Motivation and Retention of Itinerate/Rural Public Health Nurses

By

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ABSTRACT

Alaska is experiencing rural public health nursing shortages as are many other rural public health services globally. The needs of rural Alaskans are many and the challenges public health nurses (PHNs) face, such as access to their communities, can be overwhelming. In light of these two concerns, it is recommended that the Section of Public Health Nursing identify what factors motivate current PHNs and use this knowledge to target nursing recruits who will be the "right" fit. As a result, nursing retention rates will rise and the beneficiaries will be the Alaskan people.

ACKNOWLEDGEMENTS

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I am grateful for my second reader Elsa DeHart, for taking her time this summer to help me complete this project. I was amazed at the response I received when I sent out a general email to all Alaska PHNs; it was the easiest part of this whole process. It solidifies my belief that I've made the right choice in moving to Alaska and becoming part of this amazing group of nurses. Thank you for welcoming me and giving me the opportunity to be the "right" person for the job.

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INTRODUCTION

Overview

The mission of the Alaska Division of Public Health, Section of Public Health Nursing, as stated in the 2014 Strategic Plan, is "Protecting and improving the health of Alaskans through partnering with individuals, communities, and systems while advancing self-reliance, dignity and cultural integrity" (Alaska Division of Public Health, 2014, para 3). Public health nursing is a nursing specialty with the focus of preventing disease, and protecting and promoting the health of the population (American Public Health Association, 2013a). Itinerant public health nurses (PHNs) are part of the same nursing specialty with the same focus only they travel from place to place providing services to their area of responsibility. PHNs accomplish the above mentioned goals by using knowledge from social, public health, and nursing sciences. This dynamic process works on multiple levels: the individual, population (communities and groups) and system (policies, laws, and organizations); through supporting partners, such as clinics, faith-based organizations, or community services groups, etc., and by assessing, planning, implementing, and evaluating evidence-based interventions. The hope of a healthier America is the driving motivation for all PHNs.

Public health nursing practice is guided by five essential systems that provide the framework for a "synergy of systems" (American Nurses Association [ANA], 2013b, p. 12). In the center circle are the Core Public Health Functions (assessment, assurance, and policy development), surrounded by the Principles of Public Health Nursing Practice, and followed by the Essential Public Health Services, then the Core Competencies for Public Health Nursing

Practice with the last system being the ANA Standards of Public Health Nursing Practice (Figure 1.1). These systems are interrelated and have a dynamic interaction. Though all public health practice stems from the core functions of assessment, assurance, and policy development, each system delineates the standards, competencies, the essential services, and the principles by which PHNs direct their work to improve population health.

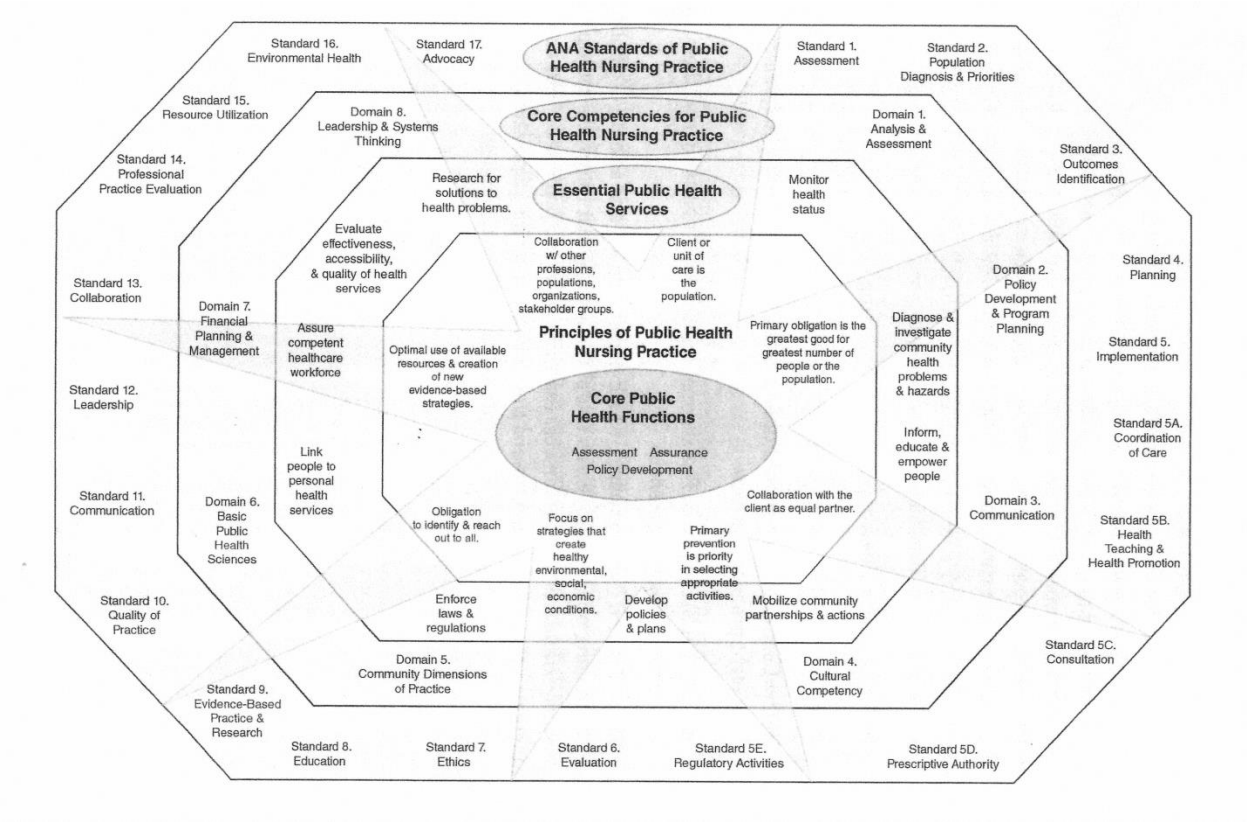
Studies have looked at the competency level of PHNs in rural areas, with the ANA recommending that the minimum education level be baccalaureate prepared nurses; however, some rural areas have struggled with filling their open positions (Knudsen & Meit, 2011). The importance of the competent PHN was best said by the American Public Health Association (2013b) policy statement "Public health nurses (PHNs) are the largest discipline within the public health workforce" (para 1). The rural PHN holds an important position in healthcare, and documented disparities between urban and rural populations are a driving force to recruit and retain a strong and competent public health nursing force (Meit & Knudson, 2009).

