

PhD and DNP Education in Pennsylvania: Implications for Faculty and Advanced Practice Shortages

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Learning Outcomes

- **Attendees will compare PhD and DNP programs and their respective implications for meeting workforce outcomes and demands**

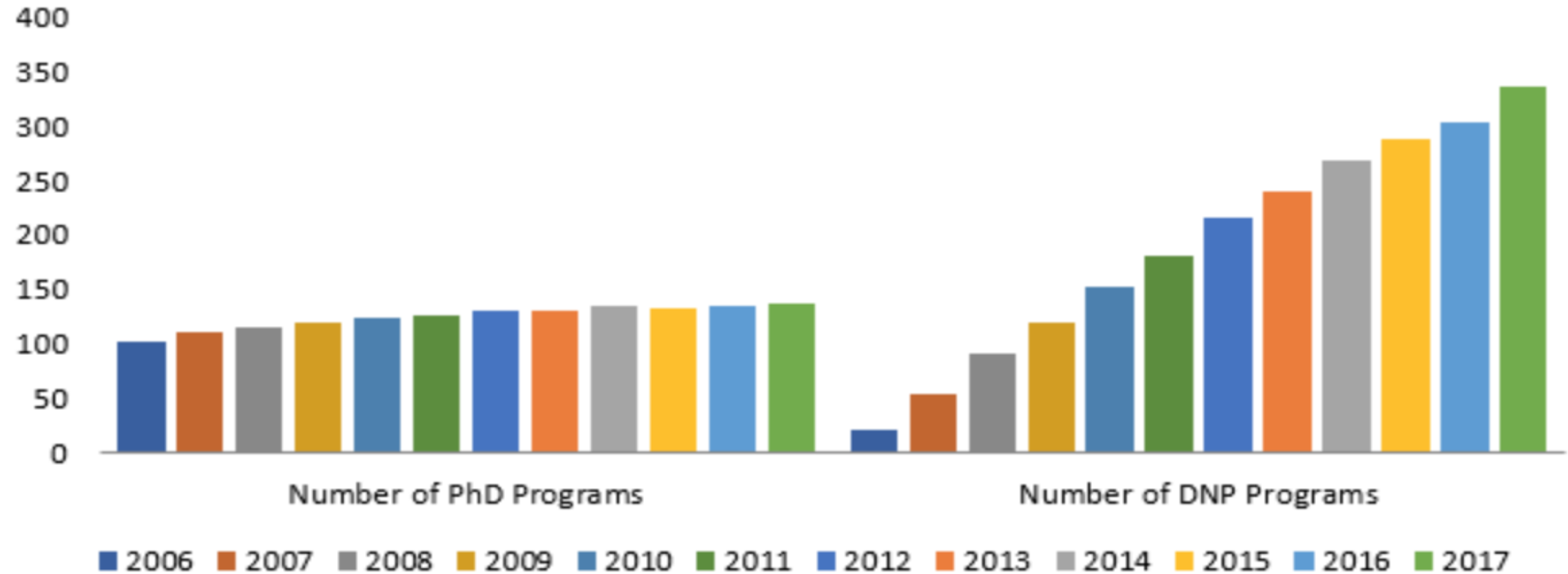
National Recommendations

- **IOM's Future of Nursing, 2010**
 - Double the number of nurses with a doctorate
 - Need for faculty and for advanced practice nurses
- **National Research Council (NRC) 2005**
 - Distinguish between practice and scientific doctoral preparation
 - Strengthen the research environment for PhD programs and increase the number of nurse scientists

DNP Recommendations

- **National Organization of Nurse Practitioner Faculty, 2018**
 - Entry to practice by 2025*
- **National Association of Pediatric Nurse Practitioners, 2017**
 - Entry to practice by 2025
- **National Association of Clinical Nurse Specialists, 2009**
 - Entry to practice by 2030
- **American Association of Nurse Practitioners, 2008**
- **American Association of Nurse Anesthetists, 2007**
 - Entry to practice by 2025*
- **American Academy of Colleges of Nursing, 2004**
 - Move advanced practice MSN to DNP by 2015

