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The role of Doctor of Nursing Practice-prepared nurses in practice settings

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ABSTRACT

Background: The role of the Doctor of Nursing Practice-prepared nurse (DNP) outside of academic settings has not been clearly articulated or widely explored, and therefore the value DNP-prepared nurses bring to their practice settings is largely unknown. This study: (1) surveyed existing DNP programs to identify the nonacademic settings in which their DNP graduates were employed and (2) conducted semistructured interviews with employers to identify the role and value of the DNP-prepared nurse in nonacademic settings.

Method: Data were collected from January 2016 to August 2016 in two parts: (1) an online survey of the DNP programs and (2) qualitative semistructured telephone interviews with employers. First, we conducted an online survey of program directors (or their equivalent) from 288 DNP programs across the United States to capture descriptive information about current DNP programs (e.g., location, modality, profit status), the types of nonacademic institutions that hire their graduates, percentage of graduates employed by each setting, and the contact information for these employers. Employers were identified either by DNP program directors through the online survey or by a convenience sampling method. Using semistructured telephone interviews, we asked questions to employers in different care settings about the role of the DNP in these settings and how the DNP compares to other nurse leaders and advanced practice nurses (APRN). Employers were asked to describe the role of the DNP-prepared nurse working in direct patient care roles such as APRNs or as leaders, administrators, and managers.

Findings: Descriptive thematic analyses were derived from the interviews, to identify the roles DNP-prepared nurses filled and how they compared to other nurse leaders and advanced practice nurses in these settings. A total of 130 DNP program directors responded to the online survey. Twenty-three employers participated in semistructured telephone interviews. The thematic analysis resulted in four main themes regarding the role of the DNP-prepared nurse in non-academic settings: “DNP-Prepared Nurse Positions and Roles,” “Perceived Impact of

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the DNP-Prepared Nurse on Staff, Patient, and Organizational Outcomes," "Comparison of the DNP-Prepared Nurse to Other Nurses With Advanced Training," and "Challenges Experienced by Nurses With DNP Degrees.

Discussion: The role of the DNP-prepared nurse in nonacademic settings is unclear. These DNP-prepared nurses typically function as APRNs in clinical care or as health care system leaders. While there is a low number of DNPs in clinical practice settings, the number is expected to grow as more graduate and enter practice. Thus, knowledge of the roles, value, and outcomes of the DNP-prepared nurse can guide practice setting leaders on how to best use DNP-prepared nurses in their setting.

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Introduction

In 2004, the American Association of Colleges of Nursing (AACN) identified the need for nurses with advanced degrees to provide leadership and advanced nursing care to improve the quality of care in clinical settings and to help meet the shortage of nursing faculty. While there were a few DNP programs prior to the AACN position paper (e.g., the University of Tennessee Health Science Center began a program in 1999), the paper articulated the need for more advanced practice nurses from the Master's degree to the doctoral level. This led many programs to create and grant the doctor of nursing practice (DNP) degree, the terminal clinical degree for nurses. The number of these programs grew from 20 programs in 2006, to 303 programs in 2017 (American Association of Colleges of Nursing, 2018), and since 2010, enrollment in DNP programs has more than doubled from 7,034 to 18,352 students (a 161% increase) (Institute of Medicine, 2011), with 2016 enrollment at approximately 29,000 (American Association of Colleges of Nursing, 2018).

Despite its widespread acceptance in educational settings, the DNP degree has evolved amidst great debate within the nursing profession (Auerbach, et al., 2015). Some have argued that advanced practice registered nurses (APRNs) (i.e., nurse practitioners [NP], clinical nurse specialists, nurse midwives, and certified registered nurse anesthetists [CRNA]) should be prepared through DNP programs rather than Master's degree programs. As health care increases in complexity, there is an increased need for more leadership training in clinical education for nurses (Potempa, 2011). Others have countered that the increased length and cost of DNP programs will result in fewer APRNs in the workforce, and will not help address the existing nursing faculty shortage (Cronenwett et al., 2011). Moreover, there is limited evidence that the DNP will improve care quality. This controversy has resulted in an influx of commentary and research focusing on the DNP degree.