In Alaska, recruiting and retaining PHNs who will be the best fit for the job, those with the experience, knowledge, and desire to work in the remotest of areas is a particularly big challenge. The turnover rate for PHNs in Alaska for fiscal year 2013 was 34% (Alaska Department of Health and Social Services, 2014). The Section of Public Health Nursing (SOPHN) has set high recruitment standards, such as entry level PHNs must have a bachelor's degree, and advancement is determined by either experience in public health or having completed a graduate degree (Alaska Division of Public Health, 2015b). These standards are imperative as itinerant PHNs in Alaska are required to function with few resources, apply independent nursing judgement, often in harsh environments. These competencies and knowledge are gained from a higher nursing education level and field experience.

FIGURE 1.1

THE ART AND SCIENCE OF PUBLIC HEALTH NURSING PRACTICE:

A SYNERGY OF SYSTEMS



Source: ANA (2013a)

PHNs are selected based on experience, knowledge, and temperament to ensure they can endure the environmental and cultural difficulties of life in Alaska in addition to the job expectations.

Purpose of Paper

The purpose of this paper is to review literature about Alaska Public Health Nursing practice and describe the challenges itinerate public health nurses face. In addition, motivational tools and retention and recruitment tools will be evaluated to determine their effectiveness for use by the Alaska Section of Public Health Nursing. It is hoped that through their use the health of the Alaska population will improve and advance the public health mission.

CHAPTER II

LITERATURE REVIEW

Research in recruitment and retention of nurses in the rural healthcare setting has had a lot of attention, including efforts by the World Health Organization to fill these gaps (Buchan et al., 2013). With nursing shortages and high turnover rates, it is important to identify what motivates the different types of healthcare providers to remain in their positions.

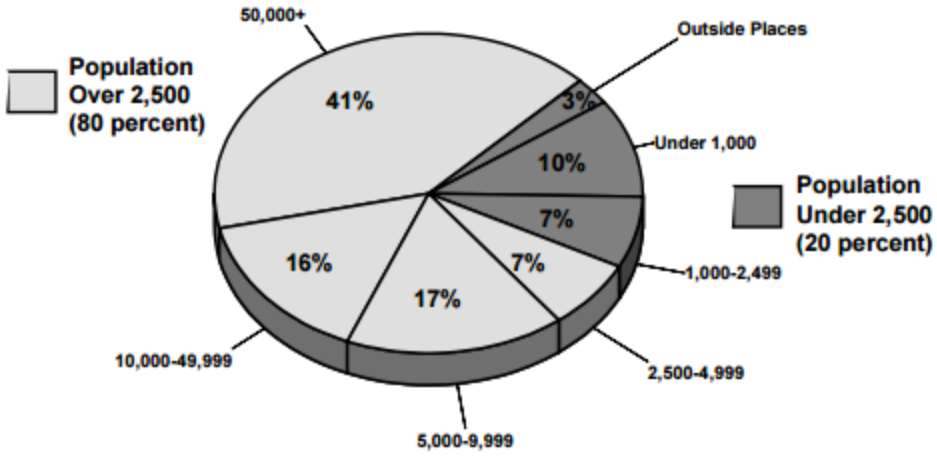
However, researchers have only recently begun to differentiate between rural and urban public health nursing settings. One of the early tasks was to define the rural healthcare setting. In their literature review, Skillman, Palazzo, Keepnews, and Hart (2006) found that researchers used population size, geographic size, or the distance from the nearest urban area as the criteria for a rural setting.

Urban and Rural

The U.S. Census (2015) defined urban as an area with at least 50,000 people, urban clusters are areas with at least 2,500 but less than 50,000 people, and rural is everything outside of this definition. Using this definition, 20% of the population in Alaska is considered rural. Rosenblatt, Casey, and Richardson (2002) designated the cities of Anchorage and Fairbanks as urban for their research based on the composition of rural public health workforces in three predominately rural states: Alaska, Montana, and Wyoming. However, based on current population census, 41% live in urban areas (greater than 50,000) and only 20% live in areas of less than 2,500. The remaining 38% live in areas with populations between 2,500 and 50,000 (Figure 2.1) (Alaska Department of Labor and Workforce Development, 2013).

FIGURE 2.1

ALASKA'S POPULATION BY SIZE OF PLACE, 2013



Alaska Department of Labor and Workforce Development (2013)

