

# **A Primary Care Nursing Perspective on Chronic Disease Prevention and Management**

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## **EXECUTIVE SUMMARY**

Today, there is growing interest in advancing health care outcomes through the utilization of registered nurses in ambulatory settings such as primary care facilities. Western medicine exist a longstanding ethos that promulgates the treatment of acute illnesses and injuries, but as the field progresses, so should our focus. There is a need today to focus on and grow the fields of preventative care and chronic disease management.<sup>1</sup> In America today we have an aging population. According to the most recent consensus projections, the proportion of the US population aged 65 or older is expected to rise from 12.7 percent to 19.3 percent in 2030.<sup>2</sup> As the population continues to age a dramatic growth in demand for health care services will be seen.<sup>1</sup> Historically, physicians cared for patients individually in their private practices. Due in large part to their smaller size, many of these physician practices, do not utilize RNs and in where RNs are used their primary role is to triage telephone calls. As we move into the 21st century and demands on healthcare systems, physicians, and accountable care organizations are to meet and manage the health care needs of the communities where they are located in the most optimal way possible.<sup>3</sup>

This article will explore the importance of the role of the RN in the Primary Care setting and their role in managing and preventing chronic diseases in the population they serve. Primary health care is a conceptual model that is used to describe a holistic structure of health care delivery and focuses on the specific needs of communities. Primary health care encompasses a broad spectrum of services, including disease prevention, health promotion, population health, community development, and target social determinants of health, such as income, housing, education, and environments. In response to the increasing emphasis being placed on the management of patients with chronic diseases in the primary care setting, strategies that enhance the coordination and comprehensiveness of the healthcare delivery to these patients have been developed and will be explored.<sup>4</sup>

## **INTRODUCTION**

According to the American Academy of Ambulatory Care Nursing (AAACN), Ambulatory care nursing is a unique realm of specialized nursing practice.

RNs in the ambulatory setting are leaders in their practice settings and are uniquely qualified to influence organizational standards related to patient safety and care delivery in the outpatient setting.<sup>5</sup> RNs in the inpatient setting are highly regarded as critical thinkers often implementing and providing care utilizing the steps of the nursing process which promote excellent quality care. As more and more patients transition from inpatient to outpatient settings, there is a greater demand for professional nursing services in the outpatient settings. RNs can utilize the same steps of the nursing process, which include assessment, nursing diagnosis, planning, implementing, and evaluation in caring for individuals in the outpatient setting. Tools used to provide care are order sets, protocols, and care plans. Primary Care offices can utilize registered

nurses in day to day patient care delivery, education, self-management support, chronic disease care management and care coordination of services, and oversight and collaboration of panels of individuals. Providing these services will make a positive impact on patient outcomes and will prevent chronic diseases. In Canada, payment models have recently been implemented in primary care to address the increasing burden that patients with chronic diseases place on the Canadian healthcare system.<sup>4</sup>

