

RESEARCH BRIEF

June 2015

Nursing in a Transformed Health Care System: New Roles, New Rules

Key takeaway message: Although the supply of nurses is likely to meet overall demand, the nature of a nurse's job is changing dramatically. In redesigned health care systems, nurses are assuming expanded roles for a broad range of patients in ambulatory settings and community-based care. These roles involve new responsibilities for population health, care coordination and interprofessional collaboration. Nursing education needs to impart new skills and regulatory frameworks need to be updated to optimize the contributions of nurses in transformed care delivery models.

Introduction

The health care system is undergoing rapid changes that put new emphasis on population health, quality of care, and the value of the services delivered. These changes present both opportunities and challenges to the 2.9 million registered nurses (RNs) employed in the United States. There are about four times as many nurses in the *health workforce* than there are physicians; nurses, by sheer numbers, will play a significant role in this transformation, and will themselves be transformed in the process. Because immediate concerns about RN shortages have *abated*, there is an opportunity to turn attention and resources away from expanding the educational pipeline toward redesigning the system to support nursing practice in a transformed health care system. In this Research Brief, we describe the changing roles nurses have in the delivery system and assess the educational, policy, and regulatory structures that must change with them. We address the *fundamental question*: how can we create the right mix of nurses in the right locations, specialties, and practice settings, with the skills and competencies needed to meet these goals?

New Nursing Roles in a Redesigned Health Care System

Health care payers, including the Centers for Medicare and Medicaid Services (CMS), are shifting away from fee-for-service payments that reward volume toward paying for value, including improved population health outcomes. HHS Secretary Burwell recently *announced* that by 2018, 50 percent of Medicare payments will be tied to value through alternative payment and care delivery models, such as Patient-Centered Medical Homes (PCMHs) and Accountable Care Organizations (ACOs). As payment models shift, health care providers—including hospitals, clinics, physicians'

ERIN FRAHER, PHD, MPP

Assistant Professor, Departments of Family Medicine and Surgery
Director, Program on Health Workforce Research and Policy
Cecil G. Sheps Center for Health Services Research
University of North Carolina at Chapel Hill

JOANNE SPETZ, PHD, FAAN

Professor, Philip R. Lee Institute for Health Policy Studies
Associate Director for Research Strategy, Center for the Health Professions
University of California, San Francisco

MARY NAYLOR, PHD, RN, FAAN

Marian S. Ware Professor in Gerontology
Director, NewCourtland Center for Transitions and Health
University of Pennsylvania, School of Nursing
INQRI Program Director

offices, and long-term care settings—are redesigning how they deliver care and how they redeploy the workforce in new roles and settings. Health systems and payers are increasingly focused on “upstream” preventive and primary care and the health workforce is shifting from acute to outpatient settings.

In redesigned health care systems, nurses are assuming expanded *roles* for a broad range of patients in ambulatory settings and community-based care. New job titles and roles are emerging, particularly in population health management, patient coaching, informatics design and analysis, geriatric care, and managing patient care transitions. Nurses are increasingly employed as “*boundary spanners*,” connecting patients with services in health and community settings. As the *Institute on Medicine* noted, nurses are increasingly called upon to collaborate as members of interprofessional teams. These emerging and expanding roles for RNs will require the application of nursing skills in new ways, as well as the development of new skills. However, current educational programs vary considerably in their ability to prepare nurses for the evolving health care system, a system that will emphasize accountability for the health of populations and place nurses in roles that address the increasingly complex needs of patients with multiple chronic conditions. In this new system, nurses will need to consistently apply skills associated with a continuous learning health system, including care coordination and transitional care; optimize care through use of data and evidence, often gleaned from electronic medical records; collaborate interprofessionally, and actively engage in performance improvement. Below we summarize key dimensions of each of these opportunities and their relevance to the preparation of the emerging nursing workforce.

Population Health

Public health nurses have long played a role in developing, implementing, and monitoring programs to advance the health of populations through health promotion and disease prevention. Today, there is growing recognition that many individual health problems have antecedents in the community, and can be prevented through improved population health programs. In serving their patients and communities, nurses and other health care providers must understand and navigate the social, political, and economic factors that influence individual and population health. For nurses to be effective in care management and coordination roles, as well as in primary care in general, they will need to address how the community affects each patient, and how interventions at a broader level—either for a patient panel or community—can improve individual outcomes. This perspective demands greater knowledge of epidemiology, sociology, and social determinants of health.