Growth in Doctoral Nursing Programs: 2006-2017



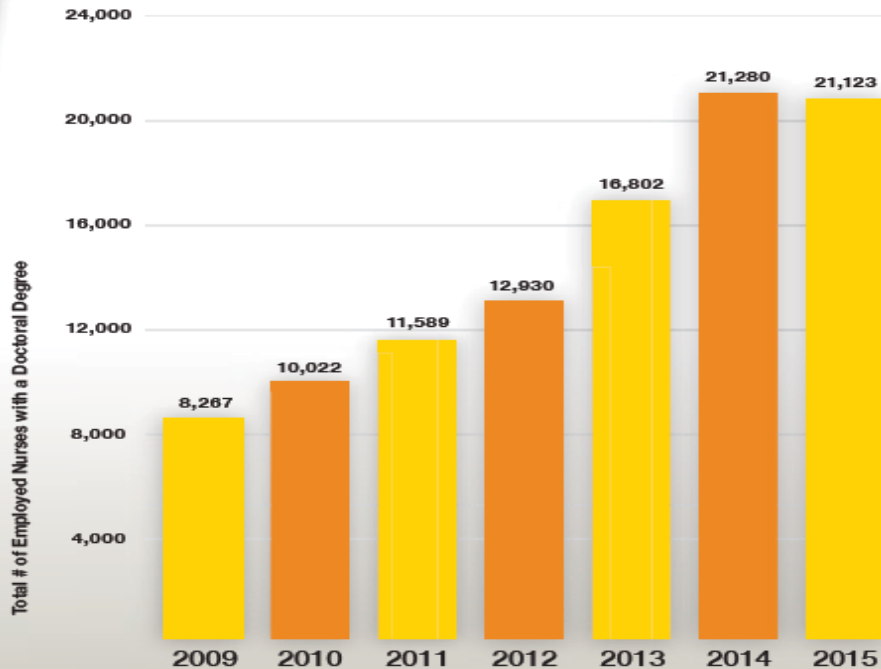
Indicator 2: Doctoral Degrees

IOM Recommendation:

Double the number of nurses with a doctorate by 2020

THIS RECOMMENDATION HAS BEEN ACHIEVED

Number of employed nurses with a doctoral degree



PhD Prepared Nurse Faculty Shortage

- **Remains a significant obstacle to expanding nursing programs to meet the growing workforce needs of the United State's health care system**
- **In 2016, 64,067 qualified applicants from baccalaureate and graduate nursing programs were turned down due to insufficient faculty resources. (AACN)**
- **Decline in PhD enrollment nationwide**

Nurse Practitioner Shortage

- **Projected shortage of up to 120,000 physicians by 2030**
- **Growth of NPs could help mitigate the shortage and improve access to quality care across the nation**
- **Current shortage in NPs across multiple specialties is expected to worsen (PMH, AG-ACNP, NNP)**

What Are We Missing? The Case of Pennsylvania



Future of Nursing in Action

- **Pennsylvania Action Coalition (PA-AC)**
 - **Mission: Implement the Future of Nursing recommendations through strategic partnerships**
 - **Partnership between University of Pittsburgh School of Nursing, the Health Policy Institute at the University of Pittsburgh, and PA-AC Board member volunteers**



