the Patient Protection and Affordable

Care Act (PPACA) was implemented in 2010, making health insurance available to more people, with the hope of removing a barrier to healthcare access. Indeed, since PPACA implementation the number of patients utilizing healthcare centers across the nation has increased (U.S. Department of Health and Human Services, 2014). In the Homer Area (HA) of Alaska, approximately 1500 (14% of the population) more people obtained health insurance during the 2013-14 health insurance market place open enrollment periods (J. Menkens, personal communication, June 19, 2015). However, it is unknown what proportion of HA residents had health insurance before PPACA implementation. In this early post-PPACA period, the current project seeks to learn what, if any, barriers continue to prevent access to healthcare in the HA.

The HA is located approximately 330 road kilometers (4.5 driving hours) south of Anchorage at the southern tip of the Kenai Peninsula. It comprises the City of Homer and its surrounding unincorporated area and stretches west to east for approximately 43 kilometers. The HA population of 10,200 (Alaska Department of Labor, n.d.) lives on a wedge-shaped geologic bench between sheer coal and sandstone bluffs to the north and the shore of Kachemak Bay to the south. As the largest town in the South Kenai Peninsula (SKP), the City of Homer is the regional hub for most healthcare services. Many parts of the HA can be travelled only by foot or with off road vehicles during certain times of the year. Though the residents of the HA tend to be sturdy in body and spirit, the rural, remote, and rugged nature of the area and lifestyles presents unique challenges for accessing healthcare services.

Until recently, few retrievable data existed that could describe access to any services on the SKP. However, Homer's South Peninsula Hospital, in collaboration with multiple organizations and community individuals, has begun a multiphase community health needs assessment. The project, known as the Mobilizing for Action through Planning and Partnerships

in the Southern Kenai Peninsula (MAPP-SKP), has completed two assessments and residents have identified strengths of the SKP community and barriers affecting access to SKP services (MAPP-SKP, 2013). Though generally useful, the assessments did not differentiate which barriers affected which services. To focus some of the MAPP-SKP findings, this project will describe the barriers specific to healthcare access that are experienced by residents living in the HA. If specific barriers can be identified, healthcare organizations, healthcare providers, politicians, the graduate student, and other groups and individuals in Homer will be able to focus efforts at minimizing specific barriers to healthcare access.

Literature Review

The keywords used to search the literature were *barriers*, *healthcare access*, *free clinic*, *rural healthcare*, and *unmet healthcare needs*. The Consortium Library at the University of Alaska Anchorage was accessed using their Quicksearch function, and the GOOGLE[®] search engine was used to search the World Wide Web. Quicksearch accesses approximately 80% of the Consortium Library's journal holdings, including CINAHL and PubMed. Specifically, it allows a search of those holdings that are either available in full text online, or through Interlibrary Loan. Only peer-reviewed articles were searched. Since the literature search was begun in 2014, the publication date parameter was set from 2004 to present. The search resulted in saturation, with older studies appearing as citations in multiple newer studies, and with the same citations appearing in searches using different terms. A few older sources are included in the literature review for their relevance to the current proposal and for their historical significance in healthcare access research and policy development. Though many works address healthcare access in countries around the world, only studies conducted in the United States and Canada were included in the review. This decision to narrow the search geographically was

made in order to maximize applicability of earlier work, by staying within a cultural backdrop similar to what might be experienced in the population of the HA.

Cost has been identified in the literature as a barrier to healthcare, and it takes many forms. The lack of health insurance, cost of healthcare (Carranti, Myers, Bowers, and Satterly, 2012; Keis, DeGeus, Cashman, and Savageau, 2004), and out-of-pocket costs (Karaca-Mandic, Choi-Yoo, Lee, and Scal, 2014; Wisk and Witt, 2012) have all been identified as financial barriers to healthcare access. Other nonfinancial barriers have also been identified (Goins, Williams, Carter, Spencer, and Solovieva, 2005; Keis et al., 2004; Kullgren, McLaughlin, Mitra, and Armstrong, 2012; Lai and Surood, 2010). Indeed, Kullgren et al. (2012) found that two thirds of U.S. adults who experienced financial barriers also experienced non-financial impediments to healthcare access. Most notable was the barrier of time; both lack of time to go to a provider and inconvenient clinic hours. An additional nonfinancial barrier is transportation. In their review of research measuring transportation barriers to healthcare access, Syed, Gerber, and Sharp (2013) found that transportation, as a barrier, is operationally defined based on demographics and where one lives. To illustrate, transportation as a barrier has been defined as the lack of family car ownership for low-income, urban children (Yang, Zarr, Kass-Hout, Kourosh, and Kelly, 2006) and increased travel time to see a provider by poor and uninsured residents of the rural southeast United States (Pathman, Ricketts, and Konrad, 2006). Further, elders living in rural West Virginia described transportation barriers as a bidirectional issue. On one hand, a lack of public transportation, and long traveling distances to see specialists, kept the elders from getting to healthcare. While on the other hand, weather related road closures and poor road signage prevented emergency vehicles from getting to the elders' homes. (Goins et al., 2005). Location, specifically rural living, can also be a barrier to healthcare access (Ziller,

