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Validation Of A Toolkit On Innovative Business Models For Nurse Practitioner Practice

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Validating A Toolkit on Innovative Business Models for Nurse Practitioners

Submitted to the Faculty
Yale University School of Nursing

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Nursing Practice

Sapana V. Patel MSN, APRN-BC

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VALIDATING A TOOLKIT ON INNOVATIVE BUSINESS MODELS

This DNP Project is accepted in partial fulfillment of the requirements for the degree
Doctor of Nursing Practice.

Dr. Jessica Shank Coviello electronically signed 3/15/18

Dr Jessica Shank Coviello

Date here March 15, 2018

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March 14, 2018

VALIDATING A TOOLKIT ON INNOVATIVE BUSINESS MODELS

Validating A Toolkit on Innovative Business Models for Nurse Practitioners

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VALIDATING A TOOLKIT ON INNOVATIVE BUSINESS MODELS

Abstract

Background: NPs have a great opportunity to undertake entrepreneurial opportunities. However, according to the International Council of Nurses, “only 0.5%-1% of working nurses are nurse entrepreneurs” (ICN, 2004, pg. 9). This is primarily due to a lack of resources that support entrepreneurial inquiry.

Objective: To validate a toolkit on innovative business models for NP practice.

Methods: The toolkit was developed by: 1) conducting a comprehensive review of scientific literature, 2) reviewing the needs and barriers of entrepreneurship by interviewing experts and 3) validating the toolkit with a panel of experts.

Results: There was 100% agreement on the relevance and importance of nine identified categories: Creating a Business Plan, Money Matters, Know your Target Market, To Buy or To Build, Legal Matters, Credentialing 101, Insurance 101, Building Your Team and Marketing.

Conclusions: This toolkit provides a robust step-by-step guide on entrepreneurship and acts as a catalyst for NPs who may consider it in the future.

Implications for Nursing: NPs are at the forefront of health reform and can identify gaps in the system where innovative solutions are vital. Access to such resources can provide a necessary infusion of NPs who are passionate about innovation and entrepreneurship to drive health reform.

Keywords: nurse practitioner; entrepreneurship; nurse practitioner practice; independent nurse practitioner practice

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Validating A Toolkit on Innovative Business Models for Nurse Practitioners

Introduction

Have you wondered if you could open your own business? If so, what is stopping you?

The momentum behind Nurse Practitioners (NPs) to undertake entrepreneurial opportunities and be disruptive has never been greater. With legislation supporting full practice authority, there has never been a more opportune time for NPs to consider innovative practice environments. Many lack the business acumen necessary to create sustainable business models given the lack of entrepreneurial training offered in academic nursing programs. NPs are at the forefront of the evolving health care landscape and thus need to be afforded the necessary tools to create innovative business solutions within the health industry.

Entrepreneurship and Nursing

Entrepreneurship is not only the quest of innovative opportunities that may incur risk, but also the process in which one implements an idea into actual practice (Guo, 2009). A nurse entrepreneur is “a proprietor of a business that offers nursing services of a direct care, educational, research, administrative or consultative nature” (ICN, 2004, pg.4). As innovative leaders in today’s changing health care landscape, NPs can undertake entrepreneurial opportunities, thus improving health outcomes and decreasing health care costs. Examples of successful nurse entrepreneurship have been evidenced by the numerous NPs who have leveraged the lax scope of practice regulation and transitioned into independent private practice settings (Elango and Winchell, 2007). However, according to the International Council of Nurses, “it appears that 0.5%-1% of working nurses are nurse entrepreneurs” (ICN, 2004, pg. 9). Why is this?

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Conventional views on the dynamic between nursing and entrepreneurship have generally assumed that one does not significantly impact the other. However, Radzaminski (2005) points

Case Study

Sonia, licensed as an adult nurse practitioner for 11 years in New York, was thrilled when the Nurse Practitioner Modernization Act (NPMA) took effect in January 2015. Having worked in primary care for most of her career, she appreciated the obstacles (quantity over quality, lack of available appointments) encountered by physicians and patients. Throughout her day, she would constantly tell herself, “if I had my own practice, I would do things differently,” improving quality outcomes and a decreasing health care costs. Now that NPMA was on her side, she had her opportunity.

