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REVIEW

GERIATRIC CARE IN BULGARIA: CURRENT STATUS, SYSTEMIC CHALLENGES AND REFORM POTENTIAL IN THE CONTEXT OF DIGITAL TRANSFORMATION

M. Vizeva¹, S. Vizev²

¹Yordanka Filaretova Medical College, Medical University – Sofia, Bulgaria

²Department of Public Health, Medical University – Sofia, Bulgaria

Abstract. Geriatric care in Bulgaria is undergoing a complex transformation driven by accelerated ageing of the population, increasing multimorbidity, and a growing need for long-term support. The analysis identifies major systemic barriers, including fragmentation between health and social services, the absence of a unified regulatory framework, insufficient development of home and community-based care, workforce shortages, and limited digital infrastructure. The lack of interdisciplinary teams and standardized comprehensive geriatric assessment (CGA) contributes to inefficiency, frequent hospitalizations, and reduced continuity of care. Despite these constraints, Bulgaria demonstrates emerging efforts in active ageing policy, community services, and digital health tools, although their impact remains limited. Digitalization and artificial intelligence present significant opportunities for improving access, coordination, and quality of services, but their implementation requires strong ethical, legal, and human-centered foundations. A transition towards an integrated care model, expansion of community-based services, professional training, quality regulation, and support for informal caregivers is crucial to ensure equitable, humane, and sustainable geriatric care in Bulgaria.

Key words: geriatric care, long-term care, interdisciplinary teams, active ageing, digital health, artificial intelligence

Corresponding author: Prof. Maya Vizeva, PhD, Yordanka Filaretova Medical College, Medical University – Sofia, Bulgaria, email: m.vizeva@mc.mu-sofia.bg

ORCID: 0000-0002-6202-2374

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INTRODUCTION

Geriatric care is a core component of contemporary health systems and is crucial for developing sustainable models that support functional independence, social participation, and quality of life in later life [1]. Due to its inherently holistic nature, geriatric care encompasses biomedical, psychological, social, ethical, and economic dimensions, requiring interprofessional coordination and an

integrated organization of services. With accelerated population ageing, rising multimorbidity and mounting pressure on health resources, geriatric care has become a strategic priority for national health policy and an increasingly relevant objective within the European Union framework [2].

Bulgaria ranks among the European countries with the most pronounced demographic shift, driven by persistently low birth rates, high mortality rates, and sus-

tained outward migration. According to the National Statistical Institute [3], as of 31 December 2023, adults aged 65+ represented 23.8% of the population, a rate confirmed by Eurostat estimates for 2024 (23-24%). The United Nations Department of Economic and Social Affairs (UN DESA) [4] projects that the proportion of people aged 80+ in Europe will double by 2050, suggesting that Bulgaria, similar to other Central and Eastern European Member States, will need to adapt its health and social care systems to address growing long-term support needs [5].

Older adults in Bulgaria experience a shorter period of healthy life expectancy than the EU average, indicating higher functional dependency and a greater need for sustained care provision. According to the Organisation for Economic Co-operation and Development (OECD) [6], Bulgaria has one of the lowest life expectancy rates in the EU (74.3 years), while healthy life years after 65 remain significantly below the European average. This trend aligns with patterns observed in several countries with comparable health-system characteristics, where multimorbidity, complex medication regimens, and delayed access to preventive care contribute to increased rates of avoidable hospitalizations.

Geriatric trends represent not only a medical, but also a social challenge, shaped by changing family structures, limited informal support, and evolving labor migration patterns affecting many European societies. A considerable proportion of older adults in Bulgaria live alone, similar to trends in other states across the eastern part of the EU [7], which can lead to an increased risk of depression, cognitive decline, and isolation. Economic vulnerability further highlights the importance of a comprehensive, coordinated approach that combines social, health, rehabilitation, and psychological dimensions of care. Strengthening community-based networks and social participation initiatives may help mitigate these risks and support ageing in place.