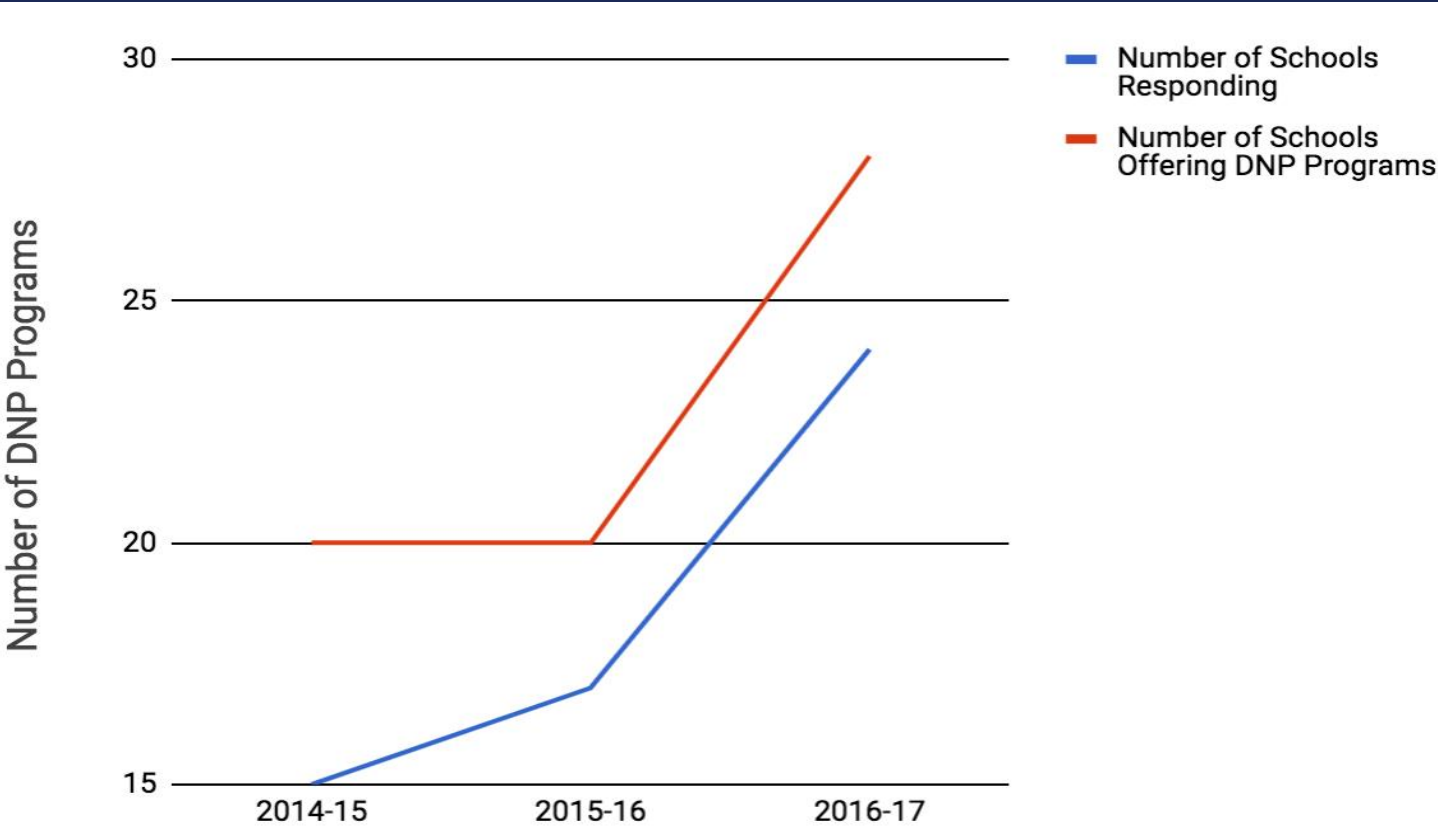
The Case for Pennsylvania

- **Data gathered annually since 2015 from each DNP and PhD program in PA**
- **Data suggest PA has seen an increase in both PhD and DNP enrollment**
- **Outcome data suggest neither program is contributing significantly to increases in faculty or advanced practice providers**

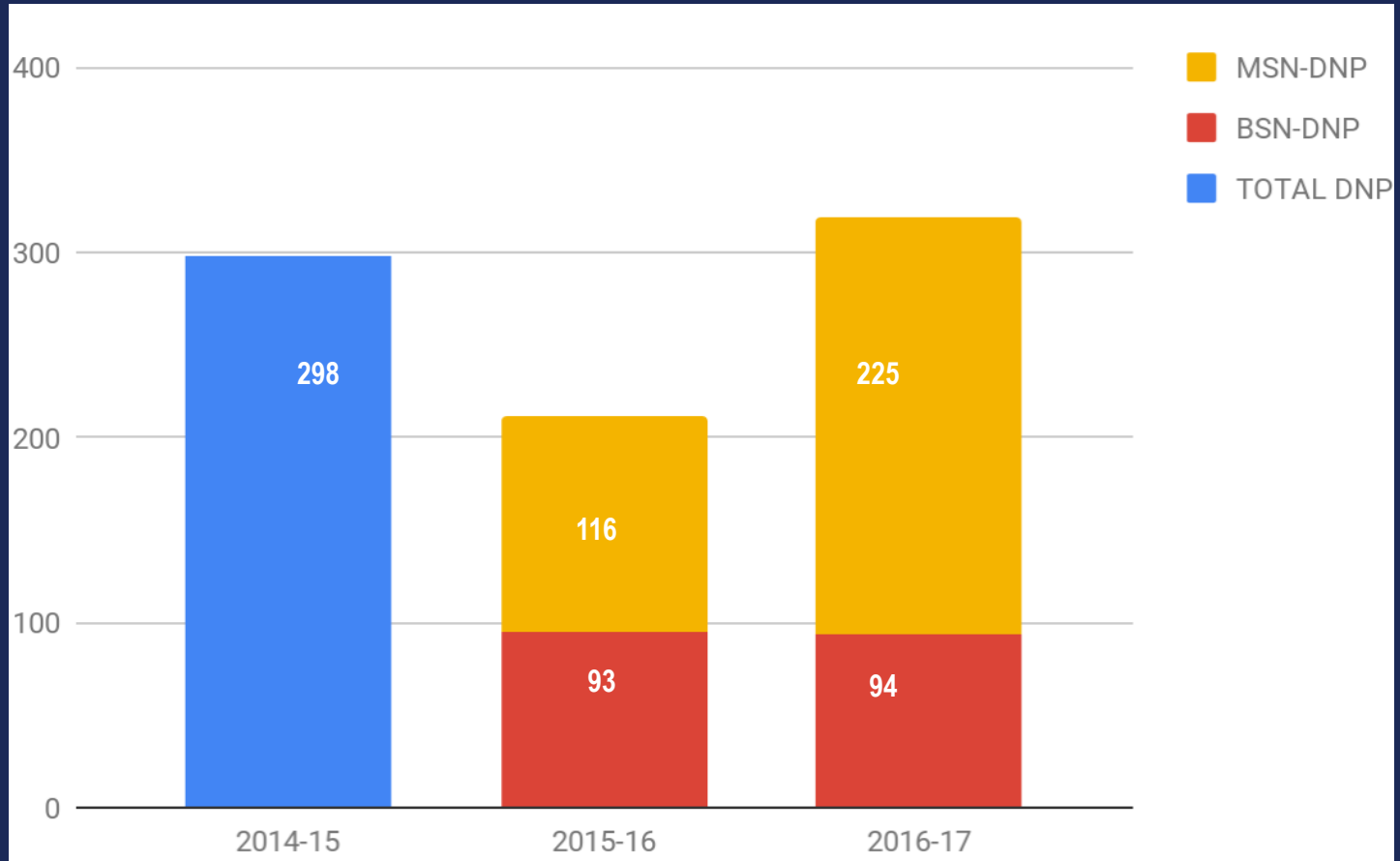


DNP Education

Have the Number of DNP Programs Increased?



DNP Enrollment Over the Past 3 Years



DNP Specialties Offered and Enrollment: 2016-17

	Offering		Enrollment	
	BSN-DNP	MSN-DNP	BSN-DNP	MSN-DNP
Family NP	10	2	129	8
Acute Care NP	4	1	28	9
Pediatric NP Primary	2	1	10	2
Pediatric NP Acute Care	0	0	0	0
PMH-NP	1	1	32	0
Neonatal NP	2	1	2	0
Adult and Geriatric NP	6	1	20	0
Leadership/Administration	2	26	3	106
Clinical Nurse Specialist	1	1	1	7
Anesthesia	5	2	88	9
Midwifery	1	0	6	0

DNP Graduation Numbers and Time to Graduation

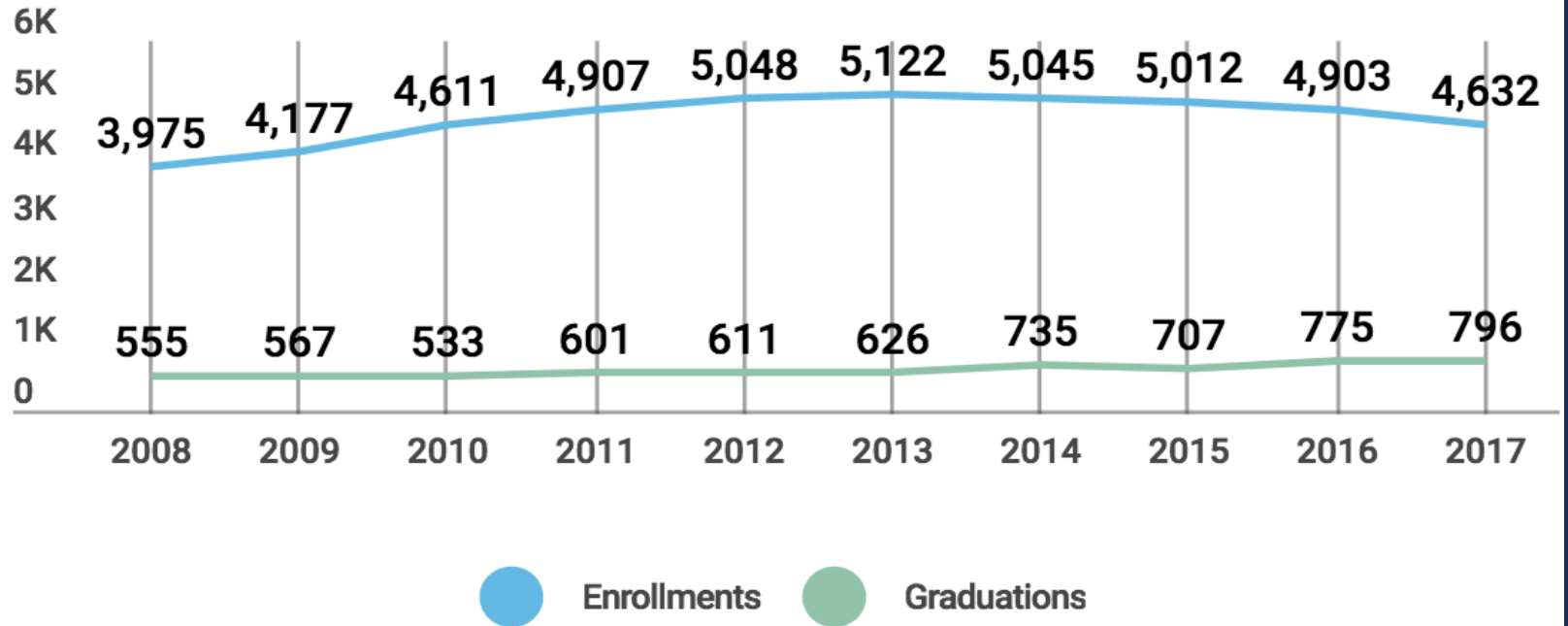
	2015-16	2016-17
BSN-DNP		
Graduated	60	65
Left program without completion	5	8
Average time to graduation (years)		
Full-time students	3.8	3.2
Part-time students	4	4.35
MSN-DNP		
Graduated	124	171
Left program without completion	12	35
Average time to graduation (years)		
Full-time students	2	1.9
Part-time students	3	3.45



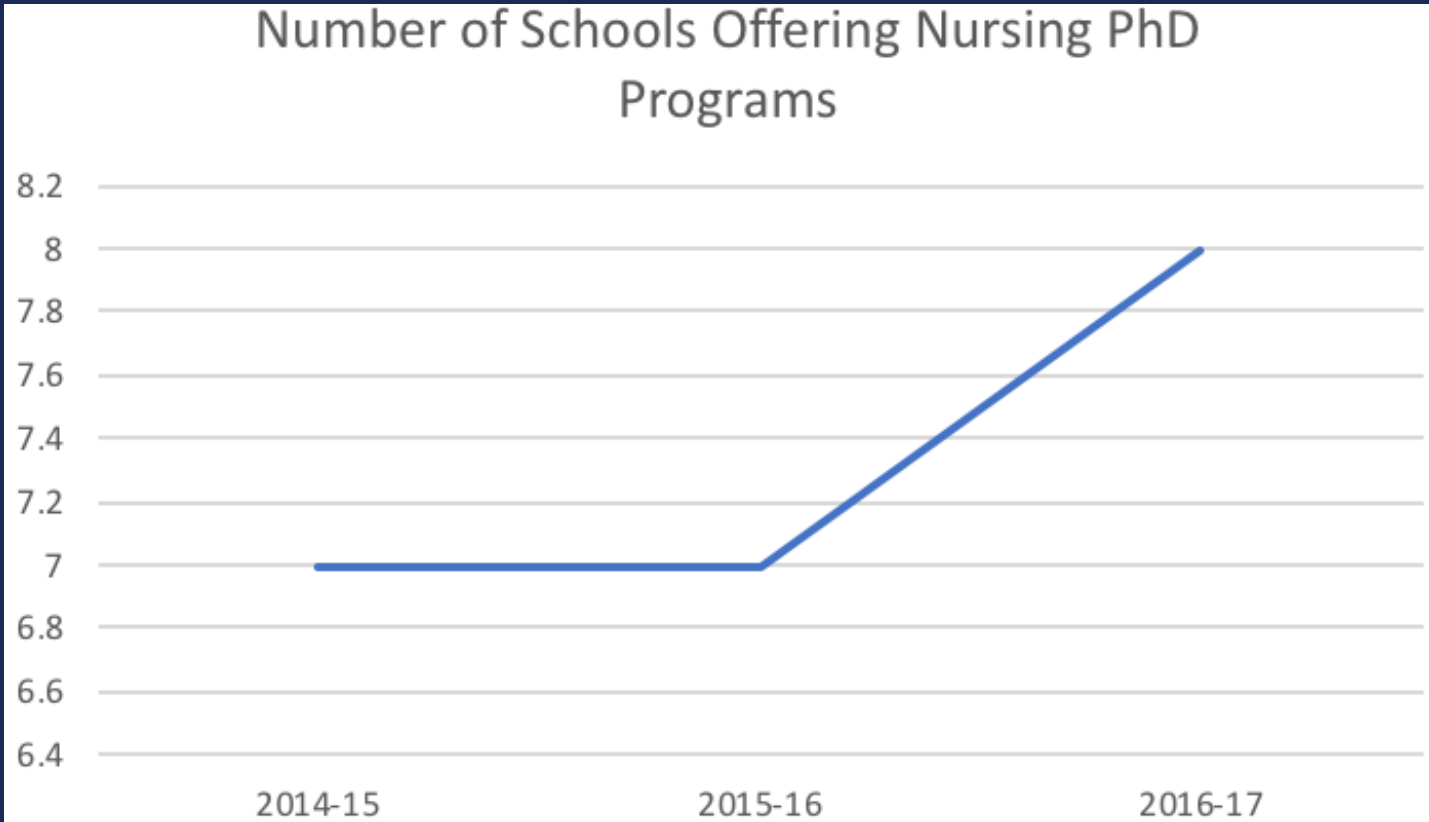
PhD in Nursing

PhD in Nursing 2008-2017

