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Role of the Registered Nurse In Primary Health Care

Health Care Needs In the 21st Century

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Role of the registered nurse in primary health care: Meeting health care needs in the 21st century

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ABSTRACT

There is widespread interest in the redesign of primary health care practice models to increase access to quality health care. Registered nurses (RNs) are well positioned to assume direct care and leadership roles based on their understanding of patient, family, and system priorities. This project identified 16 exemplar primary health care practices that used RNs to the full extent of their scope of practice in team-based care. Interviews were conducted with practice representatives. RN activities were performed within three general contexts: episodic and preventive care, chronic disease management, and practice operations. RNs performed nine general functions in these contexts including telephone triage, assessment and documentation of health status, chronic illness case management, hospital transition management, delegated care for episodic illness, health coaching, medication reconciliation, staff supervision, and quality improvement leadership. These functions improved quality and efficiency and decreased cost. Implications for policy, practice, and RN education are considered.


Health care delivery in the United States requires fundamental redesign to become effective, sustainable, and cost-effective. Early and consistent utilization of primary health care services is associated with improved patient health outcomes, reduced health disparities, and more efficient spending of health care dollars (Turner & Weinberg, 2013). Aging population demographics, increasing health care costs, and the projected need of an estimated 34 million individuals now eligible for health insurance because of the enactment of the Patient Protection and Affordable Care Act propels the need to reinvent primary health care services (Elmsdorf, 2011; Mitka, 2007).

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This challenge is further complicated by a rapidly expanding primary care workforce shortage and provider dissatisfaction within the current primary health care work environment (Bodenheimer, Chen, & Bennett, 2009; Dyrbye, 2011; Green, Savin, & Lu, 2009; Laurant et al., 2009). With increasing emphasis on the utilization of teams to enhance the work satisfaction of clinicians and improve health outcomes for individuals, communities, and populations, experts across the country are reimagining the future of primary health care (Institute for Alternative Futures, 2013; Leasure et al., 2013; Reeves, Tassone, Parker, Wagner, & Simmons, 2012). It is essential that the roles and responsibilities of all health care professionals be rapidly reconceptualized so the expertise of the care delivery team, including the registered nurse (RN), is optimized in these reimagined primary health care models.

As part of the Robert Wood Johnson Foundation (RWJF) Executive Nurse Fellow action learning project, a seven-member team from the 2012 cohort with academic, government, and service sector experience chose to examine the role and economic implications of RNs in the delivery of primary health care. This project was guided by the overarching RWJF Executive Nurse Fellow program goals to enhance leadership capacities that drive improvements in population health; access, cost, and quality of American health care systems; and the identification and formation of future health professionals. Although advanced practice registered nurses are RNs, the team chose to focus solely on the RN role because the advanced practice registered nurse contribution to primary health care has been examined in the literature and discussed by members of the media as well as the health care community (American Academy of Nurse Practitioners, 2013; Institute of Medicine, 2011; National Governors Association, 2012). To date, RN utilization in primary care has not received this level of attention (Anderson, St. Hilaire, & Flintner, 2012). Therefore, this project sought to advance this work by identifying primary care practices that use RNs to the full extent of their training, education, and scope of practice and explore the economic implications of these models. Project findings serve as the basis for proposing recommendations for interprofessional team-based clinical practice, education, and policy initiatives that optimally use the knowledge and skills of RNs to improve population health.

**Statement of Position**

Primary health care is the provision of essential health care services, involving the widest scope of health services offered, in the community for persons from all socioeconomic groups and geographic regions (Muldoon, Hogg, & Levitt, 2006; World Health Organization, 2014). There is a compelling need to expand the contributions and optimize the scope of practice of RNs in primary health care to address a rapidly expanding primary health care access crisis, promote the creation of healthy and satisfying work environments for RNs and interprofessional team members, and enhance the health of our nation. This includes individuals seeking to maintain optimal health and those with acute and chronic physical and mental health conditions. RNs are well positioned to contribute to direct care delivery, care coordination, and leadership of interprofessional teams in primary health care.

**Background**

**RNAs and Primary Health Care in the United States: Historical Overview**

Nurses in the United States have played strong roles providing care for persons in the home and community for decades. The “district” or “visiting nurse” as embodied by Lillian Wald at the turn of the 20th century is emblematic of the early public and primary health roles served by RNs (Buhler-Wilkerson, 1993). In 1929, almost 200,000 RNs were employed in private duty or public health, whereas 4,000 RNs were employed in hospitals. By the 1930s, changes in demographics, fragmented coordination of services among agencies, the growth of hospital-based care, and societal expectations reduced the demand for district nursing services.

