IDENTIFYING PRACTICE BARRIERS TO USE OF ADULT GERONTOLOGY-ACUTE CARE NURSE PRACTITIONERS IN THE NORTHERN NEVADA REGION

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As members of the DNP Project Committee, we certify that we have read the DNP Project prepared by Stephanie Carlsen entitled “Identifying Practice Barriers to Use of Adult Gerontology-Acute Care Nurse Practitioners in the Northern Nevada Region” and recommend that it be accepted as fulfilling the DNP Project requirement for the Degree of Doctor of Nursing Practice.

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ABSTRACT

The number of adult gerontology acute care nurse practitioners is increasing, as well as the number of patients requiring care in the northern Nevada region. The specialty training of adult gerontology nurse practitioners (AGACNPs) enables them to provide care for the increasing number of patients in the acute setting. Unfortunately, there are perceived barriers that inhibit the implementation of AGACNP into practice within this region. There is a need to understand the barriers to use of AGACNPs and provide feedback to organizational leaders throughout the region.

Purpose and Objective: While many studies show the benefits of adding AGACNPs or nurse practitioners in general to an organization, there is a need for further literature on the evidence of the barriers to AGACNP use. This study attempts to identify those barriers, specifically looking into the northern Nevada region.

Methods: A survey was sent out to 19 hospital and critical care group administrators in the northern Nevada region. There was an attempt made for phone interviews, if the survey was not completed during the allotted timeframe. The survey consisted of both quantitative and qualitative questions that were used to identify potential barriers influencing AGACNP role use.

Results: Out of the 19 surveys sent out, six surveys were returned. A total of six surveys from six different organizations were completed for this study. Five of the six respondents do not currently have any AGACNPs within their organizations and the one that did use AGACNPs had less than 10. Four out of six respondents reported confusion on scope of practice as a current barrier to use within their organization.
Conclusions: This survey helps AGACNPs understand the barriers to use within the northern Nevada region when looking for an acute care job. For the organizations in the northern Nevada region, there is a need for organizational education regarding the scope of practice of AGACNPs and how to utilize them within their organization, as well as create an effective collaborative practice model for their acute care organization.
CHAPTER 1: INTRODUCTION

Within the northern Nevada region, there are at least 19 hospitals that have the ability to provide acute care services to patients. Within these northern Nevada acute care organizations, there is a need for increased healthcare workers due to the growing patient population and nationwide healthcare workforce shortage. There are a total of 35.1 million discharges within acute care services and 136.3 million emergency room visits yearly within the United States (Center for Disease Control and Prevention [CDC], 2014). This number is not only affecting the nation’s provider coverage, but the northern Nevada region as well. The CDC reported in 2010, that the Nevada ratio of doctors to patient population was ranked 48th out of the 50 states, due to the shortage of providers in the state (CDC, 2014; Ackerman, 2012). According to Ackerman (2012), nurse practitioners can ease this physician shortage in Nevada.

According to the World Healthcare Organization, there is already a shortage in the healthcare workforce by 7.2 million practitioners and this will increase to 12.9 million by the year 2035 (World Health Organization [WHO], 2013). With the baby boomer generation growing older and the Affordable Care Act providing more patients with insurance, this creates an increasing number of patients flooding the healthcare industry (American Association of Nurse Practitioners [AANP], 2014a). Within the patient population, one of the highest patient populations is the geriatric population. The geriatric adult patients are estimated to be up to seventy million by 2030, an average of one in five patients over the age of 74 years old (Kilpatrick, Tremblay, Lamothe, Ritchie, & Doran, 2012).

One solution to this healthcare shortage in adult acute care is to increase the amount of adult gerontology acute care nurse practitioners (AGACNP) within organizations. However,
many northern Nevada organizations have not implemented AGACNPs within their facilities. There are currently only nine AGACNPs practicing in the northern Nevada region (Nevada State Board of Nursing [NSBN], 2014). The low number of AGACNPs practicing within the region and organizational need for AGACNPs has resulted in a need for an AGACNP program within the region. An AGACNP doctoral program was recently added to the University of Nevada Reno and University of Nevada Las Vegas curriculum. The University of Nevada Reno’s needs assessment was conducted with physician involvement and acute care population increasing within the community. This future graduating class will be expected to graduate in the fall of 2016. With the influx of this future graduating class, there is a need to understand and identify the barriers behind current AGACNP use within the northern Nevada region. Understanding barrier to use in the northern Nevada region may help with career placement for AGACNP programs within this region.

**Background**

**Call for Nurse Practitioners**

In the United States (US), there are approximately 192,000 nurse practitioners practicing in the US; of which, there are 14,000 new nurse practitioners (NP) completing their graduate degrees looking for employment (AANP, 2014b). The need for nurse practitioners to help with the additional demand on the health care workers is important due to the increasing number of patients (AANP, 2014a). This calls for the nurse practitioner workforce to increase and provide care for these patients (AANP, 2014a; Institute of Medicine [IOM], 2010). US News and World Report (2015), estimates there will be 37,100 new jobs for nurse practitioners by the year 2020, an increase of 33.7% from 2015.
There are approximately 350 educational institutions that provide education for nurse practitioner certification and there are 80 institutions listed in the AANP database that provide acute care training (AANP, 2014b). Of these 80 institutions there are 14,000 NP students graduating in the year of 2014. Of these 14,000, there are 882 graduating with an adult geriatric acute care nurse practitioner degree (AANP, 2014b). In 2012, 16.8% of nurse practitioners were currently employed in the hospital setting (Health Resources and Services Administration [HRSA], 2014; Bureau of Labor Statistics [BLS], 2013).

The demand for nurse practitioners is high with the increasing patient population, and the current statistics show that nurse practitioners can help provide care for this increasing population. Nurse practitioners in the adult/geriatric specialty see an approximated more than three patients an hour (AANP, 2014b). The need for adult gerontology acute care nurse practitioners and helping provide patient-centered quality care to this specific patient population is crucial to the health of this population’s future. Currently, there are some institutions implementing acute care nurse practitioners into the hospital setting, but this is not being utilized within all healthcare systems, especially within the Northern Nevada region (Towers, 2005; VanOyen Force, 2009). Nurse practitioners can provide equivalent medical care as physicians and patient-centered quality care in the acute setting (Fry, 2011; Bartol, 2014; Williamson, Twelvetree, Thompson, & Beaver, 2012; Budzi, Singh, Lurie, & Hooker, 2010; Kapu & Jones, 2012).

An increase in the nurse practitioner workforce is estimated at 244,000 nurse practitioners entering the healthcare workforce, this is a 94% increase from 2008 (AACN, 2014b). This increase is going to influx the amount of the providers into the healthcare industry.
and more importantly the acute care setting. Overcoming the barriers of AGACNP implementation into the hospital setting will provide improved quality of care, patient-centered care, and an effort to decrease the demands on the current healthcare workforce (Kleinpell, Hudspeth, Scordo, & Magdic, 2011).

