Headlines from the NLN

NINR/NLN Co-Sponsor 2015 National Nursing Research Roundtable: The Nexus of Practice, Research, and Education for the Health of the Nation

The National Nursing Research Roundtable (NNRR) has met annually since 1987 to provide an opportunity for the leaders of nursing organizations with a research mission to discuss and disseminate research findings to improve health outcomes. The NNRR mission is to serve the public's health through development of a strong research-based nursing practice. The annual NNRR brings together clinicians, scientists, educators, scholars, and policy leaders to discuss priorities in science, practice, and policy and to envision the future.

The 2015 NNRR, co-sponsored by the National Institute of Nursing Research (NINR) of the National Institutes of Health and the National League for Nursing, brought together more than a dozen professional nursing societies to discuss the importance of health care transitions within the context of nursing practice, research, and education. Scientific presentations on the latest advances in transitional care were followed by break-out sessions to discuss the science of health care transitions and the policy, practice, and education implications of these transitions as critical aspects of health care.

2015 PRESENTATIONS

NINR Research

NINR Director Dr. Patricia Grady provided an update on NINR research in which she summarized NINR-supported studies focused on health care transitions following treatment in acute care settings. She noted that recent changes in health care policy have catalyzed the need for more research and that the field of transitional care research has been pioneered by nurses. Citing the Transitional Care Model (TCM) developed by Dr. Mary Naylor from the University of Pennsylvania, Dr. Grady noted that the TCM has contributed to improvements in health outcomes and patient satisfaction for seniors suffering from multiple chronic illnesses. By demonstrating that nurse-managed transitional care reduces hospital readmissions and can substantially reduce total health care costs, the TCM has garnered the attention of third-party payers (Naylor, Aiken, Kurtzman, Olds, & Hirschman, 2011).

Dr. Grady cited other examples of nursing research in transitional care in hospital as well as community settings. One example was the Discharge Decision Support System, embedded in electronic health records systems to identify patients in need of follow-up after hospital discharge to improve health outcomes and reduce hospital readmission costs (Holland, Knafl, & Bowles, 2013; Holland, Rhudy, Vanderboom, & Bowles, 2012). Researchers are currently developing systems, tailored to the end-user, for continuous evaluation and improvement — an approach with potential for broad implementation and dissemination.

Intersection Among Research, Education, and Practice

In her keynote address, Dr. Eileen Sullivan-Marx of New York University discussed the critical intersection between research, education, and practice and how these areas can be combined with two current health care priorities — improved delivery of health care services and the use of technology — to enhance undergraduate nursing education. Dr. Sullivan-Marx cited opportunities through curricula to include students with experiences in technology, posing the question of how to harness their capabilities in designing future efforts rather than fitting them into ongoing projects.

Dr. Sullivan-Marx recommended teaching research skills at all levels of education to make research careers exciting. She emphasized case-based learning with the integration of research and highlighted the importance of tying nursing and nursing outcomes to data, informatics, and health care financing.

Science of Health Care Transitions

Drs. Barbara Riegel, Arlene Butz, and Debra Barksdale provided scientific presentations on the science of health care transitions and the policy and practice implications of health care transitions as a critical aspect of health care.

Dr. Riegel (School of Nursing, University of Pennsylvania) defined transitional care as "the range of time-limited services and environments designed to ensure coordination and continuity among at-risk populations as they experience care transitions," for example, moving from one level of care to another (e.g., intensive care unit to another medical team) or moving from one setting to another (e.g., hospital to home, or home to a skilled nursing facility). Disconnection in communication during these transitions, she noted, can lead to high rates of medical errors and preventable rehospitalizations, serious unmet needs and poor care experiences, and other significant problems. Interventions being tested in transitional care include motivational interviewing, skill-based education, and support for caregivers, with nurses playing central roles in interdisciplinary approaches.

Dr. Riegel's research has focused on self-management in heart failure patients. She found that poor medication adherence is the best predictor of rehospitalization in these patients. Multiple co-morbidities requiring more daily medications, poor sleep quality, impaired cognition, and older age are also predictors of poor medication adherence (Knafl & Riegel, 2014; Riegel & Knafl, 2013).

