National Study to Identify Barriers and Facilitators of Educational Advancement of Associate Degree Registered Nurses to Baccalaureate Nurses

Executive Summary

The 2011 Institute of Medicine report, “The Future of Nursing: Leading Change, Advancing Health” includes a recommendation to increase the proportion of registered nurses (RNs) with a baccalaureate degree from 50 to 80 percent by 2020. A small number of exploratory research studies have investigated the barriers and facilitators of educational advancement of associate degree RNs (ADNs) to baccalaureate nurses (BSNs).\textsuperscript{1} Identified barriers included competing personal and professional demands, limited resources and concerns about educational capabilities. Identified facilitators included opportunities for career advancement, access to a user-friendly BSN completion program and a strong professional and personal support system.

However, key limitations include the fact that these were primarily qualitative research studies that used very small samples and none of them studied ADNs who did not pursued advanced degrees. This limits the generalizability of findings from these studies. In order to successfully increase the number of registered nurses (RNs) with baccalaureate degrees, it is critical to systematically assess the factors that influence decisions of ADNs to pursue BSNs.

The Center for Health Workforce Studies (the Center) in collaboration with the Research Committee of the Forum of the State Nursing Workforce Centers proposes to conduct a ten-state sample survey of 5,000 active RNs with an initial ADN degree who graduated in 2000 or later to ascertain which RNs have completed or are completing BSN degrees, which RNs have not and why. The goal of the proposed project is to identify the barriers to and facilitators of educational advancement of ADNs to BSNs. The cost of the proposed one-year project is $100,000.

\textsuperscript{1} Alonzo, A. (2009). \textit{Motivational Factors in Registered Nurses Completing a Baccalaureate Completion Program}. Unpublished Ph.D., University of Kansas, Lawrence, Kansas.
Research Question

The Center proposes to conduct a ten-state sample survey of 5,000 active RNs with an initial nursing degree of ADN who graduated in 2000 or later. The survey will ask about the highest nursing degree attained in order to determine which of the RNs have completed or are completing BSN degrees and which RNs have not. The survey will also ask about the key barriers to and facilitators of educational advancement of ADNs. Findings from the survey can help to inform programs and policies designed to increase the proportion of BSNs in the country’s nursing workforce.

Proposed Methodology

The Center will conduct an extensive literature review of all research studies that have investigated the barriers to and facilitators of the educational advancement of ADNs to BSNs. The literature review will help to inform the design of the survey instrument.

Working with the Research Committee of the Forum of State Nursing Workforce Centers, the Center will identify approximately ten states nationwide that collect information on RNs that includes initial RN degree, year of initial degree, RN work status (active vs. inactive) and mailing address. From the registration lists in these ten states we will draw a random sample of active RNs who received an ADN as their initial nursing degree and who graduated in or after the year 2000, stratified by urban/rural residence and by year of initial graduation.

Urban/rural residence is important because RNs in urban areas are more likely to have access to a BSN nursing program locally than those who live in rural areas, resulting in a different set of barriers to educational advancement between the two groups. Stratifying the sample will ensure that enough rural RNs are sampled for adequate study. Year of initial graduation is important because economic circumstances are likely to contribute to the decision to advance one’s education. In an economic environment where it is easy for new ADN graduates to find nursing jobs (as it was in the early 2000s) there may be little motivation to immediately enter a BSN completion program. These ADNs may have decided not to pursue additional education, or to do so after several years of nursing experience. In
contrast, in an economic environment where new graduates may have difficulty finding jobs and where RN supply may be sufficient for employers to favor BSNs, new ADN graduates may have more incentive to immediately pursue a BSN. The sample will therefore be stratified into two year of graduation cohorts, 2000-2005 and 2006-2011 (the latter having experienced a less favorable job market early in their career compared to the former). There will be limitations to the later cohort in terms of the research questions of interest – ADNs who graduated in 2010 or 2011 would have had very limited experience in the workforce.

A mailed survey will then be distributed to the sampled RNs following the Dillman Total Design Survey. This method alternates mailings of the survey instrument with subsequent reminder postcards, and has been found to achieve optimal response rates from difficult subjects.

