NET4 Age-Friendly

D7 Final report on integrated health and wellbeing pathways

International Interdisciplinary Network on
Smart Healthy Age-Friendly Environments | NET4Age-Friendly

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EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY

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EXECUTIVE SUMMARY

This report reflects the activities performed in Working Group 2 of COST Action NET4Age-Friendly. The Working Group delved into the current state of the art in the field of integrated health and well-being pathways. The Working Group discussed the definitions of integrated health and well-being and started surveys to define the current policies and activities in this field. Two grantees with a Virtual Mobility Grant contributed with extensive desk research on integrated care and well-being for older people and policymaking in Europe and European countries. Additionally, a rapid scan was performed by the vice-chair of the Action to describe the situation for younger people.

The purpose of this report is to provide an overview of the current state-of-the-art on integrated health and well-being pathways and its results will be used to develop the modules on integrated health and well-being pathways that will become part of the Reference Framework, the ultimate deliverable of the COST Action 19136 NET4Age-Friendly. It delves into the primary factors and strategies influencing the development and sustainability of integrated health and well-being initiatives.

Integrated care for older people is most widespread. The relevant shift is proposed towards the integration of health and social care in order to improve functional potentials and slow down the decline in mental capacities in older people with joint and synchronised actions, thus improving both patient-centric and system-centric outcomes. Despite many examples of efforts, the evidence of successful strategies is limited.

The lives of human beings are a continuum of genetic, biological, social, cultural and economic processes. Each stage in life influences the next and determines the health effects or risks. A life course perspective of an integrated conceptual approach is needed to enable long-term health gain. Therefore, the report also focuses on integrated care for younger people. Integrated mental healthcare for children and younger people is most found in the literature.

The report further focuses on integrated care models in the world and delivers some inspiring examples. A critical benchmark was performed across EU member states to distil common practices, highlight disparities, and identify opportunities for improvement by aligning with EU policies and standards.

The report continues with an analysis of the implementation of integrated care and well-being to explore the success factors and barriers. Special attention is paid to the use of ICT for social interaction of older adults to age in place. Policy recommendations are described to address the challenges of an ageing society.

The conclusion of the report focuses on the recommendations for the Module of the Reference Framework of NET4Age on integrated health and well-being pathways.

1. INTRODUCTION

1.1 Background and aims

The number of individuals with complex care needs is increasing, because of the concurrent chronic health conditions, mental health and social challenges[1]. According to the European Parliament Report on mental health[2] mental health disorders are a public health challenge and the well-being of the population is a central focus for governments.[3] Prior to the onset of the COVID-19 pandemic in 2019, approximately 84 million individuals in the European Union (1 in 6 people) grappled with mental health issues. Unfortunately, these numbers have escalated since then. The pandemic exacerbated existing challenges, particularly impacting the mental well-being of young individuals and those already contending with mental health issues. Data reveals that women are more susceptible to common mental health disorders such as depression and anxiety compared to men. For instance, in 2019, a higher percentage of women (8.7%) in the EU aged 15 and above reported chronic depression compared to men (5.5%). Nevertheless, it is noteworthy that men face a higher risk of suicide, underscoring the importance of adopting gender-sensitive approaches in mental health strategies (Mental health in the EU, 2023)

Physical and mental health are linked and demand the health response to be equally available[4]. To improve the quality of life of all people, and even more of those with physical and mental health comorbidities, there is a need for integration across physical and mental health services. Integrated care aims to make services streamlined, encourages different services to work together and provides continuity of care[5]. This justifies why integrated care has to become an essential part of the health system to respond effectively to those needing treatment[6].

1.2 Methods and definitions

This section shortly describes the definitions of integrated care and well-being. The methodology is further described.

1.2.1 Definitions

Definitions of the integrated health

Integrated health care refers to coordinated care that addresses all aspects of patient health, focuses on a patient's individual needs, and involves a multidisciplinary team of health care professionals[[73]] In instances where individuals face health challenges or difficulties in self-care, collaborative efforts will be

employed to ensure the availability of suitable local health and social care services. The overarching goal is to integrate these services, focusing on the unique needs of each individual.

Despite the recent surge in popularity of this patient care approach, as indicated by a 2019 study in the Integrated Healthcare Journal [[74]], where approximately 75% of scholarly works on integrated health care were published within the last two decades, it is essential to recognize that its origins trace back thousands of years.

According to the World Health Organization (WHO), the approach of integrated health care stands for an improved access to family- and community oriented primary care services, ensures continuity of care through an efficient and cost-effective system of secondary and tertiary hospital care.[7]

Integrated care is an essential aspect of healthcare reform, aiming to achieve better health outcomes, improved patient experiences, and cost efficiencies. Given the increasing ageing population and the prevalence of chronic diseases in the Europe, integrated care becomes a central tenet of sustainable healthcare. This review will explore the strategic policy directions and initiatives the EU has undertaken to promote integrated care.

Over the past few decades, the EU has recognised the need for a more patient-centred, efficient, and coordinated healthcare approach [[75]]. Integrated care seeks to bridge the gaps between primary, secondary, and tertiary care, as well as social care, ensuring a continuum of care for patients.

Definitions of the well-being

Well-being became a favoured concept at global, national and local governmental levels in the decade before the Covid-19 pandemic, emerging as a national outcome to rival Gross Domestic Product.[8]

Well-being is defined as an overall evaluation that an individual makes of his or her life in all its important aspects and is often called “subjective well-being.” [[76]] This definition is contrasted with objective evaluations, which require judgments that are independent of an individual’s values and desires.

The World Health Organization defines positive mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community”. This conceptualisation of well-being goes beyond the absence of mental ill health, encompassing the perception that life is going well.[9]

Relations health and well-being

Maintaining health and well-being is important for individuals to maximise their potential and enable them, to lead active, fulfilled lives and participate fully in their local community. Physical and mental health are closely linked and both are important for well-being.

Figure 1 depicts the profound influence of various aspects of our environment and community on our health, well-being, and behaviour. Factors such as employment, education, housing, local community spaces or green areas, and transportation all play a significant role. Individual health and behaviours are not only shaped by personal choices but are also widely impacted by the broader community context, encompassing social networks, perceptions of safety, and the ability to contribute to the local neighbourhood.

Figure 1 - Model of wider determinants of health & well-being[10]

This approach to health and well-being emphasises the recognition that fostering participation, sustainability, and ownership in local initiatives requires direct collaboration with communities. This involves empowering them to develop services and activities that hold significance for both individuals and their communities. In instances where individuals face health challenges or difficulties in self-care, collaborative efforts will be employed to ensure the availability of suitable local health and social care services. The overarching goal is to integrate these services, focusing on the unique needs of each individual.

1.2.2 Methods

The first step in this review was to identify relevant literature to answer the questions on the topic of integration between general health services for older adults and young people (medical care) and health and well-being services (public health services). This was initiated by a search of the literature to identify articles appropriate to answer the review questions and we searched the thesauruses in Medline, CINAHL, and Business Elite databases to identify relevant keywords in the areas of integration, medical care and public health and then we searched these databases using combinations of the identified search terms.

Second steps were to review and critically analyse policy documents and strategies in EU and out of the EU about integrated health and provide best practice examples.

2. INTEGRATED CARE AND WELL-BEING OLDER ADULTS

2.1 Demographic change

Ageing is emerging worldwide as a key policy issue as the absolute number and proportion of older people are increasing at an increased pace. Figure 2 reflects the ageing of the population in 2013 and prospects in 2050.