Rural and Urban Alaska

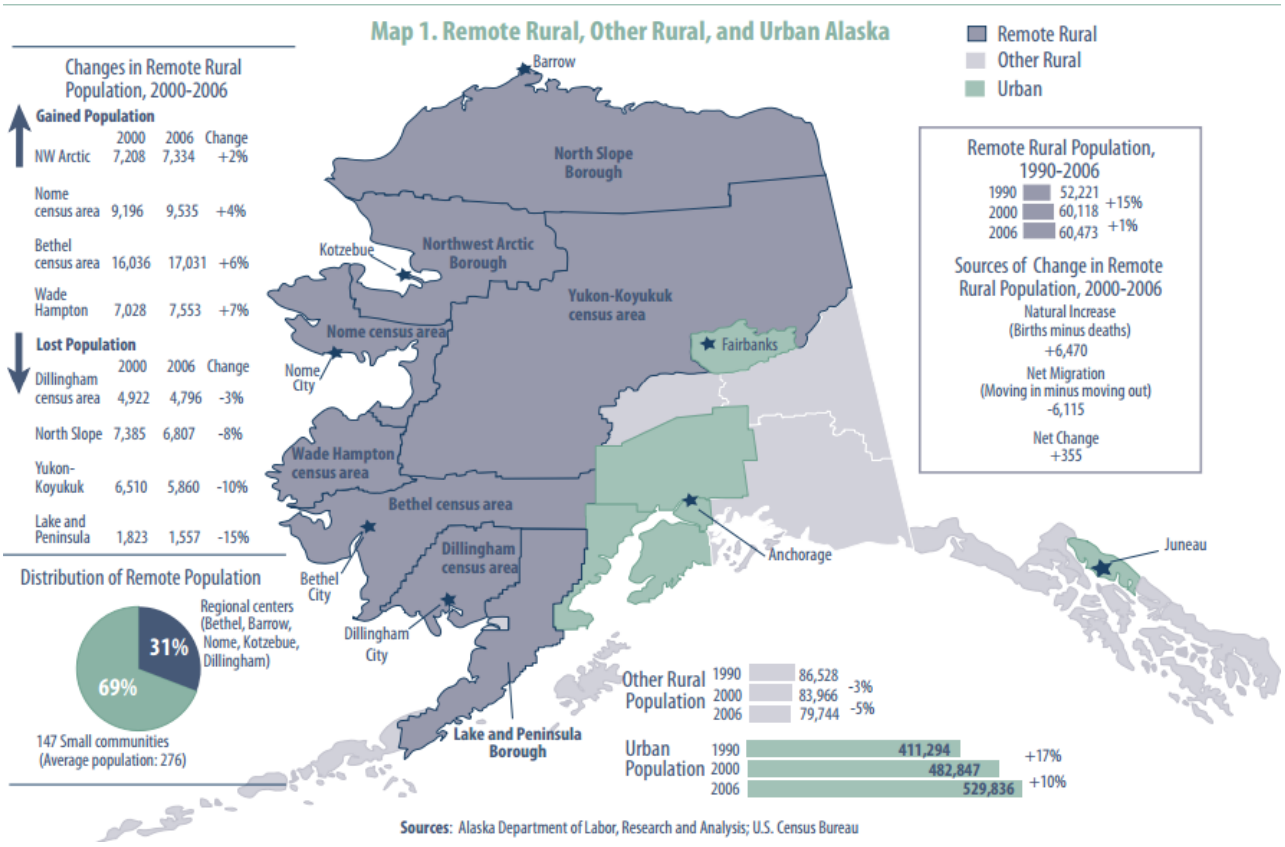
Economists at the University of Alaska at Anchorage have broken the Alaskan rural/urban debate down even further. There is remote rural, other rural, and urban Alaska (Figure 2.2). The remote rural region is defined as the "North Slope, Northwest Artic, and Lake and Peninsula boroughs and the Wade Hampton, Bethel, Nome, Dillingham, and Yukon-Yoyukuk census areas" (Goldsmith, 2008. p. 2). While a third of the population live in the larger cities of Nome, Bethel, and Dillingham, the rest live in smaller communities, and approximately 80% are Alaskan Natives who have some mix of subsistence living and jobs. Subsistence activities are the non-commercial, traditional native activities of hunting, fishing, berry picking, and preserving meat and fish (Goldsmith, 2008). The 2012 census identified 221 Alaska Native Village Statistical Areas varying in population size from 65,000 to as few as 3, and some villages are seasonal where during certain parts of the year no one resides (Alaska Department of Labor and Workforce Development [ADLWD], 2013).

Transportation and Access

What also makes remote rural Alaska or "Bush Alaska" unique is access. Most of Alaska is not connected by a road system nor has access to a ferry system. Access to these areas is by plane or boat, or in the winter by snowmachine or dog sled. Few live so remotely that access is only by bush plane; however, cities such as Nome, though having a large population of 3,659 (ADLWD, 2013), is accessible in the summer by plane, and in the winter by plane, dog sled, or snowmachine. It is the same for Bethel—access is only by river or air. According to the Alaska Department of Transportation & Public Facilities (DOT&PF) (2015), 66% of the 6,500 miles of DOT&PF roads (the major corridors) are paved and only 31% of all public roads (those operated by the boroughs, tribes, or other etc.) in Alaska are paved.

FIGURE 2.2

REMOTE RURAL, OTHER RURAL, AND URBAN ALASKA



Source: Goldsmith (2008)

Cultural Differences

Cultural differences between rural and urban populations in Alaska are much the same as in other states. There are 221 Alaskan Native villages struggling to retain or regain their Native culture, be it Athabascan in the interior; Yup'ik and Cup'ik on the west coast, who are still living traditional subsistence lifestyles; the Unangax and Alutiiq (Sugpiaq) maritime peoples of the south and southwest; the Inupiaq and the St Lawrence Island Yup'ik people who are also hunting and gathering societies of the north and northwest; and the Eyak, Tlingit, Haida and Tsimshian of the southeast (Alaska Native Tribal Health Consortium, 2015b). Further, because Alaskans have a tradition of religious freedoms, there are numerous secluded religious communities scattered throughout Alaska. These communities partake in many government assistance programs, such as Denali Kid Care, Alaska's Child Health Insurance Program, and/or Medicaid. PHNs travel to Alaska native villages, military bases, and closed religious communities such as Whitestone Community Association and Russian Old Believers where it might take months of relationship building to get an invitation to visit.