In this context, the objective of this article was to provide an in-depth analysis of the current state of geriatric care in Bulgaria, focusing on structural barriers, workforce challenges, and ethical dimensions of care, as well as on the potential of digitalization and artificial intelligence as drivers of systemic transformation. The article also examined international models and evidence-based recommendations that may inform the development of an integrated, person-centered, long-term geriatric care model suitable for the Bulgarian context. Bulgaria is presented as a case study of a rapidly ageing, middle-income EU Member State with a fragmented health and social care system, illustrating challenges that are shared by many countries in Central and Eastern Europe.

MATERIALS AND METHODS

The analysis was conducted through a structured review of scientific literature, official statistical data, national strategic documents, and European comparative reports. Sources were identified through searches in international databases – WHO, OECD, UN DESA, European Commission/ESPN, Eurocarers, and national repositories – The Bulgarian Ministry of Labor and Social Policy and the National Statistical Institute. Publications in peer-reviewed journals, thematic reports, and policy documents were included.

A narrative policy analysis approach was applied, combining descriptive demographic indicators with a comparative review of European practices and examination of systemic barriers and opportunities for strengthening coordinated geriatric care. The analysis focuses on Bulgaria as a representative example of rapidly ageing, middle-income EU Member States with fragmented long-term care structures.

Sources published between 2014 and 2024 were considered, prioritizing peer-reviewed literature, national statistics, and policy documents related to geriatric and long-term care systems. Selection criteria focused on studies analyzing population ageing, health and social care integration, workforce development, and digital transformation in long-term support.

RESULTS

Demographic and health trends

Demographic ageing is a global trend affecting most European health systems, yet its pace in Bulgaria is comparatively accelerated by persistently low birth rates, high mortality, and continuous outward migration. According to the Bulgarian National Statistical Institute, as of 31 December 2023, adults aged 65+ represented 23.8% of the population, a rate confirmed by Eurostat and Trading Economics estimates for 2024 (23-24%). UN DESA projects that the proportion of people aged 80+ in Europe will double by 2050, indicating that Bulgaria, similar to other Central and Eastern European Member States, will need to adapt care systems to meet increasing long-term support needs and expand community-based and integrated service models.

Multimorbidity – defined as the presence of two or more chronic conditions – is highly prevalent among older adults in Bulgaria, consistent with trends across Europe, affecting more than two-thirds of the ageing population [2]. Typical combinations include hypertension, type 2 diabetes, chronic heart failure, chronic obstructive pulmonary disease, osteoarthritis, neurodegenerative disorders, and depression. These con-

ditions increase the risk of functional decline and create a sustained demand for long-term support. The complexity of multimorbidity often requires coordinated management of polypharmacy, as interactions between multiple medications may increase risks, such as falls, cognitive impairment, and avoidable hospitalizations [8]. Strengthening medication monitoring, community-based follow-up, and preventive care could reduce hospital admissions and enhance the quality of life for older adults.

Life expectancy in Bulgaria remains below the EU average, at 74.3 years in 2022. Although this indicator reflects biological longevity, a more meaningful measure for geriatric policy is healthy life expectancy after age 65, reflecting years lived in functional independence. Lower levels of healthy life expectancy mean that a larger share of older adults will require continuous support for extended periods [9], a pattern also observed in several Central and Eastern European Member States.

Higher hospitalization rates among older adults are frequently linked to limited outpatient and community-based prevention and follow-up, rather than solely to medical complexity [10]. National reports suggest that hospital care often serves as both an entry point and a substitute for long-term support during exacerbations of chronic conditions. Strengthening home-based care, community services, and continuity between health and social providers could help reduce recurrent hospitalizations, preserve functional ability, and prevent avoidable costs.

Geriatric trends constitute not only a medical, but also a social challenge shaped by changing family structures, limited informal support, and sustained labor migration – a pattern shared across many European societies. A considerable proportion of older adults in Bulgaria live alone, similar to trends in other Central and Eastern European countries, which increases the risk of depression, cognitive decline, and social isolation. Economic vulnerability resulting from low pensions and unequal access to quality services further highlights the importance of an integrated approach combining social, health, rehabilitation, and psychological support. Strengthening community networks and social participation initiatives may help mitigate these risks and support ageing in place.