Lenardson, and Coburn, 2012), and can be related to the travel distance required to get healthcare (Buzza et al, 2011). Additionally, though elder South Asians living in urban Canada reported that a general lack of transportation is a barrier, in that population, issues of cultural difference—yet another nonfinancial barrier—played the largest role in preventing patients from getting their healthcare needs met (Lai and Surood, 2010).

Various authors have identified barriers that fall into the five general categories of cost, time, transportation, location, and cultural differences. Though generally barriers may be similar across populations, how those barriers are specifically defined depends on the population being sampled. This is especially true for the barriers of time, transportation, and location. The travel distance to a provider may fall under the barrier described as transportation, time, or location depending on whether one has a car, an hourly wage job that is difficult to leave, or whether one lives on the road system. By considering the findings of others and using local knowledge of the HA, this study is a first attempt at describing the barriers to healthcare access that are specific to residents of the HA.

Framework

Healthcare access is a contemporary issue with roots that span decades. In their seminal work, Aday and Andersen (1974) suggested a model of healthcare access that focused on healthcare at the systems level. The resultant framework was meant to assist healthcare policy makers and administrators in understanding the concepts that predict access to healthcare systems. Khan and Bhardwaj (1994) wanted to address spatial healthcare planning “to enhance potential spatial access opportunities for a target population” (p. 71). To do so, they built upon the Aday and Andersen model by adding concepts that move the issue of healthcare access from the system/policy level to the community level. The result was their *Model of Access to*

Healthcare, which adds the concept that location-specific variables affect healthcare access within a community or region. The additional concept allows for use of the framework as a guide to those trying to understand the factors that affect the transformative process from potential to realized healthcare access within a community or region. Khan and Bhardwaj encouraged the identification of “deficiencies in existing regional health care systems” (p. 73) so that remedies could be developed. Following their philosophy, it is the *Model of Access to Healthcare* (see Figure 1) that informs the current project, which aims to identify barriers affecting healthcare access in the HA of southcentral Alaska. By identifying local barriers, it will be possible to mitigate them at the local level.

Methods

Sampling

A cross-sectional, convenience sampling plan was used to collect data from volunteer respondents. Sampling took place between October 15 and December 31, 2015. This timeframe was after the tourist and summer commercial fishing seasons and before deep winter, making it a time with the best likelihood of sampling from a pool of only HA residents. Survey distribution began after IRB approval, and once directors at each sampling location had agreed to work with the graduate student. Sampling took place at two coffee shops, a grocery store/café, and a food distribution center. The questionnaires were placed at each location for two weeks, along with a secured box in which respondents could place completed questionnaires. During the two weeks that the questionnaire was available at each location, the graduate student was present to answer questions about the project (Grove, Burns & Gray, 2013) for a total of four hours.