Not knowing where to begin, she assumed the first, easy, logical step was to find an office space. She assumed that leasing would be less of an upfront commitment, so she started looking at office spaces in New York City. Over what seemed like a long 3 months, she finally found a location that was suitable. While reviewing the lease, she came across terms such as “good guy clause” and “personal guarantee”. She also took notice of the fact that the lease was for five years. Concurrently, she had been working to obtain a small business loan and required a business plan and pro forma to do so. Feeling overwhelmed and perplexed, she decided not to pursue entrepreneurship and returned to working at a physician-owned primary care practice.

out that nurses need to be well-versed in management, marketing, integrated information technologies, resource allocation, and finance to be effective in today’s health care landscape. As evidenced by the literature, entrepreneurial skills are necessary for NPs to flourish in today’s cost-driven, competitive health care arena (Waxman, 2013).

The Time is NOW

Currently, the United States (US) health system is experiencing a multitude of issues including a worsening shortage of primary care physicians (PCPs), exponentially rising health care costs and debatable quality of patient care (Stanik-Hutt et al., 2013). Access to primary care services is the foundation of a robust health care system, thus having an adequate supply of primary care practitioners is paramount. Evidence supports the notion that quality primary care plays an integral role in the performance of the overall health system

by providing opportunities in disease management, health promotion and resource consumption

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(Starfield, 2011). Unfortunately, based on current utilization patterns, it is projected that the shortage of primary care physicians will be 20,400 physicians by 2020 (U.S. Department of Health and Human Services, 2013). The passage of the Affordable Care Act (ACA) in 2010 afforded coverage to 32 million Americans. However, it also exacerbated the primary care physician shortage (Dill, Pankow, Erikson & Shipman, 2013). Without a just solution on how primary care is delivered, the supply of primary care physicians will not be sufficient to meet the projected primary care demands of 2020.

Increased coverage expansion, changing demographics, and economic changes have also resulted in increased health care spending. Recent analysis projects health care spending to grow approximately 5.6% per year from 2016-2025 (Keehan et al., 2017). Political and economic analysts agree that the crux of health reform is decreasing health care costs and improving access to quality health care.

NPs are a logical solution for health reform. As of 2016, approximately 222,000 NPs are licensed across the U.S. and 83.4% of them are certified in the primary care arena (AANP, 2016). An analysis conducted by Yong-Fang Kuo, Loresto, Rounds and Goodwin (2013) revealed that the number of patients who utilized a NP as a primary care provider increased 2-fold between 1998 and 2010. NPs possess an array of skills, allowing them to provide chronic disease management, acute care and health promotion, all of which are common primary health care needs. A 10-year cost analysis simulation conducted by Hooker and Muchow (2015) showed a net savings of \$729 million when utilizing more primary care providers such as physician assistants (PAs) and NPs.

Launching your Innovative Idea

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NPs are at the forefront of the health care landscape and can often identify gaps in the system where innovative solutions are vital, yet are difficult to transition from concept to market. To cultivate an entrepreneurial spirit within nursing, resources illustrating the process of creating innovative enterprises are required. Currently, no toolkit exists to build the skillset needed to support the transition into entrepreneurial practice settings. In light of this, a step-by-step guide on how to construct innovative business models for NP practice is paramount. Such a resource seeks to not only close the wide gap that remains between NPs and entrepreneurship, but also facilitate the spread of entrepreneurial knowledge within the nursing community.

The proposed solution to bridge the gap between entrepreneurship and nursing is an evidence-based toolkit for NPs. The components of the toolkit were developed with 3 specific aims: 1) to conduct a comprehensive review of the scientific literature on NP scope of practice, nurse entrepreneurship and varied business models that may be applicable for NP practice, 2) to review the needs for nurse entrepreneurship and the barriers to constructing innovative business models for nurse practitioner practice by interviewing key nurse experts and 3) to validate the toolkit utilizing a panel of experts.

Methods

Descriptions of the methods utilized to achieve the aims of the toolkit are outlined below. The first step was to conduct a comprehensive review of the scientific literature that was germane to the construction of the toolkit. The databases, SCOPUS, OVID and CINHAI, were searched using the following terms: *independent practice, scope of nursing practice, advanced practice nurse, nurse practitioner, health care models, nurse entrepreneurship and disruptive innovation*. Evidence pertaining to entrepreneurship, nurse entrepreneurship, scope of practice, patient outcomes, cost effectiveness of an NP practice and disruptive innovation were of specific

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importance, yet limited research has been done in this realm. Inclusion criteria included terms listed above and all study designs as well as working papers. Exclusion criteria included articles that were published prior to 1970, written in a foreign language or did not address NP-operated practices.