**Description of AGACNP**

Adult gerontology acute care nurse practitioner (AGACNP) is a new title for the acute care nurse practitioner (ACNP) that is graduating from any accredited nurse practitioner program with an AGACNP curriculum (AACN, 2012a). An AGACNP is an acute care nurse practitioner with additional education in providing care for the geriatric population. This change and new focus was made in 2012 by the Advanced Practice Nursing Consensus Work Group (APRN Consensus Group) and the National Council of State Boards of Nursing APRN Committee (NCSBN APRN Advising Group) to enhance full-spectrum of care to adult and older adult care (AACN, 2012b). “The purpose of the ACNP is to provide advanced nursing care across the continuum of health care services to meet the specialized physiologic and psychological needs of patients with acute, critical, and/or complex chronic health conditions” (AACN, 2012b). Thus bringing a more structured and detailed didactic focus on the geriatric population with combination to the acute care degree helping provide a more focused care to the whole adult lifespan (AACN, 2012b). With the increasing number of patients, nurse practitioners are becoming more prevalent in healthcare, and the need for them to fill the practice gaps for the increasing population is becoming more evident. Justification for the need for AGACNPs is driven by the increasing amount of patients entering the healthcare community and the need for provider coverage.
Barriers within United States

Multiple barriers are inhibiting the implementation of adult gerontology acute care nurse practitioners into practice within northern Nevada. One of the most cited barriers to practice for AGACNPs is the lack of hospital preparedness in their AGACNP implementation process (Liego, Loomis, Van Leuven, & Dragoo, 2014; McNamara, Giguere, St-Louis & Boileau, 2009). An example would be improper implementation of the role of the AGACNP into practice by hospital administrators (Liego, 2014). Additional barriers include confusion of scope of practice, legal restrictions, lower reimbursement rates, and negative perceptions on adult geriatric acute care nurse practitioners (Kilpatrick, Tremblay, Ritchie, & Lamothe, 2011; Lowe, Plummer, O’Brien, & Boyd, 2012; Sangster-Gormley, Martin-Misener, Downe-Wamboldt, DiCenso, 2010; Safriet, 2011).

Practice rules and regulations made by each state may limit their practice authority. Varying practice authority rules make it difficult for a nurse practitioner to remain consistent with job transfers wanting to acquire similar position in a different state (Naylor & Kurtzman, 2010). Currently only 19 states and the District of Colombia allow full practice authority for nurse practitioners (AANP, 2014a). Differing competencies across the nation leave organizational leaders confused about education and practice competencies upon graduation (Kilpatrick, 2012). There are also may be negative feedback from physicians about nurse practitioners that give organizational leaders negative perceptions into hiring these newly graduated nurse practitioners (Kilpatrick, 2011). Confusion on scope of practice, negative perceptions from other providers, reimbursement rates by payers, and lack of acute care practice models; can all be practice barriers to use. These barriers limit employment, role fulfillment, and
job satisfaction.

**Barriers within Northern Nevada Region**

There is a paucity of data regarding barriers to AGACNP use within the northern Nevada region. Although, there is an increasing number of graduating nurse practitioners looking to find employment in the inpatient setting; there are significant barriers that are causing AGACNPs to accept or find jobs especially within the northern Nevada region (Kinner, Cohen, & Henderson, 2001; VanOyen Force, 2009). Identifying and addressing barriers to practice are important steps to increasing AGACNP utilization in the northern Nevada region.

Potential barriers to AGACNP use could be but not limited to perceptions of physicians and organizational leaders, reimbursement rates, organizational bylaws and state regulations, and confusion on scope of practice. These perceived barriers were identified as a literature gap and this study will determine if they are current practice barriers to use for adult gerontology acute care nurse practitioners into the acute care settings specifically within northern Nevada region.

**Conceptual Framework**

The PEPPA Framework guided the survey development and project recommendations. Developed by Byrant-Lukosius & DiCenso, PEPPA is an acronym for participatory, evidence-based, patient-focused process for guiding the development, implementation, and evaluation of advance practice nursing (Bryant-Lukosius, DiCenso, Browne, & Pinelli, 2004; McNamara et al., 2009). This framework has been identified and utilized in many studies to guide the implementation and maintenance of the APN role within an organization, and can be used for AGACNP use (Liego et al., 2014). This framework gives hospital administrators, or organizational leaders, responsible for the employment of AGACNPs, the tools needed to
implement AGACNPs, overcome barriers to use, and evaluate the outcomes of implementation (Bryant-Lukosius et al., 2004).

As shown in Figures 1 and 2 (below), the PEPPA framework utilizes nine steps for implementation of a nurse practitioner into an organization (Bryant-Lukosius et al., 2004). The steps ask the administrator to look into their current organization’s model of care and how they currently implement AGACNPs. The framework can also help the leaders identify current barriers existing within their organization and evaluation and long-term monitoring of the AGACNP role within the organization (Bryant-Lukosius et al., 2004). With the use of this framework, the survey questions were created to help guide a more structured model for looking into the barriers to use of AGACNPs within the northern Nevada region. Step 2 identified the most prominent stakeholders and participants needed for this study. Steps 1, 3, 4, and 5 gave rise to the question formatting and potential barriers to be identified. While steps seven and nine provided insight into educational and future needs for the organizations participating in the study.
Step 1 Define the population and describe the current model of care. Patient population is identified for central focus of process and quality improvement. At the same time, a study of the current model of care for this patient population is done.

Step 2 Identify stakeholders and recruit participants. During this step, key stakeholders who will be impacted by the new care model, such as administrators, physicians, nurses, ancillary hospital staff, patients, and families, are identified.

Step 3 Determine the need for a new model of care. This step involves conducting a needs assessment to collect and/or generate information about the unmet patient needs and healthcare services required to meet these needs.

Step 4 Identify priority problems and goals to improve the model of care. During this step, unmet health needs are identified and prioritized to determine outcome-based goals for the new care model.

Step 5 Define the new model of care and APN role. Strategies and solutions for achieving established goals such as the implementation of the ACNP role are identified. The pros and cons for introducing an ACNP role compared with other nursing or health provider roles are considered. This step concludes with the development of a specific position description for the role within the new care model.

Step 6 Plan implementation strategies. Planning for the implementation of the role begins with the identification of potential barriers and needs that could influence the implementation of the ACNP role. Key factors to address are stakeholder education on ACNP role, marketing, recruitment, hiring, role reporting structures, funding, policy development, timeline for role implementation and developing an evaluation plan for achievement of outcome-based goals by the ACNP.

Step 7 Initiate APN role implementation plan. This step involves initiation of the role implementation plan developed in step 6 and hiring of an ACNP for the position. Full development and implementation of the ACNP role may take 3-5 years. During this time, changes are made to the role as well as the policies and procedures of the hospital to support the ACNP role development.

Step 8 Evaluate the APN role and new model of care. Formative evaluations that systematically evaluate role structure, processes and outcomes are recommended to promote ongoing ACNP role development.

Step 9 Long-term monitoring of the APN role and model of care Long-term monitoring of established ACNP role allows for improved care based on new research and/or changes in the healthcare environment, patient needs, treatment practices, and maintenance of role during hard economic times.

Source: Bryant-Lukosius and DiCenso.14

FIGURE 1. PEPPA Framework Steps.
There are current barriers to the use of nurse practitioners within the United States, although there is no data pertaining to AGACNPs within the northern Nevada region. There are only nine AGACNPs currently practicing in the northern Nevada region; there is a definite need to increase the use of AGACNPs within the region (NSBN, 2014). The benefits of AGACNPs have already been identified in multiple studies, showing equivalent high quality of care and a call for the shortage of providers compared physicians (Laurant et al., 2004; Williamson et al.,
Identifying the barriers to use of AGACNPs within the northern Nevada region can help increase the use of AGACNPs and potentially eliminate these barriers within organizations.

