



Determining the Role of the Nurse with a Doctor of Nursing Practice Degree

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Introduction/Background: In 2004, the American Association of Colleges of Nursing (AACN) endorsed an initiative to significantly increase the number of nurses with a practice-focused doctoral degree by the year 2015. In response, the number of schools offering the doctor of nursing practice (DNP) degree, the terminal clinical degree for nurses, grew from 20 programs in 2006 to 254 programs in 2014¹ and since 2010 the enrollment in DNP programs has more than doubled from 7,034 to 18,352 students (a 161 percent increase).² The majority of current research on the DNP degree evaluates how and why nursing schools are developing DNP programs, and the role of the DNP in academic settings. The role of the DNP nurse has not been explored in non-academic settings, nor have the perspectives of these non-academic employers been assessed. The rationale for this study was to address this gap in knowledge by examining the “market” for DNPs.

Methods: This descriptive study aimed to detail where nurses with DNP degrees are employed outside of academic settings, the roles to which they are hired, how they differ from nurses with other academic preparation, and the effect they have on the flexibility of the organization. Data for this study were collected from December 2016-August 2016 in two parts: 1) an online descriptive survey of the DNP programs; and 2) qualitative semi-structured telephone interviews with employers.

Part 1 - Online Survey of DNP Programs: An online survey was conducted to capture descriptive information about the types of non-academic institutions that hire DNP graduates. A recruitment database, using the American Association of Colleges of Nursing and Commission on Collegiate Nursing Education (CCNE) list of accredited DNP programs and hand searching of the internet, was created to collect contact information for the program leadership, program modality (online, hybrid, or face to face), and profit status (private, public, for profit) (N=288). From this list, we sent an online survey to DNP program directors to collect information about the program, graduate employment, and contact information for employers of the program’s graduates (*see Appendix 1 for survey*).

Part 2 - Semi-structured Employer Interviews: Employers were identified either by DNP program directors through the online survey (34 employers) or by a convenience and snow-ball sampling method (12 additional employers). Eligible participants (employers) were considered a person in a leadership role that could provide information about the role of DNPs and advanced practice nurses (APN) in their setting. The goal of this exploratory qualitative interview was to gather information about the setting characteristics, the role of the DNP, and the flexibility (in terms of time in their day, general availability, and having the skills to fill in for others) in that setting. Interview questions included: general questions about the setting; the role of the DNP(s); how the DNP(s) role differs from the role of other APN in their organization; and how and in what ways the DNP affects

Conclusions and Policy Implications

- 1) Prior studies have not examined the role of the DNP in non-academic settings, nor have the perspectives of non-academic employers been assessed.
- 2) The role of the DNP-prepared nurse in non-academic settings is typically as an advanced practice nurse in clinical practice or as a health care system leader (administration or management), however, the number of DNPs in these settings is still limited.
- 3) The DNP-prepared nurse is a flexible worker that can supplement clinical care and leadership needs, however this role needs to be explored further.
- 4) Future research efforts aimed at quantifying the outcomes of DNP-prepared nurses’ care, could provide further information about the value of the DNP to patient outcomes.

flexibility in the organization (*see Appendix 2 for telephone interview guide*). Audio recordings were transcribed and compared to handwritten notes to ensure quality. ATLAS.ti was used for a qualitative content analysis.

Findings: Online Survey – A total of 130 DNP program directors responded to the online survey (45% response rate). The survey revealed that the program modalities were 40 percent online (exclusively), 51 percent used both online and in-person, and 9 percent used in-person teaching methods. When providing information about the non-academic institutions that employ DNP graduates, program directors reported a total of 155 settings: hospitals (52%), primary care (11%), ambulatory care (8%), government agency (8%), health system/network (5%), specialty care (4%), public health (3%), retail clinic (2%), anaesthesia practice (2%), occupational/student health (2%), long-term care (1%) and occupational health (1%). The program director respondents provided the contact information for 34 employers.

Qualitative Employer Interviews – 23 employers (who were supervisors of DNPs in the organization, all were nurse leaders with advanced degrees) participated in telephone interviews, the settings included: hospitals (48%), health systems/networks (34%), public health (9%), and primary care/ambulatory care (9%).

