Doctor of Nursing Practice (DNP) Perceptions of Leadership Abilities in Policy and Governance: Clinical Inquiry Project

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Abstract

The involvement of nurses at every level of healthcare decision-making is imperative to achieve the *Triple Aim*. The American Academy of Colleges of Nursing (AACN) (2006) states, "Doctor of Nursing Practice (DNP) graduates must be proficient in…creating and sustaining changes at the organizational and policy levels" (p. 10). The Institute of Medicine (IOM) (2011) states, "nurses should have a voice in health policy making and be engaged in implementation efforts related to health care reform" (p. 8). Oregon is engaged in significant healthcare reforms but nurses are underrepresented at decision-making tables. Nursing's absence in policy development and implementation risks patient satisfaction, quality and cost. The DNP prepares nurses to lead policy development and implementation. A gap in the literature exists of whether DNPs feel adequately prepared for policy work and if, and at what levels, they are engaged. Thirty-four Oregon Health & Science University (OHSU) DNP graduates were surveyed on this topic. Most felt prepared for, and were engaged in, policy work at the institutional level, but several barriers to engagement beyond the institution, namely time, incentive, guidance and support, were cited. DNPs should seize leadership opportunities and negotiate for time and incentive to engage. Institutions should maximize DNP scopes and encourage policy development and implementation. Steps should be taken at the individual and institutional levels to maximize the role of the DNP as a leader in policy development and implementation.

Doctor of Nursing Practice (DNP) Ability to Lead Through Policy and Governance

Problem

There is little argument that US health care is in need of repair. Health care accounts for nearly 18% of the gross domestic product, the highest of any country (Squires, 2012), but infant mortality rates are higher than many other developed countries and healthy life expectancy ranking is nearly the worst (The Commonwealth Fund, 2011). Dr. Don Berwick, former CEO of the Institute for Healthcare Improvement (IHI), introduced the *Triple Aim* for US healthcare reform: improve quality, improve health, and reduce cost (IHI, 2014). The 2010 *Patient Protection and Affordable Care Act* (PPACA) is the Federal government's attempt at operationalizing the *Triple Aim* through the promotion of nurse-managed care clinics, patient-centered care delivery, care coordination, Accountable Care Organizations, and other federal and statewide initiatives.

In Oregon, organizational structures called Coordinated Care Organizations (CCOs) were established in 2012. The CCO is Oregon's version of the aforementioned Accountable Care Organization (ACO) promoted by the PPACA (PPACA, 2010). They are regional (typically county) entities that contract with the state to deliver care and evaluate health outcomes of local Medicaid patients. Each organization is governed by a board and influenced by a Community Advisory Council (CAC) and, some, by a Clinical Advisory Panel (CAP) (Oregon Center for Public Policy (OCPP), 2012).

CCO governance is lopsided. Per the state's legislation of CCOs every board must have a physician member though no requirement exists for nursing representation (OCPP, 2012). A preliminary review of the current constituency of CCO boards identified only 6 nurses out of over 220 CCO board members with physicians outnumbering them by over five to one (Oregon

Health Authority (OHA), 2012). The Institute of Medicine's (2011) *Future of Nursing* report is a blueprint for nursing's role in leading change and advancing health in America. One key strategy to achieve these goals asserts, "Nurses should be full partners with physicians and other health professionals, in redesigning health care…" (p. 4). A gap exists between this strategy and nursing's involvement in healthcare reform in Oregon

Nurses make positive contributions to health care at all levels. They "provide the majority of patient assessments, evaluations, and care in hospitals, nursing homes, clinics, schools, workplaces, and ambulatory settings" (IOM, 2011). Nursing has been rated the most trusted profession in 15 of the last 16 years (Riffkin, 2014) and patient satisfaction is associated with quality of nursing care (Khoury, Blizzard, Moore, & Hassmiller, 2011). Advanced practice registered nurses (APRN) in primary care settings deliver similar quality care as physicians and, in regards to patient satisfaction, communication and consultation times, even better (Horrocks, Anderson, & Salisbury, 2002). Newhouse et al. (2011) report that APRN-physician collaborative care quality is overwhelmingly positive, often better than care provided independently by physicians. Finally, in an update of their systematic review, Wong, Cummings and Ducharme (2013) link relational nursing leadership to increased patient satisfaction, improved safety, and decreased mortality. These perspectives and traits make nurses uniquely essential at all stages of the healthcare continuum.

The Doctor of Nursing Practice (DNP) was designed to prepare nurses to effect change at the individual, population and system level. DNPs are charged with practicing the highest leadership roles in health care: policy and governance. Along with additional clinical practice hours, DNPs receive graduate-level education in healthcare systems, finance, policy, and leadership (American Association of Colleges of Nursing (AACN), 2006). DNPs are a good fit

for nursing advocacy through health reform policy and governance, though it is unclear if they are sufficiently engaged in this work or if they believe they can be. Overwhelming direct care workloads, the nascence of the degree, lack of desire, lack of competence, and exclusion from participation related to a common perception that nurses are employees not professional leaders are a few suggested barriers to effective nursing leadership, but the literature is inconclusive (Khoury et al., 2011; IOM, 2011).

This project is inspired by a preliminary exploration of nursing constituency and activity on healthcare reform boards in Oregon and the hypothesis that DNPs are appropriate assets to increase both. The purpose of this Clinical Inquiry Project (CIP) is to understand Oregon Health & Science (OHSU) DNP graduates' perceptions of their abilities to lead through policy and governance, what barriers exist to effective leadership, and in what venues participants are practicing policy development and implementation. Recommendations for overcoming identified barriers and for maximizing DNP leadership abilities will be offered.

Literature Review

Though nurses dominate the healthcare professional workforce with over 3.4 million large, they are frequently underrepresented in healthcare leadership organizations (U.S. Census Bureau, 2010). Prybil (2009) cites nurses comprise only about 2-4% of hospital boards, and only 0.8% of Chief Nursing Officers (CNOs) participate on their respective hospital boards. Curran and Totten (2010) cite US healthcare boards comprise only 2% nursing members. Khoury et al. (2011) state, nurses are "largely absent from the highest decision-making levels of healthcare…" (p. 299). The Institute of Medicine's (2011), response to these findings, was to publish the *Future of Nursing: Leading Change, Advancing Health*.

The report outlines a blueprint for the future direction of nursing in four key messages and eight recommendations (see Appendix A). One of the key messages and two of the eight recommendations are dedicated to promoting and furthering nursing leadership. The leadership key message is "Nurses should be full partners, with physicians and other health professionals, in redesigning health care in the United States" (IOM, 2011, p. 4). The underrepresented number of nurse members on CCO boards demonstrates Oregon's gap in realizing this key message.