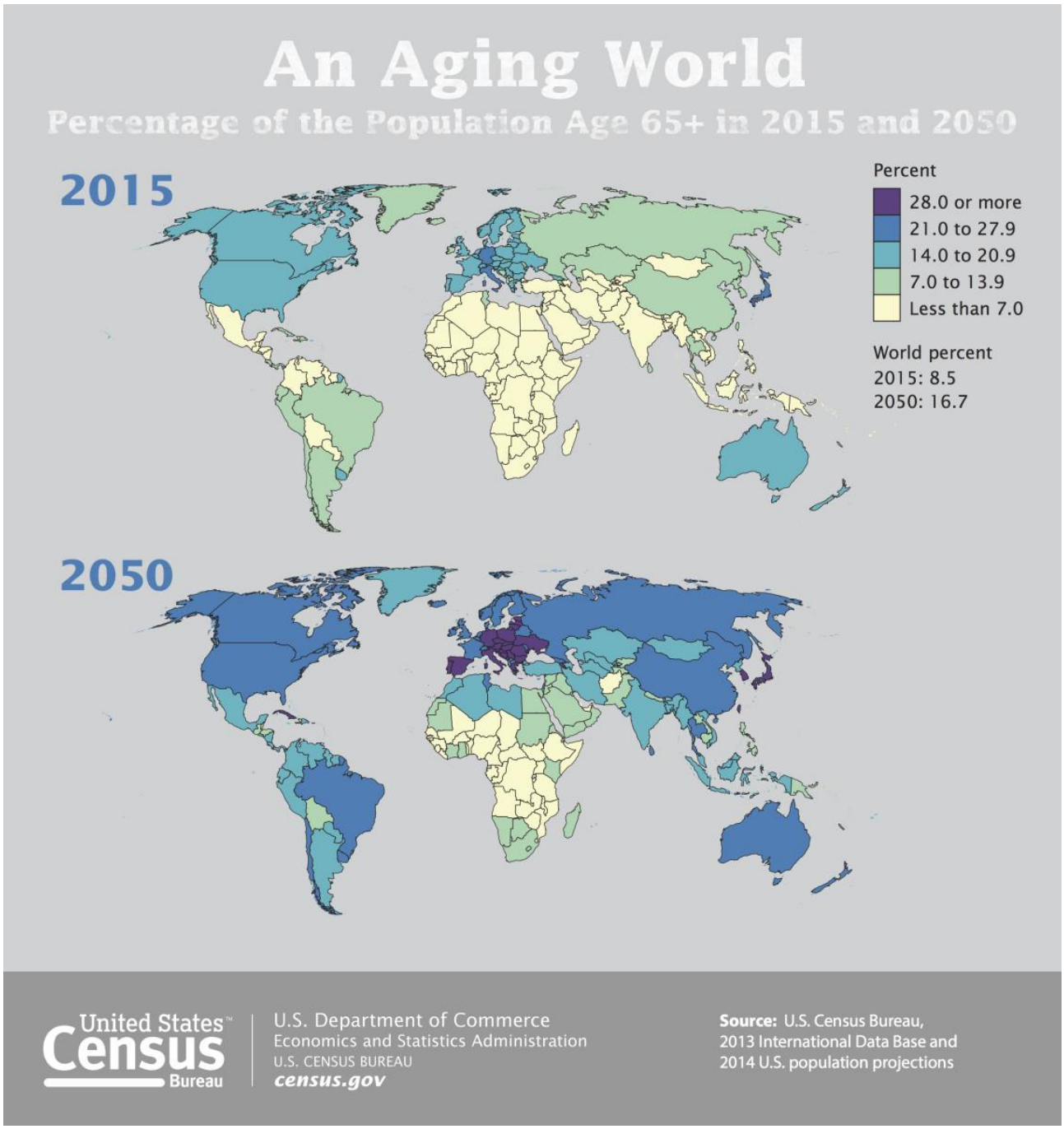

Figure 2: United States Census Bureau, 2014

In 2013, proportions indicated that only in Japan did the percentage of people aged 60 or older exceed 30%, while this trend will be more common in 2050, including countries in Europe and North America, Chile, China, the Islamic Republic of Iran, the Russian Federation, the Republic of Korea, Thailand and Vietnam. These percentages suggest that the ageing pace in many countries has increased compared to the past. While in Europe it took 150 years in France to observe the change from 10% to 20% of population over 60 years, for many countries, such as India, Chile, Brazil, this change will happen in 20 years interval, leaving much less time for the society adaptation.[10]

The main drivers of population ageing are: increased life-expectancy at birth and decreasing fertility rates.[10] Increased life expectancy worldwide has been predominantly determined by an improved survival at a younger age. In overall the major causes of death in older age are non-communicable diseases, which happens earlier in life in low- and middle-income countries than in high-income countries. However, communicable diseases still contribute significantly in both low- and middle-income settings.[10] Increasing survival at an older age has become a recent contributor to an increased life expectancy [11] unevenly between male and females and at much faster rates in high income countries reflecting overall improved health care and differences in life styles.

Contribution of older people to society is mainly determined by their health, which implies the extent of the human and social resources as well needed as we age. There is not enough evidence that longevity comes with a better health today in comparison with the previous generation.[12] Devoting public resources to improving the health of older populations, and healthy life style in general is justified and needed for multiple reasons:

- The human right that older people have to the highest attainable standard of health [13];
- Fostering sustainable society development in evolving demographic transition (UNFPA);
- The economic need to adapt to shifts in the population age structure to minimize the expenditures associated with aging society and maximize the contributions that older people make (Figure 3) (Ageing, Older Persons and the 2030 Agenda for Sustainable Development).

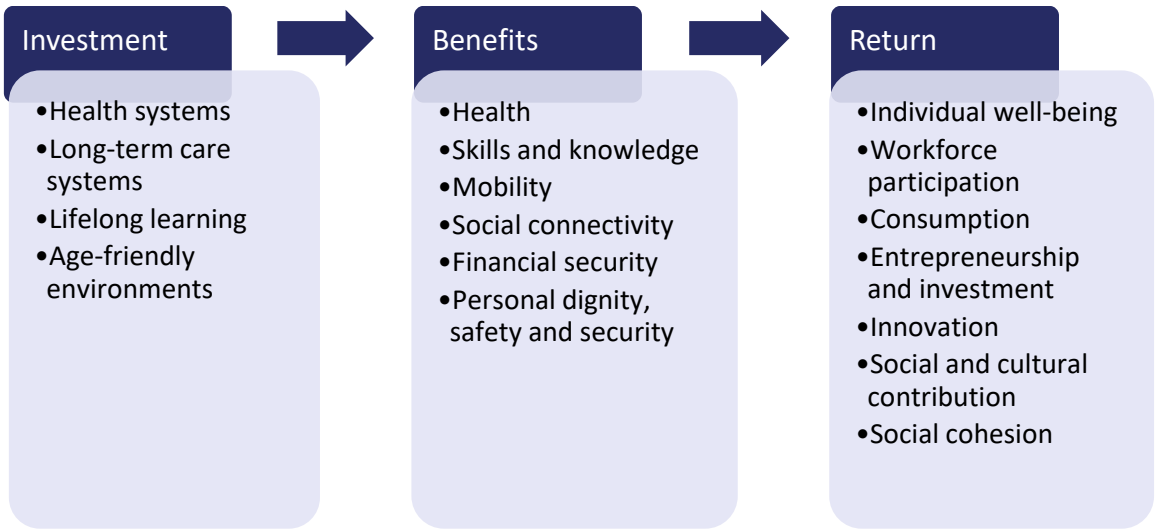

Figure 3. Investment in and return on investment in ageing populations. World Economic Forum 2013

2.2 Needs for implementing integrated care

Established healthcare systems are designed as reactive systems structured to diagnose and cure health issues as they appear, which better suits the treatment of communicable diseases and younger populations. Despite the economic and societal burden of non-communicable diseases, such as chronic diseases and cancer, being immense, the paradigm shift from reactive to proactive patient-centric healthcare systems is still ongoing and slow. It is even more emphasised in older people's care, where prevention and management of chronic pain and difficulties in walking, hearing and sight loss are often overlooked.[14]

Early diagnoses of memory decline, gait speed or muscle dysfunction is lacking, adversely affecting possibilities to delay or even reverse the changes. Moreover, in traditional healthcare system usually there is no good coordination among healthcare professionals (HCP) from different specialties, neither a unified electronic patient health record over all levels of care, from primary to tertiary. Thus, the care is usually fragmented, lacking the clear overview of system health. In older people, use of numerous clinical interventions involving different HCP calls for a high degree of coordination between HCP in terms of care and treatment settings.[14] Moreover, social and healthcare are commonly disjoint on a system level, as they are governed, funded and managed by different authorities, which is an obstacle in offering coordinated and pervasive care.