Literature on the DNP focuses on program implementation: the logistics of how nursing schools offer DNP programs (Martsolf, Auerbach, Spetz, Pearson, & Muchow, 2015) and the growth and role of the DNP in academic settings (Agger, Oermann, & Lynn, 2014; Minnick, Norman, & Donaghey, 2013; Oermann, Lynn, & Agger, 2016). However, a major challenge to the systematic study of DNP-prepared nurses in practices settings is locating these nurses (Carter & Jones, 2017). Currently, there is no national database identifying nurses with DNP degrees, and there is great variation in how the DNP degree is tracked in state nurse licensure databases (Carter & Jones, 2017). A recent study using a convenience sample drawn from the American Board of Comprehensive Care studied 375 DNP graduates and found that APRNs spent 70% of their time providing direct patient care, as well as providing teaching (16%), administrative oversight (8%), consulting (2%), and research (2%) in the remainder of their time (Carter & Jones, 2017). While this study examined the role of the DNP-prepared APRN, it did not explore the other roles of the DNP-prepared nurses in practice settings (e.g., executives, managers, clinical leaders, educators, and administrators).

Though nursing has been described as one of the most versatile occupations in the health care workforce (Aiken, 2011), we know little about the role of DNP-prepared nurses in the workforce when compared to APRNs without doctoral preparation. A survey of 340 nurses with differing educational preparations found that while the nurses agreed about the potential for the DNP-prepared nurse to be a leader in today's complex health care settings, they did not believe that employers in clinical settings would prefer a DNP-prepared nurse to a Master's-prepared nurse (Udlis & Mancuso, 2015). This suggests that employers in nonacademic settings lack knowledge about the potential value of the DNP-prepared nurse.

Therefore, our study was designed to first survey existing DNP programs to identify the nonacademic settings in which DNP graduates were employed. A secondary aim of this survey was to gather specific information about DNP programs (including program modality – online, hybrid, or in-person; and profit status – private, public, for profit) because there is limited information about existing DNP programs. Following the survey, we achieved our third aim, to conduct semistructured interviews with employers of DNP-

prepared nurses to identify the positions into which they were hired and the roles they filled in the organization. These interviews focused on gathering employers' perspectives on the role of DNP-prepared nurses, including positions which require a DNP degree, APRN roles, and administrative roles. The interviews also focused on ways in which the role of DNP-prepared nurses differ from nurses with other educational preparation (e.g., MSN) when employed in APRN or nursing administration roles. During these interviews, we also sought examined any flexibility DNP-prepared nurses bring to organizations. This includes their impact on organizational capabilities consistent with the training of a nurse with a DNP degree (i.e., evidence-based practice, quality improvement, and systems leadership), as well as other areas identified by the employers, such as coaching and mentoring.

Method

This descriptive exploratory study aimed to examine the settings in which DNPs were employed outside of academia, the positions into which they were hired, and their roles in their organizations. Data for this study were collected from January 2016 to August 2016. We conducted the study in two parts. We first conducted an online descriptive survey of existing DNP programs to gather information about the characteristics of these programs, determine the types of nonacademic settings that employ nurses with DNP degrees, and identify employers of nurses with DNPs. In the second phase, we conducted qualitative semistructured telephone interviews with employers of nurses with DNPs in nonacademic settings to explore the role of the nurse with the DNP degree. We submitted the study to the Institutional Review Board of the University of North Carolina at Chapel Hill and received approval before commencing.

Part 1 – Online Survey of DNP Programs

We developed an online survey to capture descriptive information about the programs in which DNP-prepared nurses are educated (i.e., program leadership, modality, and profit status) and the types of nonacademic institutions that hire DNP graduates. A recruitment database was developed using the AACN and Commission on Collegiate Nursing Education (CCNE) lists of accredited 242 DNP programs, and by searching the Internet for DNP programs. During this search, we collected contact information for program leaders, program modality (online, hybrid, or in-person), and profit status (private, public, for profit), resulting in a final list of 288 DNP programs in the United States. Using this list, we contacted DNP programs by email or phone to obtain information not available on the web as well as the contact information for the person responsible for their DNP program (DNP program directors). The characteristics of these programs included: 242 programs accredited by CCNE, 112 offered the MSN to DNP option only, and 187 offered the BSN to DNP and MSN to DNP options. Of these programs, 8 were for profit, 126 were private-not-for-profit, 153 were public, and 1 was military. We then sent emails to DNP program directors with a link to the online survey in which they were asked about the DNP program (location, modality, year DNP program opened, and number of students currently enrolled); percent of graduates employed by academic, hospital, and community settings; and contact information (institution name, city/state contact name, and phone number) for employers of graduates (nonacademic).