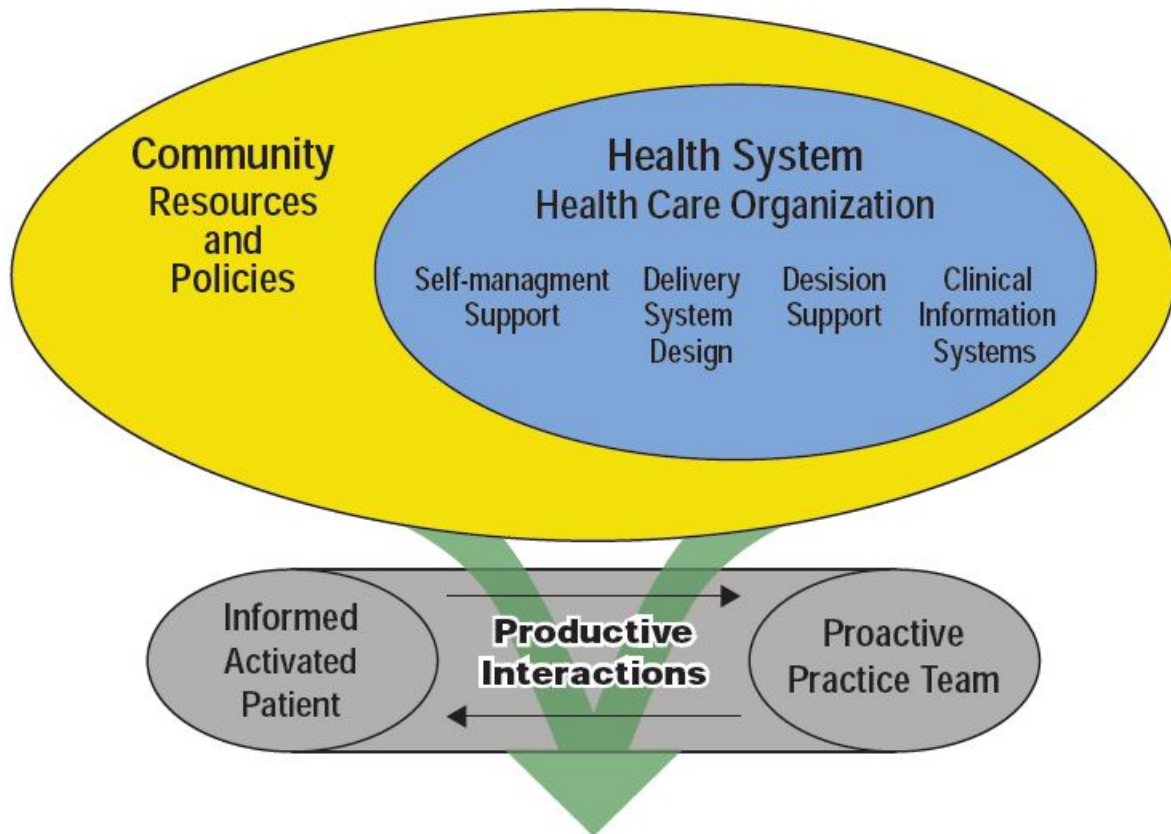
## **CHRONIC DISEASE**

The Chronic Care Model identifies six fundamental areas that form a system that encourages high-quality chronic disease management. Organizations must focus on these six areas, as well as develop productive interactions between patients who take an active part in their care, and providers who have the necessary resources and expertise. The changes listed below for each area of the Chronic Care Model can be applied to a variety of chronic illnesses, health care settings, and target populations (see Figure 1).

### Changes for Improvement

- Self-Management Support - Patients with chronic illness need support, as well as information, to become effective managers of their own health. In order to meet these needs, it is essential for them to have the following:
  - o Basic information about their disease
  - o Understanding of an assistance with self- management skill building
  - o Ongoing support from members of the practice team, family, friends, and community
- Delivery System Design - Designate staff to be responsible for follow-up by various methods, including outreach workers, telephone calls, and home visits.
  - o Identify follow-up needs, such as eye exam, dental care, HbA1c, labs, and visits.
  - o Plan the follow-up approach, including who will contact patients, how, and when.
  - o Use phone, outreach workers, and mailings for follow-up.
  - o Generate reports from the registry to discover those patients in need of follow-up and generate contact lists.
  - o Ask patients for best methods and times to follow-up for check-back visit, pharmacy refills, etc.
- Decision Support- embed evidence based guidelines into the clinic
- Clinical Information Systems - A registry — an information system that can track individual patients as well as populations of patients — is a necessity when managing chronic illness or preventive care. The registry is the foundation for successful integration of all the elements of the Chronic Care Model. The entire care team uses the registry to guide the course of treatment, anticipate problems, and track progress.

- Organization of Health Care - The effort to improve care should be woven into the fabric of the organization and aligned with a quality improvement system.
- Community - To improve the health of the population, health care organizations reach out to form powerful alliances and partnerships with state programs, local agencies, schools, faith organizations, businesses, and clubs.

Figure 1. Clinical and Functional Outcomes<sup>6</sup>

## ROLE OF PRIMARY CARE NURSING IN PREVENTING AND MANAGING CHRONIC DISEASE

Chronic diseases are currently the leading cause of preventable death and disability worldwide and the prevalence and costs associated with chronic conditions are increasing globally.<sup>4</sup> As the prevalence of chronic diseases continues to increase, more emphasis is being placed on the development of primary care strategies that enhance healthcare delivery. Innovations include inter-professional healthcare teams and chronic disease management strategies. In the United States, 117 million people have one or more chronic conditions, with one in four adults having two or more.<sup>7</sup> Technology enhanced interventions such as electronic/virtual visits, patient portals and mobile device applications enhance the ability to improve patient and family engagement in care, provides health monitoring and supports patient self- management. There is evidence that supports positive outcomes associated with these interventions.<sup>7</sup>