2.3 Framework for integrated care for older people

In the World Health Organization (WHO) World Report on Ageing and Health[10] and Global Strategy and Action Plan on Ageing and Health [15] the necessity for reinvention of healthcare systems to meet the needs of the ageing society are outlined. The relevant shift is proposed towards the integration of health and social

care in order to improve functional potentials and slow down the decline in mental capacities in older people with joint and synchronised actions, thus improving both patient-centric and system-centric outcomes.

The provision of services in integrated care strategies can be done on different levels [16]:

- clinical (micro) level,
- service/organizational (meso) level or
- system (macro) level.

Despite many examples of efforts made to implement integrated care on different levels, to mention a few (Breton [17]; Angus & Valentijn [18]; Van Rensburg & Fourie [19] the evidence on successful strategies is limited.[20] The WHO has provided a framework on Integrated People-Centred Health Services providing the system level directions for policymakers to transform health system to support integrated care and improve life-long health by optimizing the way services are designed, managed, delivered and funded.[15] Within this integrated care roadmap, the WHO has designed the Integrated Care for Older People (ICOPE) approach to address the needs in care of older people.[21] The implementation strategies to ensure integration do not imply that different existing care related structures should be merged, but that the work of different service providers in a community should be coordinated in the system.

The thorough review to identify the older people needs (summarised in World report on Aging and health;[10]) and implementation attempts from 2000 onwards [15] suggests that service-delivery models should have the following features for the ICOPE approach[21]:

- community-level and home-based interventions
- person-centred assessments and integrated care plans,
- shared decision-making and goal-setting,
- support for self-management,
- multidisciplinary care teams,
- unified information or data-sharing systems,
- community engagement and caregiver support,
- formal links with social care and support.

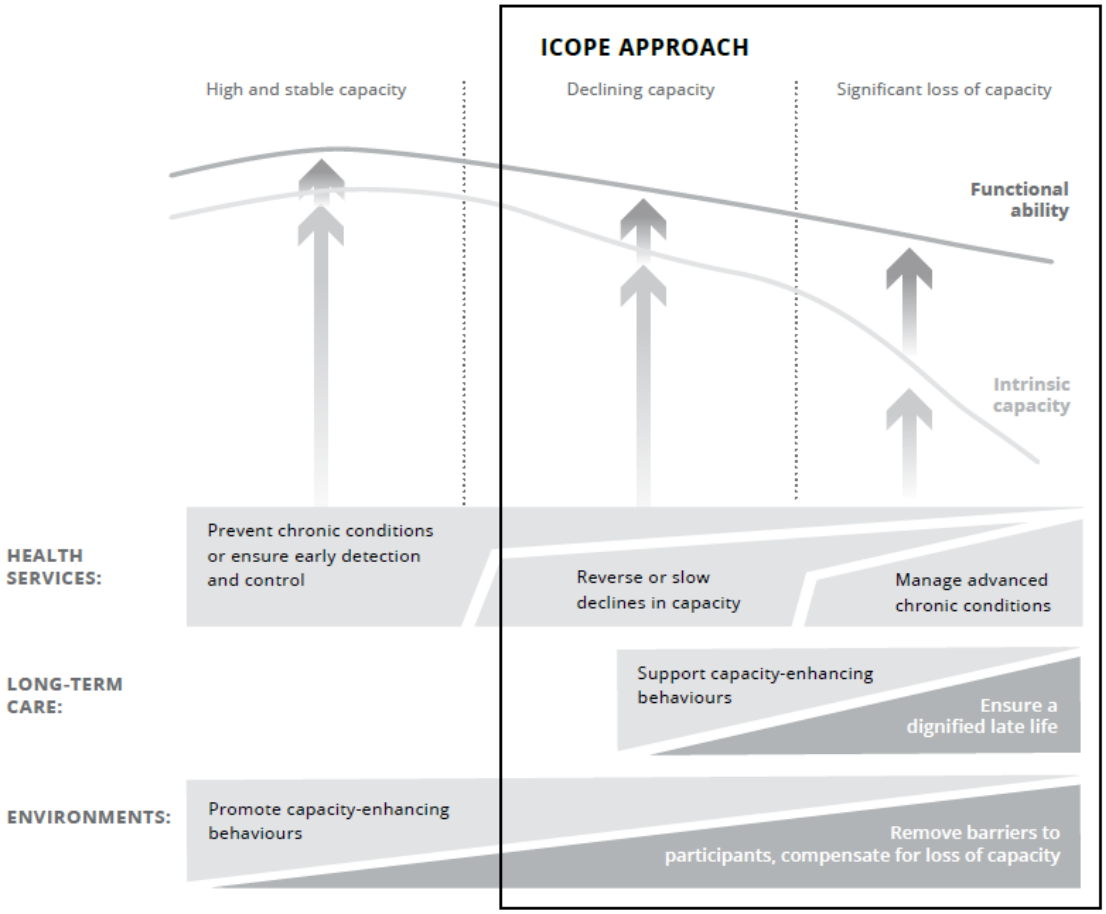

Figure 4. A public health framework for healthy ageing and the opportunities for public health.[21]

3. OVERVIEW OF INTEGRATED CARE MODELS IN THE WORLD

This systematic review examines patient outcomes of integrated care for older adults. Research indicates that integrated care may improve hospital admission rates in older adults. Integrated care may improve hospital stay length, patient satisfaction, and readmission rates. In contrast, integrated care did not affect mortality. The impact of integrated care on patient outcomes in later life is unclear due to a lack of robust findings. This review identifies important patient outcomes in integrated care for older adults, but more theory-based research is needed to evaluate their impact.[22]

Evidence from France

The "Method of Action for Integration of Health and Social Care in the field of Autonomy" (MAIA) was put into place as the first actual model of integration services in France, involving all parties involved in the medical, psychological, social, administrative, and environmental fields, at all levels of responsibility, from national to local and clinical. However, the development of policies for the older adult remained the responsibility of several organizations, and the promotion of integrated care appeared to be heavily dependent on national political leadership. The majority of France's regions have adopted case management by MAIA, which has benefited patients and their loved ones. However, some important components of the MAIA program (joint multidimensional assessment tool and joint territorial information system) were gradually dropped.[22]

Personnes Agées à Risque de Perte d'Autonomie, a first experimental program for older people at risk of losing their autonomy, was launched in 2014. In order to improve coordination between stakeholders in the private, hospital, and medical-social sectors, a variety of organizational tools were used. In particular, based on already-existing systems of coordination and integration, plans for territorial support coordination (Coordinations Territoriales d'Appui) were developed. The development of "Territorial Support Platforms" in 2016 was a concrete example of the idea of territorial coordination of support by encouraging a bottom-up strategy that placed a focus on local stakeholders' initiatives, with the regional health agencies serving as facilitators and regulators in the contract process.[22]

Since 2020 ICOPE recommendations have been incorporated into standard clinical practice at the Gerontopole of the Toulouse University Hospital (France), a WHO Collaborating Centre for Frailty, Clinical and Geroscience Research, and Geriatric Training. It is called INSPIRE ICOPECARE program and it is public health program, employing digital screening tools to enable the routine gathering and monitoring of data pertaining to intrinsic capacity.