Part 2 – Semistructured Employer Interviews

We first identified employers through the DNP program director online survey (34 employers). As we gathered contact information for employers from DNP program directors, some DNP program directors expressed reluctance to provide us with this information, and others stated that they did not track this type of information. Thus, the study team used convenience sampling to contact employers willing to discuss their DNP-prepared employees. The convenience sampling technique included contacting national leaders in DNP education that practice and recruiting employers from practices and health care systems known to employ nurses with DNP degrees. We defined "employer" as a person in a leadership role who either directly supervised nurses with a DNP degree or was in a leadership role in the organization and could provide information about the role of nurses with master's and DNP degrees in their setting. This strategy yielded 12 additional employers identified through this convenience sampling method. Out of our total 46 employer contacts, 23 employers participated in the interviews (50% response rate).

The goal of the semistructured interview was to gather information about the role of the DNP in practice settings and to compare the role of DNP-prepared nurse to other nurses in these practice settings. Interview questions included general questions about the setting, the role of DNP-prepared nurses, how the role of the DNP-prepared nurse differs from the role of other APRNs in their organization, and in what ways the DNP-prepared nurses provide flexibility in their organization.

We conducted all interviews on the phone and audio-recorded them. We then transcribed each audio recording verbatim and compared it to handwritten notes to ensure accuracy. We used thematic analysis as the analytic approach because it is useful in descriptive and exploratory research to identify recurrent themes in the data (Hsieh & Shannon, 2005). Three of the authors (AB, CP, and JW) conducted thematic analyses that consisted of independently reading each transcript and identifying recurring patterns and themes in the data. The team then met to review these initial patterns, discussed areas of congruence and

incongruence, and reached consensus on the themes that emerged from the data analysis.

Findings

Online Survey Results

A total of 130 DNP program directors responded to the online survey (45% response rate). The survey analyses indicated that approximately 40% of the responding DNP programs used an exclusively online teaching delivery method, 51% used both online and in-person teaching delivery methods, and 9% used exclusively in-person teaching delivery methods. Of these DNP programs, 2 were for profit, 54 were private, 70 were public, and the remainder did not provide profit information. When providing information about the nonacademic institutions that employ DNP graduates, program directors identified a total of 155 settings, outlined in Table 1. As noted earlier, the DNP program directors provided contact information for 34 employers.

Qualitative Employer Interviews

Twenty-three employers (primarily nurse leaders with advanced degrees [DNP, PhD, MBA, MSN] and 1 pharmacist with a PharmD) who were supervisors of nurses with DNP degrees within their organizations participated in semistructured telephone interviews. Their settings included: hospitals (48%), health systems/networks (34%), public health (9%), and primary care/ambulatory care (9%). The thematic analysis process resulted in four main themes that articulated the role of the DNP-prepared nurse in nonacademic settings: "DNP-Prepared Nurse Positions and Roles," "Perceived Impact of the DNP-Prepared Nurse on Staff, Patient, and Organizational Outcomes," "Comparison of the DNP-Prepared Nurse to Other Nurses With Advanced Training," and "Challenges Experienced by Nurses With DNP Degrees." The themes and subthemes are defined in Table 2.