Rural and Urban Public Health Nursing

One major difference between the rural and urban public health nursing is the ratio of nurse to population. Historically there are fewer healthcare services in rural areas than urban ones, and poverty rates are often higher in rural areas which classify them as more vulnerable populations. However, the results can be confusing when populations are generalized in this way. Skillman et al. (2006) evaluated data from the 2000 National Sample Survey of Registered Nurses and assigned the nurses to either rural or urban based on their zip code from data retrieved by the Rural-Urban Community Area classification. They discovered the following:

- approximately 20% of U.S. registered nurses (RNs) work in rural areas,

- rural RNs are less likely to have a bachelor's degree,
- rural RNs are more likely to work full-time,
- rural RNs are less likely to work in a hospital,
- rural RNs commute more than urbans ones,
- rural RNs make a lower salary, and
- the nurse per 100,000 population ratio decreased significantly the more rural the work location (Skillman et al., 2006).

The ANA does not differentiate between rural or urban public health nursing. However, one of the core competencies in the Scope and Standards of Practice states that the PHN "Adapts the delivery of public health nursing care in consideration of changes in the public health system, and the larger social, political, and economic environment" (ANA, 2013b, p. 80). This is direct guidance for the rural PHN.

Challenges of Rural Public Health Nursing

Knowing that rural PHNs have high turnover and a nursing shortage is looming, researchers have sought to answer some fundamental questions about rural PHNs to help the recruitment and retention process. In general it was found that rural PHNs were generalists, providing a majority of healthcare services to their area. In most parts of the U.S., rural PHNs did not have the highest level of training, but were still paid less then urban PHNs (Bigbee, Gehrke, & Otterness, 2009).

Other challenges that rural PHNs face is that rural populations are less likely to have health care coverage, despite the Affordable Care Act. States, like Alaska, that have declined to expand Medicaid have left large chunks of rural populations with little or no coverage (Gorski, 2011). Rural Americans are also more likely to have lower income levels, a known health

disparity (Gorski, 2011).

Sparse Resources

Rural communities often have sparse resources or difficulty accessing resources. There is often no or limited medical care, such as general practitioners and limited mental health services in rural communities (Allen, 2012; Hegney, 2007). In contrast to urban health centers, rural PHNs often offer more services without benefit of the team approach, including postpartum care, community assessments, and outreach or teaching (Bigbee et al., 2009). Vulnerable populations or chronically ill populations don't have access to a medical home, and rural nurses must become advocates or case managers for these populations, often being on call constantly (Lenthall et al., 2009).

Isolation

One of the most frequently cited challenges is isolation (Allen, 2012; Bigbee et al., 2009; Hegney, 2007). In fact, Bigbee et al. (2009) state this is a "distinguishing characteristic (p. 4)" of rural nursing. There is simple geographic isolation, and it depends on the nurse whether this is positive or negative. PHNs might also experience professional isolation. In a small community there might be limited or no Internet access, and little way to communicate needs or seek advice from leadership or colleagues (Turner, Stavri, Revere, & Altamore, 2008). Turner et al. (2008) identified colleagues as being the more reliable and efficient sources of information for rural PHNs. Reliable access to peers, administrators, supervisors, advanced nurse practitioners, or state program personnel is needed (Bigbee et al., 2009).

Integration into the Community

Rural PHNs are often required to integrate into a community more rapidly, as the job requires PHNs to know community resources, be able to refer clients when needed, and act as

case managers at times for other clients (Allen, 2012). Allen (2012) describes rural PHN work as "pioneer work" (p. 474). This is especially true when entering a community for the first time, and is also related to cultural awareness. The core competency of Cultural Competency states that at a generalist level, PHNs are expected to adapt care based on cultural needs and differences, and senior nurses are expected to evaluate and adapt interventions and tailor them based on cultural needs (ANA, 2013b). The level of integration, acceptance, and understanding of a culture that PHNs need to accomplish these core competencies speaks to the PHNs' ability to be adaptable, have strong critical thinking skills, and motivation (Bigbee et al., 2009).

Public Health Nursing in Alaska

All Alaska PHNs are trained to be generalists first, to achieve the goal of implementing "population-based, evidence-supported strategies in a culturally appropriate manner to address the identified health priories of our communities, Section, and Division…" (Worman, 2015, para 1). While each center might have a different focus or offer more of one service or the other, PHNs provide individual-based services such as immunizations to adults and children, family planning and pregnancy testing, prenatal and postpartum counseling, well child exams, tuberculosis screening and treatment, school screenings, as well as sexually transmitted infection (STI) and Human Immunodeficiency Virus (HIV) screening. Then on a community-based level, PHNs perform communicable disease investigations, conduct community assessments, identify community health improvement needs, and work with groups to develop processes to address those needs, assist communities in developing emergency preparedness plans, and provide health education where needed (ADPH, 2015a). In the Strategic Plan (ADPH, 2014), the six strategic external priorities are reducing chlamydia infection rates, increasing immunization rates, preparing for emergencies, and reducing levels of domestic violence (DV)/ intimate partner

violence (IPV), obesity, and tuberculosis. While PHNs are expected to work towards these goals, the Section has special workgroups that oversee the process and provide guidance to the PHNs and health centers.

PHNs in urban centers are often divided into teams: the family planning team, the communicable disease team etc., and the urban centers run regular clinic schedule hours. Itinerant PHNs are based out of these centers, and not only take all these same services to the communities for which they are responsible, but accomplish this while navigating the unique Alaska challenges (Figure 2.3).

