New Careers in Nursing: Pre-Entry Immersion Programs and Relationship to Graduation From Accelerated Nursing Programs

E. Renee Cantwell, DNP, RN, CNE, CPHQ
Margaret A. Avallone, DNP, RN, CCRN
School of Nursing, Rutgers University School of Nursing Camden, Camden, NJ, USA

For an individual with a bachelor’s degree in another field, the transition to a career in nursing through an accelerated nursing program is challenging and is often more challenging for underrepresented minority students (Cantwell, Napierkowski, Gundersen, & Naqvi, 2015). Although overall growth in nursing program graduates has increased by 141% in ten years (Buerhaus, Auerbach, & Saiger, 2014), the nursing workforce remains predominantly White (75%) and female (93%) (United States Department of Health and Human Services [USDHHS], 2013).

The Robert Wood Johnson Foundation (RWJF) in collaboration with the American Association of Colleges of Nursing (AACN) recognized Accelerated Baccalaureate of Science in Nursing (ABSN) programs as an important alternative to the traditional four-year nursing degree. This partnership resulted in The New Careers in Nursing (NCIN) program. The goals of NCIN were two-fold: help alleviate the nursing shortage and increase diversity among nursing professionals. The NCIN program provided 3,506 scholarships to underrepresented minority or economically disadvantaged nursing students attending 130 ABSN programs in the U.S. from 2008 to 2015 (DeWitty, Huerta & Downing, 2016).

Pre-Entry Immersion Programs (PIPs) have been developed to assist nursing students through the challenge of the ABSN or traditional baccalaureate nursing programs (Cantwell et al., 2015; Condon et al, 2014; DeWitty et al, 2016; Loftin, Newman, Gilden, Bond, & Dumas, 2013; Rosario-Sim, 2016) however there exists a lack of consensus regarding the utility of PIP programs and the structure that PIP programs should take. To help answer these questions, data from New Careers in Nursing (NCIN) were analyzed to examine the relationship of Pre-Entry Immersion Programs (PIPs) on student graduation. A total of 1,811 scholarship recipients participated in a PIP program; data from these 1,811 scholars was used for the analysis. NCIN sites were required to offer a PIP course starting in the round three funding cycle. Nevertheless, some students did not take advantage of this extra support. Also, not all students participated in every component recommended in the NCIN PIP toolkit.

The primary goal of the data analysis was to describe the differences in PIP participation compared to non-PIP participation in terms of demographic groups, perceived helpfulness of the program and its components, and the relationship of the PIP program and its components on graduation outcomes. Chi-Square tests were used to determine significant differences between nominal types of data. Two sample t-tests were used for ordinal data.

To identify which components of the PIP positively related to student graduation, various PIP components were compared. Components selected for analysis were those most commonly identified in the literature including time management, self-care strategies, study skills, Learning and Study Strategies Inventory (LASSI), test taking skills and test success, leadership development, medical terminology, assessment of writing skills, and basic mathematical skills.

Overall, the data suggests that participation in a PIP program may be associated with higher graduation rates for all students and also for Non-white participant scholars. Graduation rate for PIP participants was 93.4% compared to 88.97% for non-PIP participants ($p=0.009$). Of Non-white PIP participants, graduation rate was 92.45% compared to 87.29% ($p=0.019$). Withdrawal rates were also lower for PIP participants; 6.6% compared to 11.3% ($p=0.0092$). This finding supports outcomes from other nursing programs offering PIP programs (Cantwell et al., 2015; Carter & Derouin, 2015; Condon, 2013; Degazon & Mancha, 2012; DeWitty et al., 2016; Rosario-Sim, 2016; Walker, 2016).
In analyzing the supportive relationship of PIP and its components, Non-white students found the various PIP components statistically more helpful than White students ($p=0.0001$). No significant differences were found when accounting for economic status, however ($p>1.0$).

Though the PIP program was associated with higher graduation rates and lower withdrawal rates, no individual component of the PIP program in particular was found to be associated with higher graduation rates. The most common components offered included time management, self-care strategies, study skills, test-taking strategies, Learning and Study Strategies Inventory (LASSI), basic mathematical calculation, medical terminology, and assessment of writing skills.