Table 1 – Online Survey Results – DNP Practice Settings of DNP Graduates

Setting Type	Number of DNP Graduates	Percent of Total
Acute care	79	52%
Primary care	17	11%
Government agency	13	8%
Ambulatory care	13	8%
Health systems/networks	8	5%
Specialty care	6	4%
Public health	5	3%
Home care	3	2%
Occupational/ student health	3	2%
Retail	3	2%
Anesthesia practice	3	2%
Long-term care	2	1%
Total	155	100%

DNP-Prepared Nurse Positions and Roles

Overall, employers identified the role of the DNP-prepared nurse in clinical care as being in its infancy. Employers described how their organizations had too few DNP-prepared nurses to compare DNP-prepared nurses to other staff. In general, employers identified DNP-prepared nurses as filling the following roles in their organizations: (1) "traditional" clinical role – as a NP, CRNA, CNM, or CNS; (2) administrators – providing administrative oversight in roles such as managers, supervisors, or primary care practice administrator; and (3) executives – DNP-prepared nurses taking on high-level leadership roles in large health care organizations. In sum, employers stated that there were few positions that specifically required a DNP-prepared nurse. However, the respondents identified the DNP as well as the MSN and PhD as desired degrees.

APRN Role. Employers described DNP-prepared nurses as primarily providing direct patient care, usually as an APRN. These APRN jobs included NP, CRNA, or CNM. Employers perceived that DNP-prepared nurses who were practicing as APRNs had less flexibility in their roles than other leaders in their organization because their patient care duties made it difficult to take on other tasks. However, employers acknowledged that DNP-prepared APRNs were able to fill in for other clinicians (such as physicians and other APRNs) and often took on activities outside of their job descriptions (e.g., volunteering to lead quality improvement programs).

Administrative Role. In addition to clinical APRN positions, DNP-prepared nurses took on formal health system leadership roles that included administration and management, with titles such as chief nurse officer, director of care quality, and director of practice/clinical operations. Regardless of whether the roles were clinically or health systems/administrative-focused, DNP-prepared nurses' roles typically included data mining (analyzing and translating data) and leadership (both formal and informal). However, employers identified that DNP-prepared nurses actualized their roles in common ways – for example, heading other initiatives outside of their role including leading quality improvement and staff/workforce development efforts, and using and analyzing data for quality improvement, project management, and "big picture" problem solving.

Data Analysis and Mining. Employers recognized that the DNP degree provided these nurses with training in data mining and analysis, which was an asset to their organizations. These nurses were able to examine data and identify possible practice changes to address problems.

Table 2 – Themes Related to the DNP Role and Comparison to Other Nurses in Practice Settings

Theme	Subtheme	Definition	Example Data
Doctor of Nursing Practice (DNP)-prepared nurses: Positions and roles		Employers identified that the positions do not specifically state that they are for DNP-prepared nurses. The DNP-prepared nurse often fills an APRN or management/leadership position that can be filled by a person with a MSN or DNP degree. However, the DNP-prepared nurse does have several roles in their organizations.	"The roles as written in the job description are the same."
	APRN role	When asked about DNP-prepared nurses practicing as APRNs, employers stated that they function in the same way as APRNs with Master's degrees.	"I really think it's early yet in the DNP movement and I don't think many organizations have defined what they want from doctorally prepared nurses, especially APRNs."
	Administrative role	DNP-prepared nurses are taking on administrative positions, such as Chief Nurse Officers, Quality Directors, Nursing Practice Directors, Senior Vice President of Clinical Operations. These positions do not require a DNP degree.	"We have a Director of a single location who is responsible for overseeing the direct care of approximately 200 patients. We also have a Senior Vice President for clinical operations who oversees clinical operations of all 80 locations (about 6,000 patients). The Senior VP deals with clinical regulatory, care delivery, clinical education but not operations."
	Data mining and analysis	Employers recognized that the DNP degree provides training in data mining and analysis that is an asset.	"Just experience looking at data and translating research into practical solutions, actually applying them on a day-to-day basis makes such a big difference to the clients being served." "The advantage is really that data knowledge that they gain in the DNP program."
	Leadership	Employers identified that the DNP-prepared nurse provides leadership in their organizations. This may be a part of their positions or, they fill in when other leaders are not available. However, other nurses with advanced degrees fill in as well.	"We have DNP prepared nurses that are actively managing programs,…coaching and mentoring clinical practice nurses, in clinical practice." "Often times when the medical director can't fulfill certain responsibilities, they will designate the DNP to stand in for different things. Like, we do a lot of consulting and speaking for other organizations across the country and if the medical director can't go, they may ask the DNP to go. If they can't serve the term on a professional organization, they may ask the DNP to do that." "I think those DNPs and the non-DNP advanced practice nurses fill a gap."
Perceived impact of DNP-prepared nurse on staff, patient, and organizational outcomes		Employers articulated that DNP-prepared nurses do have an impact on outcomes, but at this	"Other than the impact of [the two DNPs] we don't really see [change in outcomes] because we don't have enough. It's mostly just

