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Integrated Primary And Supportive Care Models For Older Adults: The Combined Role Of Family Medicine, Pharmacy, Nursing, And Social Work In Improving Healthcare Quality

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Abstract

Background: Rapid population aging has increased the demand for coordinated, patient-centered healthcare models addressing the complex medical, functional, and social needs of older adults.

Objective: To examine integrated primary and supportive care models and evaluate the combined role of family medicine, pharmacy, nursing, and social work in improving healthcare quality for older adults.

Methods: A comprehensive literature review of multidisciplinary geriatric care models published in peer-reviewed journals was conducted, focusing on quality of care, patient safety, clinical outcomes, and system performance.

Results: Evidence indicates that integrated care models improve medication safety, chronic disease control, functional status, care coordination, and patient satisfaction while reducing hospitalizations and fragmented care.

Conclusion: Integrated primary and supportive care models are essential for achieving high-quality, sustainable elderly healthcare. Strengthening interdisciplinary collaboration is critical for future health system transformation.

Keywords: Integrated care; Geriatric healthcare; Primary care; Multidisciplinary teams; Elderly quality of care; Supportive health services.

Introduction

The global population is aging at an unprecedented rate, leading to profound challenges for healthcare systems worldwide. Older adults frequently experience multimorbidity, functional decline, polypharmacy, and heightened social vulnerability, all of which increase healthcare utilization and complicate care delivery. Traditional, fragmented models—often organized around single disciplines or episodic encounters—have proven insufficient to address the complex, longitudinal needs of this population. In response, integrated primary and supportive care models have emerged as a promising approach to improve healthcare quality, safety, and sustainability for older adults.

Integrated care is broadly defined as the coordinated delivery of health and social services across providers and settings, centered on the needs and preferences of individuals. For older adults, integration is particularly critical because clinical conditions are closely intertwined with functional status, medication management, caregiving capacity, and social determinants of health. Evidence suggests that person-centered, team-based models improve continuity of care, reduce preventable hospitalizations, and enhance patient satisfaction compared with fragmented systems (WHO, 2016; Kodner & Spreeuwenberg, 2002).

Primary care plays a pivotal role in integrated geriatric care, with family medicine often serving as the entry point and coordinating hub. Family physicians provide comprehensive, continuous care, oversee

chronic disease management, and facilitate referrals and follow-up across the healthcare continuum. However, effective integration requires the complementary expertise of other disciplines. Nursing contributes to care coordination, health monitoring, patient and caregiver education, and transitional care—functions that are essential for maintaining functional independence and preventing deterioration. Pharmacists play a critical role in optimizing medication regimens, addressing polypharmacy, and preventing adverse drug events, which are among the most common and costly risks in elderly populations. Social workers address psychosocial needs and social determinants of health, including access to community resources, caregiver support, financial challenges, and safeguarding against neglect or abuse.

The integration of family medicine, nursing, pharmacy, and social work reflects a shift from disease-centered care toward holistic, person-centered models aligned with age-friendly health system principles. Frameworks such as the World Health Organization's people-centered health services and the Age-Friendly Health Systems "4Ms" (What Matters, Medication, Mentation, Mobility) emphasize interdisciplinary collaboration as a cornerstone of quality elderly care (Fulmer et al., 2018; WHO, 2016). Despite growing implementation of integrated models, the literature remains fragmented, often examining individual disciplines in isolation rather than synthesizing their combined impact on healthcare quality.

Accordingly, this review aims to examine integrated primary and supportive care models for older adults, with a specific focus on the combined roles of family medicine, pharmacy, nursing, and social work. By synthesizing evidence across these disciplines, the review seeks to clarify how interdisciplinary integration contributes to improved quality of care, patient safety, and system performance in elderly healthcare.

Conceptual Foundations of Integrated Geriatric Care

Integrated geriatric care is grounded in the recognition that older adults present with complex, interrelated medical, functional, psychological, and social needs that cannot be effectively addressed through single-discipline or episodic models of care. Conceptually, integrated care represents a shift from fragmented, disease-oriented services toward coordinated, person-centered systems that deliver continuous and comprehensive care across settings and providers. This approach is particularly critical in geriatric populations, where multimorbidity, polypharmacy, frailty, and social vulnerability are common and mutually reinforcing.