Role of the DNP – Employers described the role of the DNP-prepared nurse as primarily providing direct patient care, usually as an Advanced Practice Nurse (APN). These APN roles included: nurse practitioner, nurse anaesthetist, nurse midwife, and psychiatric nurse practitioner. Besides APN roles, DNP-prepared nurses take on health care system leadership responsibilities including administration and management. Regardless of whether they were APNs or health system leaders, DNP-prepared nurses' roles typically included team leadership, solving health system navigation issues with special patient populations (e.g. heart failure or diabetes care planning), rapid interventions in response to quality and safety issues, and use of data to problem solve. When comparing DNPs to other APNs, employers typically compared DNPs to nurse practitioners, and identified that DNPs had stronger assessment skills than nurse practitioners and were able to focus on system level issues including quality of care and finance. In terms of differentiating between the roles, employers stated that earning a DNP was not currently part of their clinical career ladder, but that it was an intention to incorporate the DNP-prepared nurse into this system, as well as create job descriptions specifically for DNP-prepared nurses.

Flexibility – When employers were asked about how DNP-prepared nurses contribute to the flexibility in their organization, the results were mixed. Employers identified that the DNP-prepared nurses that were practicing as APNs had less flexibility because their patient care duties made it difficult to take on other tasks. However, employers identified that the DNP-prepared APNs were able to fill in for other clinicians and often did activities that were outside of their job description (e.g., lead initiatives and programs). For DNP-prepared nurses with leadership roles, the employers identified that DNP-prepared leaders were flexible, in part because the DNP-prepared nurses were able to fill in for vacancies in administrative and managerial positions.

Conclusion: Prior studies have not examined the role of the DNP in non-academic settings, nor have the perspectives of these non-academic employers been assessed. The role of the DNP-prepared nurse in non-academic settings is not clearly defined, these nurses typically practice as an APN in clinical roles or as a health care system leader (administration or management). However, the number of DNPs in these settings is still limited which is a challenge when trying to articulate the role of DNPs in given setting.

Policy Implications: The DNP-prepared nurse has the potential to be a flexible worker that can supplement clinical care and leadership needs. Employers have identified the need to characterize the role of DNP prepared nurses and the need to articulate this role in job descriptions and the clinical ladder. Future, large scale research efforts aiming to gather data about the actual and potential role of DNP prepared nurses in health care could not only help practicing DNPs actualize their roles, but could inform health care organizations of this potential resource. Future research efforts aimed at quantifying the outcomes of DNP prepared nurses' care, could provide further information about the value of the DNP to health care.

References

¹ American Association of Colleges of Nursing. DNP Fact Sheet. (June 2015). Retrieved from <http://www.aacn.nche.edu/media-relations/fact-sheets/dnp>.

² IOM (Institute of Medicine). 2011. *The Future of Nursing: Leading Change, Advancing Health*. Washington, DC: The National Academies Press. Retrieved from <https://www.nap.edu/catalog/12956/the-future-of-nursing-leading-change-advancing-health>.

Appendix 1. Online Survey of DNP Programs

Study Title: Determining the Value and Outcomes of the Doctor of Nursing Practice Degree

PI: Anna S. Beeber, PhD, RN the University of North Carolina at Chapel Hill, School of Nursing

Cecil G. Sheps Center for Health Services Research

Survey for DNP Program Directors

Introduction

Welcome! Thank you for participating in the Doctor of Nursing Practice Workforce Project. The purpose of this project is to examine the role of the DNP in non-academic settings. While we know that many DNPs are employed by academic institutions, we are interested in finding out about the non-academic settings that employ them.

About Us: Anna Song Beeber PhD, RN, Cheryl B. Jones PhD, RN, FAAN, Mary R. Lynn, PhD, RN, Carrie Palmer, DNP, RN, and Julee Waldrop, DNP, RN, FAANP, are nurse researchers at the University of North Carolina at Chapel Hill School of Nursing. We conduct research related to the nursing workforce and health services research. We are funded by the Carolina Health Workforce Research Center to examine the role of the DNP in non-academic settings.

What Your Participation Entails: We ask that you complete a brief survey (15-20 minutes) that asks questions about your DNP program and the institutions that employ your graduates. Your responses to these questions will not be shared with anyone outside of the study team. You may be wondering why we are not asking you to complete a consent form. Since this survey focuses on your DNP program and institutions and not individuals, The University of North Carolina Office of Human Research Ethics has determined that this research is not considered human subject research, and therefore does not require IRB approval (study #15-3363). However, your participation is voluntary. If you have any questions about the project please feel free to contact Anna Beeber PhD, RN at anna.beeber@unc.edu or 919-843-9489.