Under these conditions, interdisciplinary teams, continuous monitoring, fall prevention, cognitive support, and social rehabilitation become essential components of effective geriatric practice. International evidence demonstrates that successful models consistently apply comprehensive geriatric assessment (CGA) to guide diagnosis and personalized

care planning [11]. Although CGA has not yet been formally embedded in Bulgarian regulation, interest in person-centered assessment is gradually emerging within clinical and social care initiatives, suggesting potential for broader adoption. Strengthening the use of standardized assessment tools could support more objective care planning, facilitate coordination between providers, and enhance continuity between health and social services. Demographic pressures, therefore, present not only a challenge, but also an opportunity to accelerate the transition towards a more integrated and evidence-based model of geriatric care.

Regulatory and organizational challenges

Fragmented governance and evolving coordination

The regulatory and organizational framework of geriatric and long-term care in Bulgaria reflects characteristics typical of many health systems in Central and Eastern Europe, including parallel responsibilities and evolving coordination between health and social sectors [12]. Although strategic documents provide general direction, implementation remains gradual, and institutional collaboration is still developing. These structural features influence strategic planning, regulatory capacity, funding mechanisms, and quality monitoring. Strengthening intersectoral alignment and clearer distribution of responsibilities may support more coherent development of geriatric and long-term care provision.

Regulatory framework split between health and social sectors

Geriatric and long-term care regulation is distributed between health legislation (e.g., Health Act, Medical Institutions Act) and social services legislation (e.g., Social Services Act), resulting in parallel governance, differing access criteria, and separate funding mechanisms. Similar dual models exist in several EU Member States, particularly where health and social services historically evolved independently [12]. In practice, transitions between hospital care, home-based support, and community or social services may be insufficiently coordinated, highlighting the need for clearer regulatory links, shared standards, and defined responsibilities to support sustained care continuity.

Comprehensive geriatric assessment (CGA) as an emerging priority

One key area for further development within this regulatory environment is the formal introduction of comprehensive geriatric assessment (CGA) and clearly defined clinical and organizational pathways for managing geriatric patients. Such tools support

better differentiation of needs, individualized care planning, and systematic evaluation of outcomes. In many European health systems, including several in Central and Eastern Europe, CGA serves as a core instrument for assessing dependency levels, risks, therapeutic strategies, and allocation of services [11, 12]. In Bulgaria, CGA is currently applied within selected clinical settings and pilot initiatives, suggesting potential for broader integration as part of evolving standards in long-term care.

Coordination mechanisms between care providers

Coordination between hospital services, primary care, social care providers, and residential facilities remains limited, particularly during transitions from acute treatment to home or community support [13]. In the absence of unified electronic systems, shared protocols, and integrated data platforms, consistent care may be compromised, which increases the likelihood of repeated consultations, duplicated diagnostic procedures, and avoidable hospitalizations. Similar challenges have been documented across Eastern EU Member States with developing long-term care systems. Strengthening digital integration and coordinated care pathways could enhance continuity, patient safety, and resource efficiency.

Expansion of home and community-based services

The care system for older adults in Bulgaria remains primarily oriented toward hospital and institutional services, while home and community-based care is still expanding in scope and capacity. Similar patterns are observed in many Eastern European Member States, where prolonged care systems are transitioning from institutional to community-based models [12]. In practice, hospital services may act as default pathways for older adults with chronic needs, which underscores the importance of developing structured home care, community support, rehabilitation services, and preventive follow-up to enable ageing in place. Expanding such services may contribute to reduced hospital dependence and increased autonomy for older adults.

Professional roles, competencies, and organizational responsibilities

Effective geriatric care requires clearly differentiated professional responsibilities and coordinated interaction between clinical, rehabilitation, psychosocial, and social service providers. The complexity of multiple long-term conditions and functional decline necessitates workforce structures that support flexible task-sharing, interdisciplinary decision-making, and continuity across sectors. In countries with established geriatric models, such as Germany

and the United Kingdom, coordination roles are legally attributed to specialized geriatric nurses or case managers, who lead tasks such as fall-risk assessment, discharge preparation, medication monitoring, and family counselling [14, 15]. These roles do not replace physicians, rehabilitators, or social workers, but facilitate coordinated care through formal competencies and communication frameworks.