At its core, integrated geriatric care is informed by person-centered care principles, which prioritize individual values, preferences, and life goals rather than isolated clinical indicators. For older adults, person-centeredness extends beyond clinical treatment to include functional independence, cognitive health, social participation, and quality of life. Integrated models emphasize longitudinal relationships with care teams, shared decision-making, and proactive care planning, all of which contribute to improved patient experience and outcomes (WHO, 2016; Tinetti et al., 2019).

A foundational framework underpinning integrated geriatric care is the Donabedian model of healthcare quality, which conceptualizes quality across three interrelated domains: structure, process, and outcomes. In this context, structural elements include multidisciplinary teams, shared information systems, and supportive policies; process elements involve coordinated assessments, communication, and care transitions; and outcomes encompass clinical indicators, functional status, patient safety, and satisfaction. Integration across these domains enables healthcare systems to address both medical and supportive needs holistically rather than reactively (Donabedian, 1988).

Another influential conceptual foundation is the Age-Friendly Health Systems (AFHS) framework, which operationalizes integrated geriatric care through the "4Ms": What Matters, Medication, Mentation, and Mobility. This framework emphasizes alignment of care with older adults' goals, safe and effective medication use, prevention and management of cognitive and mental health conditions, and maintenance of mobility and function. Importantly, the 4Ms framework explicitly requires interdisciplinary collaboration, with family physicians, nurses, pharmacists, and social workers each contributing specialized yet interdependent expertise (Fulmer et al., 2018).

From an integration perspective, primary care–led models serve as the organizational backbone of geriatric care systems. Family medicine provides comprehensive oversight and continuity, nursing ensures ongoing monitoring and coordination, pharmacy optimizes medication safety and therapeutic effectiveness, and

social work addresses psychosocial needs and social determinants of health. Conceptually, these roles operate not in parallel but in synergy, creating a network of care that bridges clinical services with community and social support systems. Evidence suggests that such integrated configurations are associated with improved chronic disease management, reduced hospitalizations, enhanced functional outcomes, and greater patient and caregiver satisfaction (Briggs et al., 2018; Le Berre et al., 2017).

Collectively, these conceptual foundations highlight integrated geriatric care as a dynamic, systems-oriented approach. By aligning interdisciplinary roles within person-centered and quality-driven frameworks, integrated models provide a robust foundation for improving healthcare quality and sustainability in aging populations.

Figure 1. Conceptual Framework of Integrated Primary and Supportive Geriatric Care

Figure 1 illustrates an integrated geriatric care framework with the older adult at the center. Surrounding the individual are four interconnected domains representing family medicine (clinical leadership and continuity), nursing (care coordination and monitoring), pharmacy (medication optimization and safety), and social work (psychosocial support and community linkage). These domains are embedded within a primary care–led system supported by shared communication, care planning, and health information exchange. The model demonstrates how interdisciplinary integration collectively contributes to improved quality of care, patient safety, functional independence, and overall well-being of older adults.

4. Methodology

This review adopted an integrative literature review design to examine integrated primary and supportive care models for older adults, with a specific focus on the combined roles of family medicine, pharmacy, nursing, and social work in improving healthcare quality. An integrative approach was selected to allow inclusion of diverse study designs, including quantitative, qualitative, and mixed-methods research, which is appropriate for synthesizing complex, multidisciplinary healthcare interventions.

A comprehensive search was conducted across major electronic databases, including PubMed, Scopus, Web of Science, and CINAHL, to identify relevant peer-reviewed studies. The search strategy combined controlled vocabulary and free-text terms related to aging and integrated care, such as older adults, geriatric care, integrated care, primary care, family medicine, nursing, pharmacy, and social work. Boolean operators (“AND,” “OR”) were used to refine searches, and reference lists of included articles were manually screened to identify additional relevant studies.