The second step was to review the needs of nurse entrepreneurship and the barriers to constructing innovative business models for nurse practitioner practice. This was completed by interviewing key experts, such as executive directors of state nursing associations, NPs who currently operate independent practices, NPs in entrepreneurship, health care lawyers that specialize in NP regulation, financial officers and an accountant, on the complexities of the NP-entrepreneurial relationship. The content collected and reviewed from the systematic review of literature and key expert interviews was then categorized and written into items of the toolkit and grouped into categories. Ten categories were with specific items under each category were identified, creating the foundation of the toolkit.

The third step was to have the identified content of the toolkit validated by a panel of experts. A five-member expert panel validated the categories and items using the process outlined by Lazenby, Dixon, Coviello, & McCorkle (2014). The panel was comprised of experts from diverse backgrounds: 1) an executive director of a state NP association, 2) a nationally-known health care attorney, 3) a nationally-known expert in billing/coding, 4) a director of nurse innovation & entrepreneurship and 5) a doctoral-prepared nurse entrepreneur (Table 1). The expert panel rating form was organized into ten categories, with specific items listed under each. The experts were asked to rate the content using a binary rating guide for importance and a Likert scale for relevance, and return the form within 2 weeks. After receipt of all the responses, results were calculated based on percentage of agreement for all categories and items. Content

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with less than 0.78, or 78%, agreement was rejected and content with over 78% agreement was found to be evidence-based and included in the toolkit (Table 2).

Table 1
Expert Panel Biographies

<p>Carolyn Buppert, JD, is a health care attorney. She works with medical practices, institutions, non-profit organizations and individual clinicians throughout the United States. She is the author of nine books and has her YouTube channel, she briefly discusses various legal issues affecting nurse practitioners. She is a frequent contributor to various health care publications. She is on Medscape's panel of experts. She writes a "Legal Limits" column for The Journal for Nurse Practitioners. She lectures extensively on a variety of medical-legal issues throughout the nation.</p> <p>Rebecca Love RN, ANP, is the Director of Nurse Innovation & Entrepreneurship at School of Nursing Northeastern University. She is also the founder of HireNurses.com, a Boston based company with the mission to Redefine Nursing, for Nurses, By Nurses.</p> <p>Stephen Ferrara, DNP, FNP-BC, FAANP, is a practicing Nurse Practitioner and the associate dean of clinical affairs and assistant professor at Columbia University's School of Nursing. He also serves as the Executive Director of the NPA. He was awarded the American Association of Nurse Practitioners' NY State Award for Clinical Excellence in June 2012 and was inducted as a fellow of the American Association of Nurse Practitioners in June 2013.</p>	<p>Lynn Rapsilber DNP ANP-BC FAANP, is the owner of NP Business Consultants, LLC. She has been teaching coding and reimbursement to APRNs for over 17 years and has spoken at the local, state and national level. She is currently practicing as a Gastrointestinal NP and is a part time professor at Quinnipiac University in their on-line DNP program. She currently is the chair of the CT Coalition of Advanced Practice Nurses, Past President of CTAPRNs. She is also one of the 4Founders of NNPEN, the National Nurse Practitioner Entrepreneur Network.</p> <p>Michelle Schmerge, DNP, ANP-BC is the Director of Post Acute Care at Novant Health. Prior to taking this position, she was the President of her own practice which was a partnership between physicians and nurse practitioners. She was responsible for all of the finances for her practice and was the only nurse practitioner in the group to hold an office on the board. She completed her doctoral training at the Yale School of Nursing and was accepted to the American Nurses Association American Nurses Advocacy Institute for the 2015-2016 academic year.</p>
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Table 2
Categories and Items for A Toolkit on Innovative Business Models