In 2010, Oregon passed HB 3650, forming regional healthcare entities called Coordinated Care Organizations (CCOs) (OHA, 2012). These 16 organizations are responsible for care provisions of the entire Medicaid population within their respective catchment areas. They operate from a global budget and are charged with designing and implementing transformation plans which detail novel delivery reform strategies (OHPB, n.d.a). They are obliged to adopt patient-centered primary care home (PCPCH) models and shift focus to prevention. These models foster an integrated approach to the delivery of physical, mental, and by July 1, 2014, dental health (OR HB 3650, 2010). CCOs are certified by the Oregon Health Authority (OHA), but are self-governed.

Each CCO has a Board of Directors, a Community Advisory Council (CAC), and some have a Clinical Advisory Panel (CAP) (OR HB 3650, 2010). Little information is found for CAPs beyond that housed on several specific CCO webpages. There is no clearly identifiable public website/page to find a list of members of CACs and CAPs. The OHPB website merely lists points of contact for CACs although it does list CCO board member names (OHPB, n.d.c; OHPB, n.d.b). From these lists only two members display nursing credentials. Sources verified two other members as nurses (nurse executive, personal communication, April 18, 2014; nurse executive, personal communication, April 11, 2014). Calculated from these findings nurses

comprise 2.7% of board members; physicians comprise nearly 23%; the remaining constituency is undefined. These numbers are consistent with Prybil's findings of nurses on hospital boards and illustrate Oregon's incongruence with the IOM's nurse and physician full-partnership position statement.

The Governor appoints the 16-CCO board directors and the directors appoint the board members (HB 2009, 2009). Criteria for board membership are "a majority interest consisting of the persons that share in the financial risk of the organization," "major components of the healthcare delivery system," and "the community at large" (HB 3650, 2010, p. 4). Another source, OCPP (2012), lists the additional board membership requirements of at least one physician, one behavioral health professional and two community members. The physician requirement was not verifiable in legislative documents. At a recent healthcare reform conference, sponsored by the PSU & OHSU IHI (Portland State University & Oregon Health & Science University Institute for Healthcare Improvement) Open School Chapter, Dr. Jeanene Smith, Administrator of the Office for Oregon Health Policy and Research, substituted "physician" with "primary care provider" when speaking of the requirement (J. Smith, personal communication, May 23, 2014). It is unclear if this was an intentional substitution or if ambiguity exists regarding whether an APRN in the primary care setting, or naturopathic doctor or physician's assistant to that end, could serve in this role. Legislative mandates for governance are vague, but this may present a unique opportunity for nurses to advocate for and assume clinician roles on CCO boards.

It is unclear why nurses are virtually nonexistent on CCO boards though literature sheds some light. A Gallup poll of more than 1,500 opinion leaders cited perceptions that nurses lack a unified voice and that the voice of the American Nurses Association (ANA) represents laborers,

not nurse leaders. At the practice level, fear of the nursing shortage keeps nurses at the bedside, heavy workloads, and a lack of desire and education for leading also may limit greater leadership engagement (Khoury et al., 2011). It is possible the perception that nurses are employees not leaders limits their ability to progress in leadership and this notion deserves further study, but it is likely only one piece of a complex set of barriers.

Khoury et al. (2011) report nurses may be unprepared to be effective in some leadership positions citing under education, lack of leadership, management and financial skills. Leadership curriculum is criterion for American Association of Colleges of Nursing (AACN) accreditation from baccalaureate to doctorate level (AACN, 2011; 2008; 2006). The *IOM report* declares nurses must increase their scope of understanding to encompass policy and system's level thinking, especially at the graduate level (IOM, 2011). The AACN's (2006) *Essentials of Doctoral Education for Advanced Nursing Practice* explicitly outline how the Doctor of Nursing Practice (DNP) curriculum prepares nurses to practice independently at the individual level, lead system level changes, and impact healthcare policy. Are DNPs achieving these benchmarks?

In 2012, the Committee on Institutional Cooperation's sponsored a "Dean's Conference" on the Doctor of Nursing Practice to look at this question (Grey, 2013, p. 462). The DNP was initially created to prepare APRNs to be experts in population-based practice (AACN, 2004), but findings show most DNPs work in hospital administration, nursing education and inpatient settings (Grey, 2013). A preliminary search proved fruitless for practice characteristic of Oregon DNPs, but one survey of Pennsylvania DNPs showed 14% practice in the primary care setting, an area more reflective of population health (Dunbar-Jacob, Nativio, & Khalil 2013).

Though education purports to prepare DNPs well to serve in the aforementioned, as well as community, policy and leadership settings, some controversy over DNP preparation exists.

Inspired by this intraprofessional controversy, a new DNP Implementation Task Force was formed by the AACN in 2013 to prepare a white paper clarifying requirements for the DNP scholarly project and practice requirements. Consensus exists about the DNP being a positive direction for nursing and that preparation focus should be population, policy and leadership based (Kirschling, 2014) however, the implications of the DNP on the health of society and the leadership of healthcare systems and CCOs is unclear and a critical area for research (Grey, 2013). Advanced practice registered nurses have a solid track record of positive patient outcomes. Considering DNP education and training includes and exceeds that of the masters prepared APRN, the same may be said about the doctoral-prepared APRN.

Substantial evidence exists that nurses, particularly APRNs, make positive contributions to the *Triple Aim*, better quality and better health at lower costs (IHI, 2014). Not only are quality and patient outcomes comparable to physician-provided care but actually, in regards to patient satisfaction, follow up, and consultation times, nurses perform better (Robert Wood Johnson Foundation (RWJF), 2011). In some cases patients have better health outcomes with APRNs than with physicians. Certified nurse midwives document lower infant and neonatal mortality and better birth weights than births attended by physicians (RWJF, 2011). APRNs are cost effective because education is less expensive and salaries are more affordable. The Federal Trade Commission (FTC) states that APRNs are cost beneficial for their contribution to competition (FTC, 2014). Dr. Adalja, M.D. (2013), supports this claim in a recent *Forbes* magazine article. APRNs can help achieve the *Triple Aim*, but their roles must be maximized.

The healthcare delivery shift to primary care and prevention and a potential shortage of 90,000 physicians expected by 2020, make a case for maximizing the role of the APRN (Wharton, 2013). In Oregon, APRNs practice independently. Without a requirement for

physician supervision or collaborative agreement, APRNs are able to offer care to patients in underserved communities and increase overall access to primary care services. Oregon is one of 23 states offering independent practice to nurse practitioners; these statistics vary for other APRNS: nurse midwives, nurse anesthetists, and clinical nurse specialists (National Council of State Boards of Nursing, 2014). Independent practice is maintained and achieved by continual policy work of nursing entities such as the Oregon State Board of Nursing (OSBN), the Oregon Nurses Association (ONA), and Nurse Practitioners of Oregon (NPO) (NPO, n.d.). A history of policy victories provides APRNs ample opportunity for reflection and learning as care models and nursing roles shift.