More recently, the term “*population health*” has emerged within the U.S. health care system to refer to accountability for the longitudinal care and outcomes of an identified group of patients whose health care needs are typically addressed across multiple sectors (e.g., primary care, hospitals, post-acute settings, home, and hospice). Newer models of health care delivery, such as ACOs or PCMHs, have incentive structures that tie “value” to health indicators in these patient groups, identified by their clinical conditions and/or non-clinical characteristics such as socioeconomic status.

There are about four times as many nurses in the health workforce than there are physicians; nurses, by sheer numbers, will play a significant role in this transformation, and will themselves be transformed in the process.

Complex Older Adults and Their Family Caregivers

The rapidly-growing population of *older Americans* will demand more health care services in general, as well as more long-term care. A growing share of long-term care is being provided in home- and community-based settings, through home health, adult day care, and other support services. Through the Medicaid program, CMS has provided *incentives* to states to encourage greater use of *community services*. Consequently, a number of innovative state-led reforms in the provision of *long-term services and supports* are being tested. In addition to providing valuable clinical care to older adults, the nursing workforce will be central to meeting this growing need in the following ways:

- By assessing the long-term needs of individuals with physical and cognitive impairments, developing customized care plans, coordinating care across providers and settings, and overseeing the adequacy of services. Established and emerging programs for older adult and long-term care populations are *leveraging nurses* to improve care transitions, preventing physical and cognitive decline while ensuring that older adults can live in the community.
- By engaging family caregivers, broadly defined to include relatives, neighbors, and friends in the implementation of older adults' plans of care. Addressing the unique needs of this "*invisible workforce*" will be a major challenge in the transformed health care system.

Care Coordination and Transitional Care

Care coordination involves working with patients to help organize the services they receive, ensure that their preferences and needs are met, share information across health care providers, and facilitate the appropriate delivery of health care services. New financial incentives have emerged; for example, as of January 2015, Medicare is paying *\$42.60 per month* for care management of patients with two or more chronic conditions, like heart disease and diabetes.

Many types of interventions fall under the umbrella of care coordination, including care transitions, guided care, and collaborative care models. Numerous programs have demonstrated the value of care coordination, as well as the *capacity of nurses* to design, implement, and participate in care coordination projects and practices. While transitional care has traditionally focused on providing continuity between health care settings and providers, care coordination is more broadly defined to encompass both health care and social services, including the physical, behavioral, social, and economic dimensions of care. The use of evidence-based models to guide system transformation is growing. A recently completed national *scan* funded by the Robert Wood Johnson Foundation revealed that 59 percent of clinicians or clinical leaders from nearly 600 distinct health care sites (e.g., hospitals, home care agencies) reported use of the *Transitional Care Model*, a proven nurse-led team based approach, as a foundation for system change.

A growing share of long-term care is being provided in home- and community-based settings, through home health, adult day care, and other support services.

The American Academy of Ambulatory Care Nursing recently developed RN *competencies for care coordination and transition management*, and an *online course* to impart these competencies, including:

- Support for self-management
- Education and engagement of patients and families
- Cross-setting communications and care transitions
- Coaching and counseling of patients and families
- Nursing process: proxy for monitoring and evaluation
- Teamwork and collaboration
- Patient-centered care planning
- Population health management
- Advocacy

The roles and optimal mix of clinical and non-clinical professionals in coordinating care is not clear. A recent *survey* of 48 PCMHs in New York found that RNs and other employees (including clinicians such as social workers and support staff such as medical assistants and peers) were responsible for care coordination in roles such as care managers, care coordinators and patient navigators. Their functions varied considerably. Some also were employed as health coaches, helping patients understand and manage their conditions, including patient education activities, motivational interviewing techniques, providing referrals to community-based services, and visiting patients in their homes. Nearly three-quarters of responding organizations used peer staff rather than licensed health professionals in some of these roles. The use of lay community health workers to improve population health is increasing, but a 2013 *systematic review* by the Agency of Healthcare Research and Quality revealed limited evidence of improved patient knowledge, behavior change, health outcomes, and cost effectiveness.

Some programs use nurses to improve organizations' capacity to coordinate care. For example, Minnesota's *Health Care Homes* program established the job category of Nurse Planners, who are responsible for supporting integrated care across multiple Health Care Homes. Their specific responsibilities include developing resources such as care coordination and patient and family engagement toolkits, and offering technical assistance to help Health Care Homes improve their capacity to function in an integrated way. Nurse Planners also lead the certification and re-certification of clinics as Health Care Homes, and recruit primary care clinics to join the program. The developers of the Health Care Homes program initially anticipated that non-clinical professionals could manage this work, but quickly determined that the clinical background of nurses was ideally suited to this organizational coordination role.

