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Enhancing Interest and Knowledge of How to Start a Nurse Practitioner-Led Clinic

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Enhancing interest and knowledge of how to start a Nurse Practitioner-led clinic

by

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In partial fulfillment of the requirements for the degree

Doctor of Nursing Practice

Otterbein University

2016

Final Project Committee:

___________________________________________________ ______________________
Dr. John Chovan PhD, DNP (Advisor) Date

___________________________________________________ Date
Dr.

___________________________________________________ Date
Dr.
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I would like to acknowledge the following individuals for their immeasurable contribution to this project:

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Phil Campbell, for his wisdom and invaluable knowledge of business and life....

Most of all, I dedicate this project to my mother, Carolyn Campbell. Her entrepreneurial spirit, service to her community and love of the nursing profession served as the foundational building blocks of this project.
Abstract

Theoretical and methodological contributions of nursing entrepreneurship and starting an independent practice within the Nurse Practitioner arena are sparse in American clinical prospectuses. The American health care system is in need of enhancement to better serve the healthcare needs of all people so there has never been a greater opportunity for NP entrepreneurial thinking and implementation of new initiatives (Marshall, 2011). Information regarding NP-led clinics is limited and NPs need to be educated on elements of successful independent healthcare ventures. The purpose of this project was to enhance interest and knowledge of starting a NP-led clinic.

A review of the literature demonstrated that entrepreneurial opportunities abound in areas that have not yet been imagined for experts in advanced practice roles. Independent practice opportunities allow NP entrepreneurs to pursue their own personal vision and desire to improve healthcare outcomes using innovative approaches. Knowledgeable NPs are needed to initiate and lead the introduction of change. Education about entrepreneurship and source of NP-led clinics is an important issue for NPs and health care consumers (Boore & Porter, 2012).

A pre and post-test survey instrument to measure the knowledge and interest of how to start a NP-led clinic was developed consisting of eleven components. An educational offering, based on Malcolm Knowles theory of adult education, was created and presented to enhance interest and knowledge of NPs in regards to starting NP-led clinics in a rural Midwestern community. Upon
completion of the educational offering, NPs demonstrated enhanced knowledge, but did not express enhanced interest in starting a NP-led clinic.
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Enhancing interest and knowledge of how to start a Nurse Practitioner-led clinic

Introduction

Healthcare in the 21st century is envisioned as equal access to health care for all people but making this happen will be a challenge. Presently in the United States (US), the lack of primary care physicians, predominantly in low income and rural locations, stands as an obstacle to the goal of delivering sufficient health care to all Americans (Pericak, 2011). To help meet the needs, Nurse Practitioners (NPs) are being recruited as well as encouraged to practice to the fullest extent of their education and abilities (Sharp & Monsivais, 2014). In doing so, NPs will need to take on additional roles in leadership, healthcare policy, planning and delivery of care. In order to provide comprehensive health care services for all, nurses will have to “think outside the box” and engage in entrepreneur roles (Wilson, Whitaker, & Whitford, 2012). NPs are not trained in “entrepreneurship” so further education will be needed to assist the NP to plan, establish alternatives, finance and manage an independent healthcare business operation (Zaccagnini & White, 2014).

Across the country, most advanced practice nursing programs do not provide education on entrepreneurial development or even how to develop one’s creative ideas in establishing independent practice. Even though successful NP practices exist across the United States (US) little has been published that outlines successful implementation, specifically for NP led practices. For this project, a tool was developed to assess the commonalities of successful independent healthcare venues within Ohio. After identifying key elements of NP entrepreneurial practice, an educational program was developed to educate NPs to implement their creative
ideas and entrepreneurial roles. The time frame for this transformational change project to influence NPs knowledge and interest in NP-led practices was four months. Consistent with Knowles theory of adult education, immediate feedback was available after the educational offering to the participants to assure their understanding of entrepreneurship and business practices that can lead to successful independent NP practice.

**Background and Significance of Problem**

Documentation of entrepreneurship within the nursing arena is sparse in the American clinical prospectuses. In reviewing entrepreneurial activities of nurses and other healthcare personnel, it is interesting to note that there are numerous studies conducted in the UK, Scandinavia and Canada. Further analysis of why the disparities may indicate similarities and differences in the healthcare systems of the US. The American health care system is in need of transformation to better serve the healthcare needs of all healthcare consumers so there has never been a greater opportunity for entrepreneurial thinking and new initiatives. The health care system in the US is in need of innovative responses to complicated problems with more independent, creative methods to solve problems (Marshall, 2011).

