

## American Academy of Ambulatory Care Nursing Position Paper: The Role of the Registered Nurse in Ambulatory Care

N 2011, the American Academy of Ambulatory Care Nursing (AAACN) published the first-ever position statement regarding the role of the registered nurse (RN) in ambulatory care. Since that time, tremendous changes have occurred in health care, especially in ambulatory care. Healthcare reform, the Affordable Care Act, the implementation of care coordination as a strategy to improve health and prevent rehospitalization, and the transition from volume-based to value-based care have resulted in an increased focus on the ambulatory care setting as the site of health care provision now and in the future. This position paper reflects the current state of ambulatory care and the crucial role of the RN as a care provider, care coordinator, and care partner. It also highlights potential role changes and adaptations for the future.

#### Background

Health care is in the midst of unprecedented change. Improving the health of our nation will require reframing our healthcare system from one that emphasizes acute, episodic, interventional care to one that engages patients and providers in health promotion, disease prevention, and early intervention (Bodenheimer, Bauer, Syer, & Olayiwola, 2015). As a result, this enhancement of the Role of the Registered Nurse in Ambulatory Care position statement (AAACN, 2011a) reflects current trends and changes to the RN role in response to the changing healthcare environment.

Across the continuum of care, ambulatory care RNs work independently and collaboratively, partnering with patients, caregivers, providers, and other healthcare professionals in the design and provision of care in an ever-expanding array of settings. The context of the ambulatory care environment is complex, rapidly changing, and often difficult to navigate. Care delivery design and implementation is directly influenced by social determinants, environmental

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Concurrently, health care is evolving rapidly to meet the needs of an increasingly diverse and aging population. At the same time healthcare costs are driving value-based reimbursement and innovative models of care. Ambulatory care RNs are well-prepared to assume an expanded role in the design and delivery of high-quality care, defying traditional boundaries, and working in redefined interprofessional relationships, expanded community partnerships, and nontraditional healthcare settings.

#### The Importance of the RN in Ambulatory Care

- RNs provide high-quality, evidence-based care across the lifespan to enhance patient safety, reduce adverse events, impact and improve patient satisfaction, support and promote optimal health status, track admissions and readmissions, and manage costs within and among continually expanding, diverse, and complex populations. Therefore, RNs are essential to the delivery of safe, high-quality care and should not be replaced by less skilled licensed, or unlicensed members of the healthcare team.
- RNs are the team members best prepared to facilitate the functioning of interprofessional teams across the care continuum, coordinate care with patients and their caregivers, and mitigate the growing complexity of transitions in care.
- RNs play a critical role in the delivery of telehealth services and virtual care. The development of the art and science of telehealth nursing practice has improved and expanded coordination of healthcare services, reduced patient risk, and contributed significantly to care management models.

#### **AAACN's Position Statement**

Creating a future that maximizes the role of RNs in an evolving healthcare environment will require sustained forward movement in nursing practice, education, research, and leadership. Therefore:

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- RNs must be recognized and supported as leaders in the transformation of health care in the ambulatory care setting (Institute of Medicine [IOM], 2010). They have expertise in the development, implementation, and sustainability of quality measures and clinical practice improvement.
- RNs must practice at the top of their license, education, and expertise to affect quality and cost through patient engagement, care coordination, enhanced teamwork, resource reduction, improved access, and quality and outcome improvement.
- Faculty and schools of nursing must design undergraduate and graduate curricula to prepare nurses for new roles in ambulatory care.
- Health facilities must implement ambulatory care nurse residencies for new nurses and experienced nurses new to ambulatory care practice.
- Government and insurance carriers must recognize the impact on cost reduction an RN can provide under new reimbursement models which are linked to improved outcomes.
- RNs must lead, participate in, and support performance improvement activities designed to promote and enhance quality and safety, improve efficiency in care delivery, and evaluate impact on patient outcomes.
- Researchers must build the science of ambulatory care nursing by engaging in the development of new knowledge and innovation to build the evidence base needed to support quality practice.

## Evolution of Health Services in Ambulatory Care Settings

Ambulatory healthcare services have evolved significantly over recent decades. AAACN has consistently chronicled this dynamic history in major publications (AAACN, 2010, 2011b, 2015, in press). Detailed historical accounts include national and international efforts to redefine health and primary care, changes in the reimbursement of health care, and technological advances which revolutionized ambulatory care. New innovative types of ambulatory care settings have emerged including outpatient surgery centers, invasive diagnostic centers and infusion centers, among others. Sophisticated informatics systems have emerged which enable the documentation, evaluation, and dissemination of care and outcomes for patients, groups, and populations within an organizational system and across the care continuum.