(*continued on next page*)

Table 2 – (*Continued*)

Theme	Subtheme	Definition	Example Data
		point in time these outcomes are not measureable.	leadership. But hopefully we will employ those kinds of outcomes."
	Impact on Staff Outcomes	DNP-prepared nurses focus on supporting other staff in the practice setting.	"[The DNP] increases staff satisfaction, decreases turnover, increases their feeling of confidence in their roles like as a bedside nurse, especially the novice population."
	Impact on Patient Outcomes	DNP-prepared nurses focus on particular problems (e.g., infection rates) or patient populations (e.g., self-care of patients with diabetes).	"I think they bring value in terms of optimizing patient care outcomes. They provide a consistency and model of care that they deliver to patients. They significantly improve patient satisfaction."
	Impact on Organizational Outcomes	DNP-prepared nurses: • Try new models of care • Focus more on the continuum of care • Understand how to measure organizational outcomes • Have minimal impact on organizational outcomes because there are not enough DNP-prepared nurses in the organization to make a difference	"[The DNP] focused on redesigning care delivery in our organization and have several teams working on different care redesign models." "They're improving the system of care in the campus, actually developing it and once it's developed helping it to execute smoothly" [The DNP] reviews some of our clinical data and helping to make decisions that give us better organizational outcomes."
Comparison of DNP-prepared nurse to other nurses with advanced training		Employers identified minimal differences between DNP-prepared nurses and other nurses with advanced training in their organization. Rationale for this included: • no specific DNP-prepared nurse jobs, • too few DNP-prepared nurses or they are new to the organization Organizations do not know what a DNP-prepared nurse does and does not view them as different from other APRNs.	"I don't think we have enough roles carved out for DNP grads so at this point we aren't ready to make that comparison or analysis." "We don't have enough exposure to make any comparison between our masters and our DNP prepared nurses. We don't have enough of them and we have a huge volume of Master's prepared nurses and I don't think we have enough information to make a comparison. And I don't think there has been a difference made between the two in terms of expectations and outcomes." "Organizationally, there's nothing that says, 'Because you have this degree you have these additional responsibilities,' for example." "So far, we haven't seen that dramatic of a change, mostly because the person we hired had no management experience in the past." "…there is always something related around process improvement efficiency, a way to deliver patient care in a more efficient way. Not only our DNP but all our advanced practice nurses really function in that role."

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Table 2 – (*Continued*)

Theme	Subtheme	Definition	Example Data
	Unique contributions of nurses with DNP degrees	Employers identified that DNP-prepared nurses were unique in the following ways: • Better understanding of the evidence and clinical-based guidelines • Focus on the translation of evidence into practice • Understanding of health policy and population health	"They understand evidence based practice and know how to take their projects and make them sustainable." "DNPs are more on the translational side, they can argue with evidence."
	Comparison to MSN prepared nurse practitioners	MSN prepared nurses are less focused on system change and efforts to improve efficiency. However, employers noted that MSN prepared nurses are often providing clinical care and are not tapped to provide this type of leadership.	"most advanced practice nurses who want to practice clinically do look at guidelines and EBP so they can stay on top of things."
	Comparison to other nurses with non-nurse practitioner degrees and clinical nurse leaders	Acute care employers provided a comparison between the CNL and the DNP-prepared nurses. The CNLs focused on unit-based practice while the DNP worked from a system level.	" The DNP is helping us with the computer system to make sure that we're getting our data capture that we're going to need to go back and look at outcomes. . .[the DNP] is helping us manage those pieces and the CNLs and looking at all those projects in terms of how we can improve outcomes that way."
	Comparison to PhD-prepared nurses	Employers identified that DNP- and PhD-prepared nurses work together but have different responsibilities – the PhD-prepared nurse is responsible for research design/implementation and the DNP-prepared nurse helps to understand clinical problems.	"I think they bring a systems approach to analyzing problems. They also contribute to the science of nursing in partnership with PhD's. I also think they bring an awareness to the organization to see the scope of which nurses can practice and function and it creates an awareness of the educational preparation of nurses."
Challenges experienced by DNP-prepared nurses		Employers identified that DNP-prepared nurses experience challenges with: - that there are not positions that are designed specifically for nurses with DNP degrees - the need to balance their clinical and leadership/administrative responsibilities	"I think one of the challenges . . . a lot of nurses will go out and get their DNP but they come back to the organization and think "Okay what's next" failing to realize that there is no DNP role per say. The DNP is a degree and not a role. . . It's the doctoral prepared nurse going into that role but there is no DNP role. And I hear that a lot from our graduates because they come back and automatically assume they will have a new job because now they have a DNP." "[Nurses with DNP degrees are] pulled out into administrative roles to do certifications and recognitions and look at data, use data, pull data, interpret data, and you've been able to fill advance practice provider roles in enhanced care during maternity leaves, et cetera, or vacations."