The industry of healthcare is in the middle of disarray as we transform through the unknown territory of reform, with deadlock in Congress. We are currently in the midst of the greatest change known in the delivery of healthcare, with the epicenter moving toward the community (Curran & Fitzpatrick, 2014). Worldwide, health reform is also necessary as all countries share increasing health care concerns due to a large aging population, a rise in chronic diseases, and
increased cost of care (Wilson et al., 2012). But history has demonstrated repeatedly that through chaos, opportunity is born. Creative nurse entrepreneurs and inventive leaders can and are embracing the complexity of issues and are reinventing themselves and their associations to meet the current challenges (Curran & Fitzpatrick, 2014).

Traditionally, physicians have provided primary health care and the role of the nurse has been to work under their direction and guidance. The arrival of advanced practice roles for nurses, including that of NP-led clinics in the 1990’s (Hansen-Turton, Sherman, & King, 2015), has challenged this description of roles. In a 2002 systematic healthcare review, the use of NPs versus physicians in primary care identified no significant difference in terms of patient outcomes, use of resources, expense, and the care process (Horrocks, 2002). Patients perceived nurse practitioners to have excellent communication skills and a willingness to offer advice about self-care and improved health care management (Desborough, Forrest & Parker, 2011).

Many researchers and leaders have urged professionals in healthcare to adopt more innovative, creative and entrepreneurial approaches while focusing on and solving emerging and difficult problems (Darbyshire, 2014). A plan to change and improve healthcare outcomes and access to care can be realized using entrepreneurial NPs. There have never been more opportunities for entrepreneurial thinking in healthcare. In the current healthcare environment, NPs are now perfectly positioned to play vital roles as leaders and agents of change at the
decision-making table and in clinical settings as primary healthcare providers (Zaccagnini & White, 2014).

NP-led clinics in Australia provide an innovative vision of entrepreneurialism. The Australian clinics offer an increased connection to desired daily care by locating in easy to access sites and conducting business outside normal operating hours. Patient care received at the NP-led clinics is based on current evidence-based clinical guidelines (Wilson et al., 2012). NP-led clinics have also been implemented extensively throughout the UK to increase accessibility to primary healthcare. While the majority of NP-led clinic studies originate from the UK, such clinics are also identified in New Zealand and a few in the US. However, limited information is available in peer-reviewed journals about NP-led clinics in countries other than the UK (Desborough, Forrest, & Parker, 2011). Interestingly, 0.1% of NPs in New Zealand work in entrepreneurial roles, 0.18% in the US and 18% in the UK (Wilson et al., 2012).

According to a 2010 statement by the American Nurses Association (ANA), NPs in NP-led clinics are able to diagnose and treat individual responses to actual and probable health problems, while promoting optimal functioning and health in target populations and communities. The care provided in NP-led clinics is holistic, patient-centered, and cost effective. The primary characteristic is a dedication to meeting the health needs of underserved populations (Hansen-Turton, Sherman, & King, 2015). NP-led clinics play a vital role in expanding access to health care for low-income and uninsured populations in the United States (Wilson et al., 2012). Opportunities are also available through NP-led clinics to educate future NPs,
improve practice, and increase the primary care workforce (Sutter-Barrett, Sutter-Dalrymple, & Dickman, 2015).

The Institute of Medicine, in a 2010 report, recognized the need for nurses to seek unique roles that support a varied scope of practice, thereby fulfilling gaps in healthcare. The report entitled, “The Future of Nursing: Leading Change”, noted that nurses have a vital contribution to make in building a healthcare system that meets the demands for high-quality, safe, patient-centered, affordable and accessible care. Health reform is increasingly directed to strengthening the health care system as primary care is shifted to the communities. The success of health care reform in the US depends on NPs that are appropriately educated for innovative practice roles such as NP-led clinics (Wilson et al., 2012).