Inferential statistics, including logistic regression models, will be used in the analysis of the survey results. Personal, contextual (i.e. geographic and economic), and cohort effects will be examined.

Project Team

Key personnel on the propose project include the following experienced nursing workforce researchers:

Jean Moore, MSN, BSN, the Director of the Center for Health Workforce Studies, has served as principal program staff for health workforce research studies for the past twelve years. Ms. Moore’s past nurse workforce research experience includes conducting annual surveys of all New York RN education programs since 2001; conducting a re-registration survey of all RNs licensed in New York; and conducting a 2002 survey of nurse practitioners in New York State. Ms. Moore holds two master’s degrees in nursing, and is currently enrolled in the Doctor of Public Health Program at the University at Albany.

On the proposed research project, Ms. Moore will serve as the Principal Investigator.

Sandra McGinnis, PhD, is a Research Associate at the Center and has substantial experience with the analysis of large-scale, geographically-based data sets. Her workforce modeling experience includes using national data sets to construct a methodology for identifying critical nursing shortage areas for the
federal Nursing Educational Loan Repayment Program; using national and state data sources to construct a methodology for forecasting registered nurse supply and demand in New York at the county level; (3) working on updates and beta testing for the revised federal Nurse Supply Model and Nurse Demand Model (2007-2009). Dr. McGinnis received her PhD, in Sociology from the University at Albany, with specializations in family sociology and social psychology. She also holds a graduate certificate in demography from the University at Albany.

On the proposed research project, Dr. McGinnis will be responsible for the analysis of survey data, report writing and dissemination.

Robert Martiniano, MPA, MPH a Project Director at the Center primarily works on nursing and inner-city physician shortage issues. Mr. Martiniano has extensive background in survey design and data analysis, including a survey of hospital RNs in New York and the re-licensure survey for RNs. Additionally, Mr. Martiniano works with a number of large state or national data sets, including labor, census, the National Nurse Sample Survey, and American Community Survey data. Mr. Martiniano holds two master’s degrees, one in Public Administration and one in Public Health, both from the University at Albany. He is currently enrolled in the Doctor of Public Health Program at the University at Albany. Mr. Martiniano will serve as lead staff for designing the survey, drawing the stratified sample and conducting the survey.

The Research Committee of the Forum of State Nursing Workforce Centers will collaborate with the research team on the proposed project. The Research Team includes Duane Napier MSN, RN (West Virginia Center for Nursing, Executive Director), Patricia Mouton PhD (North Dakota Center for Nursing, Executive Director), Jeannie Cimiotti (NJ Collaborating Center for Nursing, Executive Director), Pamela Wiebusch BS (Texas Center for Nursing Workforce Studies, Program Specialist), Sandra Ann LeVasseur, PhD, RN (Hawaii Center for Nursing, Associate Director of Research), and Cynthia Bienemy PhD, RN (Louisiana Center for Nursing, Director).

On the proposed project, the Research Committee will assist the Center in identifying states the collect the data needed to draw the sample for the proposed study.
**Dissemination**

Key audiences for disseminating the results of this research project include a wide array of local, state and national stakeholders, including policy makers, planners, legislators, health care providers, foundations, nursing organizations (representing education, research and practice), and unions. The research team will prepare papers describing findings from the proposed study for presentation at national conferences including the annual conference of the Forum of State Nursing Workforce Centers and the annual Academy Health Research meeting. Papers based on the research will also be prepared for submission to in peer-reviewed nursing journals.

**Risks and Challenges**

A key challenge to the success of this study is securing the data needed to draw the sample and conduct the survey. The assistance of the Research Committee of the Forum of State Nursing Workforce Centers in obtaining the data needed for this research will be critical.

Another challenge is that the data are right-censored, i.e. we can only measure whether respondents enrolled in a BSN program by the time of the study. For those who graduated in 2000, this may capture most of those who will ultimately enroll in a BSN program. For those who graduated in 2011, however, we will observe only the behavior of those who enrolled in a BSN program fairly quickly. This challenge can be addressed by using techniques of event history modeling (e.g. survival analysis) that account for the variable lengths of the observation period and which use time-varying explanatory variables.