Dr. Riegel pointed to studies on racial and ethnic disparities in heart failure-related mortality and hospitalization and the finding that outcomes are worse in African American and Hispanic American
patients than in Caucasian patients (Brown, Haldeman, Croft, Giles, & Mensah, 2005). With colleagues, Dr. Riegel has pursued risk factors that contribute to racial and ethnic disparities in heart failure outcomes. Caucasian patients were found to display five risk factors, with older age the most significant contributor to nonadherence (Dickson, Knafl, & Riegel, 2015). Among non-Caucasian patients, the interactive effects of 4 of 16 risk factors significantly increased the prediction of nonadherence: living alone, lower serum sodium (as a sign of cardiac dysfunction), worse depression, and fewer methods to compensate for forgetfulness.

In her presentation, Dr. Butz (Schools of Medicine and Nursing, Johns Hopkins University) focused on problems in the transition from acute to home care for sick children and adolescents, such as parental care, medication, and device use, and the transition of pediatric patients with chronic conditions to adult patients. Dr. Butz discussed challenges to preventive care, using the example of her research in asthma management. She noted that care coordination can be affected by parental caregiver depression and life stress (e.g., domestic and environmental stress, poverty, paying for medication), which divert attention from monitoring and home management of a child’s asthma.

Dr. Butz recommended screening for parental stress in primary care settings and referral to community mental health services. She also noted that care coordination can benefit from improvements in communication (e.g., better discharge care information and instructions for the use of rescue/acute relief medication) and, with colleagues, Dr. Butz has developed evidence-based tools that provide guidance for patients and parents in conveying information to clinicians (Butz, Walker, Land, Vibbert, & Winkelstein, 2007). She pointed to system and organizational barriers that can limit access to quality transitional care, including lack of clinician endorsement of follow-up care after emergency department visits, difficulties in getting timely appointments for preventive care, and job insecurity when parents need to attend frequent clinic visits.

Adolescent-to-adult health care transition begins around age 12. Dr. Butz stated that adult providers need to be aware of adolescent behavior in patients (e.g., poor decision-making), and teenagers need to be educated in self-management tasks, such as medication use and renewing prescriptions. Future areas for nursing research to support policy and practice changes for adolescent-to-adult health care transitions include pathways for standards of transitional care, more randomized controlled trials, and insurance coverage for transitional planning.

Dr. Barksdale (University of North Carolina at Chapel Hill) focused on patient-centered care and the efforts of the Patient-Centered Outcomes Research Institute (PCORI), where she serves on the Board of Governors. PCORI is a nonprofit, nongovernmental organization, established by the Affordable Care Act, that supports comparative effectiveness research and brings attention to patient-centered care. Benefits from patient-centered care include: decreased utilization of health care resources (e.g., tests, hospitalizations, prescriptions, referrals), improved patient satisfaction, improved clinical outcomes, better recovery from discomfort and concern over symptoms (Stewart et al., 2000), and better emotional health. However, Dr. Barksdale noted, there can also be a collision of values in patient-centered care because outcomes that are important to patients and families may differ from those that are important to clinicians. For example, clinicians may face ethical issues, such as requests from patients or families for unnecessary antibiotics or futile therapies at the end of life or patients’ refusal of life-saving treatments, such as blood transfusions.

Dr. Barksdale cited the importance of interdisciplinary teamwork in quality patient care and the critical role of skilled, trained, professional-level transition “coaches” or “navigators,” who would likely be the nurses on the team. Dr. Barksdale provided examples of PCORI-sponsored research on improving care transitions, including the development of online tools for patients and caregivers; analytical tools to evaluate steps in transitional care; and using health care navigators to coordinate care, for example, social workers or coaches to help motivate patients and nurses to coordinate care. Dr. Barksdale noted that strategies such as care coaches, e-coaches, and telemedicine are new, but a long-standing concept, that nurses play critical roles in care transition, is gaining renewed attention.