**Purpose of the DNP Project**

The purpose of this study is to identify the barriers to use of adult gerontology acute care nurse practitioners (AGACNP) within the northern Nevada region. Subsequently, provide organizational leaders with an executive summary to highlight the identified barriers and provide further recommendations to minimize those barriers.

**Aims of Project**

1. Identify the practice barriers to use for AGACNPs within the northern Nevada region.
2. Utilize the identified barriers to use for AGACNPs to make a follow up executive summary that provides the barriers found in the survey results; as well as recommendations to remove the practice barriers to use.

**Significance to Healthcare and Nursing**

Since the implementation of nurse practitioners in the 1960’s, there has been an increase in the number of practitioners who are seen as a solution to meet our growing patient healthcare demands. There have been questions regarding nurse practitioner educational levels and equality to patient care; studies have shown that they can provide the same high level of patient care as physicians (Laurant et al., 2004). The effectiveness of an AGACNP in the hospital environment can lead to increased patient satisfaction with decreased hospital costs, decreasing length of stay, minimizing complications, and lowering readmission rates (Fry, 2011; Liego, 2013; McDonnell et al., 2014). Manning, Wendler and Baur (2010), also showed that after introduction of an nurse
practitioner into the hospital, there was improved collaboration between physicians, nurses, and key stakeholders with certain patient populations.

With regards to healthcare costs, Kapu and Jones (2012) state that the implementation of an acute care nurse practitioner to a hospitalist and ICU team can decrease length of stay (LOS) by 0.7 days. The acute care nurse practitioner or AGACNP has also been shown to have similar cost-savings benefits with the LOS on two neurosurgical units with an overall savings for one year of $1,668,904.00 (Russell, VorderBruegge, & Burns, 2002). The implementation of a nurse practitioner to transitional care can decrease length of time between hospital discharge and readmission rates, decrease total number of re-hospitalizations, and decrease healthcare costs, with congestive heart failure patients (Naylor et al., 2004). With the utilization of AGACNPs into the hospital environment or an acute care organization, there is a potential for improvement to patient outcomes, healthcare costs, and the future of acute care services.

**Significance to Advanced Practice**

The implementation of an AGACNP can be utilized within acute care organizations to achieve similar patient outcomes as physicians such as: help decrease healthcare costs, improve patient satisfaction, and potentially improve the provider shortage in the US (Laurant et al., 2004; Russell et al., 2002; Kapu & Jones, 2002). AGACNPs can help lower hospital costs and improve quality of care (Liego et al., 2014). Advanced practice is impacted by the improvement of healthcare use of AGACNP within organizations not only in northern Nevada, but also throughout the nation.

Although, there are currently practice barriers to use of AGACNPs within certain areas of our country. The practice barriers to use are for not only the AGACNPs seeking employment,
but also important for the organizations that are hiring them. Understanding of the barriers encumbering the use of these AGACNPs into practice is important to recognize to potentially implement AGACNPs into their organizations.

Summary

In this chapter, the significant problem of the practice barriers impacting the use of AGACNPs has been discussed, specifically within the northern Nevada area. There is a lack of data describing barriers within the northern Nevada region. The need to identify and minimize these barriers to use will benefit this specific healthcare population with the use of AGACNPs. This DNP project will attempt to identify the barriers to use of AGACNPs within the northern Nevada region and then utilize these identified barriers to create a follow up executive summary to organizational leaders in this specific region.
CHAPTER 2: LITERATURE REVIEW

This chapter discusses the literature search performed and the results of findings related to identify barriers to use of AGACNPs. The literature review will include key terms, databases accessed, and literature retrieval. The literature review will reveal specific barriers to use of AGACNPs in the acute care setting and discuss gaps in the literature both regionally and within the northern Nevada area.

Key Terms

Multiple key terms were used through various databases for literature review to identify practice barriers to use for AGACNPs.

TABLE 1. Key Words.

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Literature Search

A literature search was performed using three databases (Google Scholar, PubMed, & CINAHL) to identify recent and related articles. The Google scholar search engine was filtered to articles that were published in the English language. There were no other restrictions set within the search engine database. The first database used was Google Scholar, which produced 23,300 articles with the search title “nurse practitioners barriers to use.” This database has
limited search filters, so the amount of articles was difficult to reduce. The year publication was filtered to the last five years, which brought the numbers down to 14,100 articles.

The PubMed database was then accessed for further articles related to the search topic. PubMed with no restrictions only produced seven articles in total with the search title “nurse practitioner barriers to use.” Filters used were then used to find articles written in the English language and within the last five years. The search title was also revised to “barriers to nurse practitioner employment”, but this only produced five recent and relevant articles. The CINAHL database retrieved 24 articles with the key terms “nurse practitioner” and “barriers.” Filters were utilized with articles within the last five years and produced in the English language. Many of the articles retrieved were not relevant to the study due to focused literature on barriers to use for NPs in primary care practice. The articles that were of relevance were used to gather more data for the literature review. Articles focusing on primary care interventions were reviewed, but considered not purposeful due to the differences in nurse practitioner roles and shown not relevant to specific aims of the study. The total number of relevant and recent articles that were found useful from all three databases was 26 articles.

**Barriers to Use**

The multiple barriers that were found in the literature included the lack of hospital knowledge regarding acute care nurse practitioner implementation, lack of utilization of AGACNPs in the hospital role (Leigo, 2014), confusion on scope of practice (Hronek, 2014; Sangster, 2010), legal practice barriers (Bryant-Lukosius et al., 2004), and negative perceptions of nurse practitioners in the acute setting (Kilpatrick et al., 2011). Based on the literature review, there were significant gaps regarding barriers to use of AGACNPs within the northern Nevada
region. The nationally identified barriers found in the literature review can be used to guide the study for this region.

**Lack of Hospital Preparedness**

As Liego (2014) states, one of the biggest barriers to acute care nurse practitioners achieving jobs into the hospital setting is the lack of proper implementation of AGACNPs into the healthcare system, due to lack of hospital preparedness and knowledge. Hospitals can become more prepared and increase their knowledge of nurse practitioners by understanding the nurse practitioner role and scope of practice, awareness of community resources, and develop a nurse practitioner practice model (Liego et al., 2014; McNamara et al., 2009; Fry, 2011). The Shuler nurse practitioner practice model was developed to provide the “missing link” to nurse practitioner implementation (Shuler & Huebscher, 1998). The NP practice model is a unique combination of the nursing practice model and medicine practice model (Shuler & Huebscher, 1998). Nurse practitioners have the ability to expand their nursing knowledge and skills into medicine (Shuler & Huebscher, 1998). Literature has shown that AGACNPs can help lower hospital costs and improve quality of care (Liego et al., 2014). The hospital administrators are lacking the appropriate knowledge of the role of the NP, as well as how to create an AGACNP practice model in the acute care setting (McNamara et al., 2009). There are hindrances found in the literature with nurse practitioners practicing under a nursing model rather than a medical model (Plager & Conger, 2007). Liego (2014) believes that this is due to the lack of understanding of the AGACNP role and scope of practice within acute care settings.

Hospital preparedness can be minimized with the implementation of a systematic and evidenced-based approach for role development (Liego, 2014). PEPPA was founded when an
organization was attempting to overcome the barrier of “lack of hospital preparedness” was occurring. This is a patient-focused process for guiding development, implementation, and evaluation of advanced practice nursing and maintaining the APN role (Bryant-Lukosius et al., 2004). The implementation of this framework has the potential to be a resource for hospitals to employ AGACNPs and recruit them for longevity within their organizations (Liego, 2014).