The doctoral educational process in nursing education prepares the Doctor of Nursing Practice (DNP) to gather population-based information, individualize the findings based on needs assessment and utilize the information to provide high quality, patient-centered care that is evidence based (Zaccagnini & White, 2014). The DNP education emphasizes the construction of advanced competencies for expanding complex clinical, academic, and transformational leadership roles, enhancing knowledge to improve patient outcomes, and developing leadership skills to strengthen nursing practice and the delivery of healthcare (Gatti-Petito et al., 2013). The DNP graduate is expected to utilize this knowledge to plan, establish, finance, and operate his or her own business enterprise (Zaccagnini & White, 2014). To achieve these goals, NP programs, especially those at the practice doctoral level,
should include business courses to ensure that graduating NPs learn skills to be innovative and transformational in entrepreneurial endeavors (Wilson et al., 2012).

Self-employment opportunities allow NP entrepreneurs to pursue their own personal vision and desire to improve healthcare outcomes using innovative approaches. The NP becomes directly accountable to the patient for whom they provide services. Such NPs may operate an independent family practice, own a family practice, or run a consulting service for the purpose of research or education (Wilson et al., 2012).

Building a culture of entrepreneurship will demonstrate that NPs can successfully lead in healthcare. Dynamic, imaginative and passionate NPs are devoted to creating new approaches to the numerous healthcare challenges, support the efforts towards entrepreneurialism as well as ideas that may potentiate new businesses. (Darbyshire, 2014). A continued commitment to entrepreneurship positions will allow NPs, who practice independently, to be ahead of and outside of typical healthcare system, providing latitude to practice according to their values and beliefs (Edmonton, 2013). In order for this culture to be developed, entrepreneurial ideas must be promoted in the academic culture of colleges and universities (Darbyshire, 2014). If NPs are to address the complex and diverse range of needs of patients in the community, they need to learn business skills beginning in their initial healthcare educational setting. A broad range of business skills are needed to enhance professional and business expertise. These skills include negotiation, marketing, finance, human resources and management. Such business
skills should be considered a component or toolkit of all NP academic preparation (Roberts, 2009).

Entrepreneurial opportunities abound in areas that have not yet been imagined for experts in clinical nursing and in leadership (Marshall, 2011). Statistical data about the prevalence of entrepreneurship in nursing is not easy to obtain due to the varying definitions of entrepreneurship (Edmonton, 2013), furthermore, the term entrepreneurship has become obscure, with no single commonly noted definition (Boore & Porter, 2010). However, it appears that approximately 1% of NPs are engaged in some type of entrepreneurialism (Wilson et al., 2012). From a global perspective, the numbers are rising which is an important shift for professional nursing (Edmonton, 2013). As we enter the next generation with expansions of customized services, electronic and distance education, unconventional settings for healthcare, and information access and utilization, we cannot be sure what is on the horizon. Emerging health issues, increased chronic illnesses, infectious diseases, and the need for illness prevention and care, call for new thinking and leadership. As primary care becomes the next great challenge in healthcare, extreme needs present opportunities for entrepreneurial responses from healthcare leaders (Marshall, 2011).

The time for NP entrepreneurs to act is now. There is tremendous movement on the entrepreneurial front all over the world (Darbyshire, 2014). In 2003, an action plan was developed by the Northern Ireland executive’s Program for Government entitled ‘The Entrepreneurship and Education Action Plan’. This plan recognized the need to provide learners with skills that promote entrepreneurial
opportunities. Core concepts of this plan included early introduction of enterprise and entrepreneurship in higher education (Boore & Porter, 2010). With the current momentum for health care reform, the time has come to take these efforts to the next level and to move words into action. It has become clear that new approaches to thinking, creativity and problem solving are required in nursing and healthcare. Last decade’s approaches to healthcare issues will not address the challenges of today and tomorrow (Darbyshire, 2014). Edification is currently lacking in the education of US NPs, in regards to entrepreneurship and NP-led clinics, education offerings must be developed.

**Problem Statement**

Entrepreneurial education in advanced practice nursing programs is very limited. NPs need to be educated to enhance both their interest and knowledge of entrepreneurial nursing, as an answer to meeting the healthcare needs of Americans.