The use of lay community health workers to improve population health is increasing, but a 2013 systematic review by the Agency of Healthcare Research and Quality revealed limited evidence of improved patient knowledge, behavior change, health outcomes, and cost effectiveness.

Use of Data, Evidence, and Other Performance Improvement Skills

Increasingly, nurses are using data from electronic health records (EHRs) and patient registries to identify unmet health needs and to target population health interventions. Health information technology allows health care providers to access patient and community information rapidly, as well as supports efficient communication between providers. When designed well, these systems *improve care coordination*, increase quality of care, and lower costs. Telehealth systems allow health care providers to remotely monitor and communicate with patients, allowing for timely identification of emerging issues and consultations that are convenient to patients. Effective use of *health information and telehealth systems* are considered essential for successful care coordination.

Nurses will increasingly use health information technologies to advance evidence-based practice. Data embedded in EHRs can be used to rapidly assess the effectiveness of interventions for specific patients, as well as to assess broader relationships between care processes and patient outcomes. Nurses can leverage these systems both to better meet immediate care needs and to guide organization policies toward care improvement.

Interprofessional Collaboration

A hallmark of the transformed health system is a new level of collaboration across the health professions, including physicians, nurses, social workers, physician assistants, pharmacists, and medical assistants. Nurses' clinical knowledge and presence across all care settings will likely make them primarily responsible for navigating interactions between patients and providers along the continuum of care. They can play a *key role* in developing systems to ensure that primary care patients receive appropriate specialist consultations, physical therapy, nutrition counseling and education, medication reconciliation with pharmacists, and assistance with socioeconomic issues that affect patients' abilities to care for themselves.

The *Interprofessional Education Collaborative* has developed the following *core competencies* for interprofessional collaborative practice:

- Values/Ethics for Interprofessional Practice (work with individuals of other professions to maintain a climate of mutual respect and shared values)
- Roles/Responsibilities (use the knowledge of one's own role and those of other professions to appropriately assess and address health care needs)
- Interprofessional Communication (communicate with patients, families, communities, and other health professionals in a responsive and responsible manner that supports a team approach)
- Teams and Teamwork (apply relationship-building values and the principles of team dynamics to perform effectively in different team roles)

Despite recent advances in the identification of these competencies, few health professionals participate in *interprofessional educational activities*. It is essential

A hallmark of the transformed health system is a new level of collaboration across the health professions, including physicians, nurses, social workers, physician assistants, pharmacists, and medical assistants.

that nurses and other health professionals avoid the “turf wars” that inhibit effective collaboration, and leverage the skills of all health professionals at the highest level. In many states, licensure and scope of practice acts reflect the intense competition that exists among providers, rather than being structured to enable all health professionals to maximize their contributions to a transformed health system.

Redesigning Education, Regulation, and Policy to Support New Roles

In their systematic review of transitional care programs that help patients with complex chronic conditions, *Naylor et al.* (2011) noted that health care licensure, certification, and accreditation requirements need to better reflect emerging roles and accountabilities. *Ricketts and Fraher* (2013) have called for better connections between education and practice so that the transformative changes underway in front-line care delivery systems are incorporated into the curriculum and clinical placement requirements for nurses, physicians and other health professionals. *Dower et al.* (2013) have noted the importance of restructuring the regulatory system to accommodate the more flexible deployment of the workforce that will be needed to staff new models of care.

As new roles diffuse through the health care system, nurse educators and employed nurses need to focus on building the skills to meet patient needs in a rapidly changing and increasing value-focused care environment. To accomplish this, nurses will need to identify and advocate for the education and regulatory changes to support the nursing workforce as they shift employment settings and take on new roles.

Education

With concerns about a nursing shortage waning, the education system can shift resources from expanding the pipeline to redesigning education to prepare nurses for new roles. Nursing curricula need to incorporate the competencies (knowledge, skills, and behaviors) described above to prepare the workforce to undertake population health initiatives, support older adults and other complex patient groups, provide care coordination, manage care transitions, analyze and act upon data from EHRs, patient registries and other sources, optimize the use of evidence and performance improvement skills, and work as members of teams within and across settings.

Educational redesign needs to focus not only on revising the curriculum for nurses in the pipeline, but also on *retraining* the 2.9 million nurses already in the workforce. More than half of respondents to a *survey* on barriers to implementing care coordination roles in new models of care identified lack of work experience as a challenge to hiring new nurses and also as a barrier to moving already employed nurses to new roles in PCMHs.