In Bulgaria and other Central and Eastern European Member States, professional responsibilities in geriatric care remain embedded within general practice profiles and are not considered specialization-based roles. Physicians remain central to diagnostics and therapeutic decisions, while nurses provide continuous monitoring, medication management, functional assessment, and patient education. Rehabilitation specialists and physiotherapists support mobility, physical therapy, and disability prevention, whereas social workers coordinate access to benefits, community services, and social support networks. Psychologists and psychiatrists contribute to cognitive screening and emotional support, and clinical nutritionists, dentists, and pharmacists address nutritional risks, oral health, medication interactions, and polypharmacy management.

The growing heterogeneity of older adults' needs suggests that the development of clearer competency frameworks, potentially aligned with European practice standards, may support interprofessional communication, strengthen clinical pathways, and enhance continuity between health and social services. Such regulatory alignment may also reduce duplicated activities, clarify accountability, and reinforce patient safety without altering the clinical authority of any professional group.

The table below summarizes key professional and supportive roles within the organizational framework of geriatric care, emphasizing their interdependence in coordinating clinical, rehabilitation, and social dimensions of person-centered care (Table 1).

Recognizing these competencies within regulatory frameworks could clarify accountability, strengthen interdisciplinary collaboration, and enhance alignment with evolving European standards for integrated geriatric and long-term care services.

Regulatory standards, licensing, and quality control

The regulatory environment for long-term and geriatric care in Bulgaria includes licensing procedures, service registration requirements, and minimum operational criteria defined in health and social care legislation. However, standardized quality metrics, external auditing mechanisms, and competency-based staffing requirements are still evolving. Similar

Table 1. Key professional and supportive roles in the organization of geriatric care

Professional/Support role	Core organizational and clinical functions in geriatric care	European example/practice
Physician (GP/Geriatrician)	Diagnostics, therapeutic decision-making, risk assessment, participation in CGA, and referral to services.	Participation in CGA and team-based decisions (Germany, G-BA).
Specialized Geriatric Nurse/Nurse Practitioner	Risk assessment (falls, pressure ulcers, nutrition, cognitive status). Leading role in discharge and transition to home care. Role in patient and family education	Coordinator of geriatric care pathways (UK, Royal College of Nursing).
Rehabilitation specialist/Physiotherapist/Occupational therapist	Functional assessment, mobility support, therapeutic exercise, environmental adaptation, prevention of disability, and support for aging in place.	Community-based mobile rehabilitation services (Germany, G-BA).
Social worker	Social risk assessment, coordination of access to social benefits and community services, and mediation with family and care institutions.	Social care package coordination within LTC (UK, DHSC).
Psychologist/Psychiatrist	Cognitive screening, assessment, and management of depression, dementia, and behavioral symptoms. Provision of psychosocial support.	Cognitive impairment screening and dementia support (UK NHS Dementia Framework).
Pharmacist/Clinical pharmacologist	Polypharmacy management, prevention of drug interactions, and monitoring for medication safety.	Medication review within multidisciplinary teams (Germany, G-BA).
Clinical nutritionist/dietitian	Nutritional risk assessment, sarcopenia identification and management, dietary adaptation for chronic disease.	Nutrition screening as part of CGA (UK, NICE Guideline NG102).
Dentist	Prevention of infections, support for nutritional intake, and oral health management in cognitive and functional decline.	Oral health assessment integrated into CGA in dementia care (Germany, G-BA).
Informal caregiver (family member/relative)	Daily care support, monitoring and reporting changes, participation in care planning, and emotional and moral support.	Recognized within LTC policy frameworks and supported by caregiver programs (Eurocarers).

challenges have been noted across Eastern European Member States, where monitoring frameworks often precede the development of measurable performance criteria and transparent public reporting. Strengthening inspection mechanisms, professional standards, and public quality indicators could enhance accountability, patient safety, and alignment with European practices in long-term care.

Financing models and access to services

Financing for geriatric care in Bulgaria remains shared between public, municipal, and private sources, with a significant portion of expenditures borne directly by households. This cost-sharing structure mirrors financing arrangements in several Eastern European countries, where public investment in community care is still expanding [12, 16]. The lack of a clearly defined benefits package for extended care may create disparities in access, particularly for individuals with limited financial resources or high care needs. Developing clearer eligibility criteria and diversified funding mechanisms, including support for informal caregivers, may facilitate more equitable access and reduce reliance on out-of-pocket payments.