The FTC (2014) points out APRNs are adept collaborators. This skill is necessary for the success of new collaborative care models such as patient-centered primary care homes. Because APRNs educated at the doctoral level receive additional education and training in leadership, system, policy and interprofessional collaboration, time in profession aside, they are arguably as proficient practitioners as the masters prepared APRN, but even better prepared to exercise the nursing voice through policy. In a recent interview, a nurse executive mentioned if nurses do not represent themselves in reform organizations, someone else may or may not (nurse executive, personal communication, April 11, 2014). The future of achieving the IOM recommendations and the *Triple Aim* for Oregon depends on a vocal nursing presence in all levels of policy and governance. DNPs are charged with, educated and well positioned for exercising this voice.

Nurses are not the only ones advocating for the presence of nursing at leadership tables. Dr. Fineburg, physician and president of the IOM, and Dr. Lavizzo-Mourey, physician and president and CEO of the Robert Wood Johnson Foundation (2013), declare there is an "…essential need for more nurses to provide leadership…[N]urse leaders bring critical skills and

capacities for coordinating care and managing the disparate services…in advancing community health" (p. 2). The Governance Institute (2005) cites of Dr. Don Berwick, former head of the Centers for Medicare & Medicaid services,

> It is key that nurses be as involved as physicians, and I think boards should understand that the performance of the organization depends as much on the well-being, engagement, and capabilities of nursing and nursing leaders as it does on physicians. I would encourage much closer relationships between nursing and the board. (p. 2)

Adding nurses to boards helps decision-making capacity and may decrease defectiveness of community health systems (Prybil, 2009; Prybil et al., 2009). Nurses on boards makes sense.

Oregon is receiving $1.9 billion dollars over five years to achieve the *Triple Aim*. Great financial disincentives (up to $183 million/year) exist should Oregon not meet key federal benchmarks (OHPB, n.d.d.). Oregon has shown preliminary success but is not in the clear (OHA, 2014). Incorporating nurses, especially doctoral-prepared APRNs, on governance boards will help achieve the *Triple Aim* by several means. Nurse board members will increase the effective use of RNs and APRNs by ensuring they are allowed and encouraged to practice to their full extent. They will improve patient outcomes and save CCOs money by advocating for and creating opportunities for APRNs to fill more cost-effective practice roles by ensuring they are practicing to their full extent. Lastly, the relational leadership style of nurses will compel safer, more patient-centered care. Effective healthcare reform in Oregon could be greatly facilitated by a concerted effort to include nurses, especially DNPs, on CCO governance boards.

In consideration of both the dearth of literature regarding the Doctor of Nursing Practice, especially in regards to effective leadership through policy development and implementation,

and nurse underrepresentation on CCO boards, an understanding of what barriers exist to achieving sufficient representation will be undertaken in this project.

Implementation

Institutional Review Board

The study approval process began in August 2014 after review of the Oregon Health & Science University *Minimal Risk Protocol Template* and completion of both the *Protecting Human Research Participants* mandatory training and a waiver of consent checklist (HRP-300). The latter compelled the author to apply for a waiver of consent; the study was presumed to put participants at minimal risk, involving the loss of anonymity, which would be jeopardized in seeking consent. An expedited study approval with waiver of consent was sought from the OHSU Institutional Review Board (IRB) on September 26, 2014. The IRB requested several revisions and the study was approved January 14, 2015 with Dr. Katherine Bradley as primary investigator and Jake Creviston, DNP-Student and author, as the secondary investigator.

Participants

The doctor of nursing practice degree is nascent but growing. There are 243 DNP programs currently operating and 59 in developmental stages (AACN, 2014). Enrollees and graduates increased 21% and 24% respectively from 2012 to 2013, totaling nearly 15,000 enrollees and 2,500 graduates in 2013 alone (AACN, 2014). In contrast, PhD nursing programs claimed just over 5,000 enrollees in 2012 (Center to Champion Nursing in America (CCNA), n.d.). It was unclear how many DNPs were employed in Oregon. According to Oregon Health Policy and Research (OHPR) (2013), 2173 nurse practitioners were working in Oregon in 2012. Only 2.4% of them (≈52) reported their highest degree was a DNP, but this data was only available for 71% of the sample (OHPR, 2013). Two Oregon institutions offer the DNP: OHSU

and the University of Portland (UP). Sixty-three degrees have been awarded by OHSU and 23 by UP since program inception (E. Vecchi, personal communication, September 17, 2014; B. Fischer, personal communication, October 7, 2014). Some graduates opt for online programs to pursue degrees while others receive degrees in other states yet choose to practice in Oregon; these statistics were unclear. It was therefore difficult to ascertain how many DNPs were practicing in Oregon and from which institutions they received their degrees. Surveying a representative sample would have been difficult and outside the scope of this project. Participants were graduates from OHSU's DNP program since inception in 2007.

Inclusion Criteria

- DNP graduates from Oregon Health & Science University, School of Nursing
- Current employment and/or residence in the state of Oregon
- Proficiency in reading English
- Capability to take an electronic survey

Exclusion Criteria

- DNPs who received their degrees at institutions other than OHSU
- Current residence and employment outside the state of Oregon
- Inability to effectively complete the electronic survey
- Survey information entered in error or outside of survey limitations will be excluded

Size and Rationale

The project was not intended to be widely generalizable to the greater population of practicing DNPs and therefore did not utilize a power analysis or inferential statistics. The sample was sought by convenience (see recruitment methods below). The target sample size was approximately 30 participants. In the effort to balance validity with capacity, 30 was determined

to be the greatest number of participants for which data gathering and interpreting was manageable given the time constraints of this project. Further, this determination was informed by the "Rule of 30," which suggests that for a non-complex study such as this, it is reasonable to expect a standard distribution of results (Mateo & Foreman, 2014, p. 197).

Recruitment Methods

Graduates from OHSU's DNP program comprised a convenience sample. In February 2015, an OHSU administrative point of contact emailed a brief introduction, "Hello, my name is Jake Creviston. I am a current OHSU DNP student conducting my Clinical Inquiry Project. I would appreciate your taking a few minutes to complete this anonymous survey." and link to the survey to participants.

The email was sent to participants' email addresses on file with OHSU administration, provided by graduates upon graduation. The initial response rate was 20 participants within 6 days. A subsequent mailing via the original method was sent out eight days after the first and returned an additional 14 responses for a total return rate of 34 (54%) within 20 days of the original mailing.

Participant Protection

This survey was anonymous and met minimal risk criteria and therefore qualified for expedited institutional review board (IRB) review. Informed consent was waived by the IRB as it would serve to jeopardize the anonymity of participants more than protect them. The email to potential participants included a brief introduction to the study, the survey link, and a *Consent Information Sheet* attached. The sheet provided study details, risks, investigator contact information, notification of participant voluntary involvement and ability to withdraw at any time, etc. (see appendix B). Participants were informed in the introduction that clicking on the

survey link is their consent to participate. The primary investigator and the author did not have access to participant names or contact information and administrative points of contact for survey dissemination did not have access to survey questions or results. Only the secondary investigator accessed the data.