Nurses will need a more flexible educational system that promotes seamless academic progression and allows them to gain and refine skills and competencies throughout their career. This is particularly critical for nurses who are being laid off from acute

Nurses will need a more flexible educational system that promotes seamless academic progression and allows them to gain and refine skills and competencies throughout their career.

care settings and need to find new jobs in ambulatory and community-based settings. Education opportunities will need to be convenient in terms of location, and financial incentives will be required encourage nurses, and the health systems and practices that employ them, to take time away from work to gain new skills and competencies.

One of the biggest barriers to preparing the nursing workforce is the lack of faculty and preceptors who are familiar with the new roles demanded of nurses in new models of care. While nurses have traditionally filled care management and coordination roles in acute settings, the degree to which the skills and competencies acquired in acute settings will translate into the roles nurses will fill in ambulatory settings is unclear. Educational programs may face challenges in identifying faculty and preceptors who can teach key skills across a variety of care settings. Educational programs also will face the challenge of continuing role ambiguity. The redesign of health care organizations is occurring rapidly, and many roles may be phased out while new ones emerge. Educators will need to navigate shifting roles and adjust competencies needed according to the complexity and diagnoses of patients and settings in which nurses will work.

Another barrier faced by educational institutions is the lack of community-based practices in which to place nursing students. Most nurses still receive the majority of their clinical education in inpatient settings. Yet for nurses to learn to practice in new models of care, clinical rotations need to include exposure to *high-performing teams* in ambulatory settings, and provide longitudinal experiences with patients and family caregivers.

Traditional nursing education models will need to include more online education, simulation and flipped classrooms. An analysis of seven of the largest online RN-to-BSN education programs in the U.S. found that about 21 percent of all RN-to-BSN graduates came from these online programs in 2012. Many online educational programs, both continuing education and degree programs, are highly regarded, but more evaluations are needed to determine the quality of these approaches and the types of knowledge best suited to simulation, online education, and flipped classroom approaches.

New education opportunities are likely to emerge for nurses to develop skills and knowledge specific to emerging RN roles. For example, the University of Pennsylvania's School of Nursing and the American Academy of Ambulatory Care Nursing (among others) have developed *certification programs* to support nurses and other health professionals in evidence-based care transitions and care coordination. Common themes in their *curricula* include patient and family caregiver engagement and education; cross-setting communication and transition; teamwork and collaboration; patient-centered care planning; decision support and information systems; and advocacy. This type of certification program is available to all RNs, and some of these competencies could be incorporated into the curricula of many entry-level RN educational programs.

The Institute of Medicine (IOM) recommended that nursing schools do more to educate students about issues specific to care of older adults, such as managing cognitive impairment and multiple chronic conditions. Nursing educational programs

Traditional nursing education models will need to include more online education, simulation and flipped classrooms.

should leverage opportunities to advance faculty expertise in geriatric care, such as through the Geriatric Nursing Education Consortium (operated by Association of Colleges of Nursing (AACN)) and the Advancing Care Excellence for Seniors (ACES) project (operated by the National League for Nursing). In addition, continuing education programs should provide working RNs with opportunities to develop knowledge and skills in caring for older patients. The Nurses Improving Care for Healthsystem Elders (*NICHE*) program provides nurses working in hospitals and health care systems with educational resources, project management support, clinical protocols, and access to a community of learners made up of nurse practitioners (NPs), gerontological nurses, and health coaches working in acute care facilities. More than 600 hospitals worldwide participate in this program, which uses a “train the trainer” approach, so that those who participate in the NICHE program are expected to train fellow staff on the health needs of the frail elderly.

Regulation and Policy

Regulatory and policy changes are needed to support nurses practicing in new roles to the full extent of their education. The IOM strongly recommended that regulatory barriers be removed if they prevent RNs and other nurses from utilizing their skills to the maximum benefit of patients. A growing body of *research* supports this IOM recommendation, concluding that restrictive state regulations regarding scope of practice hinder access to care, lower the supply of providers, and increase costs. Employers and health care providers often have internal rules that are more restrictive than state laws. Hospitals, clinics, and medical groups need to ensure they are using RNs at the top of their ability and at the top of the legal authority. *Goldberg et al.* (2013) have described a “top of the license model” in which physicians and nurses jointly care for a panel of patients with nurses taking on many of the tasks formerly done by physicians, including collecting and entering information into EHRs about a patient’s history of the present illness, reviewing past problems and treatments, discussing medication lists, assessing a patient’s social history, and updating preventive care needs. Adoption of this care model depends on scope of practice laws that allow such task shifting to occur. An updated, interactive view of state scope of practice laws can be found *here*.