These changes have fueled a growing need for nursing expertise in many segments of the ambulatory care sector, similar to acute care settings. Patients in many of today's ambulatory care settings have complex needs requiring supervision by RNs to ensure safe, quality care. The Patient Protection and Affordable Care Act (ACA) of 2010 has led to the proliferation of alternate care models such as the PatientCentered Medical Home allowing ambulatory care personnel to function in newly expanded roles. New ambulatory care roles for RNs have been formalized in telehealth services (AAACN, 2011b) and in care coordination and transition management (AAACN, 2015).

Today, "comprehensive health care includes care coordination that is patient centered and focuses on health promotion, disease prevention, smooth transitions between levels and types of care, health education and the improved management of symptoms to avoid complication from disease and/or disability" (AAACN, 2012, p. 235). The RN is the team member most qualified to coordinate the elements of care with patients and caregivers, as well as to facilitate the functioning of interprofessional teams across the care continuum.

#### **Current State**

The U.S. healthcare system has undergone evolution over many years; however, it is now at the precipice of radical change. Societal changes, emphasis on value, consumer engagement, technological advancement, and pressure to reduce costs are driving redesign of every element of the care delivery system.

Demographic trends. The U.S. Census Bureau (Colby & Ortman, 2015) identifies broad demographic trends impacting healthcare delivery in the United States. Rapid population growth, increasing diversity and number of foreign-born residents, and aging of the population are expected to impact care delivery over the next several decades. These trends will challenge the traditional healthcare system to seek new models of care that are flexible, proactive, accessible, responsive, and cost effective.

Increasing incidence and prevalence of chronic disease. In the United States, 117 million people have one or more chronic conditions, with one in four adults having two or more (Ward, Schiller, & Goodman, 2014). Increasing numbers of chronic conditions lead to a proportional increase in cost of care. Medicare beneficiaries with five or more chronic conditions account for two-thirds of all healthcare expenditures (Anderson, 2010), leaving little for preventive care and health promotion for large numbers of Americans. In addition to managing their own medical and mental health conditions, patients often face complex social needs, family challenges, and difficulty navigating the healthcare system. These at-risk patients also have frequent hospitalizations and emergency room visits and are not managed well through traditional approaches to care delivery (AAACN, 2014).

*Technology-enhanced practice.* The explosive development of technology enables ambulatory care nurses to provide care beyond a physical setting. Information technology supports patients regardless of location, coordinating care across a continuum that may span traditional state and even national boundaries.

Electronic/virtual visits, patient portals, and mobile device applications have joined structured telephone support and remote biophysical monitoring as tools in the ambulatory care nurse's toolkit. These tools enhance the ability to improve patient and family engagement in care, provide real-time health monitoring, support for patient self-management, and enhanced communication between patient and caregiver. A growing body of evidence supports positive outcomes associated with many technology-enhanced interventions designed to provide health information and advice, support lifestyle modification, medication adherence, chronic condition management, and reduce unnecessary utilization (DeBlois & Millefoglie, 2015; Flodgren, Rachas, Farmer, Inzitari, & Shepperd, 2015; Vinson, McCallum, Thornlow, & Champagne, 2011; While & Dewsbury, 2011).

Healthcare analytics, risk stratification, and patient registries support efficient and effective population management. These tools help identify atrisk and rising-risk patients and populations for outreach services. Sophisticated electronic documentation processes allow ambulatory care nurses to continuously modify and communicate the plan of care, in real time, to meet individual patient care needs.

In an era of increasing reliance on technology, nurses must demonstrate core informatics and computer skill competencies. The specialty of nursing informatics provides an additional level of support to practicing nurses and other disciplines by:

- Linking nurses with clinical decision support to enhance care quality and safety at the point of care and in system design.
- Leading effective design and use of electronic health records across the health continuum.
- Incorporating standard nursing language that enables measurement and analysis of nursing care across sites and organizations.
- Supporting administrative data needs, currently underdeveloped in ambulatory care practice, to link patient complexity, nursing care needs, and nurse-sensitive outcomes.
- Enhancing nursing's key role in care coordination and information integration (American Nurses Association [ANA], 2015; Sensmeier, 2010; Swan, Lang, & McGinley, 2004).

Governmental regulation and payment models. As part of the ACA, the U.S. Department of Health and Human Services (DHHS), proposed an initial set of guidelines for the establishment of Accountable Care Organizations (ACOs) under the Medicare Shared Savings Program (Centers for Medicare & Medicaid Services [CMS], 2011). ACOs bring together a coordinated group of healthcare providers (primary care physicians, medical and surgical specialists, physician assistants, nurse practitioners). These groups are partnered with hospitals and/or other professionals who assume the responsibility and accountability for designated populations of Medicare beneficiaries.

Although there are several different types of ACOs, their common purpose is to develop care delivery systems that improve health and care quality, especially for patients with chronic disease, while lowering costs. Incentives are built into contracts that reward progress toward these goals (CMS, 2011). In addition to ACOs, other Medicare and commercial payer reimbursement models continue to evolve. Merit-Based Incentive Medicare Payments Systems and the Medicare Access and CHIP Reauthorization Act are examples of the move from traditional fee-forservice to alternative payment models (CMS, 2015).