Evidence from Germany

Health care in Germany is historically developed in sectors that are largely distinct from one another, with frequent information losses, producing negative effects on the quality and cost of care. One strategy for enhancing the effectiveness and efficiency of health care is "integrated care" with horizontal and vertical actor networks. ." The population-based integrated health care system known as "Gesundes Kinzigtal" (Integrierte Versorgung Gesundes Kinzigtal, IVGK) was initiated in the Kinzig River Valley region of the German state of Baden-Württemberg more than a decade ago. [23]

IVGK is designed to optimise the cost-effectiveness of health care. It consists of program for promoting health and facilitating cooperation among service providers, as well as a contract for shared savings that has enabled the annual saving of resources. The main aim was to examine the quality of care provided by IVGK versus conventional care over the past decade.[23]

Evidence from UK

The Health and Social Care Act of 2012 in England has accelerated the adoption of integrated care. Although health and social care system restructuring has garnered attention, there has also been significant change in service delivery. The NHS Long Term Plan in England mandated Primary Care Networks in 2019, requiring primary care practices to collaborate with community, mental health, social care, acute care, and voluntary services in their local areas.[24]

Since 2012, local health and social care organizations have implemented various initiatives to promote seamless service integration and patient-centred care across boundaries. These initiatives primarily focus on coordination between professional groups and case management. Co-locating care professionals is crucial for service integration. Colocation is when multiple professional groups share a workspace. The concept of co-location outside of hospitals is not new. General Practise (GP) surgeries in the UK have traditionally housed GPs, nurses, administrative and clerical staff. In primary care facilities, professional groups have expanded to include health visitors, chemists, social prescribers, mental health workers, and social workers.[24]

The centralization of community nursing services, procured by community health providers, has led to a provision of care that is separate from primary care. Community nursing is the primary provider of care, but other professionals like therapists, mental health professionals, and social workers may also contribute as part of a multi-professional team. Co-location can improve collaboration, communication, relationships, professional culture, and patient outcomes.

Evidence from integrated care sites – SUSTAIN project

Integrated care sites are being established in Europe to cater to the needs of older individuals with multiple health and social care requirements who reside in their own homes.[25] Stoop and associates conducted the study across the several European countries with aim to enhance comprehension of the delivery of person-centred care within the framework of integrated care, considering various viewpoints. The study was carried out as part of the European project SUSTAIN, which focuses on providing sustainable and personalized integrated care for older individuals in Europe. The objective was to enhance the provision of comprehensive healthcare for older adult individuals residing in their own homes across various European regions.[26] The SUSTAIN project involved collaboration between stakeholders from integrated care sites and researchers to devise and execute a diverse range of initiatives aimed at enhancing various facets of integrated care, including person-centeredness.

SUSTAIN project goals were: 1) recognise the activities carried out in integrated care sites that aimed to enhance person-centred care and support for older people living at home; and 2) comprehend the viewpoints of various actors (such as managers, health and social care professionals, older people, and their informal carers) regarding these activities. The SUSTAIN project encompassed thirteen integrated care sites situated across seven European countries: Austria, Estonia, Germany, Norway, Spain, the Netherlands, and the United Kingdom. These sites catered to distinct demographic segments and offered a variety of care services, such as proactive primary and social care for older adult individuals, post-hospitalization care for older adults, dementia care, and home-based nursing and rehabilitative care.

Results shows that stakeholders from integrated care sites across Europe undertook a wide variety of efforts to place older people at the centre of their care and support.

Evidence from Canada

Significant study about integrated case management between primary care clinics and hospitals for people with complex needs who frequently use healthcare services in Canada was conducted by Hudon and colleagues, published in 2023. [27]

Models of integrated care, such as case management (CM), aim to overcome fragmentation, enable better coordinated and more continuous care. CM is a collaborative, interdisciplinary, dynamic and systematic approach to ensure, coordinate and integrate care and services for a specific population. It is based on an interdisciplinary approach in which a case manager evaluates, plans, implements, coordinates and prioritizes services according to the needs of patients, in close collaboration with the partners involved.

Since 2004, Quebec has implemented a new organisational model that links resources in a territory into a local health and social services network (LSN). Each LSN consists of a health and social services centre (HSSC), which combines local community health centres (CLSCs), residential and long-term care centres (CHSLDs), and often a hospital. To achieve its goals, the HSSC is divided into service program, each serving specific patient groups through various care and service trajectories or clinical pathways.

In Quebec, the integrated services network model combines clinical (patient management procedures), governance (management, financial, and information systems), and values systems (beliefs, values, and interpretative schema that allow actors to communicate and collaborate). The pursuit of coherence between these systems results in care integration and the normative, functional, and systemic integration of the clinical team. The Quebec-adapted DMIC model identifies 89 integrative nursing practice activities that promote integrated care. These activities are organized into nine broad dimensions (clusters): client-family-centred care, delivery system, performance management, quality of care, result-focused learning, inter-professional teamwork, roles and tasks, commitment and transparency.[28]

Evidence from Australia

To address the needs of patients living in western Sydney the Western Sydney Integrated Care Program (WSICP) Demonstrator was piloted from 2014 to 2017.[29] This model had four aims:

1. improve the health of patients with chronic illness;
2. enhance patient experience;
3. reduce costs of health care; and
4. better support health professionals in caring for these patients.

The WSICP sought to improve chronic disease management in primary care and strengthen the PCMH model in western Sydney general practises. PCMH aims to improve primary care and registered patient experiences. Australian PCMHs provide team-based, whole-person, patient-centred care, care coordination and/or integration, quality and safety improvements to support evidence-based medicine, and extended hours and non-face-to-face care.

4. BENCHMARKING INTEGRATED CARE PATHWAYS IN THE EU

The intricacy of ageing populations demands adaptable and comprehensive healthcare strategies and therefore the European Union, recognising the importance of standardised high-quality care, endorses integrated care pathways (ICPs) for its citizens. This section undertakes a critical benchmarking analysis of the ICPs across EU member states to distil common practices, highlight disparities, and identify opportunities for improvement by aligning with EU policies and standards. This section is focused on the care for older people.

Review of EU Policies on older people's care

The European Union represents a coalition of member states committed to a set of common objectives that include promoting the well-being of its citizens. A cornerstone of this commitment is the establishment of a harmonized framework for health care policies that advocate for high-quality, accessible, and equitable care for all its citizens, with particular attention to vulnerable groups such as groups of older people. As Europe's population ages, the European Union faces significant challenges in ensuring that its health and social care systems are well-equipped to meet the increasing demand for services that cater to the specific needs of older adults. In response to this demographic shift, the EU has developed and implemented a range of policies, directives, and initiatives aimed at fostering integration and innovation in older adult care.

The European Union's health policy goals for older adult care aim to ensure comprehensive and equitable access to high-quality health services for all older citizens, regardless of socioeconomic or geographic differences. These objectives include improving access to care, upholding, and advancing the quality of services with a focus on safety, personalized care, and integrated service delivery. Furthermore, the EU strives to promote equitable care by tackling disparities in healthcare provision and outcomes for older people, considering the varying challenges encountered by older adults throughout Europe. To accommodate the increased demands from an aging population, the EU also prioritizes the sustainability of healthcare systems through innovation, resource efficiency, and bolstering of health system capacities. Lastly, the EU encourages member states to work collaboratively, sharing best practices, standardising care approaches, and fostering joint initiatives for health care planning and service provision, all in the pursuit of optimal health outcomes for older people. The EU's approach to these goals involves a holistic view of health care that extends beyond the traditional focus on medical treatments to encompass a broader spectrum of health determinants including social, environmental, and economic factors that impact the well-being of older people.