Q1 What is your full title/position?

Q2 Please provide the following information about your DNP program.

Q3 Name of Institution (University/College/Institution Name)

Q4 Location of Institution

City (1)

State (2)

Q5 Program Modality

- All online (1)
- Lecture/seminar based (2)
- Hybrid (3)

Q6 Year DNP program opened

Q7 Number of students currently enrolled in DNP program

Q8 Has your program graduated any DNP students as of December 31, 2015

- Yes (1)
- No (2)

If No Is Selected, Then Skip To Is there anything else you would like...

Q9 Total number of DNP graduates as of December 31, 2015

Q10 What percent of your graduates are employed by academic settings?

Q11 What percent of your graduates are employed by hospitals?

Q12 What percent of your graduates are employed by community settings (e.g. primary care, long-term care, ambulatory care)?

Q13 The following information will be used to help identify the non-academic settings where DNP graduates work. Please provide information about the top five non-academic institutions in which your graduates are employed. If you have a contact at these institutions, please provide their name, title, phone number, and email address.

Q14 First non-academic institution where graduates are employed.

- Institution Name (1)
- City (2)
- State (3)
- Contact Name (4)
- Contact Title (5)
- Contact Phone (6)
- Contact Email (7)

Q15 Setting type for institution named above

- Ambulatory care (1)
- Home Care (2)
- Hospice (3)
- Hospital (4)
- Long-term care (5)
- Occupational health (6)
- Primary care (7)
- Public health (8)
- Specialty care (9)
- Student health (10)
- Other (11)

Q16 If "other" was selected for setting type, please describe the setting here:

Q17 Second non-academic institution where graduates are employed.

- Institution Name (1)
- City (2)
- State (3)
- Contact Name (4)
- Contact Title (5)
- Contact Phone (6)
- Contact Email (7)

Q18 Setting type for institution named above

- Ambulatory care (1)
- Home Care (2)
- Hospice (3)
- Hospital (4)
- Long-term care (5)
- Occupational health (6)
- Primary care (7)
- Public health (8)
- Specialty care (9)
- Student health (10)
- Other (11)

Q19 If "other" was selected for setting type, please describe the setting here:

Q20 Third non-academic institution where graduates are employed.

- Institution Name (1)
- City (2)
- State (3)
- Contact Name (4)
- Contact Title (5)
- Contact Phone (6)
- Contact Email (7)

Q21 Setting type for institution named above

- Ambulatory care (1)
- Home Care (2)
- Hospice (3)
- Hospital (4)
- Long-term care (5)
- Occupational health (6)
- Primary care (7)
- Public health (8)
- Specialty care (9)
- Student health (10)
- Other (11)

Q22 If "other" was selected for setting type, please describe the setting here:

Q23 Fourth non-academic institution where graduates are employed.

- Institution Name (1)
- City (2)
- State (3)
- Contact Name (4)
- Contact Title (5)
- Contact Phone (6)
- Contact Email (7)

Q24 Setting type for institution named above

- Ambulatory care (1)
- Home Care (2)
- Hospice (3)
- Hospital (4)
- Long-term care (5)
- Occupational health (6)
- Primary care (7)
- Public health (8)
- Specialty care (9)
- Student health (10)
- Other (11)

Q25 If "other" was selected for setting type, please describe the setting here:

Q26 Fifth non-academic institution where graduates are employed.

- Institution Name (1)
- City (2)
- State (3)
- Contact Name (4)
- Contact Title (5)
- Contact Phone (6)
- Contact Email (7)

Q27 Setting type for institution named above

- Ambulatory care (1)
- Home Care (2)
- Hospice (3)
- Hospital (4)
- Long-term care (5)
- Occupational health (6)
- Primary care (7)
- Public health (8)
- Specialty care (9)
- Student health (10)
- Other (11)

Q28 If "other" was selected for setting type, please describe the setting here:

Q29 The following information will be used to help identify the academic settings where DNP graduates work. Please provide information about the top five academic institutions in which your graduates are employed.

Q30 First academic institution where graduates are employed.