Reimbursement opportunities. To achieve the goal of reducing cost and improving quality, reimbursement model changes have led to the expansion of cost-effective ambulatory care settings and services. Reimbursement policies provide financial incentives for high-quality coordinated care and transition management, as well as penalties for readmission for many common diagnoses (Bindman, Blum, & Kronick, 2013; CMS, 2016a; Edwards & Landon, 2014). New CMS Transitional Care and Chronic Care Management billing codes, implemented in January 2014 and January 2015 respectively, provide an increase in reimbursement for office visits associated with care coordination and transitional care services. These models permit payment to community-based physicians, partnered with the patient and an interprofessional care team, to recognize coordinated, longitudinal, interprofessional care delivery (Berenson, Paulus, & Kalman, 2012; Bindman et al., 2013; CMS, 2015; Edwards & Landon, 2014). Adoption of these new payment models highlights CMS' willingness to invest new resources in ambulatory care that support improved transitions and offer the promise of higherquality care and lower overall costs (Berenson et al., 2012).

State programs. States have also adopted changes that impact models of payment. For example, Rhode Island's multi-year Chronic Care Sustainability Initiative, with RN case managers integrated into primary care teams in 43 primary care settings, is now serving 320,000 consumers (Patient-Centered Primary Care Collaborative, 2015). Additionally, a recent evaluation of Minnesota's Health Care Home initiative demonstrated sustained cost savings, improved health indicators, access, and patient satisfaction, and includes care coordination as a program requirement (Wholey et al., 2015).

*Nurse-managed clinics.* Nurse practitioners and RNs deliver care in a variety of settings, functioning both independently and collaboratively providing "clinical, management, and accountability roles in innovative primary care models such as nurse-managed health centers and retail clinics" (Naylor & Kurtzman, 2010, p. 893). An integrated review of the literature between 2000 and 2012 indicated nursemanaged health centers received less federal financial support than federally qualified health centers, underscoring the need for further study to determine the financial viability and sustainability of support for nurse-managed clinics (Ely, 2015). In 2010, the ACA authorized up to \$50 million in funding for nurse-managed clinics (Robert Wood Johnson Foundation, 2011).

Ambulatory care RN roles. For over 100 years, nurses have served patients in their homes and communities. Recent emphasis on population health has restored a national focus on health promotion, self-management support, and the value of community-based care. Ambulatory care RNs are present in community health centers, schools, clinics, and patient homes. A key concept of population health is looking at the whole person, understanding that an individual may view themselves as healthy despite illness or disability (Radzyminski, 2007). This shifts the paradigm from a traditional medical perspective to one more aligned with nursing's core beliefs. As defined by ANA (2016),

Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, facilitation of healing, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, groups, communities, and populations. (para 1)

Growing evidence demonstrates the impact of RNs in a variety of ambulatory care roles. RNs in care coordination and transition management roles provide high-value, safe care to at-risk populations such as patients with multiple chronic conditions (Haas, Swan, & Haynes, 2014). Functioning both independently and as part of teams, ambulatory care nurses lead and facilitate interprofessional care teams in patient-centered medical homes, specialty care practices, telehealth centers, nurse-led clinics, and other settings.

The role of the ambulatory care RN is underscored through interventions identified by systematic reviews such as the value of nurse-led teams and clinics, patient self-management support, use of telehealth and structured telephone support, primary education interventions, and the role of the nurse as part of larger care teams (Boren, Fitzner, Panhalkar, & Specker, 2009; Clark, Inglis, McAlister, Cleland, & Stewart, 2007; Haas & Swan, 2014; Ingles, Clark, McAlister, Stewart, & Cleland, 2011; Jovicic, Holroyd-Leduc, & Straus, 2006; Koh, Brach, Harris, & Parchman, 2013; Naylor et al., 2004; Roccaforte, Demers, Baldassarre, Teo, & Yusuf, 2005; Takeda et al., 2012; Trehearne, Fishman, & Lin, 2014; Weintraub et al., 2010). Additional studies demonstrate the effectiveness of nurse-led and patient-centered care coordination that aim to improve patient outcomes while decreasing costs (Bodenheimer et al., 2015; Boult et al., 2009; Coleman, Parry, Chalmers, & Min, 2006; Funk & Davis, 2015; Naylor, Aiken, Kurtzman, Olds, & Hirschman, 2011; Naylor et al., 1999; Trehearne et al., 2014; Tucker et al., 2013). Other studies addressed positive outcomes associated with care for chronically ill patients, including reduced admissions and readmissions, reduction in secondary complications, reduced mortality, and reduced cost of services for patients managed in nurse-run clinics (Cipriano, 2011a; Peter et al., 2011; Raftery, Yao, Murchie, Campbell, & Ritchie, 2005; Schadewaldt & Schultz, 2010).