Identifying data were minimal and only potentially deducible by correlating key data e.g., age, gender, work setting, years in practice, specific membership and/or activity affiliation. Every possible measure was employed to protect participant identifying information, especially during data analysis and distribution of the findings.

Tool

The author designed a SurveyMonkey® survey tool which was distributed via email listserv maintained by OHSU School of Nursing administration. The tool utilized a mixed-methods approach. Nominal quantitative data, selected from drop down lists, gathered policy practice environments and barriers to effective engagement. Additionally, nominal demographic data were recorded. Ordinal quantitative data, in the form Likert scales was used to gauge perceptions of ability. Qualitative information was solicited by free text prompts e.g., "What would better prepare you to effectively engage in health policy development and implementation…?" (see Appendix C). Data was transferred to Microsoft Excel for quantitative analysis and for quantitative and qualitative depiction of the results. The processing computer was password protected and only accessible to the author.

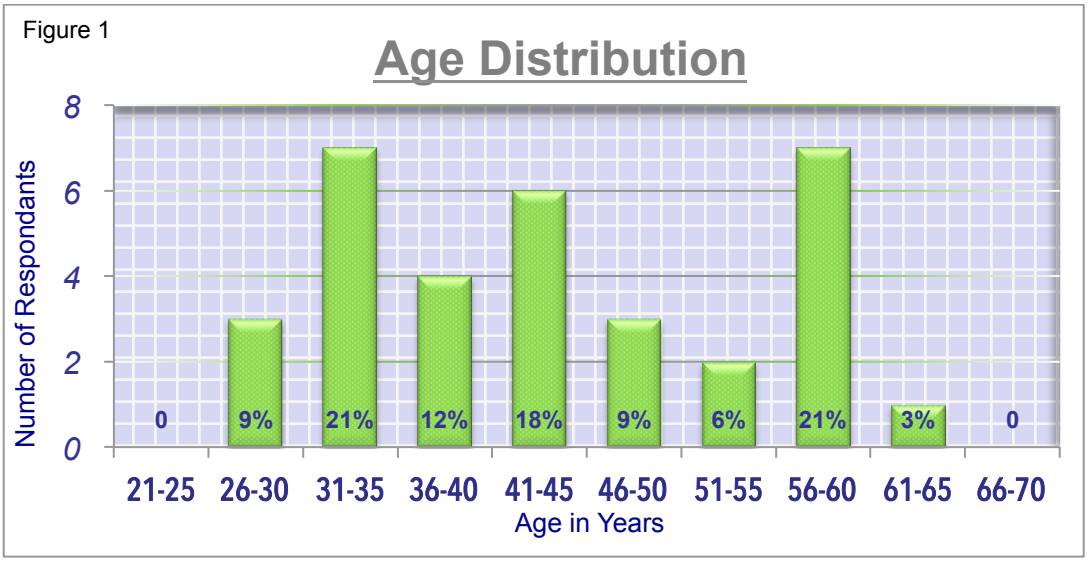
Outcomes

Analysis

Descriptive statistics. Thirty-four participants completed the survey. The majority (76%) identified as female, 7% as male and one declined to answer. The age range was from 29-

63 years old with the median age of 47 years. The distribution was somewhat bimodal in that more than 40% of the sample was between the ages 31-35 and 56-60 (Figure 1). Years in practice as a nurse ranged from 2-42 years with a mean 18 years and median of 20. Eleven (33%) graduated in 2014, none in 2010 and the rest were relatively equally dispersed between 2009, 2011, 2012 and 2013.

Figure 1



All respondents reported being practicing clinicians: 90% in direct care settings, the rest in administration or other. Greater than 40% of those claiming direct-care practice settings cited rural/community health while those in urban healthcare settings accounted for about 30% of the sample. Administrators documented almost equivalent practices between rural/community and urban health systems.

Although approximately 20% of the sample reported not currently participating in healthcare or non-healthcare committees or boards it was encouraging to note that almost 62% had served on a board at some point. Almost 70% reported current service on a healthcare committee. Nine

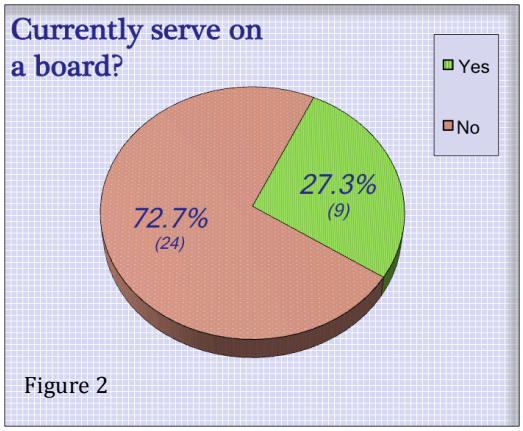


Figure 2

participants reported current board positions, 8 in health care and 3 outside health care (Figure 2). Two participants held positions on both health and non-health boards. The vast majority of respondents (85%) reported being engaged in policy development and implementation at the institutional level and the next most common, a distant second at 18%, being engaged at the state level. These findings were reflective in DNPs' perceptions of their abilities to engage in policy by specific area.

Almost half of respondents strongly agreed they were adequately prepared to engage in health policy development and implementation at the institutional level however this agreement steadily decreased as the area progressed beyond the institution towards the international setting (Figure 3).