Confusion on Scope of Practice

The confusion of the nurse practitioner scope of practice is one that has consistently been a barrier for employment but also credibility. “The term scope of practice broadly refers to the range of responsibilities that determine the boundaries within which a professional practices” (Kleinpell & Hudspeth, 2013, p. 23). The first implementation of a certified nurse practitioner was in the 1960’s, requiring only a certificate (Towers, 2005). Currently, there is a strong educational shift to obtaining a doctorate to become a nurse practitioner (AACN, 2014a). The American Association of Colleges of Nursing (AACN) endorses the doctoral degree as becoming the entry level of preparation needed for advanced practice nurses (AACN, 2014a). The rapid expansion of knowledge in the future of nursing is creating a momentum that is focusing on leadership, patient centered-quality care, high level of medical preparation, and high educational expectations for the doctorate of nursing practice degree (AACN, 2012a; AACN, 2014).

Scope of practice and confusion of nurse practitioners within healthcare is supported by the literature. The most important scope of practice confusion that needs to be understood by organizations is the difference in nurse practitioner educational training (Kleinpell & Hudspeth, 2013). Nurse practitioners can have differing education training with their sub-specialty such as family practice nurse (FNP) and acute care nurse practitioner (ACNP). The organizational leader
must possess the ability to understand nurse practitioner limitations on education, certification, and the scope of practice legally authorized by their regulatory board of nursing (Kleinpell & Hudspeth, 2013).

Multiple articles identified the scope of practice and role confusion as a barrier to employment and implementation, yet there is minimal data to represent overcoming this barrier successfully in practice (Hronek, 2014; Sangster et al., 2010). Multiple attempts by nurse practitioner associations have tried to eliminate the scope confusion and create positive reinforcement for nurse practitioner implementation into practice (National Council of State Boards of Nursing [NCSBN], 2008; AACN, 2014a). However, there is still confusion and discouragement from physician associations stating that physicians are superior to nurse practitioners being published in American medical journals.

The American Association of College of Nursing (AACN) has produced useful information to help guide hospitals and employers to having a better understanding of the scope of practice of the adult gerontology acute care nurse practitioner (AACN, 2012a). “Advanced practice registered nurse (APRN) Consensus Model standardizes regulations for APRNs as well as ensures congruence between licensure, accreditation, certification, and education” (Kleinpell et al., 2011; NCSBN, 2008). As Kleinpell and Hudspeth (2013) state, there is an urgent need for organizations to comprehend the concepts utilized within the APRN Consensus Model, which helps create a clear understanding of the scope of practice of nurse practitioners. By utilizing the APRN Consensus Model and the AACN website, organizations can have an increased amount of data on the nurse practitioner role and how to utilize them within their organizations (AACN, 2012a; NCSBN; 2008).
Legal Practice Barriers and Reimbursement Rates

Legal practice barriers to the implementation of acute care nurse practitioners are found as a current barrier in the literature. The landmark Institute of Medicine (IOM) report, ‘The Future of Nursing: Leading Change, Advancing Health,’ includes recommendations for Congress and the Department of Health and Human Services to “remove barriers limiting the ability of nurse practitioners and other advanced practice nurses to practice at the full extent of their license” (AANP, 2014a; IOM, 2010). There are state regulations regarding independent practice, prescription privileges, and how nurse practitioners evaluate and treat patients; which all can be variable and considered restrictions to practice (Hain & Fleck, 2014). With these barriers of limiting practice authority and the varying state regulations, nurse practitioners are not able to practice to their full practice authority in all states; which may limit implementation (Kleinpell et al., 2011; NCSBN, 2008; Safriet, 2011).

Reimbursement rates for nurse practitioners vary from physicians, as hospitals may see this as a barrier when strategically looking for providers that will provide them with a greater profit. “Nurse practitioners are being reimbursed at the rate of 80% of the lesser of the actual charge or 85% of the fee schedule amount for Medicare patients” (AANP, 2014a). This is also followed suit by some but not all private insurers, which may have the potential to cause a practice barrier to use for adult gerontology acute care nurse practitioners. Organizational facilities will look at the potential benefits versus reimbursement rates and may seek a physician over a nurse practitioner due to these hindrances. However, the cost of a NP is significantly less than that of a physician, and as such, organizations may not consider this an under market rate.
Negative Perceptions of Nurse Practitioners

The literature discusses that there are currently negative perceptions by physicians and organizational leaders relating to the implementation of acute care nurse practitioners (Kilpatrick et al., 2011; Wieland, Mackinlay, & Jelinke, 2010). Physicians, organizational leaders, nurses, and patients can contribute to the negative perceptions of acute care nurse practitioners; all of these viewpoints and perceptions are crucial to identify before implementation to practice (Kilpatrick et al., 2011; Wieland et al., 2010). There is a need to break the barriers between the two provider professions of physicians and nurse practitioners.

The negative perceptions that are shown in the literature are labeling nurse practitioners as incompetent, unqualified, unprepared, and not a good use of healthcare dollars (Kilpatrick et al., 2011; Wieland et al., 2010). A recommendation to overcome negative perceptions from physicians related to nurse practitioners in the acute setting is to promote a team framework, identify the role of AGACNP, minimize confusion on scope of practice, and create a positive collaboration between physicians and nurse practitioners. This will help create desirable outcomes for the implementation and employment of AGACNPs in the acute care setting (Kilpatrick et al., 2011). Creating a team framework gives the stakeholders key concepts and relationship data that helps guide leaders into making sure that the AGACNPs are implemented properly (Kilpatrick et al., 2011). Inter-professional relationships need to be looked at and acute care nurse practitioners need to be aware of this as a cause of a potential barrier to practice.

Literature Review

Multiple barriers were addressed in the literature review of the barriers to implementation of AGACNPs into practice, but no specific data on northern Nevada AGACNP implementation.
This significant gap in the literature review confirms that there is no identification of the barriers of use of AGACNPs within the northern Nevada region. The data on what barriers acute care nurse practitioners are facing is crucial in learning the next steps in creating proper implementation of AGACNPs in practice.

Identifying that there could be more than one potential barrier to adult gerontology acute care nurse practitioners finding practice is important to implementing nurse practitioners into the northern Nevada healthcare community. There also may be potential barriers that have not been identified within the current literature that may be achievable with further research.

Summary

In this chapter, summary of the literature was provided showing that there are many identified barriers to use of AGACNPs and nurse practitioners in the acute care setting. There is no data referencing the identification of the barriers to use of AGACNPs within the northern Nevada region. This needs to be further studied to determine if there are currently practice barriers to use that can be minimized to benefit this area.
CHAPTER 3: METHODS

This chapter includes a description of the research, the setting, survey and interview participants, and procedures employed to obtain the information. Furthermore, it includes the way in which the data was obtained and managed, human subjects’ protection, recruitment and consent, potential risks/benefits to the participants, and a description of how the data was analyzed.

Design and Methods

A mixed-methods research design was chosen to be the preferred method for this problem and purpose of this study. A mixed-methods research design is able to achieve objective and quantitative data from organizational leaders within northern Nevada acute care organizations. This method of design was chosen due to the “immature” nature of its literature findings and the unknown potential barriers that exist behind the problem and theory (Morse, 1991).