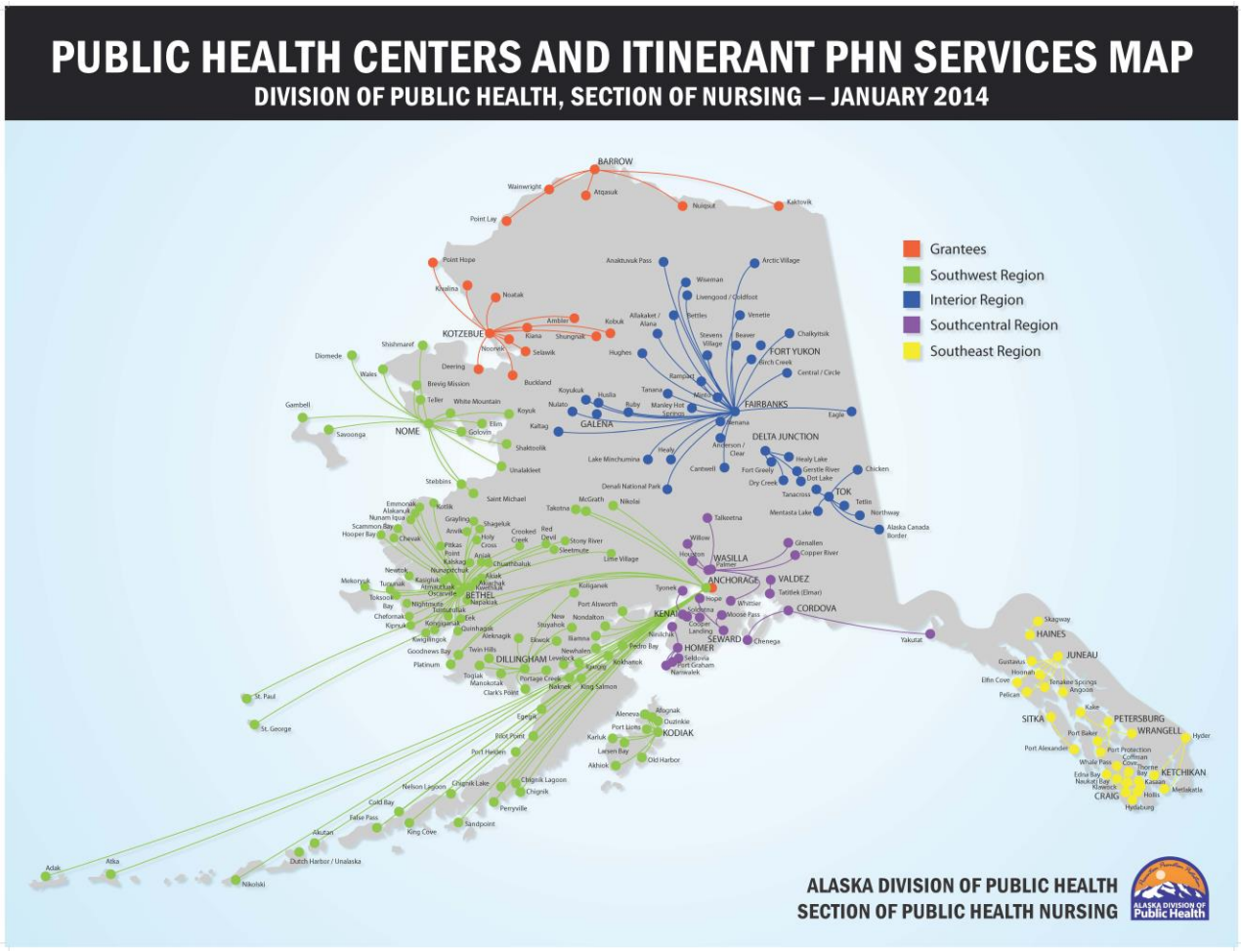
Itinerant PHNs may arrive in a village not knowing what situation they might find. While clinic appointments may have been set up with the assistance of the community health aide (CHA), the schedule could change as people wander into the clinic to chat, or PHNs are invited to a person's house. PHNs are guided and supported by the SOPHN through a fairly comprehensive Policy and Procedures manual as well as signed medical directives for vaccine and certain medication administration. New PHNs goes through the PHN Academy, a webinar-based training program that takes 6 months to complete. While completing on-site training, new itinerates accompany an experienced PHN on trips to gaining knowledge before traveling solo.

Travel

Travel can be challenging due to constantly changing weather conditions in winter and summer. Travel is variable and flights are frequently canceled or delayed for fog, rain, or snow. According the Alaska Division of Public Health, Public Health Nursing (2015a) website, "Itinerant public health nurses travel by air, boat or other motorized vehicle to a group of remote rural villages, taking public health to even the smallest communities" (para 2.). It's almost "predictable" that there will be delays for weather (Alaska Department of Health and Social

FIGURE 2.3

PUBLIC HEALTH CENTERS AND ITINERANT PHN SERVICES MAP



Source: Section of Public Health Nursing (2014)

Services [ADHSS], 2011). There are times when it has taken a PHN up to three days to arrive at a village; it is not uncommon for villages to be snowed in for weeks (Roberts, 2003). It is easier to visit villages along the road system, but for the isolated towns, PHNs are responsible to ensure flights are chartered and once they arrive in the village that they can navigate from place to place. In villages during the winter, snowmachines (or snowmobiles) are used. PHNs must arrange for someone to come pick them up prior to arrival. In the summer, a four-wheeler is used to travel to the clinic and around the village.

Accommodations

Accommodations in the village are not always ideal. When PHNs travel, they must pack survival gear in case of an airplane crash (ADHSS, 2011). They take all gear, including food and bedding, and they often carry eight to ten bags. They frequently live in the clinic, sleeping on the floor or on the exam table (Dryden, 2004). Transporting vaccines is not an easy task as vaccines must be kept within a certain temperature range. Villages might not have a reliable refrigerator or freezer to store vaccines, so careful planning is needed before a trip. The Alaska Immunization Program has a 35 page document outlining exactly how to handle vaccines, including storage, transportation, and temperature tracking (Section of Epidemiology, 2015). Some villages do not have running water or sanitation. Villagers (over 3,300 homes) use a "honey bucket" which is a bucket placed in the house with a liner and some disinfectant. Once it is full of waste it is emptied at a designated spot and brought back to the house (Alaska Department of Environmental Conservation, 2015).