Studies were eligible for inclusion if they: (1) focused on adults aged 60 years or older; (2) examined integrated or multidisciplinary care models within primary care or community-based settings; (3) involved at least two of the four target disciplines (family medicine, nursing, pharmacy, social work); and (4) reported outcomes related to healthcare quality, patient safety, clinical outcomes, service utilization, or

patient or caregiver satisfaction. Only English-language articles published between 2014 and 2025 were included. Editorials, conference abstracts, and studies lacking outcome data were excluded.

Titles and abstracts were screened for relevance, followed by full-text review of eligible studies. Key data extracted included study design, care setting, participating disciplines, intervention components, and reported outcomes. Findings were synthesized thematically, with emphasis on identifying common integration mechanisms and their associations with quality-of-care outcomes. This narrative synthesis approach enabled comparison across heterogeneous models and facilitated identification of overarching patterns and implications for integrated geriatric care practice.

Role of Family Medicine in Integrated Elderly Care

Family medicine plays a central and coordinating role in integrated care models for older adults, serving as the primary entry point to the healthcare system and the longitudinal anchor for care delivery. Owing to their broad clinical scope and sustained relationships with patients, family physicians are uniquely positioned to address the multidimensional needs of elderly populations while ensuring continuity, comprehensiveness, and coordination across healthcare and social care settings.

One of the most critical contributions of family medicine in integrated elderly care is comprehensive and continuous care management. Older adults commonly present with multimorbidity, requiring coordinated management of chronic conditions over time rather than episodic, problem-focused interventions. Family physicians oversee longitudinal care plans, balance competing clinical priorities, and integrate preventive, curative, and palliative approaches according to patient goals and functional status. This continuity has been consistently associated with improved health outcomes, reduced hospital admissions, and lower healthcare costs among older adults (Starfield et al., 2005; Bazemore et al., 2018).

Family physicians also play a key role in conducting and coordinating comprehensive geriatric assessments (CGA) within primary care settings. Although CGA is traditionally associated with specialist geriatric services, evidence increasingly supports its effective implementation in primary care–led models. Through CGA, family physicians identify medical conditions, functional impairments, cognitive issues, psychosocial risks, and environmental factors that influence health outcomes. Importantly, the findings of these assessments inform interdisciplinary care planning, enabling nurses, pharmacists, and social workers to align their interventions with identified needs and priorities (Ellis et al., 2017).

In integrated care models, family medicine functions as the clinical leadership and coordination hub of the multidisciplinary team. Family physicians facilitate communication among healthcare professionals, initiate referrals, and ensure that care plans are coherent and goal-oriented. This coordination role is particularly critical during care transitions, such as hospital discharge or movement between community and long-term care settings, where older adults are most vulnerable to adverse events. Strong primary care leadership has been shown to reduce fragmentation, duplication of services, and preventable readmissions (Stokes et al., 2015).

Another essential aspect of family medicine's role is goal-directed and person-centered decision-making. Older adults often prioritize outcomes such as functional independence, symptom control, and quality of life over disease-specific targets. Family physicians are trained to engage in shared decision-making, incorporating patient preferences, values, and life circumstances into care planning. This aligns closely with age-friendly care principles and supports individualized goal setting across the interdisciplinary team (Tinetti et al., 2019).

Furthermore, family medicine serves as a bridge between medical care and supportive services. By collaborating closely with nurses, pharmacists, and social workers, family physicians help integrate clinical management with medication optimization, patient education, caregiver support, and access to community resources. This integration is particularly important for addressing social determinants of health, which significantly influence outcomes in elderly populations. Studies demonstrate that primary care–led integrated models improve care coordination, enhance patient satisfaction, and contribute to better functional and psychosocial outcomes (Briggs et al., 2018; Reeve et al., 2013).

In summary, family medicine is foundational to integrated elderly care, providing clinical leadership, continuity, and coordination that enable multidisciplinary teams to function effectively. Strengthening the role of family physicians within integrated primary and supportive care models is essential for improving healthcare quality, safety, and sustainability for aging populations.

Role of Nursing in Continuity and Quality of Elderly Care

Nursing plays a pivotal role in ensuring continuity and quality of care within integrated primary and supportive care models for older adults. As the healthcare professionals most consistently engaged with elderly patients across settings, nurses act as the operational backbone of integrated care, linking clinical decision-making with day-to-day care delivery, monitoring, and patient support. Their contribution is especially critical in managing the complexity associated with multimorbidity, functional decline, and transitions across care environments.