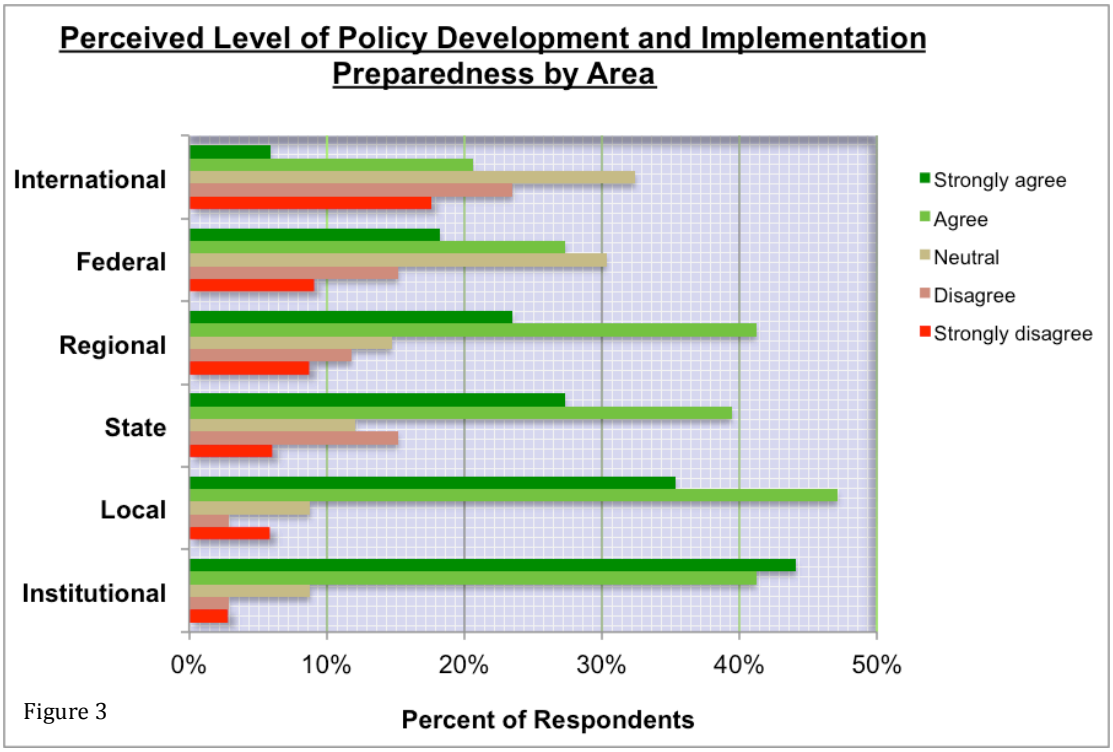


Figure 3

Barriers to effectively engaging in health policy development and implementation were similar at the institutional level as beyond the institutional level. The greatest cited barrier by far was time, with an endorsement of nearly 80% of the sample. Lack of desire and preparation

were claimed to be barriers by approximately a quarter of the sample and all other pre-assigned barriers were less frequently selected and were virtually equally distributed (Figure 4). Six percent reported financial reasons as "other" barriers to service at the institutional level; there were no other trends in the free-text "other" barriers responses.

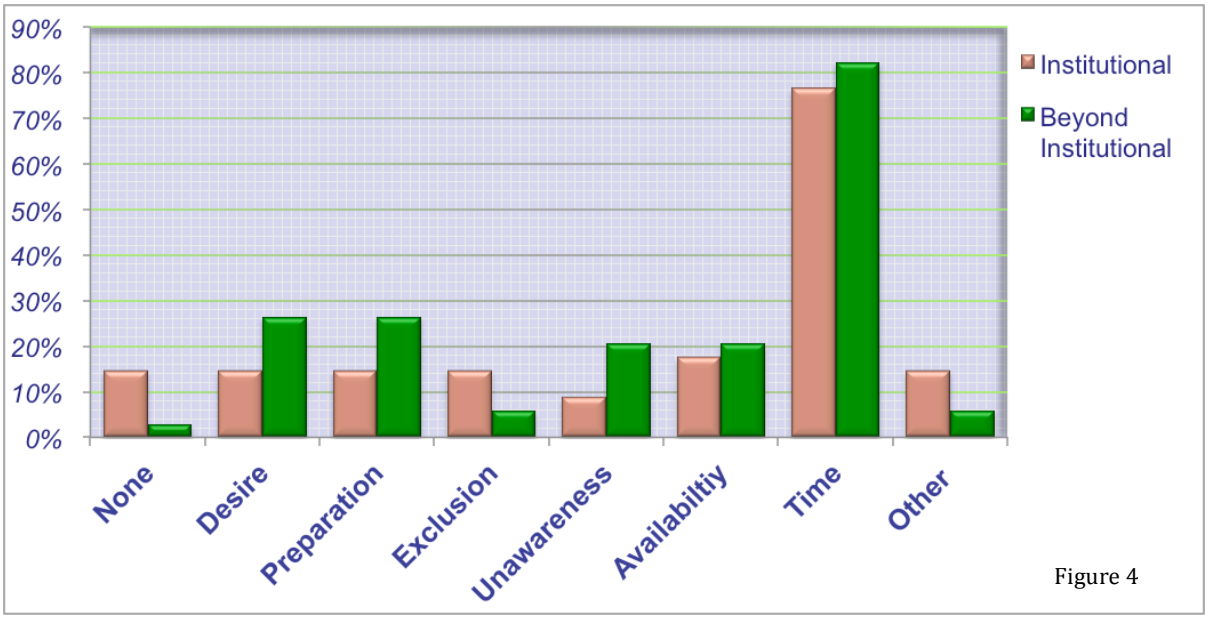


Figure 4

Qualitative content analysis. Free-text responses were analyzed and categorized by the author for trends based on frequency and similarity of response. It is important to note that in regards to categorized responses, some responses fell into multiple categories and some respondents provided multiple answers and each was counted.

In response to the question, "What would better prepare you for institutional policy and governance work?" eighteen respondents replied. Response trends compelled the categories "Guidance," "Organizational Support," "Well Prepared," and "Other." Twenty-eight percent of respondents offered that guidance e.g., preceptorships, mentorships and/or experience, would better prepare them for service. Eight respondents (44%) mentioned organizational support. This included direct mention of organizational/institutional support and/or time and incentive offered thereby. Nearly 17% felt they were well prepared for this type of service. Direct quotes

such as, “Breaking down barriers between nurses and physicians. DNPs are not as valued as MD colleagues.”, “Having more time & incentive to do so. Insofar as I have time & incentive, I am usually willing to step into these roles.”, and “I am in academia and find that there is little institutional support for this if you are a clinical faculty. The institution I work in does not allow DNPs to be tenured faculty. All engagement on your own time.” were useful.

In response to the question, “What would better prepare you for local, state, national and international policy and governance work?” 25% of those who answered again mentioned time, but also guidance. Some (2) thought being invited to participate would inspire them towards service. Five responses were categorized as “other” and included interprofessional and egalitarian support and other difficult to understand and/or categorize suggestions. Direct quotes such as, “I've considered getting a healthcare MBA for this reason.” and “It would be helpful to have some hands-on time with this, where we could participate in some change at a state, regional, or national level in order to see the process and feel very confident in making change.” were informative.

Additional findings. Creating correlational data was beyond the scope of this study however some interesting associations and finding suggestions arose during analysis. Age and years in practice was associated with board service in this study. The average age of those who have served (or currently serve) on a board was 48.5 years with an average of 20.8 years in practice. In contrast, those who have not served on a board averaged 35.8 years of age and 9.9 years in practice. Further, when Likert responses were numerically coded (strongly disagree = 1, disagree = 2,…strongly agree = 5) females felt about 8% more prepared to serve than males however it is important to note that males were roughly 3 years younger with 1 year less of practice than females.

Implications. In consideration of the findings, the AACN's essentials for doctorally-prepared nurses to be engaged in policy development and implementation at multiple levels, and the national push to increase nurse involvement in policy and governance, important practice implications exist. Because the DNPs who participated in this study reported being practicing clinicians, they exercise a unique perspective. They should not only be able to translate research into evidenced-based practice, but be able to implement these practices, evaluate the outcomes and increase the quality of patient care in the settings where they practice by designing and implementing policy changes based on their findings.

