

Nursing Roles In Addressing Complex And Chronic Health Conditions: A Comprehensive Review Of Care Models And Outcomes

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Abstract

This comprehensive review examines the evolving and multidimensional roles of nursing in the management of complex and chronic health conditions. As global healthcare systems face increasing burdens from long-term illnesses, multimorbidity, and aging populations, nurses play a pivotal role in ensuring continuity, coordination, and quality of care. The review synthesizes current evidence on nursing-led and nursing-integrated care models, including case management, chronic disease self-management support, transitional care, community-based nursing, and advanced practice nursing. Key outcomes explored include patient clinical indicators, quality of life, treatment adherence, healthcare utilization, and system-level efficiency. The review further highlights mechanisms through which nursing interventions influence outcomes, such as patient education, care coordination, psychosocial support, and interprofessional collaboration. Emerging trends—including digital health integration, nurse-led clinics, and expanded scopes of practice—are also discussed. Findings underscore that effective nursing engagement significantly improves outcomes for individuals with complex and chronic conditions while enhancing healthcare system sustainability. The review concludes with implications for practice, policy, and future research, emphasizing the strategic importance of nursing in chronic care transformation.

Keywords: Nursing roles, chronic conditions, complex care, care models, patient outcomes, integrated care

INTRODUCTION

Chronic and complex health conditions represent one of the most significant challenges facing contemporary healthcare systems worldwide. Conditions such as diabetes, cardiovascular disease, chronic respiratory disorders, cancer, and long-term neurological illnesses often require sustained, coordinated, and multifaceted care across extended

periods (World Health Organization, 2023). The growing prevalence of multimorbidity—defined as the coexistence of two or more chronic conditions in the same individual—has further intensified care complexity, increasing the risk of fragmented services, avoidable hospitalizations, and suboptimal patient outcomes (Barnett et al., 2018).

In this context, nursing has emerged as a central pillar in the management of chronic and complex conditions. Nurses operate across the full continuum of care, including acute hospitals, primary care, community services, and home-based settings, positioning them uniquely to ensure continuity, coordination, and person-centered care (Reeves et al., 2017). Unlike episodic, physician-centered models of care, nursing practice emphasizes holistic assessment, long-term monitoring, patient education, and psychosocial support—elements that are critical for managing long-term conditions effectively (Bodenheimer & Bauer, 2016).

Evidence increasingly demonstrates that nursing-led and nursing-integrated care models contribute significantly to improved outcomes for patients with chronic illnesses. These outcomes include better disease control, enhanced quality of life, improved treatment adherence, and reduced healthcare utilization such as emergency department visits and hospital readmissions (Keleher et al., 2019; Martínez-González et al., 2018). Advanced practice nurses, nurse case managers, and community nurses, in particular, have been shown to play vital roles in coordinating complex care pathways, supporting self-management, and addressing social determinants of health that influence long-term outcomes (Fraher et al., 2020).

The importance of nursing roles in chronic care has also been amplified by global health system pressures, including workforce shortages, rising healthcare costs, and the increasing demand for integrated and value-based care models (OECD, 2020). Health policy frameworks now increasingly recognize nurses as key contributors to system sustainability, task redistribution, and improved access to care, especially for populations with complex and long-term needs (Institute of Medicine, 2011; World Health Organization, 2020).

Despite the growing body of research on chronic disease management, much of the existing literature remains condition-specific or intervention-focused, often overlooking the broader and cross-cutting contributions of nursing roles across care models and settings. A comprehensive synthesis that consolidates evidence on how nursing roles influence patient, organizational, and system-level outcomes in complex and chronic care remains necessary.

Accordingly, this review aims to examine and synthesize current evidence on nursing roles in addressing complex and chronic health conditions, with a particular focus on care models, mechanisms of impact, and associated outcomes. By doing so, the review seeks to clarify nursing's strategic role in chronic care delivery and inform practice, policy, and future research directions.