**Project Description and Design**

The overall plan or design of a clinical study is considered the underpinning of a research project. A suitable quantitative design is one that detects significant statistical findings, tests the hypothesis and lacks bias. Quasi-experimental design, as used in this clinical project, concerns itself with analyzing the effects of an intervention or treatment (Melnyk & Fineout-Overhold, 2015).

Numerous theories exist to explain how adults learn (Taylor & Hamdy, 2013). Malcolm Knowles’ theory of adult education has been identified as the
supportive theoretical framework for enhancing interest and knowledge in starting a NP-led clinic.

Preparing for positive nursing educational outcomes starts with a solid foundation for learning. Knowles theory of adult education presents a framework to expand the effectiveness of entrepreneurial education. According to Knowles (1975), adult learners are described as self-directed, knowledgeable, and inspired to learn. This theory, as an approach to educating adults, is practical, adopting problem-solving strategies with a focus on issues that are of immediate value to the learner (Gatti-Petito et al., 2013).

Malcolm Knowles’ theory of adult learning is also known as the theory of andragogy and conceptualizes how and why adults learn (Lin & Ross, 2011). Andragogy, as described by Knowles, recognizes that significant differences exist between adult and child learners. Six observations were made by Knowles to describe qualities of an adult learner:

1. Expresses curiosity to learn
2. Takes ownership of personal decision to learn
3. Values own life experiences
4. Exhibits readiness to learn
5. Understands that learning will assist in dealing with new situations
6. Demonstrates motivation to learn (Knowles, 1975).

A worthwhile educational experience creates an opportunity for learners to provide feedback and gives opportunity for the educator to determine the learner’s understanding of the presentation. Such encounters provide foundations for
expanded educational experiences. As educators realize the instructional framework that suits their individual teaching style, learners will be engaged and ready to continue the educational process (Gatti- Petito et al., 2013).

The purpose of the DNP project was to provide an educational offering to NPs that enhanced interest and knowledge of entrepreneurship and starting a NP-led clinic. Objectives of the project included:

1. Determining if educational exposure of starting a NP-led clinic enhanced interest
2. Identifying if learning occurred as a result of the educational offering presented to NPs at an Ohio Association of Advanced Practice Nurses (OAANP) regional meeting in Zanesville, Ohio.

The Otterbein University Institutional Review Board (IRB) approved an expedited review of the project (Appendix A). The IRB ensures that risks to the subjects are minimal, that there is an appropriate selection of subjects, along with informed consent and protection of all participants’ privacy (Moran, Burson, & Conrad, 2014).

The development of the educational offering and instrument was augmented by interviewing NP-led clinic owner Carolyn Campbell, Family Nurse Practitioner (FNP). Mrs. Campbell entered nursing in 1976 as a licensed practical nurse. She received her associate degree of nursing in 1982 and served many years in her community hospital working as a manager in the intensive care unit. Mrs. Campbell received her bachelor degree of nursing in 1990, followed by her master of science of nursing in 1993. In 1989, she paralleled her hospital work with accepting a
clinical instructor position for an associate degree-nursing program. Mrs. Campbell continued to educate hundreds of nursing students over the course of sixteen years. In 1997 she graduated from Otterbein College’s first Adult Nurse Practitioner program, followed by their FNP program in 1999. As one of only a few FNPs in her local community, she worked with a physician in family practice for five years. In November of 2004, Mrs. Campbell and a fellow FNP business partner opened up the first local NP-led clinic in Washington Court House, Ohio. For ten years, the practice was open 365 days a year, serving patients every day of the week, weekends and holidays. Although minor changes in the business have taken place, Mrs. Campbell continues to increase the community’s access to healthcare with her dedication and service to individuals and families. Mrs. Campbell is considered an expert in her field with a patient base of 35,000, the largest family practice in her area.

Through interviewing, Mrs. Campbell was asked to describe critical information needed to start a successful NP-led clinic, i.e. what information would have been helpful to have during the birth of her own NP-led clinic. Having limited business knowledge from her formal education, she used her success in business to identify key educational concepts that would be useful to the new entrepreneurial NP, which were incorporated into the educational program.

Prior to the implementation of the project, informed consent was obtained from each NP participant prior to the educational offering and at the completion of the program using the pre/post-test survey instrument (Appendix B). No risk or harm to subjects was identified in this project. No incentive was offered to the NPs
for their participation in this clinical project. Subjects were informed that the education program was part of a DNP student project.