This study requires follow up. Utilizing the services of a statistician are imperative in promoting any further data gathering and analysis. The survey questions require testing and validation. Once the study is validated it should be adapted to survey DNPs from other institutions in other parts of the United States and subsequently disseminated widely. Statisticians should correlate findings for greater insights. It was not intended to be a program evaluation tool however with some modification may effectively serve as such. If so, findings should be disseminated to respective institutions to inform curriculum revisions. Increasing the sample size will increase the validity of the data and help to create more appropriate solutions to the identified issues.

The author intends to share these results with Oregon Health & Science University with the assumption that administration will find the results meaningful in recommending leadership curriculum revision. Results will also be shared with the Oregon Action Coalition who currently has an effort underway designed to better prepare nurses for board governance roles. Further, with the support of the primary investigator, publication in a nursing journal will be sought in Summer/Fall 2015.

Conclusion

Though it would appear that most DNPs surveyed were prepared to develop and implement policy at the institutional level, several barriers exist to effectively completing this process beyond the institution and should be further addressed. Based on the findings of this version of the study, several recommendations are offered at the individual and organizational levels.

The ultimate responsibility for engaging in the highest levels of policy development and implementation lies with the holder of the Doctor of Nursing Practice degree. DNPs should not wait for an invitation to participate in leadership roles. They should pursue their interests and advocate and/or negotiate for time and incentive for opportunities to engage in these roles. Further, DNPs should seek mentors to help guide them in their pursuits of leadership and governance. Numerous leadership and governance development programs and continuing education modules exist and should be explored and utilized. Leadership opportunities in professional organizations have been cited as effective incubators to further service and should be considered (S. Hassmiller, personal communication, February 14, 2015). Lack of allotted time and incentive as barriers to engagement validate the idea that nurses are employees, not professional leaders, and individual and organizational efforts should be targeted to thwart this notion.

Doctor of Nursing Practice conferring institutions should consider offering policy/governance preceptorships, more strongly emphasizing the role of policy development and implementation, evaluating the effectiveness of their programs based on their graduates' assessed abilities and accomplishments, and making necessary curriculum revisions based on results.

Organizations and institutions that hire DNPs should employ them to their full scope of competence, education and ability at the bedside and beyond. Keeping a DNP at the bedside, or away from policy development and implementation, limits their potential and in turn can jeopardize patient care by suppressing the perspective of practitioners who are prepared to deliver care and effect change at the individual, population and systems levels.

Lastly, a continuous mechanism for gathering state-level data on DNPs is needed. The Oregon State Board of Nursing should consider adding survey questions designed to capture the number and practice venues of practicing DNPs in the state and other important information as appropriate.

Summary

United States healthcare is expensive and in need of repair. The *Patient Protection and Affordable Care Act* of 2010 obliges sweeping healthcare reforms to help drive down cost while driving up quality but effective reform demands great leadership. Doctors of Nursing Practice should be well positioned to engage in this leadership, especially through policy development and implementation at the institutional level and beyond however, those surveyed reported feeling underprepared to serve in these roles outside of the institutions where they practice. Many claimed lack of time, incentive, organizational support and guidance as the biggest barriers to their greatest leadership actualization. The DNP is recommended as the terminal degree for APRNs. Therefore, DNPs, other health professionals and institutions must recognize the value DNPs bring to decision-making tables and encourage their participation at all levels; United States healthcare reform depends on it.

References

Adalja, A. (2013, February 10). Sometimes the best medical care is provided by those who aren't M.D.s [Op/Ed]. *Forbes*. Retrieved from http://www.forbes.com/sites/realspin/2013/02/10/sometimes-the-best-medical-care-is-provided-by-those-who-arent-m-d-s/

American Association of Colleges of Nursing. (2014). *DNP fact sheet.* Retrieved from http://www.aacn.nche.edu/media-relations/fact-sheets/dnp

American Association of Colleges of Nursing. (2011). *The essentials of master's education in nursing.* Retrieved from http://www.aacn.nche.edu/education-resources/ MastersEssentials11.pdf

American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice.* Retrieved from http://www.aacn.nche.edu/education-resources/ baccessentials08.pdf

American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice.* Retrieved from http://www.aacn.nche.edu/publications/ position/DNPEssentials.pdf

American Association of Colleges of Nursing. (2004). *AACN position statement on the practice doctorate in nursing*. Retrieved from http://www.aacn.nche.edu/publications/ position/DNPEssentials.pdf

Center to Champion Nursing in America. (n.d.). *Campaign progress: Dashboard indicators*. Retrieved from http://campaignforaction.org/dashboard

Curran, C., & Totten, M. (2010). Expanding the role of nursing in health care governance. *Nursing Economic$, 28*(1), 44-46.

Dunbar-Jacob, J., Nativio, D. G., & Khalil, H. (2013). Impact of Doctor of Nursing Practice Education in Shaping Health Care Systems for the Future. *Journal Of Nursing Education, 52*(8), 423-427. doi:10.3928/01484834-20130719-03

Federal Trade Commission. (2014). *Policy perspectives: Competition and the regulation of advance practice nurses.* Retrieved from http://www.nacns.org/docs/FTC140307aprnpolicy.pdf

Fineberg, H., & Lavizzo-Mourey, R. (2013). *The future of nursing: A look back at the landmark IOM report.* Commentary, Institute of Medicine, Washington, DC. Retrieved from http://www.iom.edu/nursingcommentary.

Gallup. (2013). *Honesty/ethics in professions* [Graphs]. Retrieved from http://www.gallup.com/poll/1654/honesty-ethics-professions.aspx

Grey, M. (2013). The doctor of nursing practice: Defining the next steps. *Journal Of Nursing Education, 52*(8), 462-465. doi:10.3928/01484834-20130719-02

Horrocks, S., Anderson, E., & Salisbury, C. (2002). Systematic review of whether nurse practitioners working in primary care can provide equivalent care to doctors. *BMJ (Clinical Research Ed.), 324*(7341), 819-823.

Institute for Healthcare Improvement. (2014). *The IHI triple aim.* Retrieved from http://www.ihi.org/Engage/Initiatives/TripleAim/Pages/default.aspx

Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. Retrieved from http://books.nap.edu/openbook.php?record_id=12956&page=R1

Institute of Medicine. (IOM) (2004). *Keeping patients safe – transforming the work environment of nurses.* National Academy Press, Washington, DC.

Khoury, C., Blizzard, R., Moore, L., & Hassmiller, S. (2011). Nursing leadership from bedside to boardroom: A Gallup national survey of opinion leaders. *Journal Of Nursing Administration, 41*(7/8), 299-305. doi:10.1097/NNA.0b013e3182250a0d

Kirschling, J. M. (2014). Reflections on the future of doctoral programs in nursing. [PDF document]. Retrieved from http://www.aacn.nche.edu/dnp/JK-2014-DNP.pdf

Mateo, M.A. & Foreman M.D. (2014). *Research for advanced practice nurses: from evidence to practice.* Springer Publishing Co. New York, NY.