The study design will be a survey study design with a non-biased standardized question format (Fowler, Rorker, & Jog, 2014). Trustworthiness was created with use of conceptual framework, literature relevant to study, and systematic formation of question design. The conceptual framework guided the project for methodology and study design. This PEPPA Framework has been previously utilized in acute care organizations for implementation of an acute care nurse practitioner. The literature review provided evidenced based analyses of prior studies and identified common themes related to this study. The framework and question design was thoroughly reviewed prior to the survey by the principal investigator and chair of the committee.
The target population of the study consisted of 19 organizational leaders’ surveys within the northern Nevada region. The data will be collected and produced by the researcher and created by a survey company (Survey Monkey) found at their website (https://www.surveymonkey.com/). The survey was sent out to the leaders using an email system and then will be returned to the researcher for analysis and collection through the protected Survey Monkey website. The survey consisted of a questionnaire format with multiple questions that provided insight into the barriers to use of AGACNPs. The questions were standardized computer based questions identified by the researcher as being potential barriers to use of AGACNPs into the acute setting. If the participants didn’t participate in the survey within the two-week time frame, a reminder email was automatically sent out in an attempt to contact the organizational leader. If no responses were made from email efforts, an attempt for telephone interview would be made within a three-week timeframe. The principal investigator (PI) called the organizational leaders attempting to make contact for a full two weeks; repeat phone calls were only made if the leader instructed the PI to call back at an alternative time.

**Setting**

The study included conducted online, with the participants (organizational leaders) recruited via telephone and email scripting (Appendix C). The email and telephone scripting was utilized to acquire the name and email address of the organization leader that would be participating in the study (Appendix C). The telephone and email scripting was formed by the principal investigator (PI) and approved by the University of Arizona of Nursing Research, and by the University of Arizona Institutional Review Board (IRB).
Participants

The sample criteria was organizational leaders within the northern Nevada region that are responsible for employing adult gerontology acute care nurse practitioners within their organization. Specific criteria for inclusion for the survey include: (a) organizational leader at northern Nevada acute care hospital or hiring service for critical care groups; (b) consent to participate; (c) ability to understand the survey questions with full comprehension; and (d) speak and read English. There was no exclusion criterion for age, gender, demographic area, ethnicity, or race for either survey.

Recruitment and Consent

Purposeful sampling was used to select the sample of the population for this intended study. The recruitment of the participants was made by online search for all organizational leaders of the nineteen acute care organizations in the northern Nevada region. The recruitment technique used a telephone scripting to the organization to acquire the telephone number of the organizational leader needed to complete the survey. A secondary call was then made to have direct contact with the organizational leader and participant responsible for hiring AGACNPs within their organization. Once the telephone script was utilized, the participant’s email address was used to send the online survey. When participants clicked on the email link, they were directed to the surveymonkey.com consent form that was approved by the University of Arizona of Nursing Research, and by the University of Arizona Institutional Review Board (IRB) (Appendix A). The surveys were only sent to those who consented. Participants were able to discontinue their participation in the study at any time by exiting the survey and their results were not to be used during the analysis process.
Protection of Human Subjects

Prior to the distribution of surveys and recruitment of participants, the study was approved by the University of Arizona of Nursing Research, and by the University of Arizona Institutional Review Board (IRB). No personally identifiable data was collected on participants; though demographic information about the organization was sought. With only 19 organizations, the demographic data could de-identify the participant’s responses. There are many differing hospital bed sizes within northern Nevada, putting the organization at higher chance for identification. The approval and data collection was done to ensure ethical concerns were taken into consideration during this survey process.

Procedures

The survey (Appendix A) was sent to the participant’s, and responses were sent to surveymonkey.com for analysis. The survey was sent out on June 1, 2015 and available until June 14, 2015. Reminder emails were sent out after June 14, 2015 if the participant hadn’t responded. Phone interviews were attempted within the weeks of June 15, 2015 - June 22, 2015 with the participants who didn’t fill out the survey during the original two-week timeframe allotted. No phone interviews were successful. There were a total of six out of 19 total surveys completed. There were many unreturned telephone calls, two leaders on vacation, four emails that were sent to their spam mail and didn’t visualize the survey until it was closed, and one leader leaving the organization entirely. The data was then analyzed using the surveymonkey.com system with both quantitative and qualitative analysis.
**Risks and Benefits to Participants**

The risks for the participants were minimal, and were included in the beginning of the consent of the survey link. There was a small risk that the organization could be identified due to the small sample size. There was no direct benefit at the time of the survey to the participants. The survey results have the potential to identify practice barriers to use of AGACNPs within the northern Nevada region. There is also potential benefit with the executive summary provided including the recommendations and information provided by the investigator.

**Cost and Compensation**

There is no cost and compensation to the participant for participating in the survey, only the cost of their time. The cost of their time was used with the expected amount of time to take the survey; no longer than 20 minutes.

**Data Analysis**

After the four-week timeframe was completed, the data was compiled and analyzed for demographic information and recurring themes of the questions. Descriptive statistics (percentages) were calculated by surveymonkey.com and they were collected and reported. The PI evaluated qualitative data with the additional commentary questions. Each annotation of the questions was evaluated line-by-line, with keywords utilized for analysis. Themes were identified once all qualitative responses were analyzed. The outliers were recorded.
CHAPTER 4: RESULTS

This chapter discusses the results of the survey including a quantitative and qualitative analysis of the results. This chapter addresses the results relating to the aims of the study: (1) identifying the practice barriers to use for AGACNPs within the Northern Nevada region and (2) utilizing the identified barriers to use for AGACNPs to make a follow-up executive summary that provides the barriers found in the survey results, as well as recommendations to remove the practice barriers to use.

Qualitative and Quantitative Analysis

The survey was formatted to summarize the potential perceived barriers to use for AGACNPs within the northern Nevada region with the use of current literature and evidence-based practice. The qualitative questions were inter-mixed within the survey allowing for open comments regarding certain quantitative answers. The quantitative data provided descriptive statistics, which focused on the percentages and trends of the survey results. There were themes throughout the results that were captured.

Demographics

Demographics of the participants were organizational leaders responsible for the hiring of nurse practitioners within their organization, although each organizational leader had differing titles. The total number of acute beds within their facilities ranged from 3-1000. Four out of the six organizations stated their facility treats acutely ill patients on a regular daily basis. Out of all six organizations, there was only one organization that had an AGACNP employed within their organization. Within that one organization, there were less than ten AGACNPs working there.
Five out of the six did not have any AGACNPs working in the intensive care units or emergency departments, but provided no disclosure on their current work settings.

**Lack of Hospital Preparedness**

The first perceived barrier was lack of hospital preparedness and knowledge; this was identified within the questions discussing the awareness of new educational programs within their region and determining current AGACNP practice models within the region. Question number one stated, “Are you aware of the University of Nevada Reno’s new graduate program for adult-gerontology acute care nurse practitioner (AGACNP) degree that began August 2014?” All of the respondents stated they had not been made aware of the new graduate program. Question 2 stated, “Recognizing that there may be an increased availability of new graduate AGACNPs within the community; would you hire AGACNPs into your facility upon graduation?” Majority of the responses stated they would hire AGACNPs into their facility upon graduation.