Nurses play a vital role in chronic disease management and are well positioned to enhance the planning and delivery of the healthcare resources in primary care. In Canada, licensed practical nurses or registered practical nurses (LPNs/RPNs), registered nurses (RNs), and nurse practitioners (NPs) all contribute to the delivery of primary care services.<sup>4</sup>

In Ontario, Canada a study was conducted of nurses working in primary care settings, as well as a survey of a random sample of RNs, LPNs, and NPs. The results of the study reported that the nurses were engaged in chronic disease management activities but to different extents depending on their licensure. Chronic Disease management activities include tasks such as:

- vital signs,
- obtaining smoking history,
- encouraging exercise
- wound care
- administering immunizations/vaccinations
- using respiratory peak flow meters
- education on healthy diets,
- lifestyle counseling
- chronic disease education
- chronic disease clinics
- utilizing clinical practice guidelines
- ordering lab tests
- titrating medications.<sup>4</sup>

Nurse practitioners and RNs deliver care in a variety of settings functioning both independently and collaboratively providing clinical, management, and accountability. Recent emphasis on population health has shifted the focus on health promotion and self-management support. RNs in care coordination and transition management roles provide high value, safe care to at-risk populations such as patients with multiple chronic conditions.<sup>7</sup>

When RNs assist in the care of patients with chronic conditions, clinical outcomes for these patients improve compared with physician-only care.<sup>7</sup> RNs at Santa Rosa Community health centers perform chronic care visits, utilizing RN clinical skills, patient education, medication reconciliation, medication adherence counseling, and behavior change goal settings.<sup>7</sup>

In addition, many primary care centers have developed complex care management programs within the primary care clinics where RNs with extensive primary care experience care for patients with chronic conditions such as diabetes, hypertension, congestive heart failure, chronic obstructive pulmonary disease, asthma, chronic kidney disease and chronic pain. The RNs work under patient -specific orders allowing them to titrate medications such as diuretics for patients with CHF or insulin for diabetic patients. Pre and post utilization data collected by the San Francisco Department of Public Health Network show a 50% reduction in hospital days one year after enrollment and a 10% reduction in ED visits. Patients reported that the team helped motivate them to change behaviors and assisted with improved navigation of the health care

system. Providers reported having RNs involved with patient care delivery in caring for patients with chronic diseases saved them time. They also felt their patients were receiving better care. While the program's visits and phone calls are not billed, the savings from reduced hospital days are thought to be sufficient to financially sustaining the program.<sup>7</sup>

At Community Healthcare Center, Inc, all RN's work as members of the care team and perform independent chronic care visits for patients with diabetes, hypertension, asthma, or COPD. In these visits RNs do patient education, medication reconciliation and adherence counseling, patient goal setting and behavior-change counseling and provide care utilizing provider directed delegated orders.<sup>7</sup>

Assessment skills of RNs promoted early intervention when exacerbation of symptoms of chronic illnesses was identified. RN telephone communication is 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 such as transitions of care management are used to reduce readmissions.<sup>3</sup>

## **REIMBURSEMENT OPPORTUNITIES**

To achieve the goal of reducing cost and improving quality, reimbursement models changes have led to the expansion of cost-effective ambulatory care settings and services. New CMS transitional Care and Chronic Care Management 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.<sup>8</sup>

Transitional Care Management (TCM) encounters with patients are both reimbursable and require a licensed nurse or clinician to provide follow-up for post- hospital discharges.<sup>9</sup>

In addition to the TCM codes there are now Medicare's Chronic Care Management codes utilizing RNs in the primary care office. The Centers for Medicare and Medicaid Services recognizes Chronic Care Management (CCM) as a critical component of primary care that contributes to better healthcare for individuals. In 2015 Medicare began paying separately under the Medicare Physician fee schedule for CCM services furnished to Medicare patients with multiple chronic conditions. CCM services may be furnished by clinical staff such as RNs that are working with the billing provider. This will allow for improved management of chronic care and is reimbursable under the Medicare reimbursement Codes.<sup>9</sup>