Categories & Items	Is the category important? (% agree)	Is the category relevant? (% agree)
1. Business Plan	100	100
Executive Summary	100	100
Industry (Practice)	100	100
Market Overview	100	100
Competitive Analysis	100	100
Marketing Plan	100	100
Management Plan	100	60
Operational Plan	100	80
Financial Plan	100	80
Project Milestone	100	60
2. Real Estate	100	100
Lease Negotiations/Signing	80	80
Architect	80	60
Permits	80	80
Compliance Issues	80	60
General Contractor	80	60
Certificate of Occupancy	80	80
3. Marketing	100	100
Understand branding	100	100
Analyze your competition	100	100
Create a strategic marketing plan	100	80
Disseminate a marketing plan	80	60
4. Identify your target market	100	100
Market Description	100	100
Market Size	100	100
Market Trends	100	100
Market Opportunities	100	100
Identify Key Stakeholders	100	100
5. Legal	100	100
Select of a Legal Firm/Attorney	100	80
Business Formation	100	100
State Practice Regulations- NP	100	100
Federal Regulations- NP	100	100
Corporate Practice of Medicine Doctrine	100	100
Corporate Documents	100	100
Employee Contracts	100	100
HIPPA Regulations	100	100
6. Insurance - Business	100	100
Understand Business Liability	100	100
Professional Liability Insurance	100	100
Disability Insurance	100	100
Worker's Compensation	100	100
7. Insurance- Patient Reimbursement	100	100
Provider Networks	100	80
Government Programs	100	80
Fee-for-Service	100	80
Analyze Payor Mix	100	80
Proper Billing and Coding	100	100
Reimbursement	100	100
8. Credentialing	100	100
CAQH	100	100
PECOS	100	100
Documents Required	100	100
National Provider ID	100	100
Third Party Payors	100	100
Medicaid	100	100
Medicare	100	100
9. Building A Team	100	100
Core Staff	100	80
Job Descriptions	100	80
Staff Experience/Licensing	100	80
Staffing Budget/Benefits Package	100	100
Employee Agreements	100	80
Training Staff	100	100
Office Procedures	100	80
10. Finance	100	100
Consult an Accounting firm/CPA	100	100
Personal Budget	100	100
Capital Requirements Business	100	100
First Year Business Projections	100	100
IRS Requirements	100	100

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Results

The systematic review and key expert interviews identified nine agreed-upon categories: 1) Creating a Business Plan, 2) Money Matters, 3) Know your Target Market, 4) To Buy or To Build, 5) Legal Matters, 6) Credentialing 101, 7) Insurance 101, 8) Building Your Team and 9) Marketing. There was 100% agreement in terms of relevance and importance of all the categories. The majority of items (N= 61) were rated to be relevant, with 39 items rated 100% relevant, 17 items rated 80% relevant and 5 items rated 60% relevant. The majority of items were rated with high importance. 54 items were rated at 100% importance and 7 items at 80% importance. The items with low relevance ratings included management plan and project milestone under the business plan category; architect and general contractor under the real estate category; and disseminating a marketing plan under the marketing category. Although these items were considered important, they were not deemed relevant by the expert panel. Expert reviewers reported that these items were not priority when considering entrepreneurial opportunities or that, depending on the opportunity, the items would not be required.

Discussion

The scientific literature on NP autonomy and patient outcomes not only irrefutably demonstrates the benefits of NP-rendered patient care, but also highlights the need for NPs to fill the gap left by the primary care physician shortage. The content of the toolkit provides a high-level overview of the pertinent factors to consider when entering into entrepreneurship. This content was authenticated by five national experts who also appreciated the benefit of such a toolkit.

NPs are often at the realm of patient care, working in primary care settings where obstacles such as lack of access, poor outcomes and increased costs are inherent. Thus, it is a

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question as to whether or not making such a toolkit accessible to NPs would result in an increase of innovative solutions to combat the hardships plaguing our system. A multitude of other health professionals already have access to such imperative information. Physicians, dentists and veterinarians all receive training, if via their academic programs or bank loan programs, to support entrepreneurial inquiry, and are often expected to start their own business.

Expansion of NP scope of practice provides a robust solution to the inexorable shortage of primary care providers. Currently, more than half of states in the US have full practice authority, allowing NPs to transform the health care delivery system. Entrepreneurial scholarship is beneficial for clinical practice, in academic settings and in research. By offering coursework to support entrepreneurship, NPs can enter into practice well-versed in management, marketing, integrated information technologies and finance. The U.S. health system is data-driven. By researching the effectiveness and sustainability of NP-led businesses, and showcasing those results, they can receive recognition and further validate their role in health reform. The toolkit can be posted online at national and state NP organizations and implemented into academic curricula for widespread utilization. It can be used as a platform for NPs seeking to start practices and other businesses, or as a guide for someone who is already in business but needs further guidance.