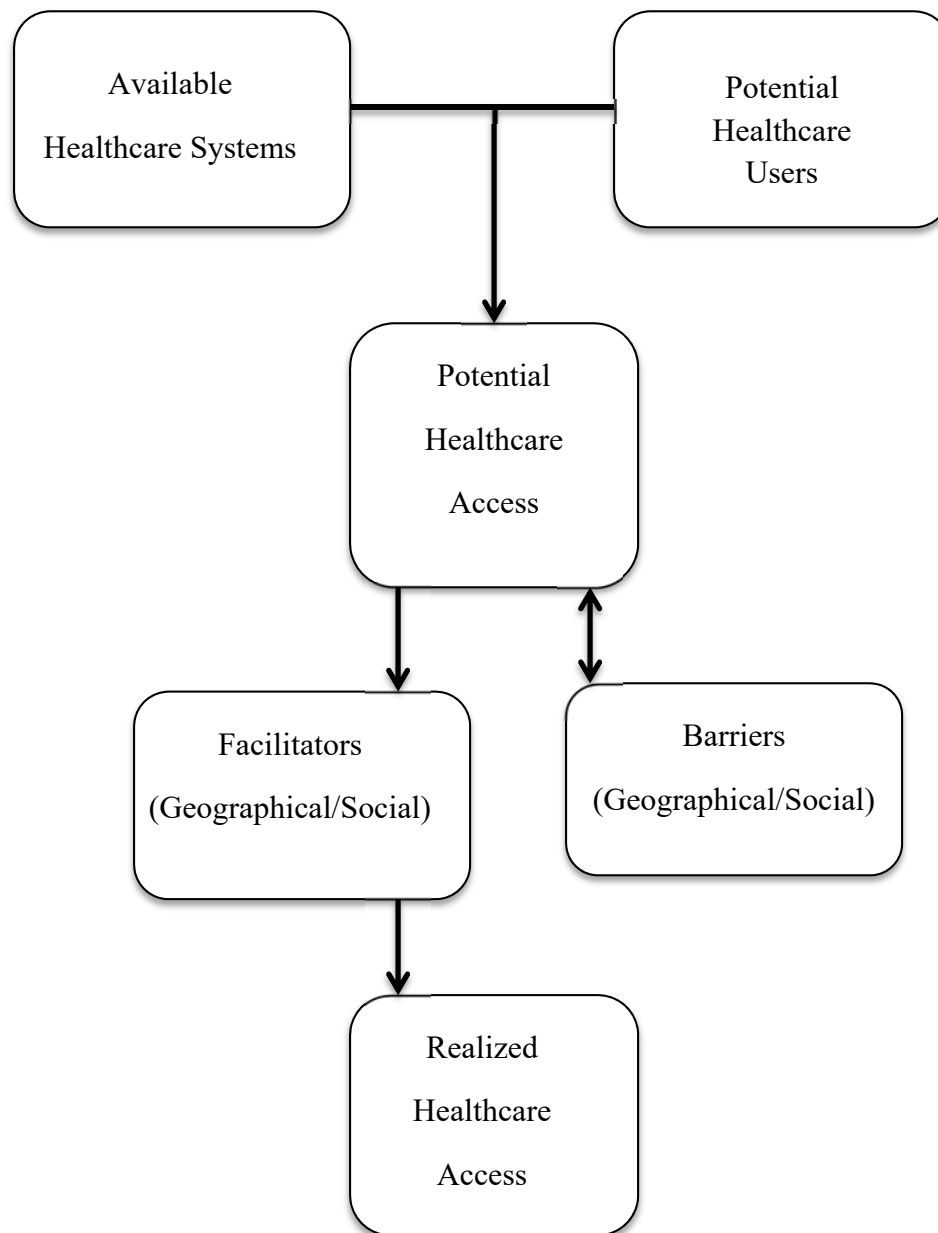


Figure 1. A Model of Access to Healthcare. The combined characteristics of healthcare systems and potential healthcare users determine potential healthcare access. The transformation of potential access to realized access is mediated by geographical and social facilitators, and blocked by geographical and social barriers. Adapted with permission from “Access to Healthcare: A Conceptual Framework and its Relevance to Healthcare Planning” by A. A. Khan and S. M. Bhardwaj, 1994, *Evaluation & the Health Professions*, 17, p. 67. Copyright 1994 by Surinder M. Bhardwaj (see Appendix B).

Population and Sample

The population from which the sample was taken consisted of residents of the HA who are 18 years and older. The sample of interest was residents of the HA who are at least 18 years old and who have experienced barriers to healthcare access in the HA in the past 12 months. The questionnaire was available to anyone interested, and the sample was extracted from all responses using two exclusionary questions at the beginning of the questionnaire. If either exclusion question was answered in the negative, the respondent was instructed to discontinue the survey and place it in the secured box at the sampling location. If both questions were answered in the positive, respondents were instructed to complete the remainder of the survey before putting it in the secured box.

Questionnaire Development

Before beginning the project, the questionnaire was pilot-tested by a group of students from the Master of Science, Nursing Science program at the University Alaska Anchorage (UAA) and Nurse Practitioners from HA. The feedback received from the pilot subjects was incorporated into the design of the questionnaire. A letter of informed consent, approved by the UAA Institutional Review Board (IRB), accompanied each questionnaire. Using Flesch-Kincaid scoring, the questionnaire scored 80.0 out of 100 (easy), and was rated at grade 4.5 reading level.

Questionnaire Content

For participants who met the inclusion criteria, the self-administered questionnaire consisted of two brief parts (Appendix A). The first part was a modification of a question from the MAPP-SKP (2013), asking respondents to identify barriers to healthcare access they had experienced in the prior 12 months. Twelve possible structured answers were available to help identify whether cost, lack of specialists, transportation or time are barriers in the HA. There was also an additional fill-in option to allow respondents to identify barriers not considered in the

structured answers. The structured answer options included the barriers to all SKP services identified by MAPP-SKP (2013) and other potential barriers identified in the literature.

Respondents were instructed to check all answers that apply and to use the fill in for options not listed. This question/answer format is identical to that used by Lai and Surood (2010) in their telephone survey.

The second part of the questionnaire requested anonymous demographic data. There were check boxes for gender, household income level (based on the 2014 Alaska poverty level), marriage status, and residence location within the HA. Fill-in answers were used to solicit age, ethnicity, and residence location (if not included in the offered answers). There was no individual identifying information. Each questionnaire had a unique color-coded mark assigned to each sampling location.