The shift to hospital-based nursing accelerated in the 1930s at which time insurance coverage for illness-related medical and surgical hospitalization began supporting nursing salaries. RNs replaced student nurses as the primary hospital labor force. By 1939, hospitals employed 28,000 of the 300,000 RNs in the workforce (D’Antonio & Whelan, 2009; Rutherford, 2012). The trend toward hospital-based care has continued because of social, political, and payment models (Elhauge, 2010).

As of 2010, 62% of RNs worked in hospitals, whereas approximately 10% were employed in primary or home care settings (U.S. Department of Health and Human Services Health Resources and Services Administration, 2010, 2013). Workforce appraisals comparing census data from 2000 with averages of census data from 2008 to 2010 showed a substantial decrease in the number of RNs working in physician offices (~14.3%) and the offices of other health practitioners (~43.1%). The change in RN employment into hospitals paralleled the change in physician practice ownership by hospitals. In 2001, 61% of physician practices were privately owned compared with hospital or health system ownership. By 2012, privately owned physician practices had decreased to 53.2% (Kane, 2009; Kane & Emmons, 2013).
RN Roles in Primary and Ambulatory Care

RNs are educated to approach health in a holistic fashion, with knowledge of essential theories and science pertaining to physical, emotional, and spiritual care, which form the basis for their diverse and complex roles and responsibilities (American Nurses Association, 2010; Bureau of Labor Statistics, U.S. Department of Labor, 2013; National Council of State Boards of Nursing, 2013). In the provision of direct patient care, RNs assess patient health status, develop nursing care plans that are implemented through medication administration and diagnostic test interpretation, and evaluate outcomes of care. They play a critical leadership role coordinating delivery of health care services by initiating and informing referrals to other health care professionals and participating in team-based planning. Within the health care delivery system, RNs are instrumental in the overall operation of the health system. They supervise the work of licensed practical nurses (LPNs) and nonlicensed assistive personnel including nurses’ aides, medical assistants (MA), home health attendants, home care aides, and personal care aids. In the broader health community, they direct health screening, community outreach programs, and immunization initiatives.

The responsibilities of RNs are fully transferable to professional practice in primary health care settings. Despite the potential breadth for involvement, RN roles in primary health care have often been limited to telephone triage of patients requiring appointments, education, immunization and medication administration, and the provision of services that can be billed as incident to the physicians’ plan of care (Grumbach & Bodenheimer, 2004).

Although information specific to the RN role in primary health care is limited, data are available regarding RN roles in ambulatory care settings (Swan, Conway-Philips, & Griffin, 2006). Key RN roles and responsibilities in ambulatory care settings include assistance with technical procedures, development of plans of care, telephone communication and resource identification, patient advocacy, and self-care and care coordination education (Swan & Haas, 2011). RNs in ambulatory settings participate in and lead clinical inquiry and quality improvement projects, research initiatives, and engage in continuing education programs to enhance professional development. In their most recent position paper, the American Academy of Ambulatory Care Nursing calls for RNs to “collaborate with professional organizational colleagues to define the duties and responsibilities for each member of the health care team; and to develop an agenda that informs the nursing community, health care professionals, and political stakeholders at the local, state, and federal levels of the value and cost effectiveness of professional ambulatory care nurses” (AAACN, 2012, p. 5).

Clearly, the American Academy of Ambulatory Care Nursing call has implications for RN practice in primary care.

Methods

Design

The overall goal of this project was to generate new information about the roles of RNs in primary health care that may contribute to strengthening the larger primary care system’s positive potential. The appreciative inquiry (AI) framework (Carter et al., 2007) was selected to guide the process. The AI framework recognizes that human systems are capable of positive change. As a method of inquiry, AI is a systematic discovery of what makes a system effective in terms of human satisfaction with work, productivity, economic sustainability, and physical environment through interpersonal interaction (Cooperrider & Whitney, 2007). This project was determined to be exempt by the Columbia University Institutional Review Board.

Sample

Practices identified as exemplar models for providing quality primary care were identified through a literature review and discussion with nursing leadership within the American Academy of Nursing and physician leadership within the American Board of Internal Medicine Foundation. Sources of evidence included (a) 23 high-functioning practices in which physician work life and patient care were both noted as being improved by using a team approach (Sinsky et al., 2013); (b) the RWJF Learning from Effective Ambulatory Practices Project (Ladden et al., 2013); and (c) additional primary care practices that incorporated the use of health professionals and staff to maximize care delivery.

Sixteen primary health care practices located throughout the country were selected from the initial sample. These practices included clinics, nurse-managed clinics, physician group practices, community health centers, health care systems, academic public health primary care networks, and hospital-affiliated primary care centers. All practices had financially sustainable models that were not grant funded and used RNs in full-scope roles within interdisciplinary teams.