Conceptual Foundations: Nursing and Chronic Care

The management of complex and chronic health conditions requires care approaches that extend beyond episodic treatment and acute symptom control, emphasizing continuity, coordination, and patient engagement over time. Nursing practice is conceptually aligned with these requirements, as it is grounded in holistic, person-centered, and relationship-based care frameworks that address the biological, psychological, and social dimensions of health. Understanding the conceptual foundations that underpin nursing roles in chronic care is essential for contextualizing their impact across diverse healthcare settings.

Chronic health conditions are generally characterized by long duration, slow progression, and the need for ongoing management rather than curative treatment. Complexity arises when individuals experience multimorbidity, functional impairment, psychosocial

vulnerability, or socioeconomic challenges that influence health outcomes and care trajectories (Salisbury et al., 2018). Such complexity necessitates integrated care approaches that can adapt to fluctuating patient needs, a requirement that aligns closely with nursing competencies in assessment, coordination, and long-term follow-up.

One of the most influential frameworks guiding chronic care is the **Chronic Care Model (CCM)**, which emphasizes productive interactions between informed, activated patients and prepared, proactive healthcare teams (Wagner et al., 2001). Within this model, nurses play a critical role in self-management support, decision support, and care coordination—functions that are essential for managing long-term conditions effectively. Evidence suggests that nursing-led implementation of CCM components improves disease control and patient experience across multiple chronic conditions (Davy et al., 2015).

Person-centered care theory further strengthens the conceptual foundation of nursing in chronic care. This perspective prioritizes individual values, preferences, and lived experiences, recognizing patients as active partners rather than passive recipients of care (McCormack & McCance, 2017). Nursing practice operationalizes person-centered care through therapeutic relationships, shared decision-making, and continuous patient education, all of which are particularly vital in chronic illness management where adherence and self-care are central to outcomes.

Additionally, continuity of care frameworks—relational, informational, and management continuity—provide a theoretical basis for understanding nursing contributions across care transitions (Haggerty et al., 2013). Nurses often serve as consistent points of contact for patients navigating complex health systems, facilitating information flow, coordinating services, and ensuring alignment between care plans and patient goals.

Drawing from these conceptual models, nursing roles in chronic care can be understood through four interrelated core functions. First, **comprehensive assessment and monitoring** enable early identification of clinical deterioration and unmet needs. Second, **patient education and empowerment** support self-management, health literacy, and behavioral change. Third, **care coordination and navigation** reduce fragmentation by linking patients with appropriate services across settings. Finally, **psychosocial and family support** addresses emotional distress, caregiver burden, and social determinants of health that influence long-term outcomes (Bodenheimer et al., 2009; Naylor et al., 2017).

Together, these conceptual foundations highlight nursing as a central integrative force in chronic care delivery. By embedding holistic assessment, person-centered engagement, and continuity-oriented practices into care models, nursing roles provide a theoretical and practical bridge between complex patient needs and sustainable healthcare system performance.

Nursing Care Models for Complex and Chronic Conditions

Nursing care models designed for complex and chronic health conditions aim to address the long-term, multidimensional needs of patients while reducing fragmentation and improving care continuity. These models emphasize proactive management, patient engagement, coordination across settings, and efficient use of healthcare resources. Evidence consistently demonstrates that nursing-led and nursing-integrated models play a critical role in improving outcomes for individuals with chronic and complex conditions. Nurse-led chronic disease management models involve nurses assuming primary responsibility for ongoing monitoring, follow-up, education, and clinical decision-making within defined scopes of practice. These models are commonly implemented in primary care clinics, outpatient specialty services, and community health settings. Advanced practice nurses often manage stable chronic conditions, adjust treatment plans in

collaboration with physicians, and provide structured follow-up using evidence-based protocols.

Research indicates that nurse-led models are associated with improved clinical indicators, such as glycemic control in diabetes, blood pressure management in hypertension, and symptom control in heart failure. These improvements are largely attributed to frequent patient contact, comprehensive education, and early identification of clinical deterioration. Additionally, nurse-led models enhance accessibility and continuity of care, particularly for patients requiring regular monitoring and long-term support.