All of the organizational leaders had no access to an AGACNP practice model and half of the organizational leaders didn’t know what an AGACNP practice model looked like. Majority of the organizational leaders stated they had current nurse practitioner practice models but no AGACNP model.

**Confusion on Scope of Practice**

The second perceived barrier to use was to identify if confusion on scope of practice was a barrier within the region. Majority of the participants stated they did not know the difference in scope of practice of an AGACNP versus a family nurse practitioner (FNP). The differences within the scope of practices were unable to be identified except for one participant. This one
participant wrote in the open-ended response, “Gerontology nurse practitioners focus on the process of aging and would focus on this in the acute rather than outpatient setting.” Confusion on scope of practice was also listed as the main identified barrier at the end of the survey with four out six of the leaders stating that confusion on scope of practice was their main barrier to use of AGACNPs within their organization.

**Lack of AGACNP Preparedness**

The third perceived barrier to use was to identify if lack of AGACNP preparedness was affecting the use of AGACNPs within the northern Nevada region. This seemed to not be a barrier within the region, majority of the respondents would not be influenced by educational level and only one respondent stated they would be influenced by experience of the nurse practitioner.

**Perceptions of Nurse Practitioners**

The fourth perceived barrier was the perceptions of AGACNPs by the organizational leader and physicians within their organizations. Overall, half of the respondents stated they had positive perceptions of adult gerontology acute care nurse practitioners and their use within their organization. However, half of the leaders were unsure about their perceptions of AGACNP use within their organization. The respondents indicated that physicians have influence on all six of the organizational leader’s use of AGACNPs within their organization. The open-ended comments showed a common theme of physician perceptions being neutral with no negative perceptions recorded by the organizational leader.
Legal Practice Barriers and Reimbursement Rates

The fifth and sixth perceived barriers were the reimbursement rates and legal practice barriers affecting AGACNPs today. Half of the respondents stated that section 1848 of the Medicare reimbursement legislation has an influence on the use of AGACNPs within their facility. One participant indicated, “Reimbursement is always a consideration when making any strategic decisions that impact practice within our hospital.” The majority of the participants stated that they would want collaborative practice models for their AGACNPs within their organization rather than independent.

Identified Barriers by Organizations

The most identified barriers to practice of use of AGACNPs were the education of administration on the scope of practice and availability of AGACNPs within their region. The second most identified barrier within the organizations was perceptions of AGACNPs within their organizations. Two respondents stated that they had “no knowledge of AGACNPs plus the difficulty in finding any APN’s willing to work in our small rural community is difficult.”

Identified Benefits to Use of AGACNPs

In the survey results returned, there was qualitative data that identified the benefits to use of AGACNPs. Two surveys stated that the addition of AGACNPs within their organization would provide better provider coverage and fill the gap in acute care services they are experiencing. One participant also noted AGACNPs could expand the services they provide to their organization stating, “Could potentially fill a gap in acute care services providing for the ability to care for more patients locally.” Another participant noted that a benefit to AGACNPs could be to provide specific care for the aging population within their community.
A theme regarding what would be beneficial to these organizations regarding the use of AGACNP’s within their organization was shown to be leadership education on AGACNP scope of practice. The themes of confusion on scope of practice and implementation of AGACNPs will be used for the follow-up executive summary as the two most common barriers of identified with this study.
CHAPTER 5: DISCUSSION

Relation to Other Evidence

Numerous studies have revealed practice barriers to use of AGACNPs, but not specifically the northern Nevada region. The six returned surveys in this project are just a start to the complexities of the practice barriers to use of AGACNPs use within the northern Nevada region. The study addresses the current gap in knowledge of limited data within the region and revealing the identified practice barriers to use for AGACNPs within the northern Nevada region.

The findings of the survey support the need for a follow-up executive summary to address the barriers found and provide feedback to the participants to potentially improve their use of AGACNPs within the region. Consistent with the literature review, the study correlates with the findings of physician involvement being a possible barrier to use (Hain & Fleck, 2014; Kilpatrick et al., 2011; Wieland et al., 2010); payer reimbursement being a barrier (Safriet, 2011); lack of hospital preparedness and knowledge (Liego et al., 2014; Sangster et al., 2011; Byrant-Lukosius et al., 2004); and the confusion on scope of practice being the largest barrier to use (Liego et al., 2014; Kilpatrick et al., 2012; & Kleinpell et al., 2011).

Limitations

Within this study identifying the practice barriers to use of AGACNPs within the northern Nevada region, there were considerable study limitations. There not only was a small sample size, but also a low response rate. Secondly, the survey may not have captured all potential barriers to use, but utilization of open-ended questions helped to catch the unidentified barriers. There also was a chance for respondents to answer “unsure” on four questions; which
could have led to a decreased choice of decision making to offer a true opinion (Bradley, Cunningham, Akers, & Knutson, 2011).

The participants in this survey were collected by measures of the PI researching the most-fitting participant from each organization. Each organization had differing titles for the survey participant ranging from a human resources representative to a chief nursing officer. This could be seen as a limitation, as it could create differing responses due to their job descriptions and background.

Finally, because the qualitative data was analyzed and themed by an adult gerontology acute care nurse practitioner within the northern Nevada region, this could have introduced a bias into the results. All attempts were made to decrease this bias, but this may be visible in the results.

**Summary**

The credibility, applicability, consistency, and neutrality of the data process provided trustworthiness of the qualitative data. The use of the PEPPA Framework proved useful in the development of the survey questions and the methodology of this project; this framework would be highly recommended for future use of determining barriers to practice to use for acute care nurse practitioners.

The results of the survey revealed that a large percentage of the participants had no experience with AGACNPs and had confusion on AGACNP scope of practice. It is reasonable to conclude that their confusion can be due to the decreased availability of the AGACNPs within the area. It can also be concluded that this confusion on AGACNP scope of practice needs to be addressed to overcome this barrier to use. Nurse practitioner scope of practice continues to be
identified as a barrier to use, despite efforts of nurse practitioner organizations and literature recommendations.

The participants all understood that there would be an increased availability of AGACNPs within the next year with the graduation of the new graduate program within the area. The respondents stated that four of the six organizations provided acute care services to the northern Nevada region; which is in opposition to the data in the literature for acute care beds within this region. There are many small rural facilities within the northern Nevada region, which are only able to treat non-medically complex patients but are considered critical access hospitals that care for acute care patients (American Hospital Directory [AHD], 2015). This opposition may be evidenced in the survey responses, due to the organizations not having acute care patients daily.

The majority of the results stated that there were many benefits to their organization on when using AGACNPs, such as better provider coverage and filling the gap of care in their acute care services. The results reveal that the use of AGACNPs within the northern Nevada region would be beneficial, but there are specific practice barriers to use that were identified within the survey. There could be a potential connection between the leaders who identify benefits of utilizing AGACNPs with the leaders with no negative perceptions. The leaders that responded may be only responding due to their positivity about nurse practitioners and they want this to be represented in the results. The leaders may have also not wanted to provide negative perceptions and have the results be linked back to their specific organization.

The overall idea of AGACNPs being utilized within the participant’s organization was positive with no neutral or negative comments. The facilities showed the vast majority would
like to have a collaborative approach with physicians and physicians would influence their decisions on use of AGACNPs. They had no negative physicians’ perceptions currently influencing their decisions within their organizations. The education and experience level played a minimal part in their use of AGACNPs, but financial reimbursements did play a significant role in their use.