Procedure

Project team members had previously received training in interview and focus group techniques (Moran, 1997). Practice leadership was contacted, and the project purpose was explained. Telephone interviews with representatives from each practice were
conducted by members of this project’s team who took notes during the interviews. Interviews were semi-structured and guided by the tenets of AI framework. General questions were posed about organizational structure, types of personnel and roles, and the role of the RN. Specific questions focused on the RN impact on team function, patient care, practice efficiency, and the financial implications of the practice model and utilization of the RN. Participants’ comments directed the evolution and length of the interviews. Interviews ranged from 60 to 90 minutes in length.

Data Analysis

After each interview, the project team reviewed, compared, and contrasted their notes. The direct content analysis method was used to identify RN roles, responsibilities, and activities that impacted primary health care delivery processes and outcomes (Downe-Wambaldt, 1992). These findings were used to describe and make recommendations about the role of RNs in primary health care (Carter et al., 2007). When all interviews were completed, findings from each interview were examined and analyzed in the aggregate.

Results

The Context of Care and RNs Roles and Responsibilities

Across the practices, RN activities were performed within three general contexts: episodic and preventive care, chronic disease management, and practice operations. RNs used their knowledge and skills to perform nine general functions in these contexts to facilitate interprofessional collaboration in the delivery of primary health care services. The responsibilities associated with the RN role in the delivery of primary health care in the three contexts included the following:

- Delegated care for episodic illness management
- Telephone triage
- Medication reconciliation
- Health coaching
- Assessment and documentation of health status
- Intensive care/case management with a focus on chronic illness
- Hospital transition management
- Practice management and staff supervision
- Quality improvement and team leadership

Episodic and Preventive Care Delivery

The RN role of delegated care visits focused on episodic illness management and health maintenance using pre-established order sets and protocols. In some instances, the RN billed for these assessments. Telephone triage was considered an RN function, which used critical thinking and decision making to ensure patients with health-related concerns were referred to the appropriate setting and provider for optimum provision of care in a timely manner. Medication reconciliation provided the RN with an opportunity to collaborate with patients and their family members to promote adherence to regimens associated with complex conditions. When performing health-coaching functions, the RN provided education and wellness counseling. RNs synthesized intake information when documenting the history of present illness and assessing patients’ health status. They often flagged key findings to guide prioritization for physician primary health care providers. Their assessments were used by other providers who interacted with the patient.

Chronic Disease Management

The assessment skills of RNs promoted early intervention when exacerbation of symptoms of chronic illnesses was identified. RN telephone communication was integral to chronic illness management in the identification of change in symptoms and the need to establish new treatment regimens and initiate referrals. Post–hospital discharge strategies used to reduce readmission included the provision of patient and family support during the transition home, effective medication management, early identification of key symptoms, and the creation of clearly defined primary and specialty care follow-up plans. These actions required high-level critical analysis and clinical judgment.

Practice Operations

RNs played a significant role in guiding telephone triage and prioritizing patient appointment access and service coordination. The assessment skills of RNs were viewed as vital to manage patient flow and capacity, enhance same-day urgent care needs, and accommodate after-hour scheduling requests. Additionally, RNs trained and supervised LPNs and MAs and assumed leadership roles by directing community-based teams, managing patient navigation centers, and providing continuity when primary care providers were unavailable. They participated in initiatives focused on quality improvement, data analysis, and practice leadership.

Financial Implications

In recent decades, MAs, an occupational group traditionally belonging to allied health professions, have been broadly used in primary health care (Chapman, Marks, & Chan, 2010). The length of training in MA programs ranges from two to four semesters and is longer for MAs who receive a certificate of achievement or an associate degree. MAs are educated to perform administrative and clinical tasks to support the work of physicians and other health care
professionals (Sinsky et al., 2013). Clinical tasks include capturing patients’ vital signs, administering medications and injections, recording information in health records, preparing and handling medical instruments and supplies, and collecting and preparing specimens of bodily fluids and tissue for laboratory testing. These activities must be supervised by licensed health care professionals.

One primary health care physician explained that practice leadership transitioned from a mostly MA model to a nursing model even though this required a decrease in staff to remain cost neutral. The nursing model was very productive. This was attributed to the independent licensure of RNs, self-governing professional practice status, and professional accountability to patients in partnership with physician colleagues.

Financial savings using RNs in primary health care settings were identified. Although most practices acknowledged RNs were more expensive than LPNs and MAs, the majority found RN contributions to the team improved patient outcomes as well as patient and provider satisfaction. In traditional fee-for-service models, RN contributions freed up physician time, thus enabling greater patient volume and increased revenue. In some cases, this allowed for more same-day appointments, which decreased the use of the emergency department (ED) and increased diagnostic options for primary care clinicians. In some instances, the revenue generated by care management services offsets the higher compensation of RNs.