The landscape of integrated care for the older adult within the EU is shaped by several pivotal policy documents and pieces of legislation. The European Pillar of Social Rights, specifically Principle 18, guarantees the right to health care services, ensuring older adults citizens have access to affordable, high-quality

preventive and curative health care. This principle's translation into national policies significantly affects the structure and delivery of older adult care services. "Together for Health," the EU Health Strategy, sets forth aims and objectives that directly impact older adults, providing a blueprint for member states to address the challenges of an aging population. The EU Directive on Patients' Rights in Cross-Border Healthcare (2011/24/EU) addresses the needs of older adult patients seeking treatment across national borders, thereby influencing the design of integrated care pathways (ICPs) to support healthcare interoperability and continuity. Additionally, the EU Action Plan on Ageing strategically confronts demographic changes, proposing specific initiatives to integrate care for the older adult within health systems.

Supporting innovation and adaptation, the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) aims to improve older individuals' health and quality of life while emphasizing the sustainability and efficiency of health and social care systems. Funding initiatives like Horizon 2020 and Horizon Europe play a vital role, offering financial backing for research and innovation in healthcare, including older adult care pathways, catalysing advancements in ICPs. Lastly, the Green Paper on Ageing promotes intergenerational solidarity and responsibility, an ethos underpinning the EU's approach to developing and refining older adult care policies and practices. Together, these documents create a comprehensive framework that guides the development of integrated care pathways, ensuring they meet the evolving needs of Europe's older adult population.

Age-friendly approaches in the European Union are informed by a variety of policy documents and initiatives that seek to address the needs of older adults, ensuring that they can lead active, healthy, and integrated lives in society. Here are some age-friendly approaches based on these documents:

1. Accessibility of Services (European Pillar of Social Rights) - Ensuring that healthcare and social services are easily accessible to older people, including the availability of age-friendly infrastructure, transportation, and digital services.

2. Preventive Health Care (EU Health Strategy "Together for Health") - Focusing on prevention to maintain the health of older adults through initiatives such as health screenings, vaccinations, and promoting healthy lifestyles to prevent or delay the onset of chronic diseases.

3. Cross-Border Healthcare Access (EU Directive on Patients' Rights in Cross-Border Healthcare) - Facilitating access to healthcare services across EU countries, providing the older adult with the opportunity to seek specialized care abroad if it is not available in their home country.

4. Integrated Care (EU Action Plan on Ageing and EIP on AHA) - Developing integrated care models that connect healthcare and social services, ensuring coordinated care pathways and support systems for older people.

5. Innovation and Technology (Horizon 2020 & Horizon Europe) - Investing in research and innovation projects that develop new technologies and solutions tailored to the needs of older people, such as telemedicine, e-health services, and assistive devices.

6. Ageing in Place (The Green Paper on Ageing) - Supporting older adults to live independently in their own homes for as long as possible, through the adaptation of living spaces, community support, and home-based care services.

7. Lifelong Learning and Active Aging (The European Innovation Partnership on Active and Healthy Ageing) - Promoting lifelong learning opportunities and active participation in society to encourage a sense of purpose and engagement among older people.

8. Social Inclusion (European Pillar of Social Rights) - Ensuring that older adults are not isolated or marginalised but are fully included in society with opportunities for social participation and community engagement.

9. Interoperable Health Data (Digital Single Market Strategy for Europe) - Developing standards for health data that enable seamless sharing and utilization across regions and countries, aiding in personalized care for older people.

10. Employment and Retirement Policies (EU Employment Guidelines) - Adjusting employment and retirement policies to account for the varying capacities and preferences of older adults, including flexible retirement options and opportunities for part-time work.

These approaches reflect the EU's commitment to creating inclusive, sustainable, and innovative health and social care systems that adapt to the needs of an aging population. They are designed to improve the quality of life for older adults, allowing them to contribute to society while receiving the care and support they require.

National Variations in policies on older people's care

The European Union provides a framework for older adult care, but the implementation of policies and the structure of care systems vary significantly across member states due to national autonomy in healthcare provision. These variations are influenced by historical, cultural, economic, and political factors. Below are examples that illustrate how different EU countries have adapted the EU guidelines and directives to their local contexts, as reflected in their national policy documents.

1. Germany - Long-Term Care Insurance Act (Pflegeversicherungsgesetz):

Germany's approach to older adult care is encapsulated in its Long-Term Care Insurance Act, which introduced a mandatory long-term care insurance for all citizens. This social insurance model provides a range of care options for older people, including in-home care, day care, and full-time care in nursing homes.

2. France - The Adaptation of Society to Ageing Act (La loi d'adaptation de la société au vieillissement):

   This French legislation focuses on adapting society to the challenges of an aging population. It includes measures to support aging in place, improve conditions in nursing homes, and provide recognition and support for informal caregivers.

3. Sweden - The National Plan for Older adult Care (Nationell handlingsplan för äldrepolitiken):

   Sweden's policy document emphasizes the importance of dignity in older adult care and outlines a holistic approach that includes health care, social services, and the built environment. The Swedish model is known for its extensive welfare programs and the provision of home-based care.

4. Spain - The State Reference System for Personal Autonomy and Dependency Care (SAAD):

   Spain’s policy focuses on personal autonomy and establishing a network of services for those in a situation of dependency, which includes many older adults. This reflects the national commitment to ensuring that older adults can lead as independent a life as possible.

5. Italy - The National Fund for Dependency Care (Fondo Nazionale per la Non Autosufficienza):

   Italy has a mixed public-private system for older adults care, and this national fund aims to provide support for non-self-sufficient individuals, including older people, across both sectors.

6. The United Kingdom (England) - The Care Act 2014:

   The Care Act is an important reference point for national variations in older adults care. The Act sets out the duties of local authorities in England to assess and meet the needs of individuals requiring care and support, as well as the need to promote well-being and independence.

7. The Netherlands - The Long-Term Care Act (Wet langdurige zorg):

   The Dutch Long-Term Care Act is aimed at individuals who need intensive care for the long term. It is an example of a comprehensive approach that includes both medical and social care, providing services ranging from medical treatment to support for daily activities.

8. Finland - The National Programme for Ageing (Kansallinen ikääntyneen väestön toimintaohjelma):

Finland's national strategy on aging includes programs to promote health and well-being among older people, improve the quality and effectiveness of older adults care, and enhance cooperation across services and administrative sectors.

9. Denmark - The Quality Reform (Kvalitetsreformen):

   Denmark has focused on improving the quality of care through its Quality Reform, which includes initiatives aimed at providing more personalized care to the older adult and enhancing the qualifications of care providers.

10. Belgium - The Flemish Care Insurance Act (Vlaamse Zorgverzekering):

    In the Flemish region of Belgium, this act provides a modest allowance for those in need of care, helping to cover the non-medical costs associated with long-term care. It exemplifies the role of regional policies within a member state's approach to older adults care.

11. Portugal - The Network of Continuing Integrated Care (Rede Nacional de Cuidados Continuados Integrados):

    Portugal's integrated network aims to bridge the gap between health and social services, providing continuous care that ranges from health care and mental health services to social support.

12. Austria - The Federal Plan for Senior Citizens (Bundesplan für Seniorinnen und Senioren):

    Austria's plan emphasizes providing care that ensures the best possible quality of life for senior citizens, with measures that focus on care at home, supporting family caregivers, and high-quality residential care.

13. Ireland - The National Positive Ageing Strategy (An Rannóg um Bheartas na hAois):

    This strategy is Ireland's commitment to age-friendly society principles, promoting independence and well-being among older people, along with better coordination of services and infrastructure to support aging in place.

14. Cyprus - The National Action Plan on Ageing (Εθνικό Σχέδιο Δράσης για την Τρίτη Ηλικία):

    Cyprus' action plan includes initiatives to improve access to health services for older people, encourage active aging, and provide support for older adults care at the community level.