Case management models position nurses as central coordinators of care for patients with high complexity, multimorbidity, or frequent healthcare utilization. In this model, nurse case managers conduct comprehensive assessments, develop individualized care plans, coordinate services across providers, and facilitate transitions between care settings. These roles are especially critical during hospital discharge, referral to community services, and long-term follow-up.

Care coordination models reduce service duplication, improve communication among multidisciplinary teams, and align care with patient goals. Evidence suggests that nurse-led case management reduces hospital readmissions, emergency department visits, and avoidable complications. By acting as consistent points of contact, nurses help patients and families navigate complex healthcare systems, thereby improving satisfaction and adherence to care plans.

Community and home-based nursing models focus on delivering care in patients' living environments, recognizing the importance of social, environmental, and functional factors in chronic illness management. These models include home visits, community clinics, outreach programs, and long-term monitoring for individuals with limited mobility or complex social needs.

Community-based nursing care has been shown to improve self-management, medication adherence, and early detection of health deterioration. Home-based models are particularly effective for older adults and patients with advanced chronic conditions, as they reduce unnecessary hospital admissions and support aging in place. Nurses in these settings often collaborate closely with family caregivers, addressing both clinical and psychosocial needs. Self-management support models emphasize empowering patients to actively participate in managing their conditions. Nurses play a central role in these models by providing tailored education, coaching, and behavioral support. Interventions may include goal-setting, motivational interviewing, lifestyle counseling, and the use of digital tools to support monitoring and adherence.

Evidence highlights that nurse-led self-management interventions improve health literacy, treatment adherence, and patient confidence in managing symptoms. These models are particularly effective when integrated into broader care frameworks, ensuring that education is reinforced through ongoing follow-up and support rather than delivered as isolated interventions.

Transitional care models address the vulnerable periods when patients move between healthcare settings, such as from hospital to home or from acute to long-term care. Nurses in transitional care roles ensure continuity through discharge planning, medication reconciliation, follow-up communication, and early post-discharge assessment.

Table 1. Nursing Care Models for Complex and Chronic Conditions

Nursing Care Model	Core Nursing Roles	Primary Care Setting	Target Patient Population	Key Outcomes
Nurse-led chronic	Monitoring, treatment	Primary care clinics,	Stable chronic conditions	Improved clinical control,

disease management	adjustment, patient education	outpatient services		continuity of care
Case management & care coordination	Comprehensive assessment, care planning, coordination	Hospitals, primary care, community	Multimorbidity, high utilizers	Reduced readmissions, improved coordination
Community-based nursing care	Home visits, long-term monitoring, caregiver support	Community clinics, home settings	Older adults, socially vulnerable patients	Enhanced self-management, reduced hospital use
Self-management support models	Education, coaching, behavioral support	Primary care, community programs	Long-term chronic illness	Improved adherence, quality of life
Transitional care models	Discharge planning, follow-up, medication reconciliation	Hospital-to-home transitions	High-risk chronic patients	Reduced readmissions, improved continuity

Studies demonstrate that nurse-led transitional care models significantly reduce readmissions, improve patient understanding of care plans, and enhance continuity across care settings. These models are especially beneficial for patients with multiple chronic conditions who are at high risk of adverse events during care transitions.

Impact of Nursing Roles on Patient Outcomes

The impact of nursing roles on patient outcomes in complex and chronic health conditions has been widely documented across diverse healthcare settings. Nursing contributions extend beyond task-based care to include continuous assessment, patient engagement, coordination, and advocacy, all of which are essential for achieving sustained improvements in long-term outcomes. Evidence from systematic reviews and large-scale studies indicates that nursing-led and nursing-integrated interventions positively influence clinical, patient-reported, and utilization-related outcomes.