Data Analysis

The barriers of cost, transportation, and time each had multiple structured answers that described a different aspect of the barrier, while there was only one answer related to the lack of specialists. This structure meant that a respondent who experiences a given barrier (RWB) could choose multiple answers to describe that barrier. The answers were so structured to try to capture more detail about what concepts helped define a particular healthcare access barrier. However, when tabulating the responses, a barrier was attributed to a RWB only once, regardless of how many of the detailed barrier concepts were chosen.

Results

One hundred twenty four questionnaires were returned. Fifty (40%) respondents met the inclusion criteria of being at least 18 years of age, and having experienced barriers to healthcare access in the HA in the previous 12 months. The barriers identified by respondents were cost,

lack of a specialty, transportation, time, and mistrust/dislike of healthcare providers (see Figure 2). Cost was a barrier to 37 (74%) of RWBs. A lack of specialty healthcare was identified by 18 (36%) of RWB. Time was identified as a barrier by 13 (26%) RWBs and 11 (22%) RWBs identified transportation as a barrier. Three (0.06%) RWBs used the open answer option to add that they had a mistrust/dislike of the local providers. One written response, not included in the final description of barriers, was “My Medicaid situation is complicated.”

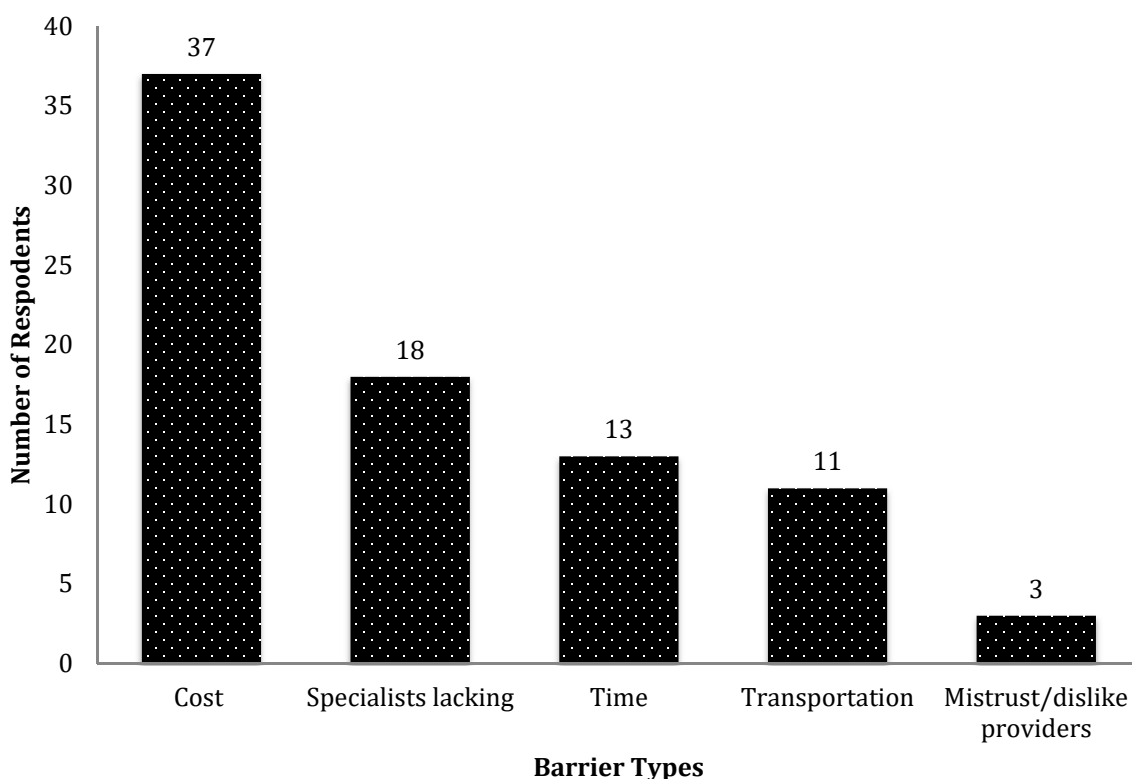


Figure 2. The number of respondents per healthcare access barrier type in the Homer Area, Alaska.

Demographic information was furnished by 37 (74%) of the RWBs. Of these, 19 (51%) were female and 18 (49%) were male. Thirty-two (91%) identified their ethnicity as white, two as non-white (5.7%), and one identified as European. The age range spanned 53 years, from 20

to 73 years of age, inclusive. The mean and median age were 45 years, and the mode was 45 and 46 years of age. Twenty-one (56%) RWBs had income equal to, or less than the 2014 Alaska poverty level income.