One of the core functions of nursing in integrated elderly care is care coordination and continuity management. Nurses often serve as care coordinators or case managers, ensuring that care plans developed by family physicians and multidisciplinary teams are implemented consistently and adjusted as patients' conditions evolve. This includes scheduling follow-up visits, monitoring symptoms, facilitating referrals, and ensuring effective communication among providers. Evidence indicates that nurse-led coordination significantly reduces care fragmentation, prevents duplication of services, and improves adherence to care plans in older adults (Boult et al., 2011; Stokes et al., 2015).

Nurses also play a key role in chronic disease management and clinical monitoring. Through regular assessments, nurses monitor vital signs, functional status, cognitive changes, and symptom progression in conditions such as diabetes, heart failure, and chronic respiratory disease. Early identification of deterioration enables timely intervention, reducing avoidable hospitalizations and emergency department visits. Nurse-led chronic care programs have been shown to improve disease control, enhance self-management, and support aging in place (Laurant et al., 2018).

Another critical contribution of nursing is patient and caregiver education. Older adults and their caregivers often face challenges related to medication adherence, lifestyle modification, symptom recognition, and navigation of health services. Nurses provide tailored education, reinforce treatment plans, and empower patients and families to participate actively in care decisions. This educational role is particularly important in supporting shared decision-making and improving health literacy, which are closely linked to better outcomes and patient satisfaction in geriatric populations (Bodenheimer et al., 2009).

Nursing is also central to transitional care, especially during high-risk periods such as hospital discharge. Poorly managed transitions are a major contributor to readmissions, medication errors, and adverse events among older adults. Transitional care interventions led by nurses—including discharge planning, medication reconciliation support, follow-up calls, and home visits—have been consistently associated with reduced readmission rates and improved continuity of care (Naylor et al., 2017). Within integrated models, nurses collaborate closely with pharmacists and social workers to address both clinical and social risks during transitions.

Finally, nurses contribute significantly to quality and safety improvement in elderly care. Their continuous presence allows for early detection of safety concerns such as falls risk, pressure injuries, cognitive decline, and medication-related problems. By integrating clinical monitoring with psychosocial awareness, nurses help ensure that care remains responsive to the evolving needs of older adults. This holistic perspective strengthens person-centered care and aligns closely with age-friendly health system principles.

Table 1. Key Nursing Roles in Integrated Elderly Care and Associated Quality Outcomes

Nursing Role	Core Activities	Associated Quality Outcomes
Care coordination and case management	Care planning, follow-up, interprofessional communication	Improved continuity of care, reduced fragmentation
Chronic disease monitoring	Symptom assessment, functional and cognitive monitoring	Better disease control, reduced hospitalizations

Patient and caregiver education	Self-management support, health literacy, adherence counseling	Improved adherence, higher patient satisfaction
Transitional care	Discharge planning, follow-up calls, home visits	Reduced readmissions, safer care transitions
Quality and safety oversight	Falls prevention, pressure injury prevention, early risk detection	Enhanced patient safety, improved functional outcomes

In summary, nursing is essential to the success of integrated elderly care models. Through coordination, monitoring, education, transitional care, and quality oversight, nurses ensure that integrated care is not only well designed but effectively delivered, thereby enhancing healthcare quality, safety, and continuity for older adults.

Role of Pharmacy in Medication Safety and Clinical Outcomes

Pharmacy services are a critical component of integrated primary and supportive care models for older adults, particularly in addressing medication safety and optimizing clinical outcomes. Older populations are disproportionately affected by polypharmacy, adverse drug reactions, and medication non-adherence due to multimorbidity, age-related physiological changes, and fragmented prescribing practices. Within integrated care frameworks, pharmacists contribute specialized expertise that complements the roles of family physicians, nurses, and social workers, thereby reducing medication-related harm and improving therapeutic effectiveness.