Nursing roles have a measurable impact on key clinical indicators in chronic disease management. Nurse-led monitoring and follow-up enable early detection of symptom exacerbation, medication-related issues, and disease progression. Studies have shown that patients managed through nurse-led chronic care programs demonstrate improved glycemic control in diabetes, better blood pressure regulation in hypertension, improved symptom management in heart failure, and enhanced respiratory function in chronic obstructive pulmonary disease. These improvements are largely attributed to frequent patient contact, adherence reinforcement, and protocol-driven interventions delivered by nurses.

Additionally, nursing involvement in medication management—such as medication reconciliation, patient counseling, and adherence monitoring—has been associated with reduced adverse drug events and improved treatment effectiveness. Nurses' holistic assessment skills also contribute to the identification of comorbidities and psychosocial factors that may otherwise remain unaddressed, thereby improving overall disease stability and reducing complications.

Patient-reported outcomes, including quality of life, satisfaction with care, and psychological well-being, are particularly sensitive to nursing interventions. Chronic illness often imposes a significant emotional and social burden on patients and families,

necessitating continuous support and communication. Nursing roles emphasize therapeutic relationships, active listening, and individualized education, which enhance patient confidence and engagement in care.

Evidence indicates that patients receiving nursing-led self-management support report higher levels of health-related quality of life and greater satisfaction with care. Nurses play a key role in helping patients understand their conditions, set realistic goals, and develop coping strategies, which reduces anxiety and improves emotional well-being. Moreover, the continuity provided by consistent nursing contact fosters trust and shared decision-making, contributing to positive patient experiences.

Nursing roles significantly influence healthcare utilization patterns and patient safety outcomes. Nurse-led case management and transitional care interventions have been shown to reduce hospital readmissions, emergency department visits, and avoidable hospitalizations among patients with complex and chronic conditions. These effects are particularly evident during high-risk transition periods, such as discharge from hospital to home.

By ensuring effective discharge planning, medication reconciliation, and timely follow-up, nurses mitigate common causes of post-discharge adverse events. Furthermore, nursing surveillance and patient education reduce preventable complications, such as infections, exacerbations, and treatment errors. The cumulative effect is improved patient safety and more efficient use of healthcare resources.

Beyond immediate clinical and utilization outcomes, nursing roles contribute to longer-term benefits and health equity. Community and home-based nursing interventions address social determinants of health, including access barriers, caregiver burden, and health literacy. These interventions are particularly beneficial for older adults, individuals with multimorbidity, and socially vulnerable populations.

Table 2. Patient Outcomes Associated with Nursing Roles in Chronic and Complex Care

Outcome Domain	Nursing Interventions	Reported Impact
Clinical outcomes	Monitoring, medication management, symptom assessment	Improved disease control, reduced complications
Patient-reported outcomes	Education, counseling, psychosocial support	Improved quality of life, satisfaction, emotional well-being
Healthcare utilization	Case management, transitional care	Reduced hospital readmissions, fewer emergency visits
Patient safety	Surveillance, discharge planning, follow-up	Reduced adverse events, improved safety
Long-term outcomes	Community and home-based care, self-management support	Sustained adherence, reduced health disparities

By tailoring care to individual contexts and engaging families and caregivers, nurses help sustain treatment adherence and self-management over time. This sustained engagement is critical for preventing disease progression and reducing disparities in chronic care outcomes. Collectively, the evidence underscores nursing as a central driver of patient-centered, safe, and effective chronic care delivery.

System-Level and Workforce Outcomes

Beyond direct patient-level benefits, nursing roles in the management of complex and chronic health conditions exert substantial influence on healthcare systems and workforce performance. As health systems confront rising demand, constrained resources, and increasing care complexity, nursing-led and nursing-integrated models have emerged as critical mechanisms for enhancing efficiency, sustainability, and service quality.

Nursing involvement in chronic care delivery contributes significantly to improved system efficiency and cost containment. Nurse-led chronic disease management, case management, and transitional care models reduce unnecessary hospitalizations, prevent avoidable complications, and optimize service utilization. By emphasizing proactive monitoring and early intervention, nurses help shift care from high-cost acute settings to more appropriate primary and community-based services. Evidence suggests that these models are associated with lower overall healthcare expenditures, particularly for high-risk populations with multimorbidity and frequent hospital use.