Performing Annual Wellness Visits plays an important role in preventing chronic disease. These visits are billable for both the RN and NP. Medicare Annual Wellness Visit (AWV) is a visit that provides a personalized prevention plan for Medicare beneficiaries who are not within the first 12 months of their first Medicare Part B coverage period and have not received an Initial Preventive Physical Examination or AWV within the past 12 months. Annual Wellness Visits ensure Medicare beneficiaries are receiving appropriate screenings. In addition, Annual Wellness Visits provides an opportunity to mitigate risks identified during health risk assessments. Medicare encourages patients to have annual wellness visits, reimbursing the clinician.<sup>8</sup> An RN can perform the visit in accordance to CR 7079 who is supervised by a provider - the provider has to be in the building but does not have to see the patient.

The RN can perform this service as long as they are licensed professional for both new patients as well as established patients.<sup>10</sup>

The increasing complexity of care, along with a need for greater coordination of care, increases the demand for professional nurses in ambulatory settings. Efforts to conserve financial resources and more effectively utilize all members of the health care team have resulted in a need to fully understand the economic impact of RNs in outpatient settings. There is growing evidence that ambulatory care RNs impact patient satisfaction, reduce adverse outcomes, improve quality patient outcomes, and reduce emergency room/ hospital admissions through specific interventions.<sup>11</sup>

Care coordination is foundational to the health care reform goals of improving the quality of care for individuals and populations via the efficient and effective use of resources. The increased complexity of care, growing numbers of patients with chronic disease, and exploding health care costs heighten the need for better integration of care without increased expenditures. In numerous studies and analyses, registered nurses, in partnership with other providers, have integral roles that improve patient care quality through care coordination across health care settings and populations. The studies have provided evidence of the value of care coordination and related modalities to patients with chronic conditions. The American Nurses Association (ANA) position statement, *The Nurse's Essential Role in Care Coordination*, affirms that registered nurses are integral to the achievement of care coordination excellence.<sup>12</sup> The care coordination process is one aspect of professional practice through which registered nurses regularly influence patient care at every level.

The value of registered nurses in care coordination roles is demonstrated in numerous health care reform initiatives focused on integrative service delivery.

Nurse care coordination for children and youth with chronic conditions has resulted in improved quality and reduced costs. A pilot study, in the form of a randomized clinical trial, was used to test a TEAMcare collaborative care model for patients with depression and uncontrolled diabetes and/or heart disease into routine care of a patient-centered medical home clinic, and compared the experience of patients experiencing this program to individuals receiving usual care. The analysis of pilot results revealed similar benefits with respect to clinical outcomes as achieved by the clinical trial. More appropriate use of health services was found among patients receiving TEAMcare; these individuals experienced fewer emergency department visits, and greater primary care visits and pharmacy dispenses. These results suggest a nurse-led collaborative care program based on the TEAMcare protocol can be practically applied within routine primary settings for patients with complex health care needs and multi-morbidities. Health care systems should consider a greater role for nurses within a collaborative care model to achieve improved clinical outcomes and more appropriate use of health services for patients with multi-morbidities.<sup>7</sup>

## **CONCLUSION**

Team based primary care models are becoming more prominent in primary care offices. It is important to clearly understand the nursing contribution to chronic disease management and preventative care in primary care. There are clinical activities such as performing nurse led clinics, utilizing nurse protocols, and performing annual wellness visits, and chronic disease education that are instrumental in the management and prevention of chronic diseases.<sup>4</sup>

In addition, there are recommendations that can be considered in changing the RN role for the future, such as providing RNs with additional training in primary care and care management skills for patients with complex health care needs.<sup>7</sup>

Professional nurses have the potential for significant contributions to patient-centered, cost-effective care through the care coordination role. The ANA recommends continued nursing research, education and improvement in professional practices to explore options for nurse led care coordination models.<sup>12</sup>

The Institute of Medicine report on the future of nursing affirms that “Nurses are being called upon to fill primary care roles and to help patients manage chronic illnesses, thereby preventing acute care episodes and disease progression”<sup>1</sup>.

Primary care practices should consider utilizing nurses in patient care delivery, care coordination, and as leaders supporting office workflows. Overall, nurses play an integral role in preventing and managing chronic diseases. Utilizing nurses will improve patient outcomes, nurse and physician satisfaction, as well as patient satisfaction and improve the health of our communities.

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