One of the primary roles of pharmacists in elderly care is comprehensive medication management (CMM). Pharmacists conduct systematic reviews of medication regimens to assess appropriateness, therapeutic duplication, dosing accuracy, and drug–drug and drug–disease interactions. In collaboration with family physicians, pharmacists recommend deprescribing or regimen optimization aligned with clinical guidelines and patient goals. Evidence indicates that pharmacist-led medication reviews significantly reduce potentially inappropriate medications and adverse drug events in older adults (Rankin et al., 2018; Spinewine et al., 2007).

Medication reconciliation is another cornerstone of pharmacy practice in integrated geriatric care, particularly during care transitions such as hospital admission and discharge. Inaccurate medication lists and poor communication across settings are major contributors to medication errors and avoidable readmissions among elderly patients. Pharmacists work alongside nurses and physicians to ensure accurate transfer of medication information, clarify discrepancies, and educate patients and caregivers on medication changes. Transitional care interventions involving pharmacists have been associated with improved adherence, reduced emergency department visits, and enhanced patient safety (Mekonnen et al., 2016).

Pharmacists also play a vital role in supporting chronic disease management and clinical outcomes. Through ongoing monitoring and follow-up, pharmacists assess treatment effectiveness and adherence in conditions such as hypertension, diabetes, heart failure, and chronic obstructive pulmonary disease. Pharmacist-led or pharmacist-supported care has been shown to improve clinical indicators, including blood pressure control and glycemic outcomes, while supporting self-management among older adults (Santschi et al., 2014; Chisholm-Burns et al., 2010).

In addition to clinical optimization, pharmacists contribute significantly to patient and caregiver education. Older adults often face challenges related to complex dosing schedules, cognitive impairment, and low health literacy. Pharmacists provide individualized counseling on medication purpose, administration, side effects, and adherence strategies, reinforcing education delivered by nurses and physicians. Such interventions are associated with improved medication adherence, patient confidence, and satisfaction with care (Nieuwlaat et al., 2014).

Within integrated models, pharmacists also support quality and safety initiatives at the system level. They contribute to the development of prescribing protocols, medication safety guidelines, and decision-support tools, and participate in multidisciplinary case reviews focused on reducing medication-related harm. By embedding pharmacists within primary care teams, healthcare systems can shift from reactive error management to proactive risk prevention, particularly in vulnerable elderly populations (Reeve et al., 2015).

Table 2. Pharmacy-Led Interventions in Integrated Elderly Care and Reported Outcomes

Pharmacy Intervention	Description	Reported Outcomes
Comprehensive medication review	Assessment of medication appropriateness, interactions, and deprescribing	Reduced inappropriate prescribing, fewer adverse drug events
Medication reconciliation	Verification of medication lists during care transitions	Improved medication accuracy, reduced readmissions
Chronic disease medication management	Monitoring therapy effectiveness and adherence	Improved clinical indicators (BP, HbA1c)
Patient and caregiver counseling	Education on medication use and side effects	Improved adherence and patient satisfaction
Medication safety programs	Protocol development, interdisciplinary case review	Enhanced patient safety, reduced medication errors

In summary, pharmacy services are essential to improving medication safety and clinical outcomes in integrated elderly care. Through comprehensive medication management, reconciliation, chronic disease support, and education, pharmacists enhance the quality, safety, and effectiveness of care delivered to older adults while strengthening interdisciplinary collaboration within primary and supportive care models.

Role of Social Work in Addressing Social Determinants of Health

Social work is a core pillar of integrated primary and supportive care models for older adults, addressing the social determinants of health (SDOH) that profoundly influence health outcomes, healthcare utilization, and quality of life in later life. While medical and nursing interventions focus primarily on clinical needs, social workers address the broader psychosocial, economic, and environmental factors that shape health trajectories, making their role indispensable in comprehensive geriatric care.

One of the primary contributions of social work in elderly care is psychosocial assessment and care planning. Older adults frequently experience social isolation, depression, cognitive decline, financial strain, and caregiving challenges, all of which can exacerbate physical illness and impair treatment adherence. Social workers conduct structured assessments to identify psychosocial risks, caregiver burden, housing insecurity, and access barriers. These assessments inform individualized care plans and enable the multidisciplinary team to tailor interventions that align with patients' social contexts and support networks (Blane et al., 2020).