Furthermore, nursing-led care supports value-based healthcare objectives by improving outcomes while controlling costs. Through standardized protocols, evidence-based practice, and continuous patient engagement, nurses enhance care consistency and reduce unwarranted variation. These efficiencies are increasingly recognized by policymakers and payers as essential components of sustainable chronic care systems.

The expanding role of nursing in chronic care has important implications for workforce planning and task redistribution. Advanced practice nurses, nurse practitioners, and clinical nurse specialists increasingly assume responsibilities traditionally performed by physicians, including assessment, follow-up, and management of stable chronic conditions. This role expansion enables more effective use of the healthcare workforce, alleviating physician workload and improving access to care without compromising quality.

Task shifting and skill mix optimization, when supported by appropriate training and regulatory frameworks, enhance workforce flexibility and resilience. Nurses' ability to manage complex care pathways, coordinate services, and provide continuity positions them as key contributors to integrated care delivery. These workforce models are particularly valuable in settings facing clinician shortages or serving geographically dispersed populations.

Nursing roles are central to strengthening interprofessional collaboration and organizational performance. Nurses often function as communication hubs within multidisciplinary teams, facilitating information exchange, aligning care plans, and ensuring continuity across settings. Effective collaboration reduces duplication, minimizes errors, and improves team efficiency.

At the organizational level, nursing leadership in chronic care initiatives supports quality improvement, patient safety, and innovation. Nurse-led programs often drive the implementation of clinical guidelines, care pathways, and monitoring systems that enhance organizational performance. Additionally, nursing involvement in data collection and outcome monitoring contributes to evidence-informed decision-making and continuous improvement.

While expanded nursing roles offer system benefits, they also highlight the importance of workforce well-being and sustainability. Managing complex and chronic care requires advanced competencies, emotional labor, and sustained engagement, which can contribute to workload pressures and burnout if not adequately supported. Investment in education, staffing, leadership development, and supportive work environments is therefore essential. Health systems that prioritize professional development, role clarity, and collaborative cultures are better positioned to sustain expanded nursing roles over time. By aligning

workforce strategies with chronic care demands, healthcare systems can leverage nursing expertise to enhance system performance while maintaining workforce resilience.

Evidence Synthesis & Integrated Care Pathway

The synthesis of evidence across nursing care models, patient outcomes, and system-level impacts demonstrates that nursing roles function as a unifying mechanism within chronic and complex care delivery. Rather than operating as isolated interventions, nursing contributions form interconnected processes that link assessment, coordination, education, and follow-up across the entire care continuum. This integrative role enables nurses to translate clinical guidelines into sustained, person-centered practice while adapting care to individual and contextual needs.

Across the reviewed literature, consistent patterns emerge. First, **nursing roles act as enablers of continuity**, ensuring that care plans remain coherent as patients transition between settings such as hospitals, primary care clinics, and community or home environments. Second, **nurses serve as catalysts for patient engagement**, transforming patients from passive recipients of care into active partners through education, coaching, and shared decision-making. Third, **nursing coordination bridges system fragmentation**, aligning multidisciplinary inputs and reducing duplication, delays, and errors.

The evidence also indicates that the effectiveness of nursing roles is maximized when they are embedded within structured care models rather than implemented as ad hoc tasks. Integrated nursing pathways—supported by clear role definitions, interprofessional collaboration, and digital health tools—consistently demonstrate superior outcomes compared with fragmented or episodic approaches. Importantly, these pathways support not only clinical improvement but also long-term sustainability by optimizing resource use and workforce capacity.