Leadership. Employers identified that DNP-prepared nurses provided leadership in their organizations, as either an assigned administrator or manager or filling in when other leaders were not available. However, employers noted that other nurses with advanced degrees filled in as well, so this activity was not solely attributed to nurses with DNP degrees.

Perceived Impact of the DNP-Prepared Nurse on Staff, Patient, and Organizational Outcomes

Overall, employers anecdotally identified that they thought DNP-prepared nurses had a positive impact on outcomes, but, at that time, they did not track or measure these outcomes to show this impact. They did identify ways in which the DNP-prepared nurse had an impact on staff, patient, and organizational outcomes.

Impact on Staff Outcomes. When asked about the impact of the DNP-prepared nurse on staff outcomes, employers highlighted how these nurses were not only role models for other nurses, but also focused their efforts on changing care practices to improve staff outcomes, such as increased satisfaction and decreased turnover. However, as stated above, their organizations were not currently collecting data to determine if the nurse with the DNP degree did, in fact, influence staff outcomes.

Impact on Patient Outcomes. Employers identified that DNP-prepared nurses did have an impact on patient outcomes because they led projects that either addressed clinical problems (e.g., infection rates) or patient populations (e.g., self-care of patients with diabetes). Employers stated that DNP-prepared nurses demonstrated improved patient outcomes with these projects, although no specific data were provided.

Impact on Organizational Outcomes. Employers recognized that DNP-prepared nurses worked to improve organizational outcomes by identifying system-level problems and proposing new models of care delivery. These nurses also used existing data sources to help administrators make decisions about ways to achieve better organizational outcomes.

Comparison of DNP-Prepared Nurses to Nurses With Other Advanced Degrees

In the interviews, we asked employers to compare the DNP-prepared nurse to nurses with other advanced training, including nurses with Master's and other graduate degrees. Employers often compared DNP-prepared nurses to nurses with Master's degree preparation, such as a nurse practitioner, a clinical nurse leader, or an administrator, and generally identified minimal differences between DNP-prepared nurses and these other nurses. They noted they did not know what specific activities a DNP-prepared nurse performed partially because there were no specific DNP positions in the organization, too few DNP-prepared nurses, or DNP-prepared nurses were new to the organization.

Employers identified that DNP-prepared nurses were hired into NP positions that did not require DNP preparation. Nurse practitioners with Master's degrees typically filled these positions. When comparing DNP-prepared nurses to other APRNs, employers stated that the DNP-prepared nurses had stronger assessment skills and were better able to focus on system-level issues including quality of care and finance. Employer comparisons ranged from there being no difference between MSN- and DNP-prepared APRNs in their organizations, to a clear difference in their abilities, with the DNP-prepared nurse practitioners had better assessment and collaboration skills and demonstrated leadership and quality improvement skills outside of their job description.