Through competent clinical care across the lifespan, facilitating transitions across care settings, coordinating care among multiple specialties, and obtaining needed resources and services, ambulatory care RNs decrease unnecessary utilization and associated costs, and allow complex patients to remain in their homes and communities longer (Kelly & Godin, 2015). The ANA describes the value of nursing care coordination as integral to the "process to improve patient care quality and outcomes, and to decrease costs across patient populations and health care settings" (Camicia et al., 2013, p. 492).

The current dynamic nature of rapidly changing population demographics, restoration of a focus on wellness and health promotion, plus a national mandate to reduce cost, offers unprecedented opportunities for ambulatory care RNs to contribute positively to improved health outcomes, an efficient and effective care delivery system, and more equitable social policy.

#### **Professional Nursing and Strategic Collaborations**

The most recent national survey of nurses, completed in 2008, shows ambulatory care settings employ 25% of all RNs in the United States (U.S. Department of Health and Human Services [DHHS], 2010). Although more recent data are not available, explosive development of ambulatory care settings and roles for RNs and pressure to reduce hospitalizations would likely demonstrate an increase in RN employment in ambulatory care settings. Availability of workforce data is critical for the nursing profession. The IOM (2010, 2015) identified the need for workforce data as a priority recommendation to evaluate progress in meeting goals of a transformed healthcare system.

The practice of professional nursing requires "specialized knowledge, skill, and independent decision-making" (National Council of State Boards of Nursing, 2016, para. 1). A nurse who cannot provide competent nursing care for any reason may pose a risk to the public. In an effort to protect the health, safety, and welfare of residents, states have enacted nurse practice acts (NPAs) that define the practice of nursing and enable action if there is a risk of harm. The NPA alone is not sufficient to guide practice questions; therefore, it establishes a Board of Nursing that has the authority to develop and promulgate administrative rules and regulations to clarify practice questions. State Board of Nursing interpretation may not go beyond parameters set forth in the NPA, but provides further interpretation and clarity. This structure has led to state-based differences in nursing practice.

In addition to nursing practice regulation, the profession is also impacted by professional organizations, accrediting or certifying agencies, and workplace policy and practices. Significant variability remains regarding appropriate roles for both licensed and unlicensed caregivers in ambulatory care practice settings (AAACN, 2011a), with nurses often practicing below clinical licensure, certification, education, and training (The Advisory Board, 2013).

To promote the role of the RN in ambulatory care, AAACN has developed collaborative partnerships with many healthcare organizations. These partnerships identify key current and future opportunities to contribute to healthcare reform and advancement of ambulatory nursing practice. Through these collaborative efforts, ambulatory care nurses help to drive healthcare practices and define their role as nursing leaders of today and for the future.

#### **Nursing Challenges in Ambulatory Care**

Although the changing healthcare arena poses significant opportunity for RNs in ambulatory care, it also poses many challenges.

*Societal changes.* Registered nurses, working with other health leaders, will need to design and implement care delivery systems that meet the needs of a U.S. population which will be larger, older, and increasingly diverse, often with complex physical and behavioral health needs. Delivery systems will need to provide high-quality care for populations as well as individualized care demanded by consumers and made possible through technological advances. Mobile applications, social media, and still undiscovered ways to access health information and providers will pose ongoing challenges to care coordination. Increasing societal violence also impacts ambulatory care environments, creating challenges in settings that lack the infrastructure and resources of large facilities.

*Healthcare environment.* The ambulatory care environment is often characterized by fragmented care delivery systems that struggle to coordinate care across sites and specialties. Ambulatory care practice has increasing regulatory control and expectations around quality, safety, and service, that impact reimbursement and ability to compete for contracts.

Quality and patient satisfaction data are transparent and can be found on numerous public websites. There is increasing national coalescence around quality measures (CMS, 2016b) and evidence supporting those sensitive to nursing intervention (Mastal, Matlock, & Start 2016). New models of care are being evaluated across the country, most of which leverage a team-based approach. In a time of increasing consumer demand and expectation, there is growing concern over a predicted shortage of primary care providers (DHHS, 2013).

Integration of health records. Lack of integration of health records has long been a key contributor to care fragmentation, posing substantial challenges for coordination of care in ambulatory care settings. Currently longitudinal care goals and plans are not easily accessible for patients and caregivers across settings, providers, and services. This contributes to threats in continuity, safety, and quality, and can add unnecessary cost (Cipriano et al., 2013).

Currently, the design of electronic health records (EHR) poses a challenge as they do not provide the patient-centered focus necessary to support complex care coordination and transitions of care. The linear design does not capture the dynamic nature of the patient experience and the high cost is still a barrier to many settings. Difficulty of integration and the lack of interoperability with other providers and systems pose significant challenges (Cipriano et al., 2013; Furukawa et al., 2014).