Discussion

Five different types of barriers to healthcare access were identified for the HA. Four of the barriers (cost, lack of specialists, transportation, and time) were identified through the structured answers offered on the questionnaire. A fifth barrier of mistrust/dislike of providers was also identified. Among all RWBs, all four concepts of the cost barrier were chosen, suggesting that some people still do not have healthcare insurance and those with insurance are still facing barriers. Specifically, some with Medicaid are finding HA providers do not universally accept this form of insurance. For others, out-of-pocket costs (OOPC) are barriers, despite having health insurance. This finding parallels findings elsewhere in the United States, post PPACA implementation (Mitts and Fish-Parcham, 2015; Shartzler, Long, and Benatar, 2015).

Lack of specialists was identified as a barrier to HA healthcare. Though most RWBs did not mention any particular specialty, two did note that dermatology is a specialty needed in the HA and a third RWB mentioned there is a need for inpatient hospice services. Interestingly, Sapru, Cassidy, and Sibbald (2014), looking at two populations in rural northern Ontario, Canada, found that though specialists were lacking in each location, respondents did not feel that access to specialists was a barrier. One reason for the difference between the current study and the findings of Sapru et al. (2014) may be in the travel distances required to see specialists. In the

Canadian study, specialists were located within 60 km of the study areas, while HA residents must travel as far as 366 km to see some specialists.

The time it takes to get an appointment and the time waiting in the clinic were the two most commonly chosen time-related concepts; though it is hard to know whether the waiting time required to get an appointment is related to the acuity of an illness or the number of available healthcare providers, or both. It is also impossible to know what constitutes too much time waiting while in the clinic. This could be a function of limited time allowed away from work or over-booking of patients. In this rural area, long waits in the clinic could be related to patients with urgent care needs that arrive and supersede those waiting for scheduled appointments. It is also interesting that some RWB still report they are unable to get care due to their work schedules, since some HA clinics have expanded their hours to include weekends and special walk-in evening clinics.

Transportation as a barrier in the HA is primarily related to the natural environment and issues of road maintenance. These findings are in line with those of Goins et al. (2005), but are contrary to other findings (Buzza et al., 2011; Pathman et al., 2006) where travel time and distances required to get to healthcare were barriers. However, in the current project neither travel time nor travel distance were concepts offered as structured answers. Interestingly, a few veterans who spoke with me, but did not fill out questionnaires, felt that they were able to get all of their healthcare needs met through the Veterans Administration (VA), because the VA provides transportation to VA providers in various locations in the state. This suggests that without transportation, the veterans might not get the healthcare they need through the VA. On the other hand, another person, who also did not fill out a questionnaire, mentioned that she needed specialists not available in the HA, and so she drives to Anchorage. She did not see either

the transportation or the lack of local specialists as barriers to her healthcare access. Lack of vehicle ownership was identified by one RWB and has been noted by others (Yang et al., 2006) as a barrier to healthcare access.

The final concept that was identified by three RWBs was mistrust/dislike of the local providers. Of all the recognized barriers, this is the most difficult to define in the context of this project. It may be that there are concerns that living in a small community precludes confidentiality. It may be that a person's own sense of embarrassment about private health issues simply makes it too difficult to see the same local provider they may see at the grocery store. It is also possible that patients may not trust the decisions made by local healthcare providers. One RWB summed up his/her experience very clearly by writing: "Doctors don't care enough, they don't take time, and they are judgmental." Though understanding the issues that underlie such a statement is clearly beyond the scope of this project, the issue of mistrust/dislike of healthcare providers is no less important than any of the other barriers that have been identified.

The subsample of RWBs who supplied demographic data was too small to make any inferences, but there were several findings worthy of note. The gender proportion of the RWBs furnishing demographic data was similar to that found by the U.S. Census Bureau (2014) for Homer. Females made up 51% of the project sample, compared to 50% females in the U.S. census (2014). Additionally, the proportion of RWBs identifying as white ethnicity was also similar to the same from the U.S. Census Bureau (2010) for Homer. Ninety-one percent of the project sample identified as white, and 89% identified as white in the U.S. census (2010). Finally, the proportion of RWBs that indicated they earned income equal to or less than the 2014 Alaska poverty level was 56%. Though no conclusions can be drawn from this finding, it is another factor that underlies cost as a barrier to healthcare access.

Strengths and weaknesses

The most important strength of the current project is that it is the first-ever effort in Alaska that attempts to describe perceived barriers to healthcare access, and it would be easily replicated in other regions of the state. Another strength is that the results lend detail to the general findings of the MAPP-SKP. Additionally the findings can guide local efforts to reduce barriers to healthcare access in the HA. A weakness is that the sample size was small. One reason for this may be related to the fact the third MAPP-SKP survey was being conducted at the same time. Thus, it is possible that HA residents experienced survey fatigue. Additionally, some people verbalized their belief that the two surveys were one and the same. This may have decreased the number of survey respondents for both surveys. The small sample size (50) allows data to be described, but it precludes any statistical analysis. Therefore, the project must be viewed as a pilot effort that can serve as a springboard for a larger effort and fuel local conversations about how to get more healthcare to more people.