Strategic planning and evaluation mechanisms

Policy initiatives for active ageing and long-term support in Bulgaria are guided by national strategies, in-

cluding the National Strategy for Active Life of Older People 2019-2030 [17, 18] and its action plans. While these documents provide a strategic outlook, monitoring tools and performance measures of impact are still being developed – a trend characteristic of many Eastern European Member States undergoing long-term care transformation. Strengthening evaluation mechanisms, introducing population needs assessments, and linking financing to measurable outcomes may support more consistent and evidence-based policy implementation. Integrated planning that combines demographic projections, workforce capacity, and technology development could help align future reforms with emerging care needs.

Human resources, education, and interdisciplinary training

Workforce and demographic pressures

Human resources capacity is a fundamental determinant of access, continuity, and quality in geriatric care. Bulgaria, similar to other Central and Eastern European countries, faces simultaneous ageing of both the general population and the health- and social care workforce, combined with outward migration of professionals and a limited influx of new entrants into long-term care careers [12, 16]. These demographic trends reduce the pool of potential workers

while increasing the number of older adults requiring sustained support. This dual pressure highlights the need for targeted recruitment strategies, retention incentives, and career development pathways in comprehensive care for older adults. Strategic workforce planning that incorporates demographic forecasting may help align staffing capacity with future care needs.

Education and specialization in geriatric care

Geriatric competencies require multidisciplinary expertise, spanning chronic disease management, polypharmacy, cognitive impairment, rehabilitation, nutrition, communication, and ethical decision-making. In many European countries, specialized geriatric nursing, geriatric medicine, rehabilitation therapy, and dementia-focused training are formally recognized and linked to competency frameworks that support advanced roles within interdisciplinary teams [14, 16].

In Bulgaria and other Eastern European Member States, specialization in geriatrics is developing, but is not yet systematically linked to regulatory standards or staffing requirements. Strengthening national curricula, expanding postgraduate programs, and introducing competency-based frameworks could support advanced practice roles, improve care continuity, and enhance integration between clinical and social support.

Digital competencies and technology-assisted care

Digital transformation requires skilled professionals capable of using electronic health records, telemedicine platforms, remote monitoring tools, and AI-assisted decision support. These competencies are particularly relevant in aging populations, where remote follow-up, medication monitoring, and early detection of complications may reduce preventable hospitalizations and support aging in place [19, 20].

Expanding education in digital health literacy for nurses, physicians, social workers, and rehabilitation professionals could enhance cross-sectoral coordination and reduce inequalities stemming from uneven technology adoption. Training should also address ethical aspects, including data protection, algorithm transparency, and informed consent, particularly for older adults with cognitive impairment.

Burnout prevention and ethical resilience

Professionals working with frail older adults face emotional and ethical demands associated with dependency, cognitive decline, family distress, and end-of-life care. These demands, if unsupported, may contribute to burnout, moral distress, and reduced workforce retention. According to WHO Eu-

rope [16], emotional exhaustion is more prevalent among professionals providing long-term care than in acute care sectors.

Embedding reflective practice, supportive supervision, peer consultation, and ethics-based communication training may strengthen professional resilience. Frameworks for shared team decision-making, especially in complex cases, can reduce individual strain and support ethically sustainable practice.

Training and support for informal caregivers

In many European countries, including Bulgaria, informal caregivers provide a substantial share of long-term care and are increasingly recognized within policy frameworks. However, they often lack structured training and emotional support, resulting in physical strain, financial burden, and psychological stress. Training programs that provide guidance on mobility support, medication safety, dementia care, nutrition, and communication can enhance care quality, reduce preventable complications, and improve caregiver well-being.

Integrating caregiver education into community services, primary care, and municipal programs may support shared responsibility between health and social sectors [17]. Recognizing informal caregiving as a complementary rather than substitute role aligns with European policy trends promoting balanced partnerships between families and professional providers.