*Changing reimbursement models.* Evolving reimbursement models present a significant challenge for ambulatory care nursing. It is important the profession of nursing and AAACN continue to work closely with CMS, other payers, and regulatory agencies to ensure understanding of nursing scope of practice. Historically, nursing has struggled for billing recognition from thirdparty payers, achieved by other allied health professionals. Nursing has much to offer in a redesigned health-care system. Reimbursement policy should reflect nursing practice contributions (O'Neil, 2009).

Ambulatory care nursing workforce. Nurses working in an increasingly complex ambulatory care practice require skill development and situational translation of knowledge to an ambulatory care environment. This environment, once characterized by the physician working with primarily unlicensed staff, is now an expanded group of professionals working as teams. Team members may include physicians, advanced practice nurses, physician assistants, RNs, licensed practical nurses, pharmacists, social workers, therapists, medical assistants, community health workers, and other support staff. Models of care continue to evolve, although confusion exists regarding the role and scope of each care provider, which is often determined by workplace mores rather than actual practice scope and licensure.

*Nursing* education. Despite rapid evolution of ambulatory care environments, the current nursing education system anchors its curriculum in acute care. An unwritten supposition of nursing education is that nurses begin practice in inpatient settings to gain experience prior to transitioning to ambulatory care roles. This supposition does not serve ambulatory care practice well for several reasons. First, the hospital skillset is not the same one needed for ambulatory care practice (Tanner, 2010). Next, given the demand for staff, ambulatory care practice must find ways to successfully integrate new graduates directly. For this to occur, nursing educators and thought leaders must identify ways to evolve clinical experiences and curricular content to meet the immediate and future needs of ambulatory care practice (Niederhauser, MacIntyre, Garner, Teel, & Murray, 2010). To support this curricular change, the NCLEX exam, which continues to be slanted toward acute care settings (Tanner, 2010), must also reflect ambulatory care practice.

## Ambulatory Care Nursing Professional Growth and Future Direction

Continued development of expanded roles for RNs will require a workforce prepared for ambulatory care practice. This expanded practice of nursing will require a strong evidence base with demonstrated outcomes; effective partnerships with patients, families, other disciplines, and payers; and innovative applications of existing and new skills. Participation in professional organizations, such as AAACN, supports professional growth, scholarly activities, and networking, and provides a strong voice for ambulatory care nursing, recognized by other professional groups, regulatory agencies, third-party payers, and policymakers.

Although tremendous progress has been made since publication of the initial AAACN (2011a) position statement regarding the Role of the Registered Nurse in Ambulatory Care, there is still much work to be done. Creating a future that maximizes the role of RNs in an evolving healthcare environment will require sustained momentum in nursing practice, education, research, and leadership.

*Practice.* Practice innovation will require strong partnerships between ambulatory care nurses and professional organizations, universities, and state Boards of Nursing to co-create a healthcare future in which RNs can safely and competently manage diverse patient care needs with consistent practice standards across state boundaries. This includes empowering RNs to engage in clinical decision making and enhance their ability to take independent action facilitated by:

- Development and implementation of standard treatment guidelines, protocols, and patient-specific order sets that allow for care and treatment for diagnosis and treatment of minor ailments (Smolowitz et al., 2014).
- Preventive care and health-promotion activities.
- Women's health.
- Chronic disease management including health

coaching and lifestyle change education, selfmanagement support, medication adherence monitoring, medication titration by protocol, and patient-specific orders (Bodenheimer et al., 2015).

- Support for RNs pursuing continuing education/certification to gain additional skills in performing specialized functions and procedures.
- Continued development of care coordination and transition management and other specialized roles (Haas & Swan, 2014).
- Development of patient-centric tools that facilitate care across systems and locations (Flodgren et al., 2015).

*Education.* Creating workforce-ready RNs requires partnering with faculty and schools of nursing to redesign undergraduate and graduate curricula to prepare nurses for new roles in ambulatory care. This is facilitated by:

- Ambulatory care experiences as part of undergraduate curriculum and opportunities for ambulatory care nurses to serve as clinical scholars and faculty (Tanner, 2010).
- Graduate educational opportunities for practice development and research.
- Ambulatory care residencies for new nurses and experienced nurses new to ambulatory care practice (AAACN, 2014; IOM, 2010; Josiah Macy Jr. Foundation, 2016; Niederhauser et al., 2010).
- Ambulatory care residencies for nursing faculty to enhance ambulatory care practice knowledge.
- Promotion of BSN, graduate education, and lifelong continuing education for nurses in ambulatory care practice (AAACN, in press).

*Healthcare reimbursement.* To have a significant impact on healthcare costs, ambulatory care nurses must aggressively partner with healthcare reimbursement and regulatory agencies to:

- Pursue reimbursement policy that recognizes and rewards nursing's contribution to health, wellness, and illness care (Fraher et al., 2015).
- Align NPAs and reimbursement policy to allow nurses to practice to their full scope without additional co-signature (IOM, 2010).
- Partner with regulatory agencies to develop and modify standards that reflect nursing contributions in ambulatory care (Fraher et al., 2015).
- Promote the recognition of independent nursing practice, similar to pharmacy and social work, preventing ambulatory care nursing from becoming part of "general care" similar to hospital nursing as part of the "room rate" (Bodenheimer et al., 2015).