BREAK-OUT SESSIONS AND DISCUSSION
This portion of the NNRR concentrated on the practice, education, and policy implications of health care transitions research and strategies NNRR member organizations can use to advance the translation of transition science to education and practice. The discussion reiterated themes raised in the preceding presentations, such as synchronizing education, research, and policy: incorporating evidence-based practice into curricula, including utilizing technology; and acknowledging patient preferences, with the recommendation that communication efforts target students as well as the community. There was an emphasis on the leadership role of nurses in research and evidence-based policy in transitional care.

- Communication issues that hamper transitions between systems could be addressed by developing common language and applying a broadly accepted transitional framework for use across disciplines, across facilities, and in the context of different clinical specialties. The framework can equip practicing bedside nurses to look beyond what tests need to be done and instead consider what needs to be accomplished to improve the system.
- Proponents noted that the original study by Naylor et al. (2011) showed improved outcomes with transitional care interventions but attributed shortcomings in ongoing studies to translation and implementation. For example, in some Centers for Medicare & Medicaid Services demonstration projects, lay navigators rather than nurses deliver care coordination interventions. The discussion reiterated the importance of initial face-to-face meetings between nurses and patients to establish the health care relationship, with the potential for follow-up nurse-patient contact using telemedicine.
• Certain patients with complex conditions and complex treatment regimens require nurses as navigators, but there are roles for lay health navigators (e.g., guiding people to cancer screening) that may be less expensive for systems with limited resources. Specific transitional care interventions are not applicable to all situations, and there is a need to conduct comparative effectiveness research to determine which approaches work best, such as when to use skilled versus nonskilled navigators.

• A coordinated effort in the research community was encouraged to elucidate the impact of interventions in specific populations.

• The use of common data elements and standardization in data collection was also encouraged, to facilitate the comparison, compilation, and sharing of data.

• Collaboration can enable the design of larger studies, which could improve competitiveness in funding. Organizations can lead these efforts by working together to develop research questions that capitalize on participants’ specific expertise to conduct different aspects of each project. Community organizations involved with public health issues and transitional care are important partners in these efforts. Collaboration with large health care systems can be avenues to addressing simple questions and identifying roadblocks.

IMPROVING TRANSITIONAL CARE RESEARCH

To build on the insights identified at the NNRR meeting, the literature surrounding transitional care interventions was assessed. It was noted that there is insufficient evidence to support definitive conclusions or clear recommendations about the effectiveness of transitional care (Feltner et al., 2014; Prvu Bettger et al., 2012; Stamp, Machado, & Allen, 2014). The literature notes gaps in existing data (Feltner et al.; Prvu Bettger et al.; Stamp et al.); lack of information on implementation, sustainability, and costs (Rennke & Ranji, 2015; Rennke et al., 2013; Verhaegh et al., 2014); heterogeneity of intervention programs (Bray-Hall, 2012; Feltner et al.; Hesselink et al., 2012); and lack of consistent standards (Bray-Hall) or agreed-upon “ideal” components of transitional care (Burke, Kripalani, Vasilevskis, & Schnipper, 2013). The literature also identifies communication as a key to success (Coleman & Boult, 2003; Duckett, 2011; Griffiths, Morphet, Innes, Crawford, & Williams, 2014; Kleckley, 2007).

Recommendations for improving transitional care research include the development of clearer descriptions of interventions (Hesselink et al., 2012); research to improve the processes of transitional care (Coleman & Boult, 2003); using uniform and valid outcome measures (Hesselink et al.); conducting more studies on care for specific populations (Hudson, Comer, & Whichello, 2014), especially those at highest risk (Piraino, Heckman, Glenn, & Stolee, 2012); and evaluation of the implementation, sustainability, and costs of interventions (Bray-Hall, 2012; Rennke et al., 2013; Verhaegh et al., 2014). The need to provide training and education for all health care professionals involved in the transfer of patients across settings was underscored (Coleman & Boult).

The 2015 NNRR provided creative and thoughtful ideas regarding the ways in which organizations with a research mission might move the science of health care transitions forward. Nurse scientists are at the forefront of interdisciplinary teams that are developing the evidence base for health care transitions and translating those findings into practice and policy.

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REFERENCES


from hospital to primary care: A systematic review. *Annals of Internal Medicine, 157*(6), 417-428.