Institution Name (1)

City (2)

State (3)

Q31 Second academic institution where graduates are employed.

Institution Name (1)

City (2)

State (3)

Q32 Third academic institution where graduates are employed.

Institution Name (1)

City (2)

State (3)

Q33 Fourth academic institution where graduates are employed.

Institution Name (1)

City (2)

State (3)

Q34 Fifth academic institution where graduates are employed.

Institution Name (1)

City (2)

State (3)

Q35 Is there anything else you would like to tell us about your program and/or its graduates?

Appendix 2. DNP Telephone Interview Guide

Determining the Value of the DNP

Interview Guide

05 12 2016

ID:

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Interviewer
Initials:

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Date:

M	M	D	D	Y	Y

Post Interview Processing:

	Interviewer Edit	Data Entry
Initials		
Date		

Pre-Interview

Thank you for speaking with me today. The purpose of this interview is to gain a better understanding of the roles of nurses who have earned the **Doctor of Nursing Practice Degree** compared to other nurses with advanced training. The interview should not take more than **30 minutes** of your time.

We are **not** going to ask you anything about yourself **or** for any personal information. Your responses to these questions will not be shared with anyone outside of the study team.

Please answer to the best of your ability and **feel free to stop the interview** at any time should you feel uncomfortable. As a reminder, **I am recording this conversation**. Do you have any objections?

Do you have any questions before we begin?

Let's begin. The first questions are about you and your organization.

1. What is your official title at [_____]?

2. What is your highest level of education? _____

And your specialty? _____

3. How long have you worked at [_____]?

a. _____ years → If less than 1 yr, b. _____ months

4. How long have you been in your current position? a. _____ years → If less than 1 yr, b. _____ months

5. How would you characterize the setting type where you work? *List of possible answers:*

Setting type	Check the correct response
Hospital	<input type="checkbox"/> 1
Primary care	<input type="checkbox"/> 2
Ambulatory care	<input type="checkbox"/> 3
Specialty care	<input type="checkbox"/> 4
Home care	<input type="checkbox"/> 5
Long-term care	<input type="checkbox"/> 6

Hospice	<input type="checkbox"/> 7
Public health	<input type="checkbox"/> 8
Occupational health	<input type="checkbox"/> 9
Student health	<input type="checkbox"/> 10
Other:	<input type="checkbox"/> 11

6. What is the ownership type for your organization? *List of possible answers:*

Ownership type	Check the correct response
Non-profit	<input type="checkbox"/> 1
Private, for profit	<input type="checkbox"/> 2
Government, federal	<input type="checkbox"/> 3
Government, nonfederal	<input type="checkbox"/> 4
Other:	<input type="checkbox"/> 5

7. And the geography type for your setting? *List of possible answers:*

Geography type	Check the correct response
Urban	<input type="checkbox"/> 1
Suburban	<input type="checkbox"/> 2
Small city, town	<input type="checkbox"/> 3
Rural	<input type="checkbox"/> 4

The next few questions will help us get a feel for how big your organization is.

8. How many people are employed by [_____] ? This number should include all nurses, staff, physicians, i.e. everybody who works for [_____]

Estimates are OK for large organizations: _____

9. How many patients does [_____] currently serve?

Estimates are OK for large organizations: _____

Is that per year or per day?: _____

Other: _____

10. And how many beds does your organization have open at this time? _____

Thank you. The next set of questions is about the nurses with the Doctor of Nursing Practice Degree at your organization.

11. How many nurses with the Doctor of Nursing Practice Degree does your organization employ?

12. To your knowledge, are any of your staff working on their DNP degree?

Yes (1)

No (0)

If Yes → how many? _____

I'd like to learn more about the roles and responsibilities of the nurses who hold the Doctor of Nursing Practice Degree at your organization.

Fill in the table below based on the response to this question. Review each role that has not been mentioned after they respond.

Role	Y	N	If, yes, how many?	What are their responsibilities?
Do you have any DNPs that are <u>Advanced Practice Nurses?</u> (<i>nurse practitioners, nurse midwives, CRNAs, or clinical nurse specialists</i>)	<input type="checkbox"/> 1	<input type="checkbox"/> 0		
Do you have DNPs that are <u>clinical staff nurses?</u> - not <u>advanced practice</u>	<input type="checkbox"/> 1	<input type="checkbox"/> 0		
Do you have DNPs that are <u>Administrators?</u>	<input type="checkbox"/> 1	<input type="checkbox"/> 0		
Do you have DNPs that fill <u>other roles?</u> list:	<input type="checkbox"/> 1	<input type="checkbox"/> 0		
DNP Other, list:	<input type="checkbox"/> 1	<input type="checkbox"/> 0		

Great, thank you. Now I am going to ask about the impact that DNP prepared nurses have on your organization.