We also asked employers to compare DNP-prepared nurses with nurses with non-APRN degrees (nursing administration, MBA, clinical nurse leaders). Employers stated that DNP-prepared nurses who were not trained as APRNs were filling positions in nursing administration, management, and operations. Nurses with Master's degrees in nursing administration or Master's in business administration also filled these roles. Employers identified nurses with the DNP degrees as having a broader perspective in terms of health policy and population health. Employers in acute care settings identified an overlap in the role of DNP-prepared nurses and those with clinical nurse leader (CNL) degrees in terms of their ability to streamline care practices, coordinate care, manage transitional care issues, and help improve length of stay and patient satisfaction. They identified that DNP-prepared nurses had a higher level of professionalism, experience working in teams, and ability to analyze care situations to drive change in the organization. However, they noted that CNLs had an impact on the outcomes of an individual hospital unit (if they worked on a single unit), and the benefit of the CNL was that they were available to serve as a staff nurse or charge nurse when needed. Employers stated that, because the CNLs were unit based, they were able to track the outcomes of the CNL's practice including patient outcomes such as length of stay, readmission rates, and patient satisfaction.

Employers also compared DNP-prepared nurses to PhD-prepared nurses, noting that the nursing profession and their organization were both confused about the difference between the two degrees. However, employers recognized that nurses with PhDs oversaw the research mission of their organizations, and nurses with DNP degrees were responsible for disseminating best practices and overseeing quality improvement. Employers in acute care settings stated that the PhD-prepared nurses had specific roles to lead research efforts at a system level and support the staff of the organization to conduct the research. In general, employers noted confusion on the part of their staff and among patients in terms of the differences among nurses with advanced degrees (Master's degree, DNP,

PhD, and other graduate degrees). One employer stated that the differences between the DNP- and MSN-prepared nurse and the DNP- and PhD-prepared nurse were analogous to the previous confusion in terms of the difference between a licensed practical nurse (LPN) and a registered nurse (RN). The participant said,

> I think it's the same confusion that we have with a LPN and a RN. It's still very confusing when we put a LPN in an acute care setting. People don't know what to do with a LPN, they can only do X-Y-Z. Even though people know it's a nurse, they are not sure how it's different from someone who has a Master's degree. I think that is an issue people really hear in our organization. People understand the fact that it's a doctorate degree, but they really don't have an idea of what the differences are.

Identified Challenges Experienced by DNP-Prepared Nurses

Employers identified several challenges that DNP-prepared nurses experienced in their organizations. First, employers stated that DNP-prepared nurses needed to articulate the meaning of their DNP degree to other practitioners and patients, including how the degree differed from Master's- and PhD-prepared nurses. This is partly due to the lack of specific jobs for those with the DNP degree – they typically took on positions that did not require a DNP degree. However, employers stated they were addressing this problem and were requiring doctoral degrees (PhD or DNP) for certain leadership positions. One employer (at a large health system) was adding the DNP degree as a rung on the clinical ladder. In terms of differentiating between roles, employers stated that if DNP-prepared nurses were not currently part of their clinical career ladder, they intended to incorporate DNP-prepared nurses into their system, in addition to creating job descriptions specifically for DNP-prepared nurses.

Another challenge identified by employers was that DNP-prepared nurses had to balance their direct care activities with additional leadership responsibilities. The employers identified that the nurses with DNP degrees, especially those with full-time clinical responsibilities, often took on leadership responsibilities in addition to their jobs. Similarly, for DNP-prepared nurses who were serving as leaders in acute care settings, they often filled gaps in management, including unit supervision, which took them away from their original role.

Discussion and Recommendations

Despite the fact that the DNP degree is a clinical degree and, therefore, generally prepares the graduate for positions in clinical settings, few studies provide information on the role of the DNP-prepared nurse in nonacademic settings (Carter & Jones, 2017), and what is provided is limited. Because of this shortfall and the fact that the perspective of nonacademic employers of DNP-prepared nurses has not been assessed, this study explores an important knowledge gap. However, we found that employers had difficulty differentiating nurses with DNP degrees from nurses with other advanced training, in part because of the "newness" of the DNP degree and the scarcity of positions specifically designed for nurses with DNP degrees. When DNP-prepared nurses were employed in either administrative or quality-centered positions, employers appreciated the DNP-prepared nurses' broader perspectives and policy backgrounds.

DNP-prepared nurses may well have to continue to explain the components of the DNP degree and why they chose the degree, especially when working in organizations in which a range of educational preparations are acceptable for any specific position. Rather than assume that employing organizations will understand what a DNP-prepared nurse offers an organization, educational programs should prepare their DNP-prepared graduates to carve out new roles in organizations. Finally, DNP-prepared nurses should disseminate information about their contributions to patient and organizational outcomes and, where needed, work with the relevant system personnel to identify and incorporate outcome measures.