Insurance reimbursement rules also can hinder nurses from delivering optimal services. Each state determines its own Medicaid payment rate for advanced practice nurses, and private insurance companies establish their own rules. In the Medicare program, NPs must seek *physician approval* for home health services for their patients. Although federal regulations prohibit NPs from ordering home health services for Medicare recipients, a number of *states* have authorized this activity through statute or regulation to improve access for patients who are covered by other payers, including Medicaid. The ACA added an additional requirement that physicians certify beneficiaries’ eligibility for these services and for durable medical equipment. These inefficiencies can reduce the amount of time NPs spend with their patients and result in care delays, especially in remote settings. The movement of health care reimbursement away from fee-for-service payment and toward paying for improved

The IOM strongly recommended that regulatory barriers be removed if they prevent RNs and other nurses from utilizing their skills to the maximum benefit of patients.

outcomes will likely support efforts to maximize nursing contributions to care. In addition, new provisions for Medicare coverage of wellness and behavioral telehealth visits and care coordination for patients with multiple chronic conditions will bring more attention to the role of nurses in these areas.

State nurse licensing boards regulate the content of nursing education, and may need to modify rules governing entry-level nursing programs to ensure that graduates have the new skills and competencies needed. They also should consider adjusting requirements regarding clinical experiences of pre-licensure students, to include more ambulatory experiences. This will likely require new regulations regarding faculty-to-student ratios in ambulatory settings and the qualifications of preceptors. Non-nurses might prove to be able preceptors for some curricular components, such as population health management and informatics.

The *National Council of State Boards of Nursing* provides a national licensing exam for RNs, called the NCLEX. The NCLEX is revised periodically to ensure that the content is current and relevant. Pre-licensure education programs design their curricula to ensure that their graduates can pass this exam. Thus, important changes in education are not likely to occur unless the NCLEX changes. It is essential that the NCLEX reflects new roles, including the shift of nurses from acute to ambulatory settings and the expanding role of nurses in care management and coordination, informatics, long-term care, and population health.

Finally, federal and state funding agencies have a key role in tracking changes to the health care system, identifying the new skills needed to optimize care, and supporting innovative education programs to meet future care needs. The U.S. Bureau of Health Workforce operates several grant programs related to nursing education. The *Nurse Education, Practice, Quality, and Retention* program provides grant support for academic, service and continuing education projects. The most recent set of grants focused on expanded enrollment in baccalaureate nursing programs, as well as internship and residency programs; education in new technologies; nursing practice in non-institutional settings; care for underserved populations and other high-risk groups; managed care, quality improvement, and other skills; and retention, including career ladder programs. In addition, the ACA authorized \$200 million over four years for the *Graduate Nursing Education Demonstration* to increase the number of advanced practice RNs prepared to provide primary care to Medicare beneficiaries. Five teaching hospitals have received funds to partner with nursing schools and community-based clinics to offer education in care transitions and chronic disease management, along with other areas.

Conclusion

The United States health care system is undergoing transformative change. Nurses are the single largest licensed health professional group and they practice in nearly every setting of the health care system, including hospitals, long-term care, home health, ambulatory care, diagnostic and treatment facilities, and clinics. In these settings, nurses will assume important new roles to improve care, advance health, and increase value.

It is essential that the NCLEX reflects new roles, including the shift of nurses from acute to ambulatory settings and the expanding role of nurses in care management and coordination, informatics, long-term care, and population health.

New roles will require that nurses be adept at recognizing the impact of community characteristics on patients and populations; understand the complex needs of older patients; design and implement care coordination programs; leverage data and technology to enhance patient care; and collaborate effectively with diverse teams of health professionals. Nursing education needs to incorporate the competencies required for nurses to be successful in new roles, through entry-level and continuing education programs. Educators need to pay particular attention to designing programs that enable nurses to seamlessly gain new skills and competencies; preparing faculty and preceptors to teach in ambulatory and community settings; and leveraging emerging educational modes such as flipped classrooms and online education. Policymakers need to modernize regulations to allow nurses to practice at the highest level of their knowledge. Now is the time to mobilize educators, nurse leaders, policymakers, and employers to advance nursing's capacity in a transformed health care system.

The authors thank Janet Weiner, MPH, associate director for Health Policy at LDI, for her helpful edits of this paper.