National Council of State Boards of Nursing. (2014). *CNP independent practice map. NCSBN's APRN campaign for consensus: state progress toward uniformity.* Retrieved from https://www.ncsbn.org/5407.htm

Newhouse, R., Stanik-Hutt, J., White, K., Johantgen, M., Bass, E., Zangaro, G., & ... Weiner, J. P. (2011). Advanced practice nurse outcomes 1990-2008: a systematic review. *Nursing Economic$, 29*(5), 230-251.

Nurse Practitioners of Oregon. (n.d.). Historic accomplishments for Oregon's nurse practitioners. Retrieved from http://www.nursepractitionersoforegon.org/?page=2

OR HB2009 | 2009 | Regular Session. (2009, June 26). Retrieved from https:// www.oregonlegislature.gov/bills_laws

OR HB3650 | 2010 | 1st Special Session. (2010, February 25). Retrieved from https://www.oregonlegislature.gov/bills_laws

Oregon Center for Public Policy. (2012). *Updated ABCs of CCOs: The basics of how Oregon aims to transform health care.* Retrieved from http://www.ocpp.org/2012/04/ 30/fs20120430updated-abcs-ccos/

Oregon Health Authority. (2012). *Coordinated Care Organizations implementation proposal.* Retrieved from https://cco.health.oregon.gov/Documents/cco-implementation-proposal.pdf

Oregon Health Policy and Research. (2013). *Workforce from OCN Oregon health professions: occupational and county profiles*. Retrieved from http://www.oregoncenterfornursing.org/documents/2013_Health_Occ_Profiles.pdf

Oregon Health Policy Board. (n.d.a). *Oregon coordinated care organizations transformation plans.* Retrieved from http://www.oregon.gov/oha/OHPB/Pages/health-reform/certification/Oregon-CCO-Transformation-Plans.aspx

Oregon Health Policy Board. (n.d.b). *CCO governing boards.* Retrieved from http://www.oregon.gov/oha/OHPB/Pages/health-reform/certification/CCO-Governing-Boards.aspx

Oregon Health Policy Board. (n.d.c). *CCO community advisory councils*. Retrieved from http://www.oregon.gov/oha/OHPB/Pages/cac.aspx

Oregon Health Policy Board. (n.d.d). *Oregon's Medicaid demonstration*. Retrieved from http://www.oregon.gov/oha/OHPB/Pages/health-reform/cms-waiver.aspx

Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 (2010).

Prybil, L. (2009). Engaging nurses in governing hospitals and health systems. *Journal Of Nursing Care Quality, 24*(1), 5-9. doi:10.1097/NCQ.0b013e31818f55b4

Prybil, L., Levey, S., Peterson, R., Heinrich, D., Brezinski, P., Zamba, G., Amendola, A., & Roach, W. (2009). Governance in high-performing community health systems. Retrieved from

http://www.grantthornton.com/staticfiles/GTCom/files/Industries/HealthCare/21248_GRAN_A2.pdf

Riffkin, R. (2014). *Americans rate nurses highest on honesty, ethical standards*. Retrieved from http://www.gallup.com/poll/180260/americans-rate-nurses-highest-honesty-ethical-standards.aspx

Robert Wood Johnson Foundation. (2011) *Quality of care provided by advance practice registered nurses* [Evidence brief]. Retrieved from http://thefutureofnursing.org/sites/default/files/Quality%20of%20Care%20Provided%20by%20Advanced%20Practice%20Registered%20Nurses_0.pdf

Squires, D. (2012). Explaining high health care spending in the United States: An international comparison of supply, utilization, prices, and quality. *Issue Brief (Commonwealth Fund)*, 101-14.

The Commonwealth Fund. (2011, October 18). *Why not the best? Results from the national scorecard on U.S. health system performance.* Retrieved from http://www.commonwealthfund.org/Publications/Fund-Reports/2011/Oct/Why-Not-the-Best-2011.aspx?page=all

The Governance Institute. (2005). Great boards ask tough questions. *BoardRoom Press.* Retrieved from http://www.ihi.org/resources/Pages/Publications/ GreatBoardsAskToughQuestions.aspx

U.S. Census Bureau. (2010). *Table 616. Employed civilians by occupation, sex, race, and Hispanic origin: 2010*. Retrieved from https://www.census.gov/compendia/statab/2012/tables/12s0616.pdf

Wharton School of the University of Pennsylvania. (2013, February 13). Nurse practitioners are in — and why you may be seeing more of them. *Knowledge@wharton.* Retrieved from http://knowledge.wharton.upenn.edu/article/nurse-practitioners-are-in-and-why-you-may-be-seeing-more-of-them/

Wong, C., & Cummings, G. (2007). The relationship between nursing leadership and patient outcomes: a systematic review. *Journal Of Nursing Management, 15*(5), 508-521. doi:10.1111/j.1365-2834.2007.00723.x

Wong, C., Cummings, G., & Ducharme, L. (2013). The relationship between nursing leadership and patient outcomes: a systematic review update. *Journal Of Nursing Management, 21*(5), 709-724. doi:10.1111/jonm.12116

Appendix A

4 Key Messages and 8 Recommendations from *The Future of Nursing: Leading Change, Advancing Health* (2011).

Key Messages

1. Nurses should practice to the full extent of their education and training.
2. Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.
3. Nurses should be full partners, with physicians and other health professionals, in redesigning health care in the United States.
4. Effective workforce planning and policy making require better data collection and an improved information infrastructure.

Recommendations

Recommendation 1: Remove scope-of-practice barriers.

Recommendation 2: Expand opportunities for nurses to lead and diffuse collaborative improvement efforts.

Recommendation 3: Implement nurse residency programs.

Recommendation 4: Increase the proportion of nurses with a baccalaureate degree to 80 percent by 2020.

Recommendation 5: Double the number of nurses with a doctorate by 2020.

Recommendation 6: Ensure that nurses engage in lifelong learning.

Recommendation 7: Prepare and enable nurses to lead change to advance health.

Recommendation 8: Build an infrastructure for the collection and analysis of interprofessional health care workforce data.

Appendix B
Consent Information Sheet

OREGON HEALTH&SCIENCE UNIVERSITY

Information Sheet

IRB#_00011158_

TITLE: Doctor of Nursing Practice Perceptions of Leadership Abilities in Policy and Governance

PRINCIPAL INVESTIGATOR: Katherine Bradley, PhD (503) 494-1137

CO-INVESTIGATORS: Jake Creviston, MN, PMHNP, DNP-Student (503) 545-5986

PURPOSE:
You have been invited to be in this research study because you hold a doctor of nursing practice from Oregon Health & Science University. This study is a final doctoral project of an OHSU DNP student. The purpose of this study is to learn about DNPs' perceptions of their abilities to lead through policy and governance, barriers thereto and what governance positions they hold. It is not aimed at identifying deficits in individual practitioners, but to identify common themes of barriers to effective leadership through policy work. The survey is anonymous and voluntary. The aggregate results will be analyzed and will help inform nursing leadership efforts in the state and beyond.