Social workers also play a crucial role in care coordination and community linkage. Integrated care models emphasize continuity beyond clinical settings, requiring effective connections with community-based services such as home care, rehabilitation, transportation, financial assistance, and social support programs. Social workers facilitate referrals, advocate for services, and assist older adults and their families in navigating complex health and social care systems. Evidence suggests that effective integration of social care into primary healthcare reduces unnecessary hospitalizations and supports aging in place, particularly for socially vulnerable older adults (Bickerdike et al., 2017).

Another important dimension of social work is caregiver support and family engagement. Informal caregivers provide the majority of long-term support for older adults, often at significant emotional and financial cost. Social workers assess caregiver capacity, provide counseling and education, and connect families to respite services and support groups. Strengthening caregiver resilience has been associated with improved patient outcomes, reduced institutionalization, and enhanced continuity of care (Adelman et al., 2014).

Social work is also integral to safeguarding and ethical care in elderly populations. Older adults are at heightened risk of abuse, neglect, and exploitation, particularly those with cognitive impairment or dependency. Social workers are trained to identify signs of mistreatment, initiate protective interventions, and collaborate with legal and community services to ensure safety and dignity. This safeguarding role reinforces ethical, rights-based approaches to geriatric care and complements clinical risk management strategies within integrated teams (Yon et al., 2017).

Furthermore, social workers contribute to health equity and access by addressing systemic and structural barriers to care. Social determinants such as poverty, low health literacy, and limited social support disproportionately affect health outcomes in later life. By advocating for equitable access to resources and incorporating social needs screening into primary care, social workers help mitigate disparities and improve population-level outcomes among older adults (Braveman & Gottlieb, 2014).

In summary, social work enhances integrated geriatric care by addressing the social and environmental dimensions of health that extend beyond traditional medical care. Through psychosocial assessment, caregiver support, community integration, safeguarding, and advocacy, social workers play a vital role in improving healthcare quality, equity, and sustainability for aging populations.

Integrated Primary and Supportive Care Models: Evidence Synthesis

Integrated primary and supportive care models for older adults are designed to overcome fragmentation by aligning clinical services with functional, psychosocial, and community-based supports. Across the literature, "integration" is operationalized through a set of recurring mechanisms: (1) team-based care anchored in primary care; (2) structured care coordination/case management; (3) standardized comprehensive assessment and shared care planning; (4) medication optimization embedded in routine workflows; and (5) linkage to social resources addressing social determinants of health. Although model configurations vary by setting and resources, evidence consistently shows that combining family medicine, nursing, pharmacy, and social work strengthens quality, safety, and continuity outcomes compared with single-discipline approaches.

A key theme is the value of primary care as the integrative hub. Family medicine provides longitudinal clinical leadership—prioritizing goals of care, coordinating chronic disease management, and ensuring continuity across settings. Within integrated models, nurses frequently act as the operational coordinators—monitoring patients, conducting follow-ups, and managing transitions—thereby reducing fragmentation and improving implementation fidelity. Reviews of integrated care for older people highlight that successful models commonly include explicit coordination roles, routine team communication, and shared accountability for outcomes (Briggs et al., 2018; Kodner & Spreeuwenberg, 2002).

Another consistent finding is the centrality of high-risk transitions and proactive management. Older adults are especially vulnerable during hospital-to-home transitions, where medication discrepancies, delayed follow-up, and unaddressed social risks can trigger avoidable readmissions. Transitional care models led by nurses—often incorporating early follow-up and cross-setting communication—demonstrate meaningful improvements in continuity and reductions in adverse outcomes (Naylor et al., 2017). When pharmacists are integrated into these transitions through medication reconciliation and post-discharge review, evidence shows additional benefits for medication safety and downstream utilization (Mekonnen et al., 2016).

Medication-related harm emerges as a dominant driver of quality and safety outcomes in older adults, making pharmacy integration particularly impactful. Systematic evidence indicates that structured polypharmacy interventions and pharmacist-led medication review programs reduce potentially inappropriate prescribing and support deprescribing where appropriate (Rankin et al., 2018). When aligned with primary care follow-up and nursing monitoring, medication optimization becomes more sustainable—moving beyond "one-time" reviews toward continuous medication management embedded in the care plan.