Digitalization, telemedicine, and artificial intelligence in geriatric care

Digital records and integrated information systems

Electronic health records (EHRs) and shared digital platforms enable continuous access to clinical, social, and rehabilitation data, supporting individualized planning and reducing avoidable repetition of diagnostics. In geriatric care, integration of medication histories, cognitive assessments, and functional scores is essential for safe care transitions. Countries with developed long-term care systems have expanded EHRs to include social assessments and standardized dependency scores. Bulgaria's gradual implementation of national e-prescription and e-referral systems represents a foundational step towards easier access of medical professionals to the patients' medical information. However, deeper integration with municipal social services and extended care providers remains necessary to support continuity and person-centered planning.

Telemedicine for chronic disease and functional monitoring

Telemedicine offers significant potential for older adults, particularly those with limited mobility or living

in underserved areas. Evidence from European pilot projects demonstrates that teleconsultations and remote monitoring can reduce hospitalizations for heart failure, chronic obstructive pulmonary disease (COPD), and diabetes, while improving treatment adherence and early detection of complications. Examples include:

- remote spirometry and oxygen saturation monitoring for COPD;
- telemonitoring of weight, blood pressure, and edema for heart failure;
- glucose telemetry and automated alerts for diabetes management.

Such tools support ageing-in-place strategies and reduce reliance on hospital care. To maximize benefits, reimbursement mechanisms, training for providers, and digital literacy programs for patients and caregivers are essential.

Artificial intelligence as a supportive tool in geriatric care

Artificial intelligence (AI) may assist with diagnostic risk stratification, fall prediction, medication safety, and early detection of cognitive impairment [21]. Algorithms trained to analyze multimorbidity patterns and drug interactions can support clinicians in identifying high-risk combinations associated with polypharmacy and frailty. AI-based tools are also being tested to:

- predict falls using gait sensors and motion analysis;
- detect early cognitive decline using speech and writing patterns;
- optimize rehabilitation exercises through motion tracking.

These applications may enhance clinical decision-making, but they should complement rather than substitute professional judgement. Given the emotional and ethical sensitivity of geriatric care, algorithmic recommendations must be transparent, explainable, and applied within a human-centered model.

Ethical and legal considerations in digital geriatric care

Digital tools must respect autonomy, privacy, and informed consent. For older adults with cognitive impairment, consent procedures should include simplified communication and involvement of legal representatives or caregivers. Algorithm transparency and data protection regulations must prevent discrimination, particularly against individuals with lower levels of digital literacy. Ethical safeguards should ensure that:

- the right to human contact is preserved;
- decisions involving vulnerability (e.g., end-of-life care) are not delegated to algorithms;

- data cannot be used to deny access based on predictive risk.

Thus, AI and digital tools should function as responsible support systems that strengthen dignity and equity rather than create new barriers.

Digital literacy for professionals and caregivers

Effective uptake of digital tools depends on the digital competencies of care providers and informal caregivers. Training programs should include practical instruction in teleconsultation, remote monitoring, system navigation, and ethical use of sensitive data. Education tailored to the cognitive and emotional aspects of working with vulnerable older adults may enhance confidence and mitigate the risk of digital exclusion.

DISCUSSION

Demographic change as a strategic catalyst

Demographic change, combined with increasing multimorbidity and longer periods of dependency, is reshaping the structural and ethical scope of geriatric care in Bulgaria. These developments mirror trends observed in other Central and Eastern European countries, where long-term care systems are adapting to evolving patterns of population ageing, chronic illness, and parallel organization of health and social services. Rather than representing only a challenge in terms of resource demand, demographic ageing can serve as a catalyst for building more coherent, community-oriented, and person-centered care models.

Fragmentation and the need for integrated care pathways

Across Eastern EU contexts, health and social care have historically operated under parallel governance arrangements, often resulting in limited coordination and unclear accountability. The Bulgarian experience reflects this broader regional dynamic, where regulatory frameworks and financing systems remain partially separated. Strengthening integrated care pathways and shared data systems could support timely transitions between hospital, community, and home care. Person-centered models grounded in comprehensive geriatric assessment (CGA) may enhance continuity, facilitate interdisciplinary collaboration, and guide resource allocation using more consistent and objective criteria.