Twenty-two participants were included in the convenience sample of APNs attending an OAAPN regional meeting. The subjects attended the OAAPN regional meeting after solicitation using email requests and ongoing communication to all regional chapter presidents of the OAAPN. A November 2015 date was agreed upon for the regional chapter meeting in Zanesville, Ohio where the educational offering was presented.

The educational offering consisted of a theoretical and lived-experience presentation on starting a NP-led clinic. A power point presentation was utilized to emphasize specific content of the educational offering (power point outlines Appendix C). Specific content of the theoretical presentation consisted of providing a background of NP roles in healthcare, up-to-date information on the modernization of House Bill 216, related to full independent practice in the state of Ohio for APNs, and introduction of entrepreneurial concepts in nursing. Additional content included necessary steps to starting a NP-led clinic such as conducting a community needs assessment, identifying necessary operating licenses, consultants of professional business, and business structure awareness. Lastly, reimbursement of services, procurement of equipment, laboratory issues and marketing were examined. Attendees were also informed that the education program was part of a DNP student project.

Following the theoretical content of the educational offering, Carolyn Campbell, FNP, facilitated a lived-experience discussion. Mrs. Campbell discussed
her personal experience of starting a NP-led clinic in a rural community. She emphasized the purpose of her clinic as meeting the healthcare needs of her community and serving those who are underserved. The chapter meeting attendees demonstrated interest in her experience by asking numerous questions.

A pre and post presentation instrument was developed using the content presented in the educational offering and was administered to attendees before and after the theoretical and lived-experience presentation (Figure 1). The literature indicates that if an assessment instrument is not available, content experts can be utilized to create and pilot the instrument, which was done for this project utilizing the DNPs project committee for review and approval (Sullivan, 2011). Components of the instrument identified: necessity of assessing the community for development of a NP-led clinic, operating licenses, professional consultants, business structures, reimbursement systems, components of a business plan, operational equipment, laboratory issues, marketing strategies, interest in starting NP-led clinic in one’s area, and knowledge about starting NP-led clinic. Participants responded to the identified content areas on the survey by using a Likert scale, choosing between four responses: strongly agree, agree, disagree or strongly disagree.

Validity of the instrument was essential because it portrayed how well the instrument measured what it was intended to measure, which was interest and knowledge of starting a NP-led clinic (Moran et al., 2014). Mrs. Campbell, as content expert, reviewed and approved the content of the instrument prior to offering it to the NPs at the OAAPN regional meeting. This was done because using experts to validate the content of the instrument and critically assessing their
recommendations regarding items can result in further revision of items beyond what is suggested by professional experts. This process may result in a more methodical content validity assessment of the instrument, leading to an instrument with greater significance for the target learners, which it did (Schilling, 2007).
Figure 1. Instrument to measure enhanced interest and knowledge of starting a NP-led clinic

<table>
<thead>
<tr>
<th><strong>The Participant can:</strong></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify necessity of assessing the community for need of NP-led health clinic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Describe all licenses that must be obtained to open and operate a NP-led health clinic</td>
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<tr>
<td>3. Identify business professionals that would be knowledgeable and appropriate to consult with for set-up of clinic</td>
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<tr>
<td>4. Describe two business structures effective for starting an NP-led health clinic</td>
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<tr>
<td>5. Describe two reimbursement systems appropriate for collection of payments for services rendered at a NP-led clinic</td>
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<td></td>
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</tr>
<tr>
<td>6. Describe components of a business plan that would include options for financing clinic operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Identify operational equipment and two options for procurement of identified clinic equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Identify Clinical Laboratory Improvement Amendments (CLIA) tests for laboratory issues within the NP-led health clinic</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9. Identify two marketing strategies appropriate for advertising the NP-led health clinic</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**INTEREST**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. I am interested in starting a NP-led health clinic in my area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I am knowledgeable about starting a NP-led health clinic in my area</td>
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<td></td>
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</tbody>
</table>
Outcomes and Evaluation

Inferential statistics using Chi-squared were used to compare the pre-and post-test answers on the eleven content areas (Terry, 2012). A p value of < .05 was chosen as it is commonly used to determine statistical significance between groups in interpretation of research projects. When $p < .05$ is noted, there is less than a 5% chance that a statistically significant difference between the pre and post survey results could be reported in error or by chance (Sylvia & Terhaar, 2014).