Note for Interviewee: DNP graduates have advanced training in evidence-based practice, quality improvement, and systems leadership.

13. In what ways do DNP prepared nurse affect patient outcomes in your organization?
(Do any of them lead quality improvement initiatives, patient data collection efforts, program evaluations, or similar efforts?)

14. In what ways do DNPs affect staff outcomes in your organization?
(Do any of them lead staff involvement and development projects, or nurse turnover and retention improvement initiatives?)

15. In what ways do DNPs affect organizational outcomes in your organization?
(Do any of them lead efforts to improve efficiency and resources utilization? Or perhaps a DNP nurse is leading an organization wide effort to adopt a new system, like Epic)

16. In your opinion, what are the most valuable contributions that DNP prepared nurses bring to your organization?

17. Do the roles of DNP prepared nurses differ from master’s prepared nurses in your organization?

Yes (1)

No (0)

If **Yes** → in what ways do their roles differ from master’s prepared nurses?

18. Do DNP prepared nurses provide flexibility to the organization?

Yes (1)

No (0)

If **Yes** → How do DNPs provide flexibility to your organization?

Fill in the table below based on the response to this question. Review each role that has not been mentioned after they respond.

Possible answers	Yes	No
Do DNPs “fill in” for others in your organization? If so, who? Describe:	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀
Do DNPs assume leadership duties when a position is vacant?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀
Do DNPs supplement gaps in clinical care in your organization?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀
Are there any Other ways that DNPs bring flexibility to your organization? Describe:	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀

Thank you. That completes my questions about DNP prepared nurses. The next section will help us understand the roles and responsibilities of other nurses at your organization with advanced degrees. I am no longer asking about DNP prepared nurses.

Fill in the table below based on their answer to this question. Review each role that has not been mentioned after they respond.

Role	Y	N	If, yes, how many?	What are their responsibilities?
Do you have any nurses with other advanced degrees that are <u>Advanced Practice Nurses?</u> (<i>nurse practitioners, nurse midwives, CRNAs, and clinical nurse specialists</i>)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀		
Do you have any nurses with other advanced degrees that are <u>clinical staff nurses - not advanced practice?</u>	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀		
Do you have any nurses with other advanced degrees that are <u>Administrators?</u>	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀		
Do you have any nurses with other advanced degrees that fill <u>other roles?</u> List:	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀		
Other, list:	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀		

Now I am going to ask about the impact that Non-DNP nurses with advanced degrees have on your organization.

- 19.** In what ways do the nurses with other advanced degrees affect patient outcomes in your organization?
- 20.** In what ways do the nurses with other advanced degrees affect staff outcomes in your organization?
- 21.** In what ways do the nurses with other advanced degrees affect organizational outcomes in your organization?
- 22.** In your opinion, what are the most valuable contributions that nurses with other advanced degrees bring to your organization?

23. Do nurses with other advanced degrees provide flexibility to the organization?

Yes (1)

No (0)

If **Yes** → How do APNs provide flexibility to your organization?

Fill in the table below based on the response to this question. Review each role that has not been mentioned after they respond.

Flexibility Questions	Yes	No
Do other nurses with advanced degrees “fill in” for other providers in your organization? If so, who? <i>Describe:</i>	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀
Do other nurses with advanced degrees assume leadership duties when a position is vacant?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀
Do other nurses with advanced degrees supplement gaps in clinical care in your organization?	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀
Are there other ways that other nurses with advanced degrees bring flexibility to your organization? <i>Describe:</i>	<input type="checkbox"/> ₁	<input type="checkbox"/> ₀

24. We are just about done. Are there any final thoughts you have about the role of the DNP prepared nurse or how they compare to nurses with other advanced degrees in your organization?

Finally, there is a possibility that our team will be conducting future studies related to the role of DNPs in non-academic settings. Would you be interested in being contacted by us in the future?

If yes, please provide an email address and phone number: