



School of Nursing

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Current Best Evidence about Nurse Practitioner
Residency/Fellowship Programs

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Purpose

To describe current study results which examined characteristics of current postgraduate nurse practitioner (NP) residency/fellowship programs to gain an understanding of what these programs offer, how they are implemented, and what the benefits are of these programs to assist NPs to transition to practice.

Objectives

1. Describe program characteristics, program content, delivery methods and benefits to participants of current postgraduate NP residency/fellowship programs.
2. Describe the competencies met, and evaluation criteria of participants in postgraduate NP residency/fellowship programs.
3. Describe the organizational barriers and advantages of implementing postgraduate NP residency/fellowship programs.

Background

- A number of healthcare organizations and employers have developed postgraduate NP residency/fellowship programs that supplement formal graduate education.
- There is relatively little research that has systematically examined postgraduate NP residency/fellowship programs in terms of program characteristics, program content, barriers and facilitators to program development and implementation, and benefits and outcomes of the programs to prepare nurse practitioners for the challenges of the current and future healthcare system.

IOM Recommendation, 2010

“state boards of nursing, accrediting bodies, the federal government, and healthcare organizations should take actions to support nurses’ completion of transition-to-practice programs after they have completed a pre-licensure or advanced practice degree program or when they are transitioning into new clinical practice areas”

Institute of Medicine of the National Academies, 2010, p.3

Opportunities for NPs to Make an Optimal Contribution to the Healthcare of the Nation

- Changes in health insurance coverage
- Aging population
- New models of healthcare delivery and reimbursement
- Increasingly complex clinical care
- Increase in demand for primary care providers
- Uncertainties with payment and delivery reforms
- Opportunity to serve rural and vulnerable populations

Projected Growth of NP Workforce

- NPs projected to increase by 93% between 2013 and 2025 (HRSA, 2016)
- NPs are practicing in specialty practices areas (Martsof, et al., 2017)
- Advanced Practice Registered Nurse (APRN) Consensus Model state regulations making progress enforcing full scope of practice authority and autonomy for NPs to practice to the full extent of their education, preparation and residency/fellowship (National Council of State Boards of Nursing, 2018)

Provider Concerns

- Some providers have voiced concern that NPs practicing in specialty care receive shorter formal residency/fellowship than specialist physicians, with specialty-specific residency/fellowship taking place entirely on-the-job in some specialties.
- NPs more autonomous, responsibilities increasing in complexity and importance

National Nursing Organizations

- Strong data to support academic preparation for NPs (NONPF)
- The safety and high quality of care provided by NPs has been extensively documented across multiple settings (Harper, 2017).
- Little evidence exists that a residency requirement thru regulatory channels is needed (Nicely and Fairman, 2015)

Limited Research Focuses on Experiences of Participants

- job satisfaction
- self-assessment, reflections
- interest in NP residency and fellowship programs

(Bush & Lowry, 2016; Comola, 2014; Flinter & Hart, 2017; Hart & Bowen, 2016; Rugen, 2016; Rugen, 2017; Sciacca & Reville, 2016)

- NPs need help transitioning into practice, and need mentoring and support especially during entry into practice (Hart & Bowen, 2017)

Limited Research: Factors Create Success

- Communication with preceptors, mentoring consistency
- Building evaluation components to quantify program results
- Identifying key stakeholders and funding sources to support implementation and sustainability of the programs
- Developing standard characteristics of successful NP residency and fellowship graduates
- Developing evidence-based competency assessment tools

Brown, Poppe, Kaminetzky, Wipf, & Woods, 2014; Goudreau et al., 2011; Kells, Dunn, Melchiono, & Burke, 2015; Rugen et al., 2014; Sciacca & Reville, 2016

Take Away Points from the Research

- Little evidence exists as to whether these programs successfully prepare NPs to deliver better and safer quality of care, beyond their formal nursing education.
- Given the rapid growth in the number of NPs and the trend toward full practice authority, understanding how postgraduate NP residency/fellowship programs contribute to the current and future landscape of NP education and readiness to practice is crucial.

More Questions than Answers

- What is the extent to which these programs prepare NPs to coordinate and manage care for an aging population with multiple chronic illnesses in diverse healthcare settings, and the extent to which programs prepare NPs for rapidly changing delivery systems and expectations?
- What role will DNP programs with immersion practice experiences help to prepare the NPs of the future?

Methodology

- This exploratory study used a quantitative design to conduct an online survey of program directors of NP residency/fellowship programs to collect data about program characteristics, program content, acquired competencies of graduates from these programs, facilitators and barriers to program implementation
- . Descriptive statistics (mean, standard deviation, minimum and maximum) were calculated for continuous variables while frequency and percentage were calculated for categorical variables.

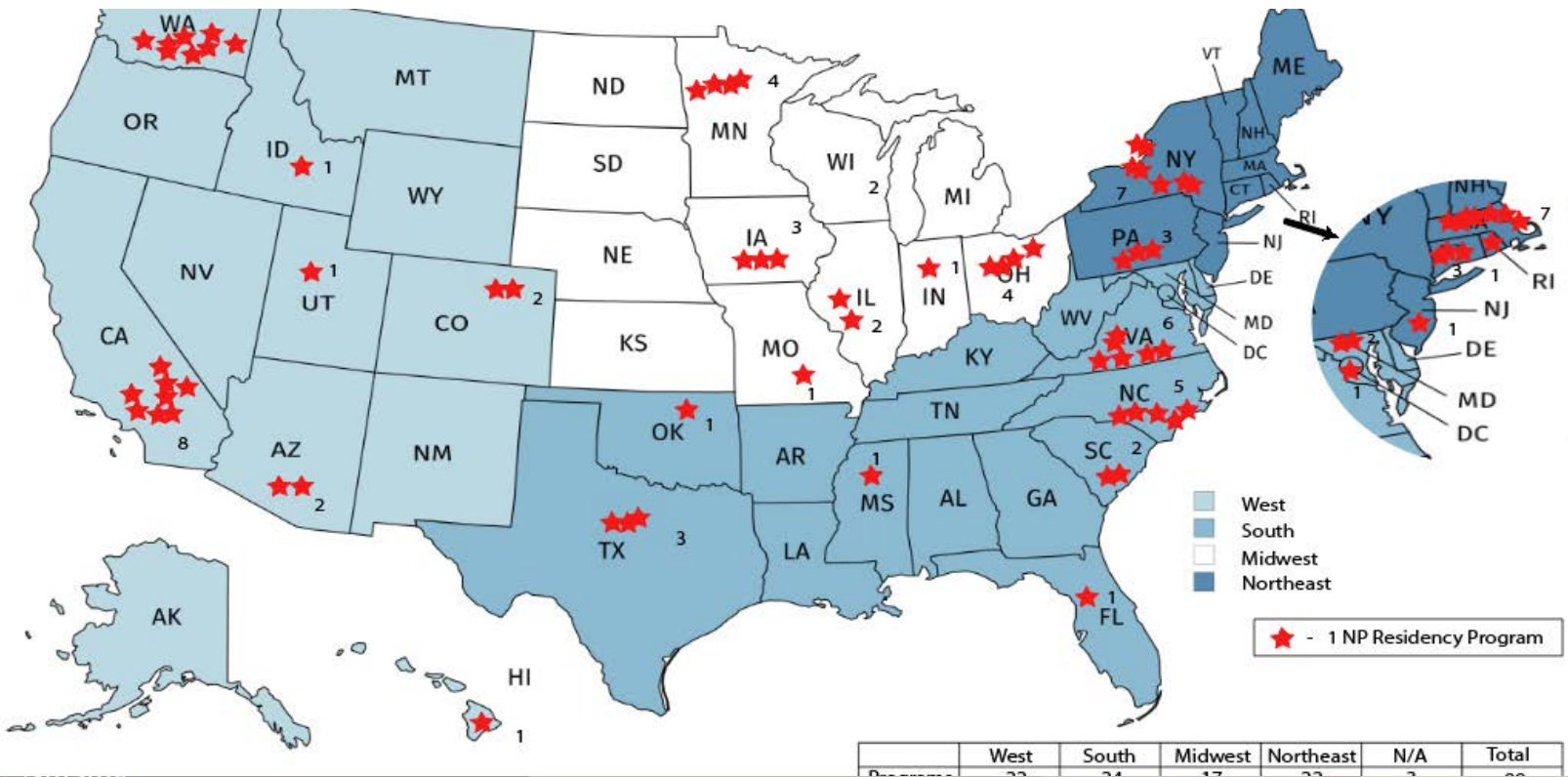
Methodology

- An expanded list of programs was developed from the data provided by Martsolf, et al., 2017, supplemented with accredited programs listed on accreditors websites, and searching program websites.
- An invitation to participate in the study was sent to 88 programs across the US after Institutional Review Board approval was obtained through the George Washington University.
- Data were collected from December 2018 to February 2019.

Data Analysis

- Data analyzed using IBM SPSS version 25
- Categorical data analyzed using frequencies and percentages
- N=41 completed surveys, 49 program directors responded (56% response rate).
- Only the 41 completed surveys were used in this study

Results



Program Demographics: What's in a name?

- NP Residency 41%
- NP Fellowship 51%
- Other, postgraduate NP training 5%

Program Demographics

- The majority of the programs (85.4%) are 12-18 months in length
- The program length is most commonly 12 months
- Mean length of program time in existence was 4.8 years (SD = 2.69)
- Programs are relatively small with a maximum cohort size of 20 (M= 4.31, SD = 4.20)
- 73.2% of programs surveyed are not accredited

Program Demographics

- Eligibility
 - All accept NPs
 - Half of the programs accept Physician Assistants (PAs)
 - 2.5% accept Medical Doctors (MDs).
- 41% reported accepting 2 or 3 NP populations including:
 - Adult Gerontology Primary Care Nurse Practitioner (AGPNP)
 - Adult Gerontology Acute Care Nurse Practitioner (AGACNP)
 - Family Nurse Practitioner (FNP)
 - Family Nurse Practitioner (FNP) was the most commonly cited population track offered (73%).

Chart 1: Population/Specialty Areas offered in NP Residency/Fellowship Programs

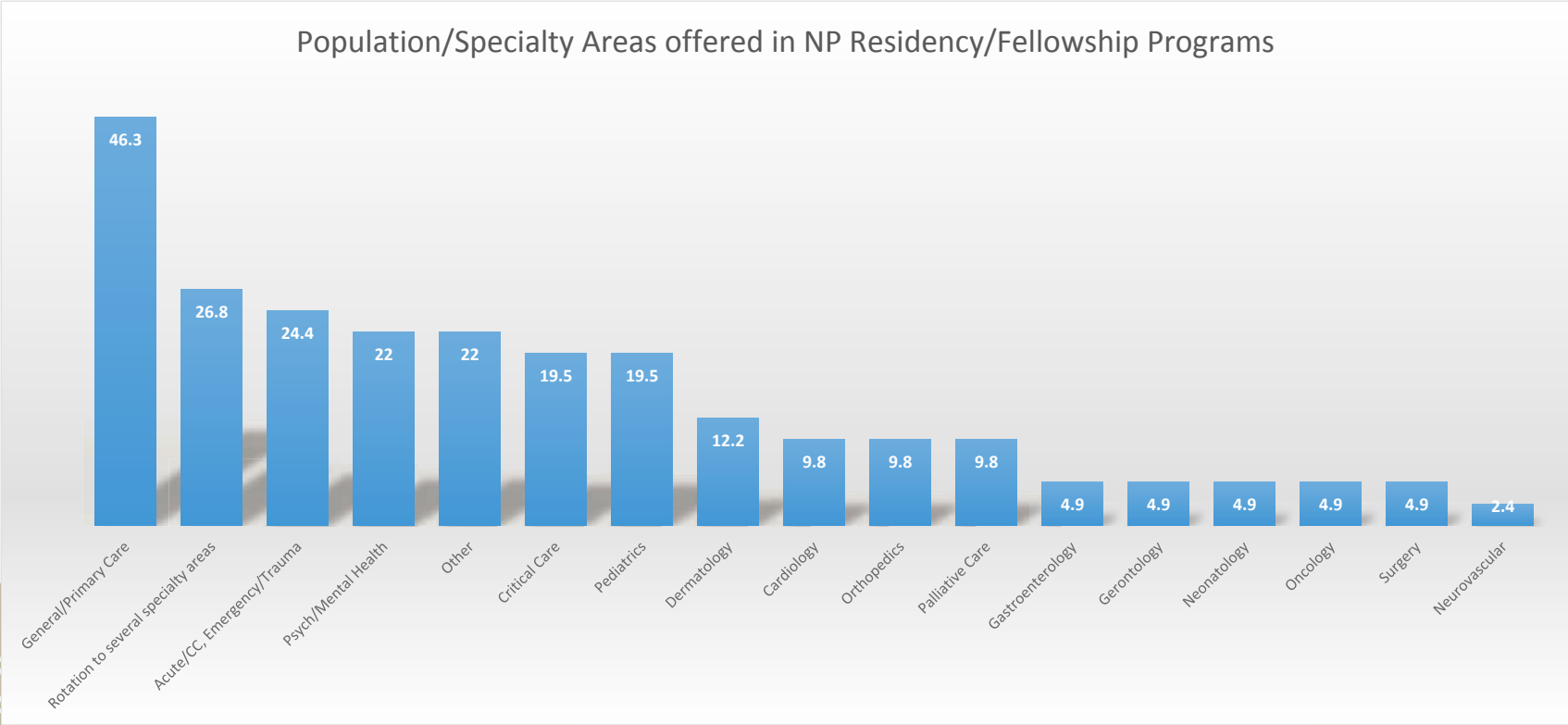


Chart 2: Percentages of Educational Methods used in NP Residency/Fellowship Programs

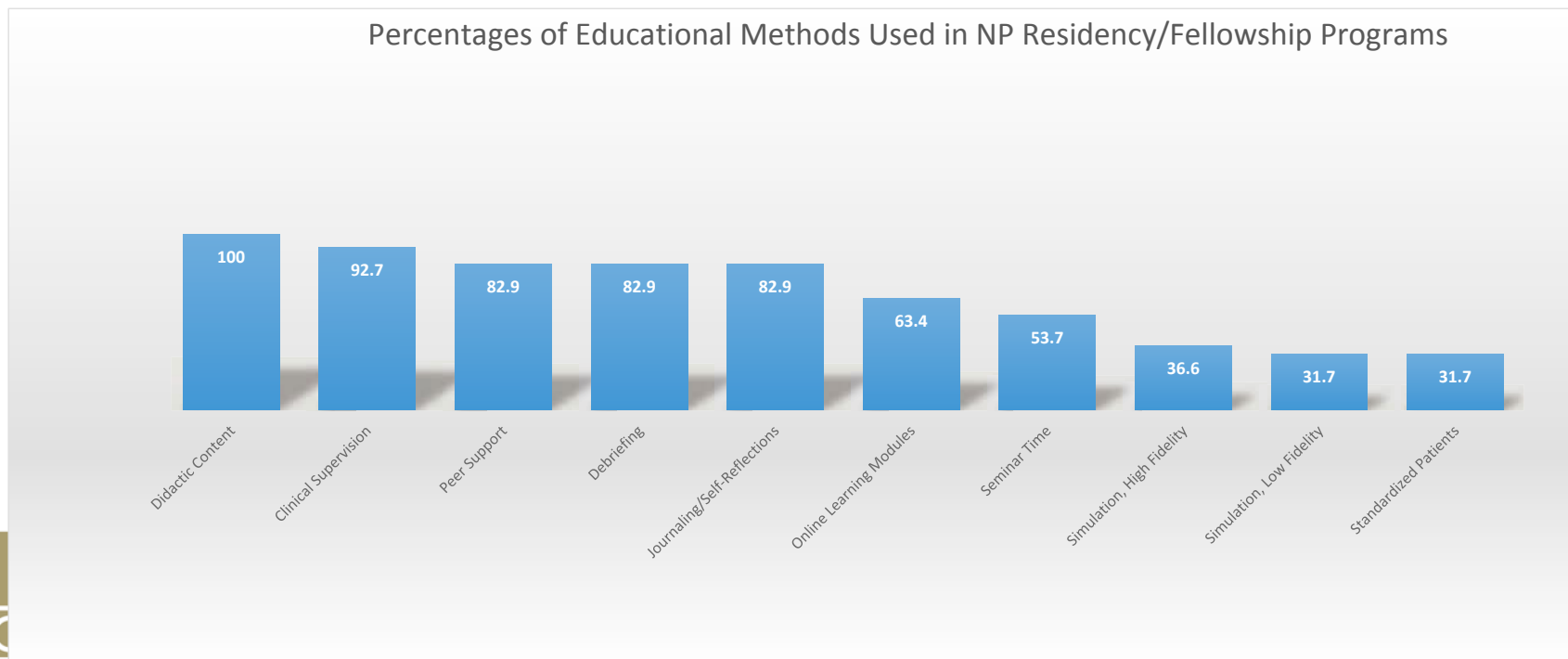
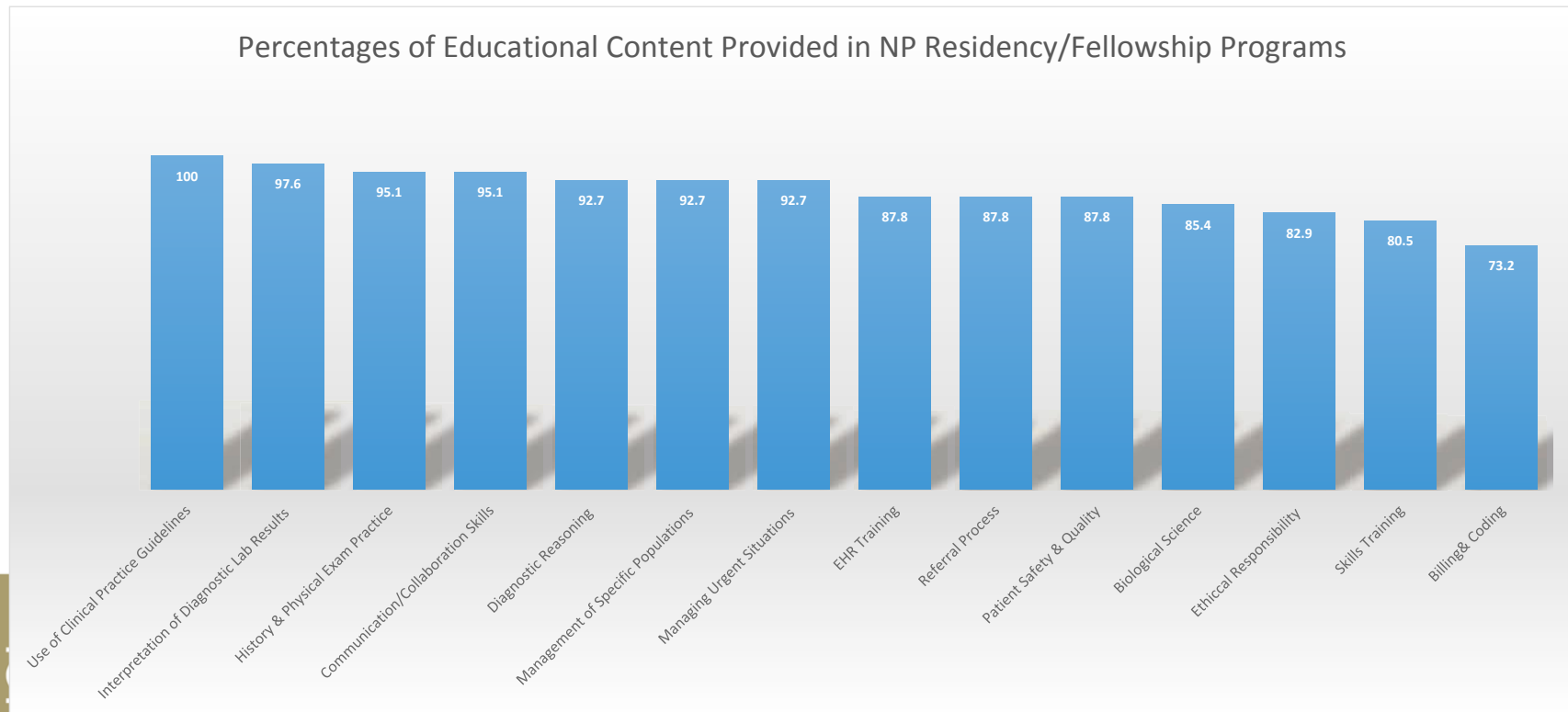


Chart 3: Percentages of Educational Content Provided in NP Residency/Fellowship Programs



Lack of Consistency in the Use of Standard National Competencies

Competency/Competencies	Percentage
National Nurse Practitioner Residency and Fellowship Training Consortium (NNPRFTC)	36.6%
National Organization of Nurse Practitioner Faculty (NONPF)	31.7%
Other	24.2%
Graduate Medical Education (GME)	22%
None	12.2%
Interprofessional Education Competencies (IPEC)	9.8%
Veterans Affairs Centers of Excellence in Primary Care Education (VA CoEPCE)	7.3%

How Time is Spent

- NP residents/fellows are required to complete an average of 1,523 practice hours (SD = 682.72, n= 27)
- Focus of care primarily was on adults (92.3%)
- Focus of care on children (61.5%)
- 90% of NP residents/fellows work with aging populations
- 63% time spent on chronic illnesses care and treatment

Social Determinants of Health Addressed

Social Determinants of Health

Access to health care services

Socioeconomic conditions

Availability of community resources

Language literacy

Education and job training

Housing

Transportation options

Other food insecurity, safety, trauma

Percentage of Coverage in the Program

95%

95%

77.5%

72.5%

50%

50%

47.4%

5%

Facilitators to Program Implementation

- Physician support (86.8%)
- Administrative support (84.2%)
- Competitive compensation program (42.1%)
- A program lead with time to devote to administering the program (68.4%)
- The demand by NPs for NP residency/fellowship program (65.8%)

Benefits to the Organization Providing NP Residency/Fellowship Program

Benefits to the Organization	Percentage
Recruitment of NPs	95.0%
Retention of NPs	90.0%
Increased NP satisfaction	82.5%
Improved socialization to the NP role	85.0%
Enhanced clinical judgment of the NP	87.5%
Increased competence and skill proficiency of the NP	97.5%
Increased confidence of the NP	97.5%
Improved communication and collaboration in team	95.0%

Perceived Barriers of Nurse Residency/ Fellowship Programs by Program Directors

Nurse Residency/Fellowship Barriers	Selected as Barrier	Not Selected as Barrier
Cost of implementation	46%	54%
Time spent on planning or implementation	27%	73%
Lack of knowledge of purpose or definition of nurse residency	36%	64%
Lack of knowledge of how to implement a nurse residency program	30%	70%
Lack of trained staff/preceptors	33%	67%
Lack of interested preceptors	23%	76%
No incentives for preceptor participation	39%	61%
Staffing pressures/increased work load	33%	67%
Resistance to change	28%	72%

Benefits and Costs to Programs

- Retention rate was reported as 87.08 % (SD = 18.473)
- 66.98% of the programs hired their NP resident/fellow graduates
- Employer assisted (80%) of the graduates with job placement

Salary and Benefits to NP Residents/Fellows

- Salary for NP resident/fellows ranged from \$50,000 to \$98,000/ year with the mean salary \$69,301/year (SD =10,307)
- Employer provided health care insurance (97.6%)
- Employer provided liability insurance (90.2%)
- Employer provided life insurance (80.5%)
- 78% of NP residency/fellowship programs indicated that they do not require contract time after program completion

Additional Benefits

- 66.98% of the programs hired their NP resident/fellow graduates
- 80% Assisted them with job placement

Discussion Points

- Our study identified the largest number of programs and had the highest response rate from the survey of program directors
- Absence of programs in states with large rural areas
- There is a need for nursing to define terminology for NP transition to practice programs consistently
- Largest percentage of programs in our study offered primary care in spite of need in rural and underserved areas

Discussion Points

- Our findings highlight the need for nurse practitioners to learn how to care for older adults
- Focus on social determinants of health, serving rural communities, particularly access to healthcare and socioeconomic factors was program content delivered in NP residency/fellowship programs and stresses the importance of concentrating on this content in graduate education preparation.

Discussion Points

- More than 90% of program directors indicated that NP recruitment and retention were benefits to organizations implementing NP residency/fellowship programs.
- More than 84% indicated that physician support and administrative support were facilitators to program implementation.
- Less than 50% of program directors were able to identify barriers to implementation.
- Implications for Practice: This study serves to provide data that will inform regulators, educators, and employers about the emerging industry of postgraduate NP residency/training programs and inform decision makers about the benefits, costs, facilitators and barriers of programs.

Discussion Points

- Strong dependence on didactic sessions and clinical supervision as education methods, with less utilization of more complex and expensive approaches such as low or high fidelity simulation
- Employers are offering new NP graduates more traditional delivery methods with dependence on practice hours with supervision
- Content delivered matches the content offered in graduate nursing education programs

Recommendations

- Majority of programs are not accredited as a transition to practice program.
- This is an opportunity for accrediting bodies to protect the consumers of healthcare and ensure patient safety by providing standards and guidance to NP residency /fellowship programs to ensure consistency of program competencies and standards.
- The recent addition of the Commission on Collegiate Nursing Education (CCNE) as an accrediting body for NP residencies may promote more opportunities for programs to seek accreditation.

Recommendations

- Inconsistent use of national competencies to drive program education
- Opportunity for nursing to influence the establishment and utilization of consistent competency driven model programs reflecting national consensus based nursing standards for knowledge, skills and aptitudes to be acquired in transition to practice programs for NPs.
- The development of evidence-based competency assessment tools would help to quantify outcomes and establish standards of successful NP residency/fellowship programs.

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Questions?

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