Statistical significance was obtained at the 95% confidence level (and higher confidence levels as seen by the small $p$ value in Table 1) for nine of the eleven content areas of the instrument. These nine areas include operating licenses, professional consultants, business structures, reimbursement systems, components of a business plan, operational equipment, laboratory issues, marketing strategies and knowledge about starting NP-led clinic. Appendix D reflects the Chi-squared worksheets from Minitab for each of the eleven content items.

Each of the hypothesis tests compared the pre-education to the post-education results (Table 1). The null hypothesis was that there is no difference before and after the educational offering. The alternative hypothesis was that the score on the pre-and post-test were not the same, which was the desired outcome of the scholarly project. The statistically significant findings reject the null hypothesis in favor of the alternative, i.e., the education had a significant impact on the learners for nine of the eleven content areas (Appendix D).
<table>
<thead>
<tr>
<th>Question</th>
<th>Topic</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre, Q1</td>
<td>Community</td>
<td>7</td>
<td>14</td>
<td>1</td>
<td>0</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>Post, Q1</td>
<td></td>
<td>13</td>
<td>9</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Pre, Q2</td>
<td>Licenses</td>
<td>5</td>
<td>3</td>
<td>9</td>
<td>5</td>
<td>0.000</td>
</tr>
<tr>
<td>Post, Q2</td>
<td></td>
<td>11</td>
<td>11</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Pre, Q3</td>
<td>Consultants</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>3</td>
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<td>10</td>
<td>12</td>
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<tr>
<td>Pre, Q4</td>
<td>Structures</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>6</td>
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</tr>
<tr>
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<td></td>
<td>10</td>
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<td>1</td>
<td>0</td>
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<td>Pre, Q5</td>
<td>Reimbursement</td>
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<td>6</td>
<td>7</td>
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<td>13</td>
<td>9</td>
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<tr>
<td>Pre, Q6</td>
<td>Plan</td>
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<td>9</td>
<td>5</td>
<td>0.000</td>
</tr>
<tr>
<td>Post, Q6</td>
<td></td>
<td>10</td>
<td>11</td>
<td>0</td>
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<tr>
<td>Pre, Q7</td>
<td>Equipment</td>
<td>3</td>
<td>7</td>
<td>8</td>
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<tr>
<td>Post, Q7</td>
<td></td>
<td>11</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Pre, Q8</td>
<td>Laboratory</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>0.001</td>
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<td>11</td>
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<tr>
<td>Pre, Q9</td>
<td>Marketing</td>
<td>5</td>
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<td>5</td>
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<tr>
<td>Pre, Q10</td>
<td>Interest</td>
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<td>6</td>
<td>5</td>
<td>9</td>
<td>&gt;.05</td>
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<td>Post, Q10</td>
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<td>5</td>
<td>5</td>
<td>4</td>
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<tr>
<td>Pre, Q11</td>
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<td>9</td>
<td>8</td>
<td>0.000</td>
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<td>Post, Q11</td>
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<td>8</td>
<td>12</td>
<td>1</td>
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</tbody>
</table>
Unintended consequences of the project included the lack of available data to determine statistical significance in two of the instrument content areas: necessity of assessing the community for a NP-led clinic and interest in starting a NP-led clinic in one’s area. However, according to Oetker-Black et al. (2014), the development of an instrument is a process of continuous improvement and change. Once the instrument is constructed, modified and re-evaluated, the tool may assist future nurse educators to evaluate the learner’s ability to transfer knowledge into the practice setting.