This study found that many schools of nursing do not track employment information of DNP graduates, limiting the ability to identify the roles these graduates fill. Such information is important for schools to use to improve their programs. DNP programs need to do a better job informing the nursing profession of what DNP-prepared nurses can bring to organizations outside of academic settings. Likewise, schools should better prepare DNP-prepared nurses to articulate what they can offer organizations and how to create job descriptions that blend clinical with leadership and implementation skills.

This study found that the role of DNP-prepared nurses in nonacademic settings was not clearly defined and that these nurses typically worked as APRNs in clinical practices or as health care system leaders (administration or management). However, there were only a few nurses with DNP degrees in these settings, which is consistent with an existing study of DNP roles (Carter & Jones, 2017). The role of the DNP-prepared nurse is still being established on an individual basis, making it difficult to generalize the role in any given setting.

The DNP-prepared nurse has the potential to be a flexible employee who can supplement clinical care and leadership vacancies. However, fully actualizing the role of the DNP-prepared nurse has not been achieved because the role is still relatively new and evolving in most organizations (Carter & Jones, 2017; Grey, 2013; Martsolf et al., 2015). As a result, the role of the DNP-prepared nurse is still being established on an individual basis, making it difficult to generalize the role of DNP-prepared nurses in a given setting.

The burden currently appears to be on the nurse, once he or she has earned the DNP degree. The nurse will need to be an ambassador for a value-added role, similar to what nurse practitioners had to do when that role first began. The NP role was developed partly in response to a looming physician shortage. Likewise, the DNP degree was developed to support a new role for those in advanced nursing practice to address another identified need: improving particular aspects of health care and the health care system (Brown & Draye, 2003). Whether future research and critical evaluation supports the role of the DNP-prepared nurse remains to be seen.

The main limitation of this work is its lack of generalizability due to the exploratory nature of the study. The online survey had a 45% response rate that, while a relatively high response rate for an online study, may not necessarily represent the population of DNP programs or their directors. In the online survey, we did not collect data about the type of DNP program (advanced practice vs health care systems/leadership) so we were unable to compare the employer differences by program type. Furthermore, we found that some DNP program directors either did not track employer information or were reluctant to provide employer contact information. This led the research team to use convenience sampling methods to identify employers. Given the dynamic nature of DNP programs across the United States, the trends in DNP education and employment of DNP-prepared nurses may have changed since 2016. Nonetheless, this study still offers a unique perspective on the role of the DNP-prepared nurse in practice settings.

Future, large-scale research efforts aimed at gathering data about the actual and potential roles of DNP-prepared nurses are needed to help practicing DNPs actualize their roles and inform health care organizations on how best to deploy DNP-prepared nurses. Likewise, future research aimed at quantifying the outcomes of DNP-prepared nurses' direct care and leadership roles could provide additional information about the value of the DNP-prepared nurse in health care. In terms of the implications of this work for practice, policy, and education, it will be important to monitor the evolving role of the DNP-prepared nurse as the degree becomes more commonplace. Finally, focusing future research efforts on quantifying how DNP-prepared nurses (in roles as APRNs and administrators/leaders) affect patient and organizational outcomes would no doubt provide important insight into the value of DNP-prepared nurses across health care settings.

Conclusions

A recent editorial (Broome, 2017) highlighted the need for the nursing discipline to use data to determine the value of the DNP degree. Our study highlights the need for further investigation of the DNP-prepared nurses' "return on investment," weighing the cost of the degree with the students' potential for adequate employment. However, there is not a critical mass of DNP-prepared nurses in clinical settings to determine whether the nurse with the DNP degree has an impact on outcomes. Thus, future research efforts should focus on identifying measureable outcomes necessary to evaluate the DNP-prepared nurse's role. Research should focus on large-scale data collection efforts to document the impact of DNP-prepared nurses on patient, organizational, system, and societal outcomes, and DNP-prepared nurses should consider advocating for this measurement to demonstrate their utility on the ground.

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Supplementary materials

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