Expanded evidence-base for ambulatory care nursing practice. To build the science of ambulatory care nursing, clinical nurse researchers must be engaged in the development of new knowledge and innovation to build the evidence base needed to support ambulatory care practice to:

- Develop, implement, and evaluate new care delivery models (American Organization of Nurse Executives [AONE], 2015).
- Incorporate patient-centric principles into care and facility design.
- Utilize and expand the knowledge base for ambulatory care nursing practice (AAACN, in press)
- Share new knowledge and quality improvements through scholarly presentations and publications.
- Promote nursing accountability for nurse-sensitive quality metrics (AAACN, 2016; Mastal et al., 2016).
- Utilize data to drive decisions (AONE, 2015).

*Leadership.* Healthcare leaders and policymakers must be educated regarding ambulatory care nursing practice, reimbursement, and regulatory issues to ensure models designed:

- Are effective and efficient in providing care for populations, communities, and individuals (AONE, 2015).
- Support working at top of license and scope (AONE, 2010).
- Clarify role confusion.
- Demonstrate value (Care Continuum Alliance, 2012).

#### Conclusion

Over the past decade, professional nurses in ambulatory care have worked together to increase their organizational leadership expertise and identify a unique body of nursing knowledge specific to ambulatory care environments (AAACN, 2010, 2011a, 2011b, 2012, 2014, 2015, in press; Laughlin, 2006; Mastal et al., 2016; Robinson, 2001). Additionally, through face-to face and telehealth encounters, they have established regular, consistent, often long-term relationships with patients and families. This combination of specialty knowledge, leadership skills, and relational expertise positions RNs to contribute constructively to the emerging models of ambulatory care.

The evolving Patient-Centered Medical Home model reinforces the critical need for RNs to provide chronic disease management, care coordination, health-risk appraisal, health-promotion, and diseaseprevention services (IOM, 2010, 2015; Cipriano, 2011b; Haas, Vlasses, & Havey, 2016; Mastal, Reardon, & English, 2007; Palsbo, Mastal, & O'Donnell, 2006). This confluence of abilities and accomplishments provide ambulatory care RNs with unique capacities to partner with other health professionals in reforming the U.S. healthcare system. Ambulatory care RNs are competently poised to lead improvements in service delivery within their organizations and beyond – improvements that will enhance health outcomes for patients (IOM, 2010, 2015).

The need for healthcare reform, improved safety and quality, and improved population health outcomes calls for strong and immediate action on the part of ambulatory care RNs to:

- Communicate the powerful story of professional progress made by ambulatory care nurses and articulate their ability to positively impact patient care and outcomes.
- Expand the body of knowledge for ambulatory care clinical and telehealth nursing practice by conducting and/or applying the findings of scientific studies that build evidence-based nursing practice.
- Lead organizational efforts to define and implement professional nursing responsibilities that promote autonomy, enhance collaboration, improve patient care, and address core competencies in care coordination and transition management.
- Ensure EHRs include robust documentation tools that support professional ambulatory and telehealth nursing practice.
- Establish strategic alliances between health systems and academic institutions to develop curricula that prepare students to practice as RNs in ambulatory care environments.
- Pursue partnerships with regulatory and standard setting agencies to identify and measure indicators of patient safety and quality of care in ambulatory care nursing practice.
- Design organizational cultures and structures that spur and reward innovation.
- Collaborate with professional organizational colleagues to define the duties and responsibilities for each member of the healthcare team.
- Develop an agenda that informs the nursing community, healthcare professionals, and political stakeholders at the local, state, and federal levels of the value and cost-effectiveness of professional ambulatory care nurses. *The time to act is now.* **\$**

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# Endorsements

Academy of Medical-Surgical Nurses American Association of Nurse Anesthetists American Association of Occupational Health Nurses American Nephrology Nurses Association American Psychiatric Nurses Association American Society for PeriAnesthesia Nurses Association for Nursing Professional Development Association of Pediatric Gastroenterology and Nutrition Nurses Association of Rehabilitation Nurses Infusion Nurses Society National Association of Pediatric Nurse Practitioners National Association of School Nurses Oncology Nursing Society Society of Gastroenterology Nurses and Associates

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#### Many settings. Multiple roles. One unifying specialty.

## Role of the RN in Ambulatory Care Tip Sheet and Exemplars

In January 2017, AAACN published its updated Position Paper on the Role of the RN in Ambulatory Care. This Tip Sheet is provided as a tool to support nurses in using the position paper within their organizations. Key points and examples of practice applications are included.