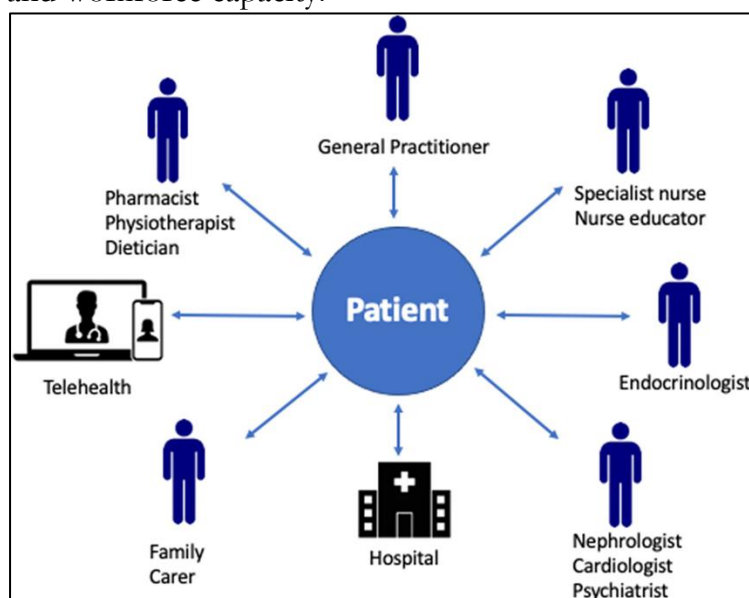


Figure 1. Integrated Nursing-Led Care Pathway for Complex and Chronic Conditions

Based on the synthesized evidence, an integrated nursing-led care pathway can be conceptualized as a dynamic, cyclical process encompassing five interrelated stages:

- 1. Comprehensive Assessment and Risk Stratification:** Nurses conduct holistic assessments addressing clinical status, comorbidities, functional ability, psychosocial factors, and social determinants of health. This stage enables early identification of high-risk patients and informs individualized care planning.

2. **Individualized Care Planning and Coordination:** Using assessment findings, nurses collaborate with patients and multidisciplinary teams to develop personalized care plans. Nurses coordinate services across providers and settings, ensuring alignment with patient goals and clinical priorities.

3. **Patient Education and Self-Management Support:** Nurses deliver tailored education and coaching to enhance health literacy, self-monitoring skills, and adherence to treatment plans. This stage emphasizes empowerment and sustained patient engagement.

4. **Ongoing Monitoring and Follow-Up:** Continuous nursing monitoring—through in-person visits, telehealth, or community outreach—supports early detection of deterioration, timely intervention, and reinforcement of care plans.

5. **Care Transition and Outcome Evaluation:** During transitions (e.g., hospital discharge), nurses ensure continuity through discharge planning, communication, and follow-up. Outcomes are evaluated to inform care adjustment and quality improvement. This pathway reflects nursing's integrative function, linking patient-level care processes with organizational and system-level outcomes. By operating across all stages, nursing roles create a feedback loop that supports continuous improvement and adaptive care delivery.

DISCUSSION

This comprehensive review highlights the central and integrative role of nursing in addressing complex and chronic health conditions across the continuum of care. The synthesized evidence demonstrates that nursing contributions extend far beyond supportive or task-oriented functions, positioning nurses as key drivers of care coordination, patient engagement, and system sustainability. The findings reinforce the view that effective chronic care delivery is fundamentally dependent on nursing roles that are continuous, holistic, and embedded within structured care models.

A key insight from this review is that nursing effectiveness in chronic and complex care is closely linked to **continuity and proximity to patients**. Unlike episodic models of care that focus on acute encounters, nursing practice emphasizes long-term relationships, regular monitoring, and responsiveness to changing patient needs. This sustained engagement explains the consistent improvements observed in clinical outcomes, such as disease control and complication reduction, as well as in patient-reported outcomes, including quality of life and satisfaction. These findings align with chronic care and person-centered care theories, which emphasize the importance of ongoing therapeutic relationships and active patient participation in long-term condition management.

Another important discussion point relates to the **mechanisms through which nursing roles influence outcomes**. The review indicates that positive outcomes are rarely the result of a single intervention. Rather, they emerge from the cumulative effect of assessment, education, coordination, and follow-up delivered within integrated care pathways. Nursing roles function as connective tissue within healthcare systems, translating clinical guidelines into practical, individualized care while ensuring alignment between multidisciplinary inputs. This integrative function is particularly critical for patients with multimorbidity, who often experience fragmented care and competing clinical priorities.