A fourth theme is the increasing emphasis on social care integration to address unmet needs that influence outcomes (e.g., isolation, food insecurity, transportation barriers, caregiver strain). Approaches such as social needs screening, community referral pathways, and social prescribing reflect practical integration between primary care teams and community resources. Social-care-linked interventions can improve patient experience and enable aging in place, especially among socially vulnerable older adults (Bickerdike et al., 2017; Blane et al., 2020). Additionally, addressing caregiver burden is repeatedly associated with improved continuity and reduced crisis-driven utilization (Adelman et al., 2014).

Across the evidence base, integrated models are most consistently associated with improvements in: care coordination, patient safety (especially medication safety), patient/caregiver satisfaction, and—depending on model intensity—reductions in avoidable hospitalizations/readmissions (Le Berre et al., 2017;

Bazemore et al., 2018). Implementation challenges are also consistent: role clarity, interprofessional communication, shared information systems, and sustainable financing. Conceptually, successful models align well with person-centered and age-friendly principles that emphasize "what matters," safe medication use, functional preservation, and cognitive/mental health—requiring coordinated contributions from all four disciplines (Fulmer et al., 2018; World Health Organization, 2016).

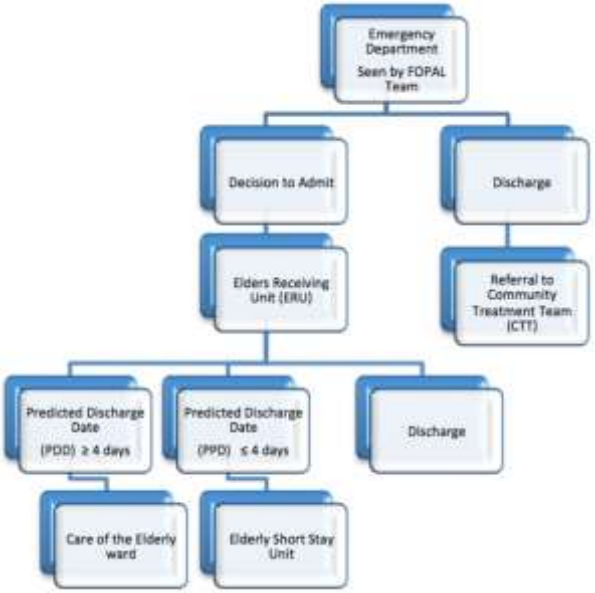

Figure 2. Integrated Primary–Supportive Care Pathway for Older Adults (Team-Based Model)

Figure 2 presents a team-based integrated primary–supportive care pathway for older adults, illustrating how medical and social services are coordinated across the continuum of care. The pathway begins with risk identification and enrollment through primary care screening, referrals, or population health registries. This is followed by comprehensive assessment, integrating medical evaluation, functional and cognitive assessment, medication review, and psychosocial screening.

Based on assessment findings, the interdisciplinary team develops a shared, person-centered care plan, aligned with older adults' goals and age-friendly care principles. The coordinated implementation phase represents the core of integration, where family medicine provides clinical leadership and continuity, nursing ensures care coordination and monitoring, pharmacy optimizes medication safety and adherence, and social work addresses social determinants of health and caregiver needs.

The pathway explicitly incorporates care transitions and escalation, recognizing high-risk periods such as hospital discharge or acute deterioration, during which intensified coordination and communication are required. Finally, the model emphasizes outcomes evaluation and continuous quality improvement, using clinical indicators, functional outcomes, patient-reported experiences, and safety metrics to refine care delivery.

Overall, the figure highlights integration as a dynamic, cyclical process rather than a linear intervention, demonstrating how interdisciplinary collaboration across primary and supportive care settings collectively improves healthcare quality, patient safety, functional independence, and satisfaction among older adults.

Discussion

This review synthesizes evidence demonstrating that integrated primary and supportive care models—anchored in collaboration among family medicine, nursing, pharmacy, and social work—offer a robust approach to improving healthcare quality for older adults. The findings reinforce a growing consensus that fragmented, discipline-specific models are insufficient for addressing the complex clinical, functional, and social needs associated with aging. Instead, coordinated, person-centered, and team-based care emerges as a critical strategy for enhancing outcomes and system sustainability.