Itinerant PHNs typically use the village CHA clinic as a base for their operations. The CHA program was developed in the 1960s in a coordinated effort between federal, state, and Native tribal health organizations, as a solution to the shortage of healthcare providers, the

geographical difficulties in accessing these villages, and the epidemics such as tuberculosis that were affecting the tribal populations (Alaska Community Health Aide Program [ACHAP], 2015). CHAs are the "frontline of healthcare in their communities" with over 550 aides in 170 villages (ACHAP, 2015, para 1.). PHNs will contact potential clients by phone, and in conjunction with the CHA, schedule those clients to be seen by itinerate PHNs; PHNs will also support the CHA as needed if medical emergencies arise. While the CHAs operate under separate medical directives, they are an integral part of furthering the public health mission. The Behavioral Health Aide (BHA) is a recent program under the ACHAP, developed by the desperate need to address substance abuse and mental health issues such as suicide, trauma, and depression. The program is facilitated through the Alaska Native Tribal Health Consortium in Anchorage (Alaska Native Tribal Health Consortium, 2015a).

Cultural Awareness

Cultural and social considerations require a flexible healthcare delivery system. Nurses need to recognize that populations are as distinct culturally as well as geographically; they also need to be culturally sensitive and recognize each tribe for its traditions, heritage, and history (Rhoades & Rhoades, 2014).

The history of devastating epidemics, tuberculosis, smallpox, influenza, and cholera among others and how they swept through Alaska from the arrival of traders and explorers is important to remember as they were the incentive for needed public health services (Rhoades & Rhoades, 2014). Historical trauma is also of utmost consideration for PHNs. Historical trauma is psychological and emotional trauma from events that is transmitted to subsequent generations, resulting in an intergenerational cycle of trauma response (Sotero, 2006). This concept was first introduced in the 1960s but has since become a strong theory to explaining why some

populations, such as American Indians and Native Alaskans, have higher burden of diseases (Sotero, 2006).

Safety

Safety in the villages and traveling around Alaska is always of concern. PHNs must be alert to avoid situations that could escalate to violence or harm to themselves or to their clients, as unlike in the lower 48 states, it might take law enforcement days to arrive to help. Currently, the Alaska State Troopers (AST) are responsible for most of public safety in the state. Most of the larger cities (Anchorage, Fairbanks, Juneau, and Valdez, etc.) have city/municipal police departments, but the vast majority of the state is covered by the approximately 300 AST (Alaska Department of Public Safety, 2015a). Most villages have a local Village Public Safety Officer who is the "local presence" until AST can arrive (Alaska Department of Public Safety, 2015b). Again, AST experience the same travel barriers to villages as PHNs, in that it can also take a Trooper up to three days to arrive in a village.

Health Issues

The burden of disease in Alaska is staggering. The Healthy Alaskans 2020 (2014) initiative provides the foundation for healthcare providers and other stakeholders and prioritizes the 25 top health objectives with strategies on how to reach those goals. A primary concern for the Department of Public Health (DPH) is the increasing rates of communicable diseases. Alaska ranked as number one in highest rates of chlamydia (CT) for 2010-2013, and the 2014 data showed Alaska's infection rate was 73% higher than the U.S. rate, ranking it at third in the nation (State of Alaska Epidemiology [SOA Epi], 2015a). Further, when broken down by population, CT rates are highest in non-Hispanic American Indian/ Alaska Native (AI/AN) population (SOA Epi, 2015a). Gonococcal (GC) infection rates are also high in Alaska, also ranked at third in the

nation for 2014, an increase from fourth in 2013, with highest rates also being in AI/AN (SOA Epi, 2015b). The annual infectious disease report for 2014 provides a summary of all infectious diseases reported in the state, such as botulism (12 cases in 2014), and Legionellosis (76 cases in 2014) (SOA Epi, 2015c). In 2013, Alaska had the only confirmed cases of paralytic shellfish poisoning, dengue fever, and Lyme disease.

Tuberculosis

A big challenge for itinerant PHNs is the rate of tuberculosis (TB) and latent tuberculosis infection (LTBI) in rural Alaska. In 2014, there were 62 newly confirmed cases of TB, compared to 71 cases in 2013. In 2011, Alaska had the highest rates of TB in the nation (9.3 per 100,000) with most of the cases among the Native population (SOA Epi, 2013). The toll TB took on the Alaskan population in the early part of the 20th century was horrific. With an estimated rate of 655 per 100,000 people infected, entire families were lost resulting in the decimation of villages (Funk, 2003).

PHNs work in conjunction with the Section of Epidemiology and CHAs to travel to villages where the case originates, conduct TB sweeps (placing TB skin tests and reading 48-72 hours later or collecting sputa samples for evaluation), and provide additional TB screening to those who seroconvert. In 2013, an outbreak in a Yukon-Kuskokwim Delta village identified 17 new cases and 60 latent cases, and each active case needed to be treated using a direct-observed-treatment technique over 9 to 12 months (Funk, 2003).

There are many challenges to identifying and treating TB cases, as with all infectious disease cases, including travel to the village for contact investigation. Since villages are not always along the road system PHNs must travel to the village by bush plane or other means, and consider the season as the client might be hunting or at fish camp during the time the PHN

arrives (Funk, 2003).

Domestic Violence, Intimate Partner Violence, and Sexual Assault

Another strategic priority for PHNs is to reduce the rate of domestic violence/ intimate partner violence (DV/IPV) and sexual assault. The National Network to End Domestic Violence (2014) conducted a 24 hour survey of 18 of the 19 Alaskan domestic violence programs. During that 24 hour period, 406 victims were assisted; of those, 292 (including 116 children) were sheltered. The 18 programs answered 54 hotline calls. Estimates for Alaska are that out of every 100 adult women, 48 have experienced intimate partner violence, 37 experienced sexual violence, and 59 experienced intimate partner violence, sexual violence, or both (UUA Justice Center, 2010). Screening is a routine part of a face-to-face visit in the clinic, and PHNs have participated in Former Governor Sean Parnell's 2010 Choose Respect initiative (Council on Domestic Violence and Sexual Assault, 2015).