**Recommendations**

Future direction for the project includes improving the content of the educational program that educates the NP on the importance of assessing the community for need of NP-led clinics and enhancing the interest of NPs in starting a NP-led clinic. By increasing content information on community assessment, a broader understanding of the need to assess the community’s access to healthcare, economical status of the community, opportunities for employment and appropriate location identification for a NP-led clinic would be provided. In order to enhance interest in NP-led clinics, the presentation would benefit from improved identification of benefits of starting a NP-led clinic for both the entrepreneur and the patient/community. A benefit to the NP entrepreneur is that NP-led clinics allow the NP to work in their full scope of practice and utilize individual skills to their fullest advantage (Heale, 2012). A benefit at the patient and community level is that NP-led clinics improve linkage between hard-to-serve populations and access to primary care (Roots & MacDonald, 2014).
Assessing the NPs willingness to take risks would be an additional consideration for future use of the instrument. Recruitment of a larger sample size would be recommended for future projects to ensure adequate statistical findings. To enhance sample size and interest in the program, future presenters should include continuing education opportunities that contribute to the requirements for nursing licensure renewal. An additional setting for application of this project is university NP programs to educate prospective NPs on entrepreneurial business opportunities at the beginning of their NP career. Incorporating entrepreneurship content into the NP curriculum would be a start to educate the new NP about expanded roles for advanced practice nurses. This presentation could be presented to graduating NPs in their leadership/role courses utilizing communication technology so that they benefit first-hand from the experts.

Limitations of the clinical project included a small sample size, which in turn had a lack of interest by participants for pursuing their own NP-led clinic. But, this was a small sampling of OAAPN members who were attending a general meeting and not specifically looking to start a practice. For future replication of the project, area NPs should be invited to the program presentation thereby increasing interest in the topic and those in attendance would be there because they were interested in this issue of independent NP-led clinics and interest could be quantified more easily. Other limitations include the lack of reliability for a newly constructed instrument to measure the basic enhanced interest and knowledge acquisition of starting a NP-led clinic. Repeat utilization of the tool would fine-tune the scale and increase reliability.
Summary

The American health care system is in great need of enhancement to transform and better serve the healthcare needs of all people, there has never been a greater opportunity for NP entrepreneurial thinking and utilization of new initiatives (Marshall, 2011). Information regarding NP-led clinics is limited and NPs need to be educated on elements of successful independent healthcare venues. Success of an educational offering requires that educators present learners with a stimulating process of knowledge reorganization (Oetker-Black, Underwood, Price & DeMetro, 2014). An educational offering on enhancing interest and knowledge of starting a NP-led clinic along with a pre and post presentation instrument demonstrated a significant impact on the participant’s knowledge of entrepreneurship and NP-led clinics but no significant impact on the participant’s interest. Education about entrepreneurship and NP-led clinics is an important issue for NPs and should be addressed on multiple levels including locally in communities, statewide, and in the educational setting (Boore & Porter, 2012).
References


content validity of a self-report instrument for adolescents using a heterogeneous expert panel. *Nursing Research, 56*(5).


Appendix A/IRB Approval

INSTITUTIONAL REVIEW BOARD
RESEARCH INVOLVING HUMAN SUBJECTS
OTTERBEIN UNIVERSITY

ACTION OF THE INSTITUTIONAL REVIEW BOARD

With regard to the employment of human subjects in the proposed research:

HS # 15/16-17
Chavez & Campbell: Enhancing interest and knowledge of how to start ...

THE INSTITUTIONAL REVIEW BOARD HAS TAKEN THE FOLLOWING ACTION:

☑ Approved          ☐ Disapproved
☐ Approved with Stipulations* ☐ Waiver of Written Consent Granted
☐ Deferred

*Stipulations stated by the IRB have been met by the investigator and, therefore, the protocol is APPROVED.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject’s participation in the proposed activity. Should the principal investigator leave the college, signed consent forms are to be transferred to the Institutional Review Board for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the IRB, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: 28 September 2015  Signed: [Signature]

Chairperson

OC HS Form AF
Appendix B/Informed Consent

Thank you for your participation in the DNP Research Project entitled: ‘Enhancing Interest and knowledge of how to start a Nurse Practitioner (NP)-led clinic’

This project has received approval from Otterbein University’s Institutional Review Board.

Participation in the educational program is completely voluntary. No personal identifiers will be collected. All responses are confidential and will help to evaluate the impact of an educational program on practitioners’ awareness and knowledge of setting up a NP-led health clinic. Participation will be considered consent to participate in the study. If you choose to participate, you may change your mind, stop the survey at any time, or refuse to answer questions.

Statement on Data Protection
Data will not contain personal identifiers and will be analyzed in the aggregate to assure confidentiality and maintain the anonymity of those responding.