Across the reviewed literature, primary care–led integration consistently functions as the organizing backbone of effective geriatric care. Family medicine provides longitudinal clinical leadership and goal-directed oversight, while nursing operationalizes care plans through coordination, monitoring, and transitional care. Pharmacy integration addresses one of the most persistent safety challenges in elderly care—polypharmacy and medication-related harm—through continuous medication management rather than isolated reviews. Social work complements these clinical roles by addressing social determinants of health, caregiver burden, and access to community resources, which significantly shape health trajectories in later life. The convergence of these roles creates synergistic effects that are rarely achieved when disciplines operate independently.

Importantly, the evidence synthesis highlights that quality improvements are most consistent in process and safety outcomes, including improved care coordination, enhanced medication safety, better patient and caregiver satisfaction, and smoother care transitions. Reductions in hospitalizations and emergency department use are reported across multiple models, though these outcomes appear sensitive to intervention intensity, population risk profiles, and local health system context. This variability underscores the need for realistic expectations and context-aware implementation strategies when scaling integrated care models.

The findings also align strongly with contemporary person-centered and age-friendly frameworks, which emphasize alignment of care with what matters most to older adults, preservation of function, safe medication use, and attention to cognitive and psychosocial well-being. Achieving these aims requires interdisciplinary interdependence, rather than parallel task completion. Integrated models that embed regular team communication, shared care planning, and clearly defined roles demonstrate greater coherence and effectiveness, supporting the argument that integration is as much an organizational and cultural intervention as a clinical one.

Despite demonstrated benefits, implementation challenges remain prominent. Common barriers include role ambiguity, time constraints, limited interoperability of information systems, and misaligned financing structures that reward episodic care over coordination. Workforce preparation is another recurring issue; effective integration requires interprofessional competencies that are not consistently embedded in training curricula. Addressing these barriers will require supportive policy environments, leadership commitment, and investment in digital infrastructure to enable information sharing and outcome monitoring.

From a system perspective, the synthesis suggests that integrated primary–supportive care models are well positioned to support broader health system goals, including equity, sustainability, and value-based care. By proactively addressing social and clinical risks, these models can reduce downstream utilization and improve quality of life—outcomes increasingly prioritized by policymakers and health leaders, including those articulated by the World Health Organization in its people-centered health services agenda.

In summary, the discussion affirms that integration of family medicine, nursing, pharmacy, and social work represents a foundational strategy for high-quality elderly care. Future efforts should focus not only on expanding integrated models but also on refining implementation mechanisms, aligning incentives, and rigorously evaluating long-term outcomes to ensure that integration translates into sustained improvements for aging populations.

Conclusion

The findings of this review underscore the critical importance of integrated primary and supportive care models in improving the quality, safety, and effectiveness of healthcare for older adults. As aging populations increasingly present with complex combinations of chronic conditions, functional limitations, medication burden, and social vulnerabilities, traditional fragmented care approaches are no longer adequate. Integrated models that deliberately align family medicine, nursing, pharmacy, and social work offer a comprehensive and sustainable response to these challenges.

Family medicine provides longitudinal clinical leadership and continuity, ensuring that care remains goal-directed and person-centered. Nursing operationalizes integration through coordination, monitoring, patient and caregiver education, and transitional care, thereby translating care plans into consistent, high-quality delivery. Pharmacy services address one of the most persistent risks in elderly care—polypharmacy and medication-related harm—through continuous medication management and safety oversight. Social

work extends care beyond the clinical encounter by addressing social determinants of health, supporting caregivers, and facilitating access to community resources. Together, these disciplines form an interdependent team that strengthens care coordination, enhances patient safety, and improves functional and experiential outcomes for older adults.

The evidence synthesized in this review suggests that integrated primary–supportive care models are most effective when supported by clear role definition, structured communication, and shared accountability for outcomes. While implementation challenges remain, particularly related to workforce capacity and system-level alignment, the demonstrated benefits justify continued investment in interdisciplinary integration. Advancing and scaling such models will be essential for health systems seeking to deliver equitable, high-quality, and person-centered care for aging populations.

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