PROCEDURES:
In the winter of 2015 a staff member from OHSU will send out an email with an introduction and a link to a survey. The survey has 21-questions and will be taken online with SurveyMonkey®. It will take about 15 minutes to take the survey and send it back. The study investigators are the only ones who will have access to the results. The results will be reviewed for leadership ability themes from the survey answers of participants. One of the study investigators will share results to classmates and faculty during a presentation in May 2015. The results may also be shared with nursing schools and nursing organizations. The study investigators may also try to publish the study.

If you have any questions, concerns, or complaints regarding this study now or in the future, or you think you may have been injured or harmed by the study, contact Jake Creviston at (503) 545-5986.

RISKS:
Although we have made every effort to protect your identity, there is a minimal risk of loss of confidentiality, most notably if you are to contact the investigator(s) or if you provide identifying information in the free-text portions of the survey.

BENEFITS:
You may or may not benefit from being in this study. However, by serving as a subject, you may help us learn how to benefit patients in the future.

CONFIDENTIALITY:
In this study we are not receiving any identifiable information about you so there is little chance of breach of confidentiality.

COSTS:
It will not cost you anything to participate in this study.

PARTICIPATION:
This research is being overseen by an Institutional Review Board ("IRB"). You may talk to the IRB at (503) 494-7887 or irb@ohsu.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research subject.
- You want to get more information or provide input about this research.

You may also submit a report to the OHSU Integrity Hotline online at https://secure.ethicspoint.com/domain/media/en/gui/18915/index.html or by calling toll-free (877) 733-8313 (anonymous and available 24 hours a day, 7 days a week).

You do not have to join this or any research study. If you do join, and later change your mind, you may quit at any time. If you refuse to join or withdraw early from the study, there will be no penalty or loss of any benefits to which you are otherwise entitled.

Appendix C
Survey

Introduction

Hi, my name is Jake Creviston. I am a Doctor of Nursing Practice student at Oregon Health & Science University. For my doctoral project I am a surveying DNPs who received their DNP from OHSU. You have been selected based on these criteria. The survey relates to DNPs' abilities to lead through policy development and implementation. It is not aimed at identifying deficits in individual practitioners, but to identify common themes of barriers to effective leadership through policy work. The survey is anonymous and voluntary. The aggregate results will be analyzed and will help inform nursing leadership efforts in the state and beyond. The survey should take about 10 minutes to complete. Please see the attached for further details (Consent Information Sheet). Clicking on the survey link is your consent to participate. Thank you for your participation and for your stewardship to nursing.

DEFINITION OF TERMS (Retrieved from Merriam-Webster.com; on each survey page)

Board- "a group of persons having managerial, supervisory, investigatory, or advisory powers"

Committee- **"**a body of persons delegated to consider, investigate, take action on, or report on some matter" (includes taskforces, associations, coalitions, commissions, panels and other advisory bodies lacking the governing authority of boards)

Policy- "a definite course or method of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions"

Policy Development- "the act or process of growing or causing [policy] to grow or become…more advanced"

Policy Implementation- "to give practical effect to and ensure[ment] of actual fulfillment of [policy] by concrete measures"

Survey Questions

1. Select all that apply to your ***current*** level of ***membership***.

Venue (drop-down box)
None
Non-healthcare committee (e.g., neighborhood association, PTA)
Healthcare committee (e.g., hospital ethics committee, shared governance, member of professional organization)
Non-healthcare board (e.g., board of directors for private or non-profit business)
Healthcare board (e.g., board of directors for Coordinated Care Organization, hospital or other healthcare org.)
Other: please describe _____

2. Select all that apply to your ***current*** area of ***engagement*** in health policy development and implementation.

Setting (drop-down box)
None
Institutional (e.g., practice/policy changes; influence in hospital unit, clinic, or healthcare system)
Local (e.g., town hall, petition for a local measure, active with local health organization, hold county seat)
State (e.g., testify at state congress, active member of state professional organization, hold state political office)
Regional (e.g., active member of multi-state organization, advocate for regional policy)
Federal (e.g., lobby congress, active member of national professional organization, hold federal political office)
International (e.g., member or elected official of an international health organization e.g. WHO)
Other/Unsure of Most Appropriate Setting: please describe _____

3. I am adequately prepared to engage in health policy development and implementation at the ***institutional*** level...

Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

4. I am adequately prepared to engage in health policy development and implementation at the ***local*** level...

Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

5. I am adequately prepared to engage in health policy development and implementation at the ***state*** level...

Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

6. I am adequately prepared to engage in health policy development and implementation at the ***regional*** level...

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

7. I am adequately prepared to engage in health policy development and implementation at the ***federal*** level...

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

8. I am adequately prepared to engage in health policy development and implementation at the ***international*** level...

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

9. Select all personal and environmental barriers to effectively engaging in health policy development and implementation at the ***institutional*** level.

Barriers (drop-down box)
None (there are no barriers)
Desire (e.g., lack of desire to engage in this work)
Preparation (e.g., lack of understanding of how to engage in this work)
Exclusion (e.g., I was discouraged from serving or not allowed to serve)
Unawareness (e.g., I'm not sure how to get involved)
Availability (e.g., there is a lack of policy development and implementation opportunities in my practice area)
Time (e.g., lack of time and/or I am not allotted time to perform this work)
Other (including personal limitations): please describe _____

10. What would better prepare you to effectively engage in health policy work development and implementation at the ***institutional*** level?

Free text response

11. Select all personal and environmental barriers to effectively engaging in health policy development and implementation ***beyond*** the institutional level.

Barriers (drop-down box)
None (there are no barriers)
Desire (e.g., lack of desire to engage in this work)
Preparation (e.g., lack of understanding of how to engage in this work)
Exclusion (e.g., I was/am discouraged from serving or not allowed to serve)
Unawareness (e.g., I'm not sure how/where to find an organization to get involved with)
Availability (e.g., there are a lack of health policy engagement opportunities in my area)
Time (e.g., lack of time and/or I am not allotted time to perform this work)
Other (including personal limitations): please describe _____

12. What would better prepare you to effectively engage in health policy development and implementation at the local, state, regional, national or international level?

Free text response

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13. Demographic data:
    - Age (in years)
    - Sex (M/F)
    - DNP graduation date (year)
    - How many years practicing as a nurse (years)
    - Practicing clinician (yes/no)
    - Ever served on a board (yes/no)
    - Practice environment (check all that apply)
        - Direct patient care
            - Urban HC system
            - Community/rural health
            - Other (please specify)
        - Educator at an institution
        - Administrator/Nurse executive
            - Urban HC system
            - Community/rural health
            - Nursing organization
            - Other (please specify)
        - Other (please specify)