15. Greece – The National Action Plan on Ageing – (Organization and Development of a National Pilot Program for the Prevention and Promotion of the Health of the Older adult- EPIONI)

Integration into commonalities

Preventative Care: The EPIONI program aligns with the common EU objective of enhancing the quality of care, with a specific emphasis on prevention. It reflects a shared understanding that preventative health measures, including vaccinations, are crucial for maintaining the health of older adults and ensuring the sustainability of care systems.

Public Health Initiatives: Greece's focus on public health education and promotion, particularly regarding respiratory health and infection control, mirrors wider EU efforts to address public health challenges, which are especially pertinent given the aging demographic.

Integration into differences

Specific Health Campaigns: The thematic approach taken by Greece in 2020, concentrating on respiratory health, signifies how national strategies can prioritise specific health concerns based on current needs, such as the global emphasis on respiratory infections considering the COVID-19 pandemic.

Tailored Public Health Messaging: The EPIONI program demonstrates Greece's tailored approach to public health messaging and intervention for older people, which differs from broader, more generalized health policies seen in some other member states.

5. IMPLEMENTATION OF INTEGRATED CARE AND WELL-BEING

5.1 Success factors

Standards and Best Practices

As the European Union strives to enhance care for people of all ages, a set of standards and best practices has been established to guide member states in the development of integrated care pathways. These standards are anchored in EU directives, cross-national policies, and evidence from studies and pilot programs. The following segment delves into these elements and incorporates stakeholder feedback to provide a multi-dimensional perspective on older adult care in the EU.

Table 1: Core components of integrated care for older or frail populations (Threaplton)

ELEMENTS OF EFFECTIVE INTEGRATED HEALTHCARE	DESCRIPTION
Care continuity and transitions	Connected service networks, and effective referral systems can ensure patients receive quality care and continuity when they transit between locations or providers.
Policy and governance	Enabling policy is needed to align stakeholder goals/outcomes and provide financing structures to facilitate integration. Cooperation across care provider organizations and the integration of health and social care at the clinical level is important.
Shared values and goals	Shared values and goals are facilitated through formal policies and changes in culture at clinical and managerial levels.
Person centred care	Holistic care should be delivered with a focus on the individual and on enabling autonomy by empowering individuals to be involved in their own care.
Multi-/inter-disciplinary teams	Providers from all services must work together in a flexible way to provide coordinated care and so that patients can benefit from expertise from multiple specialties.
Effective communication	Communication is a vital component for all involved in care and extends to the communication between healthcare professionals by providing integrated electronic record management.
Case management	A named individual is identified as care coordinator/case manager, who has direct responsibility for supporting service users by coordinating care, engaging patients in their own care and providing care directly.

Facilitators for integrated health play a crucial role in fostering a holistic approach to healthcare, promoting collaboration among various healthcare components for improved patient outcomes.

Multi-disciplinary teams, which participate in frequent communication and share common values, was frequently identified as a necessary feature for successful integration of services. Integration can be realized by through planning and financing, shared vision, and a focus on providing patient-centred care. All changes that are large will inevitably be slower to take effect, requiring greater investment in preliminary work. Relevant facilitators and support tools are functional and well-structured information systems and appropriate methodology for evaluation of the implemented integrated care programs.

Table 2: Integrated healthcare facilitators

LEVEL OF INTEGRATION	FACILITATORS
Macro-level factors: External context	Strategic direction for improving services • Wider health system stability • Laws and regulation regarding professional competency, scope of practice, care standards and safety
Miso-level factors: System organization	Funding/finances • Common governance • Incentives for integration • Funding realignment, ring-fencing and pooling • Funding systems for integration
	Organisational leadership • Ensure strong project management and ties between implementers and the organization where changes will occur • Strong leadership and clearly communicated strategic visions
	Structure of existing services • System-level policies and procedures should be made that detail how care works and who is eligible
	Philosophy/ culture • Encourage innovation • Enable an adaptive system and focus on the system's capacity to self-organize
Miso-level factors: Intervention organization	Intervention size and complexity • Small/ focused teams can make fast decisions, implement changes and drive the project forward • Preliminary work to promote mutual understanding and clarify roles is useful

	Intervention resources • Success can be supported by a general framework for suitable conditions and funding in place
	Credibility • Staff must be confident that senior management/team leaders are strongly committed to implementing lasting change
Micro-level factors: Providers and research staff	Shared values and understanding • Training is needed on the objectives of change. Joint training (different professional groups) may be useful • Staff consultation promotes feelings of involvement and understanding of aims
	Engagement • Identify or appoint 'champions' who act to remind and encourage staff • Engage workforce with a simple vision and enable people on the front line to 'feel involved' in changing the service to ensure they effectively engage • Some staff autonomy and being motivated helped to make changes possible
	Communication • Allow time for relationships to develop Co-location increases frequency and quality of communication and gives better access to the appropriate professional knowledge • Regular, ongoing and pre-planned communication between senior partners in the relevant organizations • Create rules and agreement in advance about how the partnership/ collaboration will work • Electronic record sharing and using an integrated information system for record sharing in real-time data • Preliminary work is needed to involve staff, so they feel consulted and valued • Clear outlines of each role/responsibility are needed • Integrated care pathways can formalize multi-disciplinary team-working and enable professionals to examine their roles and responsibilities • Encourage staff to make decisions autonomously

5.1 Barriers experienced in the use of ICT for social interaction of older adults to age in place

Social networks and connectivity play a pivotal role in the health and well-being of individuals, particularly in the case of older adults. The phenomena of loneliness and social isolation, as defined by Holt-Lunstad and colleagues [31], refer to the subjective sensation of feeling alone and an actual deficiency in social ties,

respectively. These conditions can have harmful effects. The impact is more pronounced in the aging demographic, especially due to the shrinking of social networks as peers age or pass away. This is notably severe in Northern Europe, where it's less common for older adults to reside with their adult children.[32] [33] In an effort to alleviate loneliness and enhance the well-being of the aging demographic, a range of technological solutions have been introduced. Information and Communication Technologies (ICT), encompassing integrated computer and communication systems, empower older adults to stay updated and sustain social connections. These technologies cover a spectrum including social networking platforms, video calls, online communities, forums, and digital means to counter social isolation. Researchers like Khosravi et al. [34] have classified these ICT solutions into six distinct categories, highlighting their effectiveness in curbing loneliness and social isolation. The primary focus of most research has been on broad ICT tools such as the Internet, emails, computers, tablets, and smartphones that ease communication with friends and family. Additionally, social networking sites, social presence robots, videos for mental and physical engagement, and software designed for social connectivity and recreational activities are among the significant ICT tools. Moreover, Tele-Care and 3D virtual environments also play a crucial role in this area.

Notwithstanding the beneficial effects of ICT in fostering social connections and diminishing feelings of loneliness and social isolation in older adults residing in their own homes, barriers related to access, availability, and appeal remain. As reported by Eurostat, 61% of individuals aged between 65 and 74 in the European Union were internet users by the end of 2020.[35] However, older adults encounter more obstacles and exhibit less confidence in adopting new technologies compared to younger populations. This underscores an ongoing need to evolve and tailor ICT to better meet the needs of this older segment. Statistics like those from Eurostat often neglect the senior age group (75 years and above), who are more likely to experience mobility barriers that hinder social interactions - barriers that ICT could potentially mitigate.[35] Older adults encounter various hurdles in utilizing ICT, such as procuring the right technology, setting up devices and services, and health challenges like visual or auditory impairments. Additionally, the lack of technical skills and apprehension towards computing technology can be significant obstacles. Those with chronic conditions might be hesitant to embrace new skills and technologies due to gaps in knowledge and reluctance. Furthermore, digital disengagement is a common issue among older adults, with the utilization of the Internet and ICT decreasing with age, often due to declining health, marginalized living conditions, or psychological factors. Research has identified seven key influencers on technology adoption by older adults, including the practicality of the technology, psychological attitudes, societal influence, personal factors like age and sensory issues, cost considerations, environmental factors, and behavioural aspects like usage habits and frequency.[36] Within the scope of these barriers, we are undertaking a review of qualitative studies. The goal is to examine published research that details how older adults aging in their own homes utilize ICT for social interaction. This review aims to analyse and categorize the barriers they encounter with such

technologies. The protocol for this study has been published [37], and the team is currently in the phase of analysing which studies to include.