Nearly all practices acknowledged financial impacts would be most evident in a total cost of care environment where enhanced primary care was linked to the prevention of more costly care over time. Practices consistently reported that RNs who performed case management and transition management functions prevented ED use and hospital stays including hospital readmissions and associated financial penalties. Telephone triage interventions by RNs were cited as key to preventing unnecessary ED visits and rehospitalizations with associated cost savings; quality enhancement; and improved satisfaction for patients, payers, and care delivery organizations. Medication reconciliation directed by RNs prevented life-threatening complications from dangerous medication interactions and the associated costs. Practices reported better quality outcomes, such as improved the Healthcare Effectiveness Data and Information Set (HEDIS) scores, when RNs provided health education, including preventive care and management of chronic conditions. These represented financial incentives for practices that participated in quality incentive programs.

**Recommendations**

Based on literature review and practice representative interviews, the following recommendations are proposed as the “next steps” to expand the role and contribution of the RN in primary health care.

**Policy**

- Develop and expand payment models that provide appropriate levels of reimbursement for nursing and interprofessional team-based health care services.
- Create incentives for physicians, provider organizations, payers, states, and the federal government to adopt primary health care delivery models using nurses within exemplary interprofessional primary health care models.
- Educate the public to expand their understanding of their rights and responsibilities as consumers of primary health care services and to advocate for their own wellness and care management.

**Education**

- Survey schools of nursing to identify undergraduate curriculum exemplars incorporating didactic and practicum experience that prepare RNs to support their future contributions as leaders in primary health care settings.
- Define and disseminate essential nursing and interprofessional competencies necessary for RNs to practice and lead effectively in primary health care settings.

**Practice**

- Design and bring to scale the RN primary health care roles and responsibilities as outlined by exemplar primary health care settings.
- Develop, endorse, and adopt quality measures that capture both processes and outcomes that reflect the contributions of RNs in primary health care settings and in support of population health spanning settings of care.
- Clarify and maximize the role of all members of the interprofessional primary health care team to further substantiate the distinct contributions of effective RN practice in primary health care settings.

**Discussion**

Primary health care delivery in the United States continues to evolve in various forms in response to available resources, institutional policies, state regulations, payer type, and identified consumer needs. Deliberate action is needed to retain and expand the primary health care workforce essential for improving the health of our nation (Bodenheimer et al., 2009; Dyrbye, 2011; Institute for Alternative Futures, 2013). With the projected increase in the number of persons seeking primary care services as a result of improved access granted by passage of the Patient Protection and
Affordable Care Act, many primary health care practices, including those presented in our report, anticipate redesigning their practice models to meet the needs of a greater number of patients in a systematic fashion using team-based care. Team-oriented, interprofessional care may also mitigate concerns voiced by health care professionals currently employed in primary health care delivery settings regarding work hours, compensation, and job satisfaction.

The current state of primary health care presents an opportunity for RNs to establish a leadership role. To accomplish this, new curricula and practice models will be required to prepare RNs to function in primary health care settings, fulfill active roles within interprofessional teams, and serve as primary care practice organization leaders. The primary health care practice representatives interviewed as part of this analysis used team-based care delivery models in which RN professional practice directly affected outcomes of care as well as the environment of care. These RNs, and others providing care in exemplar primary health care practices, could serve as the role models and preceptors for nursing and medical students who need to acquire direct experience in team-based primary health care settings.

Conclusion

It is all but certain that health care reform will continue to be a focus of ongoing national discussion and debate. It is well documented that the way in which we care for individuals, especially our most vulnerable, needs to be fundamentally reshaped. The primary health care delivery model has been shown to effectively provide patient-centered care to a cadre of individuals through integrated services. Adding RNs who practice to the full scope of their license in primary care for individuals, especially our most vulnerable, needs to be fundamentally reshaped. The primary health care delivery model has been shown to effectively provide patient-centered care to a cadre of individuals through integrated services. Adding RNs who practice to the full scope of their license in primary health care settings, fulfill active roles within interprofessional teams, and serve as primary care practice organization leaders. The primary health care practice representatives interviewed as part of this analysis used team-based care delivery models in which RN professional practice directly affected outcomes of care as well as the environment of care. These RNs, and others providing care in exemplar primary health care practices, could serve as the role models and preceptors for nursing and medical students who need to acquire direct experience in team-based primary health care settings.

Collaboration among a group of health professionals has the greatest potential to lead to effective quality patient care (Reeves et al., 2012). Practitioners who can communicate and use the “team decision-making approach” are more likely to solve patient care issues. The RN skill set is uniquely positioned to provide a significant contribution to team-based patient-centered care. Through RN team leadership, care coordination, and individual, family, and community inspired values and priorities, primary health care is poised to serve as a meaningful foundation to transform the health of our nation.

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