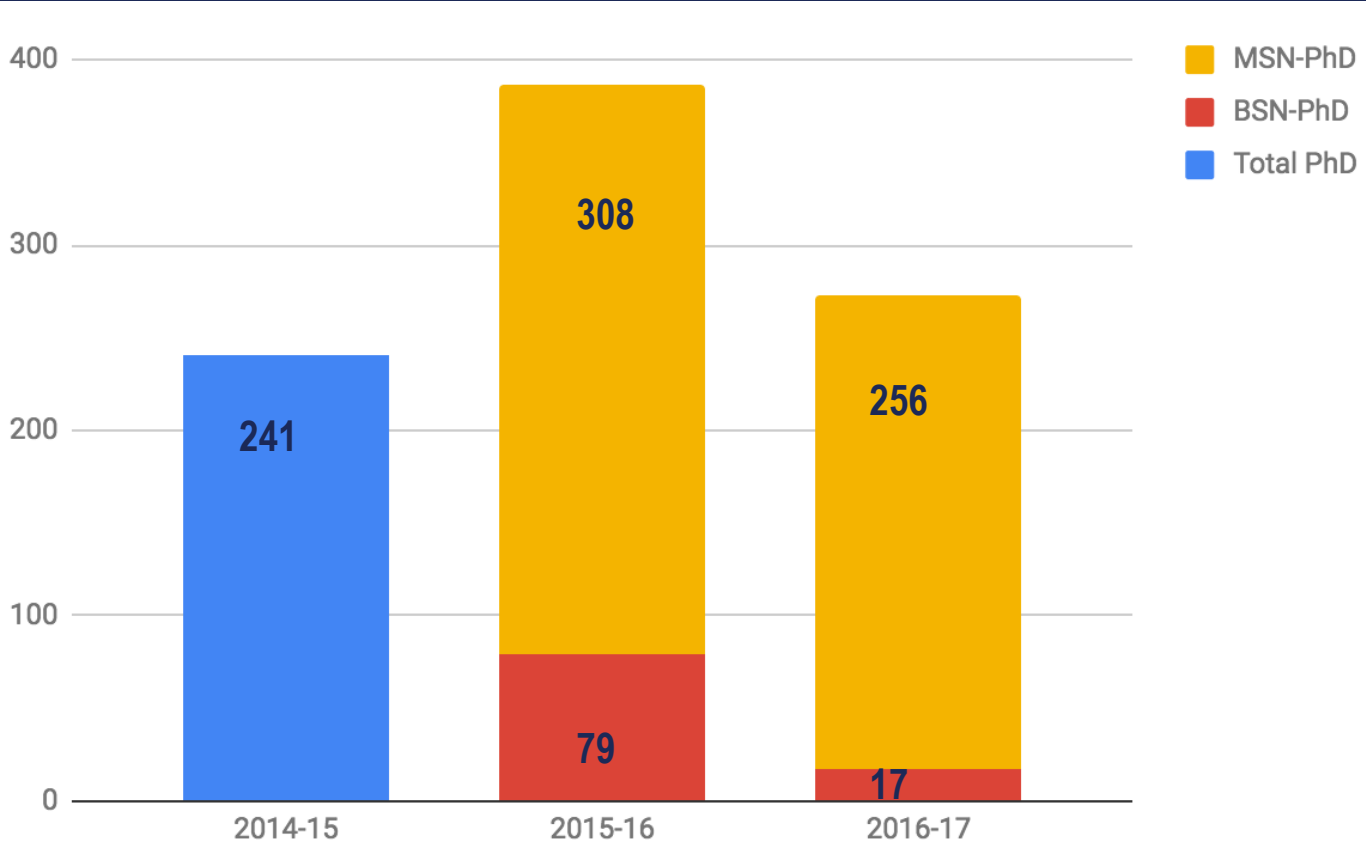
Enrollments & Graduations



Have the Number of PhD Programs Increased?