Several studies describe ICT as beneficial for older adults' social engagement at home. This review, which is expected to be completed in October 2024, will highlight potential solutions for developing age-appropriate technologies and ICT use among older adults, supporting well-being, independence and social connectivity. Effective integration of user-friendly ICT can enrich the experience of aging at home. Although several technologies exist for social purposes, accessibility challenges, such as technical difficulties, declining health, sensory loss, and lack of technical skills, are prevalent among older adults. This review is systematically describing these barriers and identifying gaps in the literature, which will assist policy makers and ICT developers in creating more adaptable and age-friendly ICT solutions for individuals ageing at home.

5.2 Barriers to implementation

Challenges and barriers for the implementation of integrated care - summary

No model or guidelines can be singled out to be the best for integrating care which hampers delivery of integrated care for ageing populations. Multiple initiatives are required through different services and professions in the health and social care systems. Moreover, the integration is costly, labour intensive and are prone to failure.[30]

Some barriers at national, i.e. cultural level, may exist in terms of greater resistance to change and accept innovation. It is thus important that people involved in care are encouraged to accept and even improve the proposed services and interventions. All stakeholders should be able to address common barriers they encountered, as introducing flexibility into programs for older people was found to be beneficial, leaving caretakers the choice on which actions to take based on patient needs.[30]

Implementation issues can be summarised at four main levels[30]:

i. Macro-level contextual factors;
ii. Miso-level system organization (funding, leadership, service structure and culture);
iii. Miso-level intervention organization (characteristics, resources and credibility);
iv. Micro-level factors (shared values, engagement and communication).

Table 3 - Implementation barriers for integrated care at different levels of integration. Source [59]

LEVEL OF INTEGRATION	BARRIERS
Macro-level factors: External context	• Cultural related barriers/inertia • Health system instability
Meso-level factors: System organization	Funding/finances • Funding silos • Competitive funding among stakeholders • Unclear financial attribution
	Organizational leadership • A barrier occurs when organization leaders are not in charge of interventions and changes are implemented from outside groups • Weakness in commissioning to support innovations and collaborative work and lack of sustained project management
	Structure of existing services • Divides between primary and secondary or health and social service provision. • Time pressure and staffing levels • Complexity in the care system
	Philosophy/ culture • Poor institutional philosophy • A permission-based and risk-averse culture • Bureaucratic environment based on a command and control approach to management
Meso-level factors: Intervention organization	Intervention size and complexity • Large, multi-component interventions take longer and are harder to implement • Complex interventions require cooperation with multiple stakeholders—getting agreement and implementing change can take longer and is more difficult
	Intervention resources • Insufficient additional resources/ extra funds mean new tasks will simply be added to existing ones, staff will not have enough time and new tasks will not be done
	Credibility • Interventions may lack credibility

Micro-level factors: Providers and research staff	Shared values and understanding • Staff attitudes, lack of shared values and disagreement over the goals or benefits of interventions • Lack of understanding may cause staff to feel their role is being eroded and are therefore not happy to help with changes • Sites, teams and members disagree over the aims or benefit of the proposed intervention and their roles and responsibilities
	Engagement • Lack of professional engagement is a barrier • Changes lacked credibility and others did not engage in change • Staff may feel uninvolved, underprepared and 'thrown in' to projects
	Communication • Insufficient communication in general is a major barrier to integrated care • Lack of existing working relationships between individuals/ groups • Teams and team-members are not located together • Lack of robust record sharing across services • Staff members are concerned about data security and viewing permissions • Primary care physicians may not be proactive in sharing data • Staff may be unclear of purpose/ objectives of interventions and thus not motivated to engage in changes • Staff confusion about their own and others' roles, permissions and responsibilities

5.3 Policy recommendations

Impact assessments and reports

Evaluating the effectiveness of healthcare policies on older adult care is critical for ensuring that the objectives of the European Union in promoting high-quality and accessible care for the older adult care met. To this end, the EU conducts regular impact assessments and issues reports that provide insights into how policies perform in real-world settings. This section reviews some of the key assessments and reports that have been instrumental in shaping current and future policies for older adult care.

1. Comprehensive Assessments of Older Adult Care Policies:

   European Commission's State of Health in the EU Reports. These biennial reports provide an analysis of the strengths and challenges in the health systems of EU member states, including a focus on the care of older adult populations. They offer a comparative perspective, highlighting how different health care models address common challenges.

2. Joint Reports on Health Care and Long-Term Care Protection:

Joint reports by the Social Protection Committee (SPC) and the European Commission examine how policies are safeguarding health and long-term care provisions for older people, focusing on sustainability and adequacy.

3. Focused Evaluations on Integrated Care Models:

   Evaluations of the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA): These assessments look at the initiatives under the EIP on AHA, particularly those that foster the implementation of integrated care models for older people, and their impact on improving health outcomes and care efficiency.

4. Assessments by the European Observatory on Health Systems and Policies:

   Studies and reports by this group provide in-depth analysis of specific aspects of older adult care, such as the integration of services, health workforce challenges, and digital health innovations.

Performance of health systems

Eurostat Statistics and Reports: Eurostat, the statistical office of the European Union, provides data and analyses on health care, including information pertinent to older people, such as access to care services, quality of care, and health outcomes.

Health at a Glance, Europe Reports: Produced in collaboration with the OECD, these reports benchmark the performance of health systems across EU countries, with chapters dedicated to aging and older adult care.

Policy Effectiveness and Recommendations: European Court of Auditors' Special Reports: The audits carried out by the European Court of Auditors occasionally focus on health-related expenditures and programs, evaluating the effectiveness of EU-funded health initiatives for the older adult and making recommendations for improvement.

The Aging Report: Economic and Budgetary Projections: This report projects the economic and budgetary impact of an ageing population in the EU, providing essential data for planning future health and long-term care services for older people.

Funding and Support Mechanisms: Overview of funding mechanisms like the European Structural and Investment Funds (ESIF), particularly the European Social Fund (ESF) and the European Regional Development Fund (ERDF), which may be used to improve health services for older people.

Development of Key Performance Indicators (KPIs): The Key Performance Indicators (KPIs) are designed to provide a standardised set of metrics that can be used to assess and compare the performance of ICPs across different EU member states, identify best practices and areas that require improvement, and inform policymakers and healthcare providers about progress toward predefined goals.

The following KPIs could be recommended:

- Data Infrastructure Development: Invest in the necessary infrastructure to ensure that the data required for the KPIs are collected consistently and accurately.
- Performance Monitoring Systems: Implement robust systems to monitor these KPIs regularly, providing visibility into the performance of ICPs.
- Benchmarking Best Practices: Utilise the KPIs for periodic benchmarking exercises to share best practices and foster improvement across the EU.
- Policy Harmonisation: Align national older adult care policies with the standardised KPIs to ensure that all member states are working towards the same objectives.
- Stakeholder Engagement: Engage with older adult patients, healthcare providers, and policymakers in the KPI development and review process to ensure that the indicators remain relevant and actionable.

Our research reveals a landscape of contrast and diversity within the older adult care frameworks of EU member states. Access to and quality of older adult care services are highly variable, often influenced by the country's economic robustness and the maturity of its healthcare infrastructure. Marked disparities are noted, with some regions providing cutting-edge, comprehensive care, while others grapple with basic service delivery. Innovation in older adult care is emerging as a beacon of progress, with several member states deploying integrated models that marry health and social care, fostering improved outcomes and patient satisfaction. However, these advancements are not widespread, with a lack of consistent data application hindering potential service improvements. The utilisation of data analytics, crucial for shaping efficient care pathways, remains an underdeveloped resource in numerous regions. Furthermore, while the spirit of collaboration and shared learning is rooted in EU philosophy, practical implementation of such cooperation is patchy, suggesting that more concerted efforts are needed to bridge the gap between policy and practice.