Further research is required on the sustainability of NP-led entrepreneurship. The toolkit is not exhaustive in terms of all the elements of entrepreneurship. However, through the utilization of the toolkit in various settings, we can better appreciate the areas that need to be included.

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	Monthly (20 Working Days)			
	Low	Medium	High	
Patients	200	300	400	
Co-Pay(\$30)	\$ 6,000.00	\$ 9,000.00	\$ 12,000.00	
Insurance Payouts:				
Routine Visit (80% @ \$70)	\$ 11,200.00	\$ 16,800.00	\$ 22,400.00	
Total Monthly Revenue	\$ 17,200.00	\$ 25,800.00	\$ 34,400.00	
Expenses				
Rent	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	
Business Insurance	\$ 200.00	\$ 200.00	\$ 200.00	
Malpractice Insurance	\$ 700.00	\$ 700.00	\$ 700.00	
Utilities	\$ 1,230.00	\$ 1,230.00	\$ 1,230.00	
Internet/WIFI	\$ 200.00	\$ 200.00	\$ 200.00	
On-Call/Forwarding Service	\$ 30.00	\$ 30.00	\$ 30.00	
ZocDoc	\$ 250.00	\$ 250.00	\$ 250.00	
Garbage	\$ 50.00	\$ 50.00	\$ 50.00	
Utilities	\$ 300.00	\$ 300.00	\$ 300.00	
Equipment Maintenance	\$ 200.00	\$ 200.00	\$ 200.00	
Cleaning	\$ 200.00	\$ 200.00	\$ 200.00	
General Supplies	\$ 1,089.00	\$ 1,089.00	\$ 1,089.00	
Syringes	\$ 100.00	\$ 100.00	\$ 100.00	
Needles	\$ 120.00	\$ 120.00	\$ 120.00	
Saline	\$ 6.00	\$ 6.00	\$ 6.00	
Gauze Pack	\$ 50.00	\$ 50.00	\$ 50.00	
Band Aids	\$ 15.00	\$ 15.00	\$ 15.00	
Bacitracin	\$ 18.00	\$ 18.00	\$ 18.00	
Dental Drapes	\$ 40.00	\$ 40.00	\$ 40.00	
Gloves	\$ 140.00	\$ 140.00	\$ 140.00	
Clinical Supplies	\$ 600.00	\$ 600.00	\$ 600.00	
Staff Salaries	\$ 6,054.72	\$ 6,054.72	\$ 6,054.72	
Receptionist (\$396/week)	\$ 1,584.00	\$ 1,584.00	\$ 1,584.00	
Medical Assistants (1 @ \$576/week)	\$ 2,304.00	\$ 2,304.00	\$ 2,304.00	
Billing Associate (\$300/week)	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	
Payroll Taxes	\$ 712.32	\$ 712.32	\$ 712.32	
Workers Comp.	\$ 254.40	\$ 254.40	\$ 254.40	
Total Expenses	\$ 12,273.72	\$ 12,273.72	\$ 12,273.72	
Net Income (Monthly)	\$ 4,926.28	\$ 13,526.28	\$ 22,126.28	
Monthly Salary (NP)	\$ 7,500.00	\$ 7,500.00	\$ 7,500.00	
Net Income after Salary	\$ (2,573.72)	\$ 6,026.28	\$ 14,626.28	

Figure 1. Example of a Primary Care Practice Pro Form

Conclusions

As illustrated in the case study, Sonia would not have felt so overwhelmed with the entrepreneurship process had she utilized a toolkit such as the one proposed. By understanding the steps beforehand, she would have been able to make an informed decision on whether starting her own business was a viable option for her prior to committing months of her time searching for a location. The toolkit would have guided her to strategize appropriately and follow a step-wise approach to entrepreneurship. Terms such as “good-guy clause” and “pro forma” (Figure 1) would not have easily deterred her and instead given her an advantage when negotiating lease and financial terms.

Over the next 5-8 years, there is an unprecedented opportunity for NPs to transition into the primary care practice environment where they can practice to the full extent of their training (Cadmus et al, 2017). However, in order to seize this opportunity, NPs need to be knowledgeable on how to design and implement innovative business models that are successful and scalable regardless of state scope of practice regulations. Such models go beyond the scopes

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of just private enterprise by creating solutions that can influence systematic changes benefiting society. In order to implement such change, NPs will need to view their practice through an entrepreneurial lens. By doing so, they can create opportunity where none existed.

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