Suicide

Suicide is another leading health indicator. In 2014, suicide rates amongst Alaskans were 23.4 per 100,000 while the national rate for that same year was 12.6 per 100,000 (Statewide Suicide Prevention Council, 2014). Research continues into the epidemic of suicide amongst AI/AN, specifically those living in rural communities. It is possible that geographic isolation, poverty, and lack of education contribute to the persistently high levels of suicide as do mental and behavioral health problems, stressful life events, and substance abuse (strongly associated with suicide) all combined with lack of resources to address these very issues (Gray & McCullagh, 2014).

PHNs actively participate in initiatives by partnering with communities in suicide prevention training. They help communities integrate evidence-based and culturally appropriate

prevention teaching. They collaborate with partners on interventions, such as supporting the behavioral health aide work or research through tribal councils, at the individual level.

Mental Health Issues

PHNs might spend over half their time in a village focusing on mental health issues, such as drug and alcohol dependence, which is closely associated with violence and suicide (Gray & McCullagh, 2014). Alaska rates of alcohol dependence and abuse is 14% compared to national average of 7% (Division of Behavioral Health, 2015). In 2015, Alaska approved the legalization of marijuana, and as yet the public health repercussions are unknown. One of the ongoing barriers to discussing and helping Alaskan Natives prevent and treat these issues is the cultural stigma against talking about mental health problems (DeCou, Skewes, Lopez, & Skanis, 2013). DeCou et al. (2013) identified that native youth might be more open to discussing problems; however, many elders carry on the tradition of silence about mental health problems.

CHAPTER III

MOTIVATION AND TOOLS FOR RECRUITMENT AND RETENTION

It has been established that rural health care, specifically in Alaska, is paramount as the needs of the population are enormous and the critical public health problems are plenteous. One of the purposes of this paper is to help identify ways to motivate PHNs, not only to assist in recruiting to fill positions but also in finding the right PHNs who will want to stay in the position.

Motivation and Job Satisfaction

One of the first motivators to staying in a position is job satisfaction which is closely related to retention (Cole, Ouzts, & Stepans, 2010). Knowing what factors nurses find most satisfying about a job allows recruiters to capitalize on those factors and managers can utilize the knowledge of what the nurses found unsatisfying to bring change in the work environment. Cole et al. (2010) conducted a non-experimental comparative study on 88 PHNs employed in a rural western state. They used the Stember's Web-based 80-question job satisfaction survey, unmodified, and received responses from 20 managers and 68 staff nurses. Understanding that the results of this study are specific to the population of nurses surveyed, the reliability scores for this study were much wider than for Stember's research; however, since Stember's work had a much larger population that might account for the difference. The researchers found that there was no difference in motivation between managers and staff nurses and that the data on satisfaction and level of education were inconclusive (Cole et al., 2010). Power or influence were identified as important and nurses need a balance between responsibility and authority to feel satisfied.

Bigbee et al. (2009) surveyed 124 PHNs in rural Idaho. They used on-site structured interviews, and found that PHNs reported high job satisfaction related to autonomy, variety, and close community ties. Of interest in this study was that solo PHNs (working alone in one nurse clinics) rated their competency in community dimensions much higher than those nurses in multi-nurse stations. The authors suggested that rural PHNs feel this way due to the strong community base of rural nursing (Bigbee et al., 2009). They also found that good communication networks and collegial support were key strategies to professional satisfaction. One constant emerging theme was the ability to work solo, and that PHNs valued autonomy in their job. These findings are only valid on those populations surveyed. Public health in Alaska is too unique and results from other studies cannot be generalized to other PHN populations, especially the itinerate PHNs.

Recruitment and Retention Tools

Several tools are available for use by SOPHN recruitment team, though some modification might be recommended to suit the population. The validity and reliability, as calculated by statistical software, on modified tools will guide future use.

COSMIN Checklist

One tool that can be used to validate a survey is the COSMIN checklist. Morrison, Batura, Thapa, Basnyat and Skordis-Worrall (2015) utilized it to validate their modified survey tool when assessing motivation in auxiliary nurse midwives and nurses in rural Nepal. By taking a locally developed tool (in Kenya amongst low-income district hospitals) and modifying it for their needs, they were able to establish validity and discover their own internally consistent measures of motivation.

Qualitative Survey

deValpine (2014) used a simple qualitative survey tool to identify motivation themes in Bristol Bay, Alaska. While quantitative data are better for measuring frequency of categories and themes, a qualitative approach can help the researcher "gain a depth of understanding into the motivations and experiences of long-term retained nurses in bush Alaska for the purpose of informing recruitment and retention in an extremely underserved area" (deValpine, 2014, p. 3). deValpine's (2014) approach was simple: three questions were asked 1) what motivated the nurse to come, 2) what has kept the nurse there, and 3) what are the nurse's greatest accomplishments. While this particular study had several limitations including a small sample size (11), three central themes that emerged were a sense of adventure, appreciation of Alaskan culture, and an independent sense of family.

Alexander Structure Instrument

Campbell, Fowles, and Weber (2004) used the Alexander Structure Instrument (1993 adapted version) to assess components of the work environment and job satisfaction. The study was based on Maslow's theory of human motivation which states that individuals have basic needs and when those needs are met, they seek satisfaction on higher level needs. The needs are divided into physiological, safety, love, esteem, and self-actualization. Campbell et al. (2004) surveyed 182 PHNs in Illinois to measure flexibility of relationships between nursing personnel and organizational structure. They found that high job satisfaction was correlated with PHNs being more involved in decision making and more engaged in consulting with supervisors.

McCloskey/Mueller Satisfaction Survey

Campbell et al. (2004) also used the McCloskey/Mueller Satisfaction Survey (MMSS) (1990) measuring three dimensions of satisfaction: psychological, safety, and social rewards.