#### Background

The transition of health care from acute to ambulatory care settings has increased the complexity of care delivered outside acute care hospitals, bringing changes to accessing, implementing, and coordinating care services. This shift has dramatically increased the need for professional nursing services in ambulatory care settings to meet patients' complex needs. In addition to providing complex procedural care, professional nursing services furnish support to patients and families in decision-making, navigating complex health care systems, coordinating services, and applying strategies that enhance disease management.

Ambulatory care registered nurses (RNs) work both independently and collaboratively across the continuum of care, partnering with patients, caregivers, providers, and other health care professionals in the design and provision of care in an expanding array of community health settings. Further, they have expertise in the development, implementation, and measurement of quality indicators specific to the ambulatory care environment that will improve clinical practice and patient outcomes.

#### Recommendations

Health care providers, insurers, and educational systems can contribute to the emerging paradigm of health care in the United States by:

- Recognizing and supporting RNs as leaders in the transformation of health care in the ambulatory care setting (IOM, 2010).
- Encouraging RNs to practice at the top of their license, education, and expertise to affect quality and cost through patient engagement, care coordination, enhanced teamwork, resource reduction, improved access, and quality and outcome improvement.
- Partnering with faculty and schools of nursing to design undergraduate and graduate curricula to prepare nurses for new roles in ambulatory care.
- Implementing ambulatory care nurse residencies in health facilities for new nurses and experienced nurses new to ambulatory care practice.
- Ensuring that government and insurance carriers recognize cost reductions that RNs provide under new reimbursement models linked to improved outcomes.
- Engaging RNs to lead, participate in, and support performance improvement activities that promote and enhance quality and safety, improve efficiency in care delivery, and evaluate impact on patient outcomes.
- Urging researchers to build the science of ambulatory care nursing by engaging in the development of new knowledge and innovation that will expand the evidence base needed to support improved quality practice.

### **Role of the RN in Ambulatory Care Exemplars**

Recommendation: Encouraging RNs to practice at the top of their license, education, and expertise to affect quality and cost through patient engagement, care coordination, enhanced teamwork, resource reduction, improved access, and quality and outcome improvement.

#### Exemplar #1: Nurse-Led FMT Procedure

#### Children's Hospital Colorado

Fecal Microbiota Transplant (FMT) is a new treatment for recurrent C.diff infections with resolution of infection as high as 90%. Ambulatory care RNs at Children's Hospital Colorado worked with GI specialists to initiate a nurse-driven FMT procedure delivering stool donor bank-derived fecal material into the stomach via nasogastric tube (NGT) or gastrostomy tube (G-tube).

#### Outcomes

Treatment success in pediatric patients is comparable to published data.

Exemplar #2: Health Information Technology Tools to Support the Implementation of a Complex Care Management Program

#### Community Health Center, Inc. (CHCI) Middletown, CT

An electronic dashboard was developed through the collaboration of frontline RNs, Business Intelligence, the Quality Improvement Department, and the Ambulatory Chief Nursing Officer to provide nurse care managers (NCMs) with decision support for Complex Care Management Program across 12 clinical sites.

The dashboard is updated daily by extracting data from individual electronic health records based on an algorithm using Uniform Data System (UDS) measures along with other clinical markers. It is then populated with the medical record numbers of patients who meet these criteria, including uncontrolled hypertension, diabetes and asthma. The dashboard lists a patient's last recorded blood pressure, hemoglobin A1c, and smoking status. It indicates whether the patient has had two or more visits to an emergency room within six months, and if the patient has 4 or more chronic conditions listed on their active problem list.

#### Outcomes

The dashboard lends timely decision support and organization to NCMs to improve their ability to identify patients who would most benefit from Complex Care Management.

Recommendation: Engaging RNs to lead, participate in, and support performance improvement activities that promote and enhance quality and safety, improve efficiency in care delivery, and evaluate impact on patient outcomes.

#### Exemplar #1: Enhanced Nurse Visits for Patients with Uncontrolled HTN

#### Mayo Clinic, Rochester MN

Development and testing of a nurse visit series to assist patients with uncontrolled hypertension (HTN). This visit includes patient-centered lifestyle management education and hypertension medication titration and monitoring utilizing a nursing protocol and provider directed order set.

#### Outcomes

- 93% achieved BP goal compared to usual care group 86%.
- Nurses' outcomes comparable to usual care but in much shorter time period.
- Average weeks to goal RN: 2; provider: 17.
- Provider satisfaction high (63% likely or very likely to enroll).
- Nurse satisfaction high (70% very satisfied).
- Patient satisfaction very high (100% very satisfied).
- Protocol/order set performed well with minimal need for provider advice.

#### Conclusion

Registered nurse visits utilizing evidence-based standards can support patients' ability to achieve blood pressure control in a shorter period of time, as compared with usual care, with high patient, provider, and nurse satisfaction, opening provider access for patients with more complex needs.