Conclusion

Having identified healthcare access barriers in the HA is a tacit acknowledgment that there is room for improvement in local healthcare delivery. It is important to recognize that the barriers people face are not just direct medical costs. In this remote area, the natural environment and civic infrastructure also have roles. In order to grow a healthcare program that is accessible by all in the HA, it is important to start to think outside the box and beyond healthcare itself. It must be recognized that healthcare includes not only the cost of clinic visits, prescriptions, and treatments, but also the ability of patients to get to providers in the first place. Therefore, improving access to healthcare in the HA may necessitate a local paradigm shift or

reconfiguration (Khan and Bhardwaj, 1994) to one that considers dramatic changes in when, where, and how healthcare is delivered. Such a paradigm shift might see the Nurse Practitioner delivering care to people in their homes or businesses, or by mobile clinic. Or perhaps there are partnerships to be formed between taxi companies, volunteer organizations, and healthcare entities that can ensure that people get to their healthcare, regardless of weather and road maintenance barriers. Perhaps the answer is a Nurse Practitioner-directed free or very low cost community clinic. Regardless of the method of delivery, as healthcare providers and in following with Paterson and Zderad (1976), it is our responsibility to heed the call of the communities we serve. If we are to respond to such a call, then we must critically and creatively work to improve healthcare access in the HA. And just as the provider-patient relationship is a partnership, so too must healthcare providers partner with the community in which they live and serve. To this end, these data will be shared with healthcare and other entities in the HA, in the hope that novel ways of healthcare delivery, that can better serve the HA community, will come to fruition.

Dissemination of Information

For the findings of this study to be most useful, several methods of data and information sharing will take place. A manuscript has been submitted to *The Journal of Healthcare for the Poor and Underserved*. Publication of the manuscript will add to the body of literature that addresses international healthcare access issues. Specifically, attention will be brought, for the first time, to the challenges faced by rural Alaska residents trying to access healthcare. The data have been shared with the South Peninsula Hospital and the MAPP-SKP project coordinator. The graduate student attended a meeting of the MAPP-SKP to discuss innovative solutions to relieve healthcare access barriers. Discussions are already underway with one Homer volunteer organization to see if transporting people to healthcare appointments could be added to an

existing program. The graduate student and family have established a non-profit organization called the Homer Community Free Clinic, and an endowment has been created, to which community members have contributed. The aim of the organization is to provide healthcare to the underserved. The concept of a free clinic has been shared with many people in the Homer community, and it has met with all positive response, both from potential volunteer providers, and from people who would be helped by receipt of free healthcare. The graduate student is already working on a plan to secure larger scale private funding, based on other free clinic models. Based on the findings from this study, the likely method of healthcare delivery will be through some form of a mobile healthcare clinic. Though this method of healthcare delivery would be novel for the Homer Area, there are many examples of such delivery systems in other parts of the United States.

References

- Aday, L.A., & Andersen, R. (1974). A framework for the study of access to medical care. *Health Services Research, 9*(3), 208-220. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/pmc1071804/?tool=pmcentrez&report=abstract>
- Alaska Department of Labor. (n.d.). *Alaska population estimates: Cities and census designated places (CDP), 2010-2015*. Retrieved from <http://labor.state.ak.us/research/pop/popest.htm>
- Buzza, C., Ono, S.S., Turvey, C., Wittrock, S., Noble, M., Reddy, G., . . . Reisinger, H.S. (2011). Distance is relative: Unpacking a principal barrier in rural healthcare. *Journal of General Internal Medicine, 26* (Supplement 2), 648-654. doi: 10.1007/s11606-011-1762-1
- Carranti, B., Myers, G., Bowers, L., & Satterly, L.B. (2012). A description of patient characteristics, insurance status and travel distance at a free inner-city clinic. *Journal of the New York State Nurses Association, 43*(1), 13-19. doi: 10.1080/13561820701773041
- Frazier, R., Hanna, V., & Wilson, M. (2007). *Understanding barriers to health insurance of uninsured and sporadically insured Alaskans*. Retrieved from http://iser.uaa.alaska.edu/Publications/health_care/focusGroupsReport.pdf
- Goins, R.T., Williams, K.A., Carter, M.W., Spencer, S.M., & Solovieiva, T. (2005). Perceived barriers to healthcare among rural older adults: A qualitative study. *The Journal of Rural Health, 21*(3), 206-213. doi: 10.1111/j.1748-0361.2005.tb00084.x
- Grove, S.K., Burns, N., & Gray, J.R. (2013). *The practice of nursing research. Appraisal, synthesis, and generation of evidence*. St. Louis, MO: Elsevier Saunders.
- Hwang, S.W., Ueng, J.M., Chiu, S., Kiss, A., Tolomiczenko, G., Cowan, L., . . . Redelmeier, D.A. (2010). Universal health insurance and healthcare access for homeless persons. *American Journal of Public Health, 100*(8), 1454-1461. doi: 10.2105/AJPH.2009.182022
- Karaca-Mandic, P., Choi-Yoo, S.J., Lee, J., & Scal, P. (2014). Family out-of-pocket health care burden and children's unmet needs or delayed health care. *Academic Pediatrics 14*(1), 101-108. doi: 10.1016/j.acap.2013.10.005
- Keis, R.M., DeGeus, L.G., Cashman, S., & Savageau, J. (2004). Characteristics of patients at three free clinics. *Journal of Healthcare for the Poor and Underserved, 15*(4), 603-617. doi: 10.1001/archinternmed.2010.107
- Khan, A.A. & Bhardwaj, S.M. (1994). Access to healthcare. A conceptual framework and its relevance to healthcare planning. *Evaluation & the Health Professions, 17*(1), 60-76. doi: 10.1177/016327879401700104