At the system level, the findings underscore nursing's contribution to **healthcare efficiency and sustainability**. Nursing-led and nursing-integrated models consistently demonstrate reductions in hospital readmissions, emergency department utilization, and avoidable complications. These effects have significant implications for cost containment and resource optimization, particularly in health systems facing rising demand and workforce constraints. The expansion of advanced nursing roles and task redistribution emerges as a pragmatic strategy for addressing clinician shortages while maintaining or

improving care quality. However, the review also highlights that successful role expansion depends on supportive regulatory frameworks, adequate training, and organizational commitment.

The evidence further emphasizes the importance of **interprofessional collaboration**, with nurses frequently serving as coordinators and communication hubs within multidisciplinary teams. Effective collaboration enhances care coherence, reduces duplication, and supports shared accountability for outcomes. Organizations that empower nursing leadership in chronic care initiatives tend to demonstrate stronger performance in quality improvement and patient safety. This finding reinforces the strategic value of investing in nursing leadership development and governance structures that support collaborative practice.

Despite the strong evidence base, several **challenges and gaps** warrant consideration. Variability in role definitions, scopes of practice, and implementation contexts complicates comparison across studies and limits generalizability. Additionally, while short- and medium-term outcomes are well documented, there is less robust evidence on long-term population-level impacts and cost-effectiveness across diverse health systems. Workforce sustainability also remains a concern, as expanded nursing roles may increase workload and emotional demands if not accompanied by adequate staffing, support, and professional development opportunities.

From a research perspective, the findings point to the need for more **longitudinal, mixed-methods, and implementation-focused studies** that capture both outcomes and contextual factors influencing success. Greater attention to equity-related outcomes and the experiences of vulnerable populations is also needed, particularly in community and home-based care settings. Standardized outcome measures and clearer reporting of nursing role components would further strengthen the evidence base.

In summary, this discussion reinforces nursing as a cornerstone of effective chronic and complex care. Nursing roles enable continuity, integration, and patient-centeredness—elements that are essential for achieving sustainable improvements in outcomes and system performance. Strengthening and formalizing nursing roles within integrated care pathways should therefore be viewed not as an optional enhancement, but as a strategic imperative for healthcare systems seeking to respond effectively to the growing burden of chronic and complex health conditions.

CONCLUSION

This comprehensive review demonstrates that nursing roles are fundamental to the effective management of complex and chronic health conditions across healthcare systems. The evidence consistently shows that nurses contribute not only to direct clinical care, but also to the integration, continuity, and sustainability of long-term care delivery. Through holistic assessment, care coordination, patient education, and ongoing monitoring, nursing roles address the multifaceted needs of individuals living with chronic and complex conditions in ways that episodic, condition-focused models cannot achieve alone.

The findings highlight that nursing-led and nursing-integrated care models are associated with improved clinical outcomes, enhanced quality of life, greater patient satisfaction, and reduced healthcare utilization, particularly among high-risk and multimorbid populations. At the system level, these roles support efficiency, cost containment, and workforce optimization, reinforcing nursing as a strategic asset in responding to increasing demand for chronic care services. Importantly, the effectiveness of nursing contributions is greatest when roles are clearly defined, supported by appropriate education and regulation, and embedded within integrated care pathways.

Despite these strengths, the review also identifies the need for continued investment in nursing workforce development, leadership, and well-being to ensure the sustainability of expanded roles. Variability in implementation and limited long-term outcome data suggest opportunities for further research, particularly studies that examine contextual factors, equity impacts, and system-wide effects over time.

In conclusion, nursing should be recognized as a cornerstone of chronic and complex care delivery rather than a supplementary component. Strengthening nursing roles within integrated care models represents a critical strategy for improving patient outcomes, enhancing healthcare system performance, and meeting the growing global burden of chronic disease in a sustainable and patient-centered manner.

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