Results demonstrated that PHNs cite autonomy, flexibility, scheduling, low stress, and enjoyment of what they do as the reasons they remained in their positions. One of the key findings in this study is that ignoring the need for esteem leads to feelings of weakness and inferiority, whereas fulfilling that need leads to self-confidence, strength, worth, and capability. Workplaces that encourage more consulting about tasks and decisions, and involving individuals in decision-making produce higher job satisfaction.

Motivation and job satisfaction are both big components in retention and recruitment. Finding the right nurses for the job will ensure that qualified PHNs will remain in their jobs. Public health nursing practice can be supported and cultivated for professional growth, which in turn will help attract new PHNs (Campbell et al., 2004). The World Health Organization (WHO) recognized that retention and recruitment is a global healthcare need. They described the ramifications of a poorly distributed healthcare population: "Lack of access to health workers in rural and remote areas often leads to relatively higher mortality rates in that area" (Buchan et al., 2013, p. 1). One of the keys to recruitment to rural areas is the PHNs' ability and desire for autonomous and solo work. Common themes identified when evaluating motivation and job satisfaction in rural PHNs are: an independent nature (deValpine, 2014; Dryden, 2004; Hegney, 2007), strong sense of adventure (deValpine, 2014), and desire for autonomy (Bigbee et al., 2009; Campbell et al., 2004; Cole et al., 2010; Dryden, 2004; Hegney, 2007). These descriptors should be capitalized on in the recruitment process as well as in work environment evaluation for retention purposes.

Nursing Community Apgar Questionnaire

The Nursing Community Apgar Questionnaire (NCAQ) is a tool used for recruitment. Prengaman, Bigbee, Baker, & Schmitz (2013) modified the NCAQ from the Community Apgar

Questionnaire (CAQ), a tool which had been successfully utilized to augment physician recruitment to rural areas. The characteristics of rural nurses were identified (lower pay, full-time employment, clinical exposure to rural nursing during training, rural lifestyle, job diversity, contentment with the community, and work environment) and strongly correlated with retention. They formatted the CAQ to 50 factors, which were grouped into five classifications: geographic, economic/resources, management/decision making, practice environment, and scope and community practice support. The goal was to identify the exact factors that are important to recruitment and retention in that specific nursing area, identify strengths and weaknesses of the work environment, and be a dynamic, real-time tool to guide needed interventions. While the results of the research have not been published, the findings were presented at the 2013 Annual Northwest Regional Rural Health Conference in 2013 (Prengaman et al., 2013).

CHAPTER IV

APPLICATION TO PUBLIC HEALTH NURSING

The possibilities of adapting the NCAQ to public health nursing in Alaska are positive. The objective was to discover what attributes attracted the current nurses to their positions, what factors contribute to their job satisfaction, and what the Alaska SOPHN should build upon as a recruitment tool. The NCAQ tool can assist in maximizing the effectiveness of recruitment and retention efforts, while simultaneously minimizing resources that had been directed towards factors now identified as unimportant or too difficult to alter.

Surveying current PHNs, especially the tenured PHNs, is essential to discovering what kind of nurses the SOPHN needs to target in their recruitment process. The current retention rate of itinerate PHNs is unknown; however, with turnover rates as high as 34% in 2013, it doesn't bode well for the Alaskan population (Alaska Department of Health and Social Services, 2014).

The recruitment/retention specialist and the staff development nurse consultant for the SOPHN understand that there is a social aspect to public health nursing. The baccalaureate prepared nurse (BSN) receives training in community and public health nursing, nursing research, and prevention medicine. While not required, it is recommended that PHNs be members of professional organizations, such as the ANA, the American Public Health Association, or the Alaska Public Health Association. Organizations such as these expose the nurse to current research, standards of practice, a code of ethics, and provide opportunities for interaction with other professionals (Abrams, 2010). The staff development nurse consultant is also charged with directing the training of not only new PHNs but also keeping all PHNs current on policies, medical directives, and methods of communicating information. The quality of field

training is crucial to ensuring that new PHNs integrate into the community and are able to provide the essential public health services in the assigned community. New PHNs must complete training to be competent in the many facets of public health nursing, including organizational structure, client services, community focus, community resources identification, cultural competency, and health teaching techniques. It is evident from the description of itinerant PHNs that the desire and ability to travel and work alone is one of the key traits of the job, supported by Bigbee et al. (2009).

CHAPTER V

CONCLUSIONS

The role of itinerant PHNs in Alaska is an adventurous, challenging, and a highly rewarding career choice. PHNs in Alaska have a legacy of being caring individuals and are respected in the many communities they cover. The Alaskan population needs motivated and skilled nurses to continue the work of solving public health concerns, improving community health, and reducing the burden of disease that is afflicting the population. The challenges facing incoming itinerate PHNs are many, and include the environmental challenge of life in "the last frontier" as well as cultural, geographic, and healthcare delivery challenges.

The SOPHN can evaluate current PHNs for factors that contribute to their satisfaction and retention in the Section. Recruitment officers can modify tools to survey incoming nurses to ensure they are the "right fit" for the Section and that incoming PHNs understand the challenges that face them. Current PHNs must continue to commit to training and adapting new evidence-based strategies to reduce the burden of disease. They must continue to strive to achieve the Healthy Alaskans 2020 goals and utilize the longstanding community partnerships they have fostered to raise awareness and bring about change.

One of the core competencies for public health professionals is contributing to the public health evidence base by participating in public health practice-based research. Promoting this competency section-wide is recommended (ANA, 2013b, p. 78.) Only through research will PHNs be able to add to the evidence base of how to translate their experience and knowledge into practice and policy. Further research is needed to improve recruitment into this demanding field, and to understand how to keep PHN positions filled.

The benefits of coming to Alaska and becoming a part of a great healthcare team are immense and as one itinerant PHN put it, "For any nurse considering this type of work, I recommend they are flexible, able to think for themselves, desire professional autonomy, have upper body strength to carry all those bags, and have a great sense of humor. The rewards of this job are too numerous to count" (Dryden, 2004, p. 8).

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