- Kleiman, S. (2010). Josephine Paterson and Loretta Zderad's Humanistic Nursing Theory. In M.E. Parker & M.C. Smith (Eds.), *Nursing theories and nursing practice*. (pp. 337-350). Philadelphia, PA: F.A. Davis Company.
- Kullgren, J.T., McLaughlin, C.G., Mitra, N., & Armstrong, K. (2012). Nonfinancial barriers and access to care for U.S. adults. *Health Services Research*, 47(1.2), 462-485. doi: 10.1111/j.1475-6773.2011.01308.x
- Lai, D.W. L., & Surood, S. (2010). Types and factor structure of barriers to utilization of health services among aging South Asians in Calgary, Canada. *Canadian Journal on Aging*, 29(2), 249-258. doi: 10.1017/S0714980810000188
- MAPP of the Southern Kenai Peninsula. (2013). *Southern Kenai Peninsula, Alaska community health needs assessment*. Retrieved from <http://mappofskp.net/content/community-health-needs-assessment>
- Mitts, L., & Fish-Parcham, C. (2015). Non-group health insurance: Many insured Americans with high out-of-pocket costs forgo needed health care. Retrieved from http://familiesusa.org/sites/default/files/product_documents/ACA_HRMSurvey%20Urban-Report_final_web.pdf
- Paterson, J. & Zderad, L. (1976). *Humanistic nursing*. Retrieved from <http://www.gutenberg.org/cache/epub/25020/pg25020-images.html>
- Pathman, D.E., Ricketts, T.C., III, & Konrad, T.R. (2006). How adults' access to outpatient physician services relates to the local supply of primary care physicians in the rural southeast. *Health Services Research*, 41(1), 79-102. doi: 10.1111/j.1475-6773.2005.00454.x
- Sapru, I.S., Cassidy, K., & Sibbald, S.L. (2014). Perceived barriers to accessing specialized medical care in rural communities of Ontario: A pilot study. *Western Undergraduate Research Journal of Health and Natural Sciences*, 5(1): Article 4. Retrieved from <http://ir.lib.uwo.ca/wurjhns/vol5/iss1/4/>
- Shartzler, A., Long, S.K., & Benatar, S. (2015). Health care costs are a barrier to care for many women. *Health Reform Monitoring Survey*. Retrieved from <http://hrms.urban.org/briefs/Health-Care-Costs-Are-a-Barrier-to-Care-for-Many-Women.pdf>
- Syed, S.T., Gerber, B.S., & Sharp, L.K. (2013). Traveling towards disease: Transportation barriers to healthcare access. *Journal of Community Health*, 38, 976-993. doi: 10.1007/s10900-013-9681-1
- U.S. Census Bureau. (2010). QuickFacts Kenai Peninsula Borough, Alaska. Retrieved from <http://www.census.gov/quickfacts/table/PST045215/02122,0233140>

- U.S. Census Bureau. (2014). QuickFacts Kenai Peninsula Borough, Alaska. Retrieved from <http://www.census.gov/quickfacts/table/PST045215/02122,0233140>
- U.S. Department of Health and Human Services. (2014). *Health centers and the Affordable Care Act fact sheet*. Retrieved from <http://bphc.hrsa.gov/about/healthcenterfactsheet.pdf>
- Wisk, L.E. & Witt, W.P. (2012). Predictors of delayed or forgone healthcare for families with children. *Pediatrics* 130(6), 1027-1037. doi:10.1542/peds.2012-0668
- Yang, S., Zarr, R.L., Kass-Hout, T.A., Kourosh, A., & Kelly, N.R. (2006). Transportation barriers to accessing healthcare for urban children. *Journal of Healthcare for the Poor and Underserved*, 17(4), 928-943. doi: <http://dx.doi.org/10.1353/hpu.2006.0137>
- Ziller, E.C., Lenardson, J.D., & Coburn, A.F. (2012). Healthcare access and use among the rural uninsured. *Journal of Healthcare for the Poor and Underserved*, 23(3), 1327-1345. doi: 10.1353/hpu.2012.0100

Appendix A

Project Informed Consent and Questionnaire.