If you have any questions about the project, please contact Kami S. Campbell, MSN, RN, FNP, at kami.campbell@otterbein.edu or by phone at 740-572-6359.

Name____________________________________________________________
Appendix C/Power Point Outline

- Kami Campbell, FNP  
  DNP candidate of Otterbein University  
- **Enhancing interest and knowledge of how to start a Nurse Practitioner-led clinic**  
- Carolyn Campbell, FNP  
- Owner and operator of NP-led clinic in Washington Court House, Ohio  
  Campbell-Wall After Hours Family Practice  
- Opened November 2004  
- What we know  
  - Health reform is necessary  
  - Physician’s traditionally provided primary care  
  - Arrival of APN roles for nurses challenges traditional views  
- Roles include:  
  - APN’s in primary care  
  - NP-led clinics  
- **Advanced practice nursing programs lack education on entrepreneurial development**  
- APRN Modernization House Bill 216  
- Standard care arrangement mandates collaborating agreements with supervising physicians  
- US will face shortage of **90,000** physicians in next ten years  
- Nearly **1/3** of physicians will retire in the next decade  
- **>32 million** consumers of healthcare are expected to be added to healthcare marketplace  
- Modernization laws will allow APRNs to practice to full potential  
- Increase access of care  
- **Entrepreneurial** approaches are needed to address complex issues  
- Purpose of this project  
- Recognize the entrepreneurial work of my mother  
- Enhance **interest** and **knowledge** of how to start a NP-led clinic  
- Provide educational presentation  
- Conduct pre/post survey

**How do I start a NP-led clinic?**  
**Where do I begin?**

- Community Needs Assessment  
- Understand the healthcare needs of the **community**...  
- Access to healthcare  
- Economic status of the community  
- **Health department helpful with healthcare statistics**
• Employment opportunities
• Appropriate location of clinic, parking, room for growth?
• Operating Licenses
• Business name/register name with county clerk
• Application for Employer Tax Number (EIN) from the IRS (for identification purpose)
• National Provider Identifier (NPI) application, 10-digit number
• Credentialing if accepting insurance, Medicare and/or Medicaid
• Consulting with Business Professionals
• Lawyer/s
• Professional in banking: business loan, line of credit, checking account
• Professional insurance for business and liability coverage
• Other entrepreneurs
• Healthcare professionals knowledgeable about clinic set-up
• Business Structures
• Sole proprietorship-you alone own the company as well as responsibilities for assets and liabilities
• Corporation-larger established companies, numerous employees
• Limited liability company (LLC)-operational flexibility of partnership, claims can't be against personal assets
• Partnership-depending on nature of agreed arrangements
• Reimbursement Systems
• Cash/check/credit card
• Insurance reimbursement (credentialing necessary)
• Medicaid/Medicare (credentialing necessary)
• Business Plan
• What you want to do with your business? Who will you hire?
• What will make you different from others? Unique qualities
• Research your community
• Finance with cash, personal loan, small business loans, available grants for rural healthcare and underserved areas
• Marketing and sales strategies
• Equipment
• Waiting room furniture, office desks/chairs
• Charts vs. EMR
• Exam tables/chairs
• Instruments/sterilization, scopes, dressings, sterile procedure supplies
• Lounge area for employees
• Procurement of equipment: online searches, newspaper ads, sale of used medical office equipment (eBay, Craig's list)
• Laboratory Issues or Guidelines
• Enrollment in the CLIA (Clinical Laboratory Improvement Amendment) program
• Application form CMS (Centers for Medicare & Medicaid Services)-116
• A certificate of waiver that labs performed pose little risk of error
• Urinalysis, pregnancy, glucose, drug screening, CBC, CMP, strep \(\rightarrow\) > 100 tests
• Marketing Strategies
• **Announce it to the public!**
  • Facebook, twitter
  • Newspaper advertisement
  • Radio
  • Billboards/Signs
  • Word of mouth
• Thank you for your participation!
• Kami Campbell, FNP
• DNP Candidate of Otterbein University kami.campbell@otterbein.edu
• Campbell-Wall After Hours Family Practice, Washington Court House, OH 1-740-333-3310
• Assistant Professor of Nursing at Southern State Community College, Hillsboro, Ohio kcampbell@sscc.edu