The results of the NCIN data and data from other studies in relation to PIP programs suggest that PIP programs may be an important part of academic support for students enrolled in accelerated nursing programs. This study suggests that NCIN PIP program was associated with higher graduation rates and a lower withdrawal rate for all students and also for Non-white students. The Self-care strategies component was found to be a significant PIP component associated with higher graduation rates. Non-white students found the PIP program components to be significantly more helpful compared to White students.

These early interventions may be important to student success and confidence. Increased diversity is needed in the nursing workforce in order to provide culturally competent quality care. Interventions that support student retention are vital to not only minority students but all nursing students. Schools working toward improving retention must consider the importance of PIP programs to help prevent attrition of minority students and support the success of all students.

Generalizability may not be possible as PIP programs are not limited to accelerated programs, nor do all programs offer the same components or topics. Additionally, nursing programs vary in size and student demographics. PIP programs also vary in length with some as short as two days and others up to 10 weeks and outcomes were measured differently. Another limitation to generalizability is that NCIN scholars also received financial support for the program making satisfaction and progression to graduation an easier pathway to success.

Title:
New Careers in Nursing: Pre-Entry Immersion Programs and Relationship to Graduation From Accelerated Nursing Programs

Keywords:
Accelerated Baccalaureate in Nursing, Diversity in nursing and Pre-entry Immersion Programs (PIP)

References:


**Abstract Summary:**

Pre-entry Immersion Program data gleaned from the Robert Wood Johnson New Careers in Nursing Program was analyzed and compared to sample PIP programs. Analysis included program length, topics offered, and perceived helpfulness. Findings suggest PIP programs may be helpful in decreasing student nurse attrition, thereby increasing retention and graduation rates.

**Content Outline:**

Introduction

Robert Wood Johnson NCIN Program
Data Source

Background

Accelerated Nursing Programs

Nursing shortage and Diversity

Pre-entry Immersion Programs (PIP)

NCIN PIP Toolkit

Analysis of Data

Methodology

Demographics of PIP Participants

PIP Program Components

Findings and Discussion

Graduation and Attrition Rates according to PIP participation

Perceived Helpfulness of PIP Components

Unexpected Findings

Conclusion

Recommendations for Educational Practice

Generalizability

Future study

Questions

First Primary Presenting Author

**Primary Presenting Author**

E. Renee Cantwell, DNP, RN, CNE, CPHQ

Rutgers University School of Nursing Camden

School of Nursing

Assistant Professor

Camden NJ

USA

**Professional Experience:** E. Renee Cantwell, DNP, RN, CNE, CPHQ, is an Assistant Professor at Rutgers University School of Nursing, Camden where she is the Director of the Accelerated
Baccalaureate in Nursing Program. She holds a Masters in Nursing from Widener University and a DNP with a focus on Education and Administration, from Duquesne University, Pittsburgh, PA. She has more than 30 years of teaching experience as well as a strong clinical background in quality management, leadership. Medical-Surgical and critical care nursing. Her research interest is primarily in the area of nursing education. She is frequently exploring teaching methods that increase retention and graduation for her nursing students. Dr. Cantwell has authored many publications and presented her research at national and international conferences.

**Author Summary:** Dr. Cantwell has more than 30 years of teaching experience. Currently she teaches at Rutgers University School of Nursing- Camden where she is the Director of the Accelerated Program. She holds a DNP with a focus on Education and Administration, from Duquesne University. Dr. Cantwell has authored many publications and presented her research on student nurse retention at national and international conferences.

Second Secondary Presenting Author

**Corresponding Secondary Presenting Author**

Margaret A. Avallone, DNP, RN, CCRN
Rutgers University School of Nursing Camden
School of Nursing
Director/Assistant Professor
Camden NJ
USA

**Professional Experience:** Rutgers University School of Nursing-Camden Assistant Professor, Director Traditional Baccalaureate Program. Member of faculty, course and programmatic responsibilities. 2010-present University of Pennsylvania- Lecturer B. Responsible for Senior leadership clinical experiences. 2012 Published and presented at local, regional, and national conferences on educational and critical care topics to nurses and physician groups.

**Author Summary:** Dr. Avallone is an Associate Professor and Director of the Traditional Nursing Program at Rutgers University School of Nursing in Camden, NJ. She received her MSN from the University of Pennsylvania and her DNP from Duquesne University. She has significant experience educating prelicensure nurses and novice nurses in a variety of educational and practice settings. She has spoken and published on topics related to patient safety and transition to professional practice.