Describing Barriers to Healthcare Access in the Homer Area

Graduate Student:

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Molly Rothmeyer, DNP, FNP-BC, CPNP-AC
Assistant Professor
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University of Alaska Anchorage
(907) 786-6375; mkrothmeyer@uaa.alaska.edu

Description: We want to learn what barriers keep people from getting healthcare in the Homer Area. You are invited to take this survey if you are at least 18 years old, and have had difficulty getting your healthcare needs met in the Homer Area, in the past 12 months. Completing this project is one requirement for my Master's in Nursing Science degree. To participate, all you need to do is fill out the attached questionnaire. It will take you between 30 seconds and 2 minutes to complete. Really! Completing the questionnaire implies your informed consent.

Anonymity and Confidentiality: Neither your name nor any other personal information will be recorded or attached to the questionnaire or your responses. This means I will be unable to connect your questionnaire or answers to you. The data will be grouped and will be stored in a locked file cabinet accessible only to me. After three years, the data will be destroyed. There is the possibility that the results of this project will be published, and again, the data will be grouped disallowing anyone reading the published paper to identify you or your individual data.

Risks/Benefits: There are no risks or direct benefits for your participation in this study. However, it is my hope that the data will be used to help guide how healthcare is delivered in the Homer Area in the future.

Voluntary Nature of Participation: Your participation in this study is strictly voluntary. You, and only you, get to decide whether to take a questionnaire, whether to fill it out, and whether to return it to the locked response box. You should feel no obligation to the graduate student, or officials of any organization where you may find the questionnaire available.

Contact information: If you have any questions about the project, please contact either of us- Lisa Zatz or Dr. Molly Rothmeyer- using the above contact information. If you have any questions about your rights as a project participant, please contact Sharilyn Mumaw, Research Compliance Officer, at (907) 786-1099.

Thank you for your participation!

Describing Barriers to Healthcare Access in the Homer Area

Questionnaire

Are you at least 18 years old? Yes No

In the past 12 months, have you had difficulty getting your healthcare needs met in the Homer Area? Yes No

If you answered *yes* to *both* questions, *please continue* to fill out this survey. Otherwise, please stop and put your questionnaire in the locked box.

1. What has kept you from using healthcare services in the Homer Area, over the past 12 months?

Please check all that apply

- I do not have health insurance.
- Healthcare costs too much.
- I have health insurance, but out-of-pocket costs are still too much.
- No one accepts my kind of insurance. My insurance is: _____
- I need a specialist that we do not have here.
- I can't/don't drive in bad weather.
- I can't/don't drive in the dark.
- My road is not maintained year round.
- I don't have my own transportation.
- I can't leave work to go to appointments.
- Clinic visits take too long.
- Wait time for an appointment is too long.

Please list any other reasons you can't get healthcare:

2. Please tell me a little about yourself.

I am:

- male
- female

I live in:

- Homer
- Kachemak City
- Kachemak Selo
- Vosnesenka
- Razdolna
- Other _____

My ethnicity is: _____

My age is: _____

My HOUSEHOLD income is the amount shown in the table

- Yes
- No

Persons in family/household	Income
1	\$14,720
2	\$19,920
3	\$25,120
4	\$30,320
5	\$35,520
6	\$40,720
7	\$45,920
8	\$51,120

equal to or less than below:

I have _____ dependents

Appendix B

Permissions

From: Surinder Bhardwaj <surinder.bhrdwj@gmail.com>
Subject: Re: Request permission to modify your schematic of the Model of Access to Healthcare
Date: April 11, 2014 4:31:30 GS AKDT
To: Lisa Zatz <Lisa@wildlifehd.com>

Dear Lisa,

It is a pleasure to know that you are developing a framework for healthcare access in Alaska. Since you have not been able to contact Dr. Abdullah Khan, you have my permission to modify the schematic in our article to develop your research with due credit to the authors, especially to Dr. Abdullah. It is commendable that you are following the protocol of professional ethics. That speaks highly of your professionalism.

Wishing you well in your future research,

Surinder Bhardwaj, PhD
Professor Emeritus, Geography
Kent State University
Kent, OH 44242
330-678-9460

On Fri, Apr 11, 2014 at 2:20 AM, Lisa Zatz <Lisa@wildlifehd.com>