Strengthening workforce competencies and interdisciplinary collaboration

The sustainability of geriatric care depends on the availability of qualified professionals able to deliver clinical management, rehabilitation, psychosocial

support, ethical decision-making, and technology-assisted care. Opportunities for specialization and advanced practice roles, particularly in nursing and rehabilitation, may strengthen interdisciplinary communication and support coordination across extended-care settings. Addressing workforce resilience through professional supervision, ethics-based communication training, and shared decision-making frameworks may help mitigate burnout and improve retention, consistent with emerging European workforce strategies.

The role of informal caregivers within professional structures

Informal caregivers provide a substantial proportion of long-term support in Bulgaria and other European countries. Recognizing their contribution through structured training, psychosocial assistance, and financial mechanisms aligns with European policy directions that promote balanced partnerships between formal and informal care. Involving caregivers in interdisciplinary planning processes may enhance continuity, reduce avoidable complications, and support ageing in place, while maintaining a clear distinction between supportive, complementary roles and regulated professional responsibilities.

Digital transformation as an enabler, not a substitute

Digital technologies, remote monitoring, and AI-assisted tools offer important opportunities to strengthen continuity of care, reduce preventable hospitalization, and improve personalized decision-making. However, these innovations cannot replace clinical expertise or human interaction, particularly when working with individuals experiencing frailty, cognitive impairment, or end-of-life needs. Ethical implementation of digital tools should prioritize data protection, algorithm transparency, and equitable access, ensuring that technology reinforces human dignity and person-centered practice rather than substituting interpersonal support.

CONCLUSION

Geriatric care in Bulgaria is undergoing a significant period of transformation driven by demographic ageing, increasing multimorbidity, and a rising demand for sustained long-term support. Although current practices reflect broader global trends toward more complex models of care, fragmentation between health and social services continues to limit continuity, coordination, and person-centered planning. The progressive implementation of digital tools, comprehensive geriatric assessment (CGA), and interdisci-

plinary competencies may serve as structural drivers of reform, positioning geriatric care not as a reactive response to functional decline, but as a proactive framework that promotes autonomy, dignity, and ageing in place.

Investment in workforce development, particularly in specialized geriatric nursing, rehabilitation, and digital literacy, may reinforce the capacity of interdisciplinary teams to respond to complex needs. Strengthening regulatory standards, transparent quality metrics, and well-defined care pathways between hospital, community, and home settings could enhance accountability, safety, and more effective allocation of resources. Formal recognition and structured training for informal caregivers – consistent with European policy trends – may align family support with professional services, reinforcing shared responsibility without substituting regulated competencies.

Digital solutions and artificial intelligence offer meaningful opportunities to improve access, monitoring, and personalized interventions. However, their adoption must be embedded within ethical safeguards that protect autonomy, informed consent, and equity, particularly for individuals with cognitive impairment or limited digital literacy. Technology should support, rather than replace, clinical expertise, human interaction, and ethical judgement.

RECOMMENDATIONS

To support the development of an integrated and sustainable model of aged-care services, the following strategic directions are proposed:

- Strengthen coordination between health and social sectors through shared care pathways and interoperable digital systems.
- Introduce comprehensive geriatric assessment (CGA) as a regulatory standard linked to decision-making, care planning, and financing mechanisms.
- Expand specialized education and advanced practice roles in geriatric nursing, rehabilitation, and dementia care, aligned with European competency frameworks.
- Develop community- and home-based services, including mobile teams and day centers, as alternatives to hospital-centered and institutional care.
- Establish transparent quality metrics, regular auditing, and licensing standards for long-term care providers.
- Support informal caregivers through structured education, psychological assistance, and financial mechanisms.

- Ensure ethical and person-centered deployment of AI and digital health tools, safeguarding clinical autonomy and equitable access.
- Promote research and national data systems to monitor care needs, outcomes, and service effectiveness.

Geriatric care is not solely a clinical domain, but a societal commitment that reflects collective values of dignity, solidarity, and human rights in later life. Bulgaria, similar to many Central and Eastern European countries, has the potential to develop a modern, integrated, and ethically grounded model of long-term support. Achieving this vision will require political commitment, professional expertise, and sustained investment in both human and technological resources that enable older adults to live meaningful, autonomous, and socially connected lives.

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