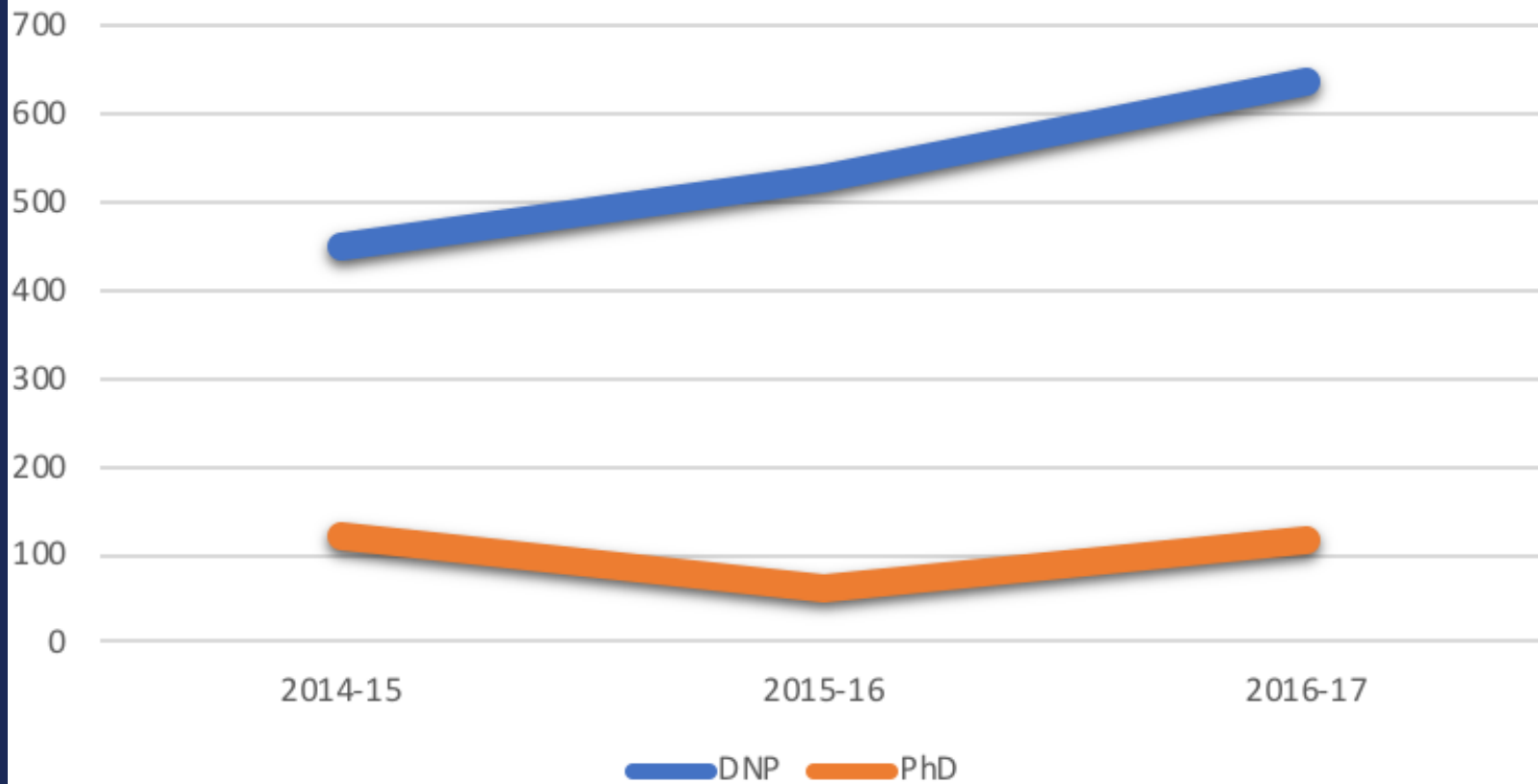
PhD Enrollment Over the Past 3 Years



PhD Graduate Numbers and Time to Graduation

	2015-16	2016-17
BSN-PhD		
Graduated	4	3
Left program without completion	4	0
Average time to graduation (years)		
Full-time students	5	4.67
Part-time students	n/a	n/a
MSN-PhD		
Graduated	23	42
Left program without completion	7	3
Average time to graduation (years)		
Full-time students	4	4.76
Part-time students	5	6.60

Doctoral Applications: DNP & PhD



Summary

- **Number of Doctoral Programs is Increasing**
- **Number of PhD applicants Remains Flat**
- **BSN Entry is Not Growing as Fast as MSN Entry**

Positions after Graduation

Position	DNP	PhD
Faculty	35 (8%)	46 (63%)
Post-doctoral	1 (<1%)	11 (15%)
Research/QI	3 (<1%)	1 (1%)
Leadership	100 (24%)	58 (52%)
Clinical/service	240 (57%)	8 (11%)

Production of New Clinicians

- **57% of DNP's enter clinical practice/service,**
 - **BSN entry more likely to enter practice**
 - **Limited diversity of specialty DNP programs available**
- **11% of PhD's enter clinical practice/service**

Impact on Faculty Shortage

- **8% of DNP graduates enter academic positions, most MSN entry**
- **63% of PhD graduates enter academic positions, most MSN entry**
- **16% of doctoral graduates took faculty positions**
 - **57% PhD and 43% DNP**

Impact on Science Development

- **Of the 493 doctoral graduates, 15% were PhD**
- **15% of PhD graduates pursued post-doctoral study**
- **3 of 8 institutions producing PhD students are classified as R1**
 - **1 R2**
 - **3 R3**

Future Considerations to Strengthen the Academic & Clinical Workforce

- **NRC recommendation to strengthen the research environments in PhD programs**
- **Need for more PhD graduates to pursue post-doctoral study**
- **Recommendations for BSN to DNP from professional associations**
- **Need for more clinical specialty diversity in DNP programs**

ANY
QUESTIONS?