**Conclusions**

The results of this study can help guide the future for the graduating AGACNPs wanting to find employment within the northern Nevada region and also provide benefit to the organizational leaders responsible for hiring AGACNPs. The results of the survey show that six out of the six organizations do not currently have an AGACNP model and majority don’t know what an AGACNP practice model looks like. Five out of the six organizations have not currently employed AGACNPs within their organization, which shows a large deficit within the area. Open-ended responses showed that a few of the participants could see potential benefit from the use of AGACNPs within their organizations. The use of a DNP prepared AGACNP can be beneficial to the implementation of acute care nurse practitioner practice model and increasing the use of AGACNPs within organizations. Their educational training, leadership skills, and extensive knowledge of process improvement and change processes can provide useful to any organization needing expertise in AGACNP implementation.

The survey results noted that there is a need to provide further education to the organizational leaders, specifically focusing on two main barriers to use of AGACNPs that could benefit their organization. These two barriers include confusion on scope of practice and implementation of an AGACNP practice model.
With these two identified practice barriers to use for AGACNPs within the northern Nevada region, a follow up executive summary can be made and sent to the participants. This executive summary included a brief educational notation on the scope of practice of AGACNPs and how they can be utilized within any northern Nevada organization. This executive summary also provided references regarding scope of practice of AGACNPs that the organizational leaders could find useful. The executive summary also provided the recommendations for implementation of a well-recognized and useful AGACNP practice model utilizing the PEPPA framework (McNamera et al., 2009; Bryant-Lukosius et al., 2004). (Appendix B). If organizational leaders required additional expertise on the implementation or questions regarding AGACNP use, they could contact the principal investigator. With the utilization of these recommendations and resources, there is potential for minimizing practice barriers to use of AGACNPs within northern Nevada.
APPENDIX A:

IDENTIFIED PRACTICE BARRIERS TO USE SURVEY
Hello Organizational Leader,

You have been selected for a regional survey provided by a student at the University of Arizona School of Nursing Graduate College. The survey and consent form are provided below and your desire to complete them are greatly appreciated. This study will be utilized in this student's graduate final doctoral project. You have a two-week timeframe to complete this survey. If you haven't responded within the next week, a reminder email will be sent. If you haven't responded within the two weeks, the student may contact you for a phone interview in the survey format provided below to reach a satisfactory amount of samples in the study. Please see the attached survey and consent below to begin the survey.

Thank you again for participating,

University of Arizona Nursing Graduate Student

CONSENT ATTACHED WITHIN SURVEYMONKEY.COM

The University of Arizona Consent to Participate in Research

Study Title: Identifying Practice Barriers to Use of Adult Gerontology-Acute Care Nurse Practitioners in the Northern Nevada Region

Principal Investigator: Stephanie Carlsen MSN, RN

This is a consent form for research participation. It contains important information about this study and what to expect if you decide to participate. Please consider the information carefully. Feel free to discuss the study with your friends and family and to ask questions before making your decision whether or not to participate.

Why is this study being done?
This study is being performed to better understand the barriers to use of AGACNPs in the acute care settings within Northern Nevada.

What will happen if I take part in this study?
You will answer a set of 22 questions. The questions will relate to what practice barriers to use of AGACNPs may be present within Northern Nevada. There will also be questions that provide demographic data needed for the study. There will be no names or identifying factors labeled.

How long will I be in the study?
The survey time frame allotted is 2 weeks for completion. Once you open the survey, the survey will begin. Once you close the survey, the survey will be completed. There is only one survey being administered during this study. Once the survey is completed, no further participation is required.
How many people will take part in this study?
There are a total of 19 hospital administrators that will be emailed this survey.

Can I stop being in the study?

*Your participation is voluntary.* You may refuse to participate in this study. If you decide to take part in the study, you may leave the study at any time. No matter what decision you make, there will be no penalty to you and you will not lose any of your usual benefits. Your decision will not affect your future relationship with The University of Arizona. If you are a student or employee at the University of Arizona, your decision will not affect your grades or employment status.

What risks, side effects or discomforts can I expect from being in the study?
There can be potential for the organization to be exposed due to the small sample size.

What benefits can I expect from being in the study? There is only future potential benefit to help minimize the barriers for AGANPs use into hospital-based practice. You will receive a follow up executive summary including the information identified from the results of this study. This information could include but not limited to: the barriers identified in this study, beneficial information regarding use of AGACNP practice, and recommendations and implications to minimize the barriers identified within the study.

What other choices do I have if I do not take part in the study?
You may choose not to participate in this study without penalty or loss of benefits to which you are otherwise entitled.
Will my study-related information be kept confidential?

Efforts will be made to keep your study-related information confidential. However, there may be circumstances where this information must be released. These examples can be but not limited to: publication in healthcare related journals, referenced for further research, and utilized for personal benefit for future AGACNP students.

Also, your records may be reviewed by the following groups:

- Office for Human Research Protections or other federal, state, or international regulatory agencies
- The University of Arizona Institutional Review Board
- The committee member chair and principal investigator
- The University of Arizona Health Network (UAHN)

Who can answer my questions about the study?

For questions, concerns, or complaints about the study you may contact Stephanie Carlsen MSN, RN, shumans@email.arizona.edu or 775-544-0815

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Human Subjects Protection Program at 520-626-6721 or online at http://orcr.arizona.edu/hspp.

An Institutional Review Board responsible for human subject’s research at The University of Arizona reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

Definitions Needed to Complete this Survey:

Adult gerontology acute care nurse practitioner (AGACNP): An advanced practice nurse that has specified training to treat and care for patients through the adult-older adult age spectrum (17-end of life). AGACNPs practice not just in acute care or critical care settings, but also with patients who have specialized needs and complex, acute, chronic, and/or exacerbation of chronic illnesses.
1. Are you aware of the University of Nevada Reno’s new graduate program for adult-gerontology acute care nurse practitioner (AGACNP) degree that began August 2014?
   a) Yes
   b) No

2. Recognizing that there may be an increased availability of new graduate AGACNPs within the community; would you hire AGACNPs into your facility upon graduation?
   a) Yes
   b) No

3. Does your facility currently have an adult-gerontology acute care nurse practitioner practice model?
   a) Yes
   b) No - our facility doesn’t hire AGACNPs
   c) No - our facility is unsure of what this practice model looks like
   d) No - our practice only has a nurse practitioner model, not an AGACNP model

4. Are you familiar with the differences in scope of practice between the following specialties of nurse practitioners: Family practice nurse practitioner (FNP) and adult gerontology acute care nurse practitioner (AGACNP)?
   a) Yes
   b) No

5. If you answered yes, list some of the differences in their scope of practice.

6. Which educational level of an AGACNP would influence your decision of employment?
   a) Masters
   b) Doctoral
   c) Does not influence

7. When making hiring decisions, our facility would not hire AGACNPs with less than 1 year of experience?
   a) Strongly Agree
   b) Agree
   c) Neutral
   d) Disagree
   e) Strongly Disagree
8. What are your perceptions of AGACNPs being utilized within the acute care setting as an organizational leader?
   a) Positive
   b) Unsure
   c) Negative

9. What do you believe are the benefits to utilizing AGACNPs in your organization?
   ________________________________________________

10. What, if any, negative perceptions or experiences do you have regarding the utilization of AGACNPs?
    ________________________________________________

11. Would physicians have influence on your employment of AGACNPs within your facility?
    a) Yes
    b) No
    c) Unsure