## **Role of the RN in Ambulatory Care Exemplars**

#### Exemplar #2: Cost Savings Through Use of Ambulatory Infusion Center vs ED for Pediatric Migraine Treatment

#### Children's Hospital Colorado

Chronic headaches and migraines are a significant cause of missed school and extracurricular activity for school age/adolescent populations. The emergency department (ED) is often used for treatment for fluids and intravenous medications. Average cost of care for ED headache treatment for each patient was \$2,539-\$3,375 compared to average cost of care in an ambulatory infusion center of \$700-\$900.

The clinic RN identified high ED utilization and cost for this patient population, then expanded nurse telephone triage guidelines to allow RNs to refer patients directly to the infusion center. She also worked with the infusion center to increase access.

#### Outcomes

Use of the infusion center increased 272% over one year while ED visits decreased. There was high patient and RN satisfaction with the new process.

## Exemplar #3: Development of a Transitional Care Center to Decrease Readmission Rate for Heart Failure Patients

#### Yale New Haven Hospital

In 2012 Yale New Haven Hospital (YNHH) had a readmission rate of 30% for heart failure (HF) patients. This prompted the development of a Transitional Care Center (TCC), a collaborative practice model between inpatient units and ambulatory care resources.

#### Transitional Care Management (TCM) focused on six interventions:

#### **Acute Phase**

- 1. Visit by APRN in hospital
- 2. HF specific discharge planning
- 3. 7-day follow up appointment scheduled prior to discharge
- 4. Patient/Caregiver HF education initiated prior to discharge

#### **Transition Phase**

5. 48-Hour discharge phone call

#### **Secondary Care**

- 6. Interventions to increase same provider continuity:
  - Medication reconciliation
  - Continued Education

At the end of the first year a study was done to evaluate:

- Consistent provision of the 6 TCM interventions.
- Patient demographics and baseline characteristics.
- Adherence to TCM interventions.
- The effect of TCM on 30-day all-cause readmissions.

#### Outcomes

Among the HF patients receiving care through the TCM, the 30-day readmission rate was lower than the published national rate, suggesting TCM was effective for reducing HF readmission in the high-risk population.

## **Role of the RN in Ambulatory Care Exemplars**

Recommendation: Implementing ambulatory care nurse residencies in health facilities for new nurses and experienced nurses new to ambulatory care practice.

#### Exemplar #1: Improving the Onboarding Process for Clinical Staff in the Ambulatory Care Setting

#### Wellstar Medical Group

(230 medical specialties)

A robust, comprehensive 4-week residency and onboarding program was created for the ambulatory care clinical staff including simulation, extensive preceptorship and competency completion to ensure patient safety and quality is met before the new employee even steps into their new role independently.

#### Outcomes

New employees feel supported and satisfied with their orientation experience, patient safety is elevated, quality is being taught at the front end.

Recommendation: Urging researchers to build the science of ambulatory care nursing by engaging in the development of new knowledge and innovation that will expand the evidence base needed to support improved quality practice.

Exemplar #1: An independent DNP project in the ambulatory care setting looked at the use of culturally sensitive education on heart health in the African American (AA) community.

#### Background

Cardiovascular disease is the foremost cause of mortality of adults in the United States. Although there have been substantial improvements in hypertension awareness in the general population, African Americans continue to suffer disproportionately in hypertension and related heart disease.

#### Purpose

The purpose of this scholarly project was to determine if the use of culturally appropriate education would impact the awareness of risk factors associated with heart disease in AA adults in a church-based setting.

#### Methods

- A pre- and post-test design was utilized.
- Project setting interdenominational church located in suburban Houston.
- Target population African American adults.
- Diverse ages (25-75 or >) (n=19).
- Participants recruited directly from congregation.
- Flyers and letters of participation were distributed.
- Education and healthy habits were provided using the NIH evidence-based heart
- health manual.
- Evaluation tools:
  - General Self-Efficacy Scale (GSES)
  - Hypertension Evaluation of Lifestyle & Management Scale (HELM)

#### Results

- Two Paired Samples t-test used to examine mean scores/standard deviation and p value
- Mean of GSES significantly increased from pre-intervention (M=3.44, SD=.53)
- Post-intervention (M=3.60, SD=.39) p=0.005
- Mean of HELM did not significantly increase from the pre-intervention (M=1.89, SD=.24)
- Post-intervention (M=1.76, SD=.14) p=0.056

#### **Conclusions and Clinical Implications**

- Nurses are ideally situated to inform patients about HTN and other risks related to heart disease.
- Awareness of disparities that affect individual needs are gained through the nurse's community involvement.
- Patient attitudes on health are influenced by cultural differences and beliefs.
- Nurses must respect those differences to build trust and increase communication.
- Nurses can proactively assess patient needs for social services to address medication affordability.

The Role of the RN in Ambulatory Care Exemplars was developed by the AAACN RN Role Position Paper Task Force for informational purposes only. AAACN does not endorse or make representations with respect to the research, services, treatment plans, or products described in this document. All information found here was believed to be correct at the time of inclusion and is subject to change, based on new research and development, and does not necessarily express the views of AAACN.