12. What, if anything, have you heard from physicians about their perceptions of AGACNPs?
    ________________________________________________

13. Under section 1848 of the Medicare reimbursement legislation, nurse practitioners are reimbursed at the rate of 80% of the lesser of the actual charge or 85% of the fee schedule amount for physicians. Would this have any influence on hiring AGACNPs within your facility?
    a) Yes
    b) No

14. Regarding question 13, please explain why or how this has an effect on your hiring of AGACNPs at your facility or not at all.
    ________________________________________________
    ________________________________________________
    ________________________________________________

15. If your facility hired AGACNPs in the acute care setting or currently does, what would the practice model look like?
    a) Collaborative with physicians
    b) Independent practice
    c) Other, please describe:
16. Do you currently have AGACNPs employed in your facility?
   a) Yes
   b) No
   c) Unsure

17. Please quantify how many AGACNPs practice at your facility?
   a) 0
   b) 1-10
   c) 11-20
   d) >21

18. How many acute care beds in your facility?
   Please type in number of beds here_______

19. Is your facility able to provide acute care to critically or acutely ill patients?
   a) Yes
   b) No

20. Do you currently have AGACNPs employed in the ICU or emergency departments within your facility?
   a) Yes
   b) No
   c) Unsure

21. What would help increase the use of AGACNPs in your facility?

22. What are the current practice barriers you think exist in the use of AGACNPs within your facility? (Select all that apply):
   a) Educational level
   b) Experience
   c) Perceptions
   d) Payer reimbursement
   e) Lack of Need
   f) Confusion on scope of practice
   Other__________________________________________________________
APPENDIX B:

FOLLOW-UP EXECUTIVE SUMMARY
Follow-Up Executive Summary

You were identified as an acute care organizational leader invited to participate in the survey, *Identifying Practice Barriers to Use of Adult Gerontology-Acute Care Nurse Practitioners in the Northern Nevada Region*. Below is a bulleted summary of the survey results, and the two main barriers identified within the survey results. Information is provided to help address these barriers.

RESULTS:

- 6 out of 19 acute care organizations within northern Nevada responded to the survey
- 5 out of 6 respondents stated they had no AGACNPs employed at their facilities
- 6 out of 6 had no acute care nurse practitioner models in place
- 5 out of 6 stated they would benefit from education of scope of practice of AGACNPs
- 5 out of 6 stated they would benefit from the use of AGACNPs at their facility

TWO MAIN BARRIERS:

1. Lack of Hospital Preparedness and Knowledge
   - Literature Evidence: One of the biggest barriers to use of AGACNPs as stated in the literature and as identified in the survey results, is the improper implementation of the role due to lack of knowledge and hospital preparedness (Liego et al., 2014; Kleinpell & Hudspeth, 2013). This was also identified in this survey.
   - Recommendation: Systematic/evidenced-based approach for role development that incorporates AGACNP standards for successful implementation of an AGACNP into an organization.
     - Utilize the PEPPA Framework (attached below). Developed by Byrant-Lukosius & DiCenso, PEPPA is an acronym for participatory, evidence-based, patient-focused process for guiding the development, implementation, and evaluation of advance practice nursing. This framework has been used to guide the implementation and maintenance of the APN role within an organization, providing organizational leaders the tools needed to implement AGACNPs, overcome barriers to use, and evaluate the outcomes of implementation.
     - For additional information and a complete listing of tools, visit: apntoolkit.mcmaster.ca

2. Confusion on scope of practice
   - Literature Evidence: One of the biggest barriers to practice is the confusion on scope of practice (Kleinpell & Hudspeth, 2013).
   - Recommendations: Scope of practice can be clarified through definitions provided by organizations that develop standards, as well as from seminal papers in the field. The definition of an AGACNP is included below, as well as a list of resources that you may find helpful in clarifying scope of practice and AGACNP implementation. The article by Drs Kleinpell and Hudspeth (bolded) serves a primer for
executives seeking clarification on scope of practice, and in particular, the use of acute care prepared NPs (as opposed to primary care NPs) in acute care settings.

**Definition of the Adult-Gerontology Acute Care Nurse Practitioner**

The AGACNP is a registered nurse who has completed an accredited graduate-level educational program that prepares him or her as a nurse practitioner with supervised clinical practice to acquire advanced knowledge, skills, and abilities. This education and training qualifies him or her to independently: (1) perform comprehensive health assessments; (2) order and interpret the full spectrum of diagnostic tests and procedures; (3) use a differential diagnosis to reach a medical diagnosis; and (4) order, provide, and evaluate the outcomes of interventions. The purpose of the AGACNP is to provide advanced nursing care across the continuum of health care services to meet the specialized physiologic and psychological needs of patients with acute, critical, and/or complex chronic health conditions. This care is continuous and comprehensive and may be provided in any setting where the patient may be found. The AGACNP is a licensed independent practitioner and may autonomously provide care or work collaboratively with your physicians.

**Resources for AGACNP Implementation and Scope of Practice:**

American Association of Critical Care Nurses (2012). AACN Scope and Standards of Acute Care Nurse Practitioner Practice. AACN Critical Care Publication.


Should you have any questions, or would like additional resources, please feel free to contact me.

Stephanie Carlsen, MSN, APRN, AGACNP-BC
Email: scarlsen@renown.org

*Thank you.*
APPENDIX C:

TELEPHONE AND EMAIL SCRIPTING
TELEPHONE SCRIPTING

Hello, my name is Stephanie Carlsen, MSN, APRN, AGACNP-BC. I am a doctoral student at the University of Arizona Nursing School and currently live in the Reno, NV area. I am conducting an online research email survey to identify potential practice barriers to use of adult gerontology acute care nurse practitioners (AG-ACNP’s) within the northern Nevada region.

I am interested in achieving the contact information for your organizational leader responsible for hiring AGACNPs or nurse practitioners within your organization. Can you please provide me with this information? All contact information that is needed is their email address and telephone number. The contact information will be kept in a Microsoft Word file on a password-protected computer. The contact information will not be disclosed to any other individuals. Within the next two weeks after the contact information is received, I will send out a survey link to the email address provided. This email survey is to be completed within a two-week timeframe. At the one week mark, if the survey is not completed a reminder will be sent out to the email address. If the online email survey isn’t completed within the two-week timeframe, a phone interview to the phone number provided will be conducted with the same survey questions.

Thank you for the information provided. I look forward to hearing from you.

Stephanie Carlsen MSN, APRN, AGACNP-BC
shumans@email.arizona.edu
775-544-0815

EMAIL SCRIPTING

Hello Organizational Leader,

You have been selected for a regional survey provided by a doctoral student at the University of Arizona College of Nursing. The survey and consent form are provided below and your participation is greatly appreciated. This study will be utilized in this student’s graduate final doctoral project. The research project is an email survey or phone interview to identify the practice barriers to use of adult geriatric acute care nurse practitioners within the northern Nevada region. The online survey will take you a total of 15 minutes for completion; it will need to be completed by xx/xx/xxxx. If not completed, a reminder email will be sent by xx/xx/xxxx. If you haven’t responded within by xx/xx/xxxx, the student may contact you for a phone interview in the survey format to reach a satisfactory amount of samples for the study. Please see the attached survey and consent below to begin the survey.

Thank you again for participating,
University of Arizona Nursing Graduate Student
REFERENCES