Recommended Actions

To address the varied challenges, a series of targeted actions are recommended. Foremost is the development and enforcement of EU-wide standards for ICPs to ensure all Europeans benefit from a consistent baseline of quality and accessible care. Addressing the stark inequities in care requires a dual approach: localised interventions for under-resourced areas and broader policy reforms to reduce socioeconomic disparities. A central EU platform should be established to facilitate the exchange and scaling-up of innovative care practices, enabling member states to benefit from shared expertise and experiences. Such an initiative must be underpinned by a commitment to strengthen health data systems, ensuring data-driven decision-making becomes the cornerstone of care pathway development. Finally, invigorating cooperation across EU borders

is crucial for a harmonized approach to older adult care, calling for a renewed focus on partnerships and resource-sharing to fortify the collective capacity to care for Europe's ageing population.

1. **Strengthen inter-sectoral collaboration:** foster collaboration between health and non-health sectors such as education, employment, housing, and transportation. Develop policies that encourage cross-sectoral partnerships to address the various determinants of health and promote holistic well-being.
2. **Community engagement and empowerment:** implement policies that prioritise community involvement in decision-making processes related to health services and programs. Empower communities to actively participate in the planning, development, and evaluation of integrated health initiatives.
3. **Incentivize integrated care models:** create incentives for healthcare providers to adopt integrated care models that focus on coordinating services across different healthcare settings. Support the implementation of accountable care organizations and integrated delivery networks to enhance continuity of care.
4. **Health information exchange and technology integration:** develop and implement policies that facilitate seamless sharing of health information among different healthcare providers and systems. Encourage the integration of technology to improve communication and coordination, ensuring a more comprehensive approach to patient care.
5. **Workforce training and development:** invest in training programs for healthcare professionals to enhance their skills in collaborative care and interdisciplinary communication. Foster a culture of teamwork and shared responsibility among healthcare providers from various disciplines.
6. **Address socioeconomic disparities:** develop policies that specifically target socioeconomic determinants of health, such as income, education, and employment. Addressing these disparities is crucial for achieving true integration and improving health outcomes for all segments of the population.
7. **Preventive and promotional initiatives:** prioritize preventive and health promotion strategies through policies that encourage regular screenings, vaccinations, and lifestyle interventions. Emphasize the importance of addressing root causes and promoting wellness to reduce the burden on the healthcare system.
8. **Patient-centred care:** implement policies that prioritize patient-centered care, ensuring that individuals have an active role in their healthcare decisions. Foster a culture of shared decision-making and support the integration of patient feedback in the continuous improvement of health services.
9. **Evaluation and continuous improvement:** establish mechanisms for regular evaluation of integrated health initiatives. Use data and feedback to identify areas for improvement and refine policies to better meet the evolving needs of the population.
10. **Legislation supporting integration:** enact legislation that explicitly supports and mandates the integration of health services. Provide a legal framework that encourages collaboration among different sectors, ensuring the sustainability and longevity of integrated health approaches.

6. INTEGRATED CARE AND WELL-BEING FOR YOUNGER PEOPLE

Integrated care is often mainly connected to older adults. That is not surprising: older adults are more likely to develop multiple (chronic) diseases or impairments than younger people. People with co-morbidity are often well-off with holistic person-centred approaches, such as integrated care programmes and protocols offer.

A quick scan in Google Scholar on the term "Integrated care younger people" yielded a wealth of information on integrated care approaches for younger people around the world. Integrated care for younger people mainly focuses on paediatric and mental healthcare and prevention for children and adolescents. Integrated care is also mentioned in combination with depression, autism, tobacco or substance misuse, with disability, with acquired brain injury, with diabetes and obesity.

In this contribution, attention is paid to a selection of available literature: the need for integrated care, prevention, mental health and obesity. This contribution mainly focuses on publications after 2017.

Life course perspective and the need for integrated care for children and young people

The need for integrated care for children and younger people and a life course approach was found in several contributions. The lives of human beings are a continuum of genetic, biological, social, cultural and economic processes. Each stage in life influences the next and determines the health effects or risks. A life course perspective of an integrated conceptual approach is needed to enable long-term health gain.[38] Interviewed stakeholders of integrated care systems revealed a common aspiration to change the focus to include education, public health, social care or the voluntary sector to set children and young people on a life-long path towards improved health and well-being.[39] A similar pledge is found in the editorial of Eastwood in the International Journal of Integrated Care in 2018.[40]

For the last two decades, the approach of integrated care, including co-located care, telepsychiatry, primary care, behavioural health and collaborative care, has grown and addresses the challenges of a siloed system of care where the body and mind are artificially separated. Current evidence indicates that integrated care will play a critical role in achieving better health, better patient experience, low costs and improved physician experience.[41] It is also acknowledged by Watson et.al. that children's health needs are changing: infections do cause less morbidity, but children are living with complex conditions and social determinants of health play an ever greater role. To address these changes, new models of integrated care that connect hospital-based paediatrics with community-based primary care are needed. Three models are described, and they demonstrate efficient delivery of tangible benefits and satisfaction.[42]

A meta-analysis on Integrated Care models and child health led to the conclusion that integrated care for children and younger people with ongoing conditions may deliver improved quality of life and cost savings. However, the effects of integrated care on the number of emergency department visits remained unclear.[43] The same conclusion was found for children and young people with severe problems: the need for an integrated care approach is evident to bridge the gap of wide-ranging psychosocial problems.[44] Although encouraging, evidence of clinical effectiveness of integrated secondary and tertiary healthcare models for children and young people with comorbid physical and/or mental health conditions is limited and of moderate quality. Agreed definitions and terms of integrated care for future research is needed.[45]

Mental health

Mental health problems represent the largest burden of disease in young people. Despite that, access to mental health care has been poor for them. Integrated services that provide physical, mental health and social care services, preferably in one location, benefits younger people.[46]

One in five people experience clinically relevant mental health problems before the age of 25 years. [47] Due to the fragmentation of care and services, children and young people are not accessing appropriate and/or timely care. In Australia, the Integrated Continuum of Connect and Care model is developed to integrate relevant services along a tiered care pathway.[47] Téa Collins and colleagues argue that digital health solutions have the potential to strengthen health systems and help achieve universal health coverage.[48] The need for more collaborative approaches that facilitate early recognition and treatment of the psychological aspects of illness as an integral part of patient-centred, family-focussed paediatric care are found in the clinical review performed by Fazel et.al.[49]

Another systematic review of models of integrated care for younger people experiencing medical emergencies related to mental illness shows promising evidence for improved health outcomes such as reduced emergency admissions and length of stay, and a reduced number of emergency readmissions. Integrating psychiatric care helps to triage effectively, intervene earlier, and signpost to therapeutic support, reducing lengthy and repeat hospitalisation.[50] An integrated one-stop shop for youth with mental problems has positive outcomes.[46] A randomised controlled implementation trial of a multicomponent integrated care program to empower mental health service users and their relatives throughout the recovery process led to the conclusion that the programme has a positive effect on the recovery journey. However, it is needed to reconsider implementation and evaluation strategies to meet the lack of effectiveness regarding the burden and social support in relatives.[51] Another model is the integrated/collaborative care treatment

model. It was designed to improve access within primary care and six studies indicated increased access and improved mental health outcomes.[52]

Adolescents with depression

Within the field of mental health, special attention was paid to adolescents with depression. The WHO[53] estimates that globally one in seven 10-19-year-olds experiences a mental disorder. Depression, anxiety and behavioural disorders are among the leading causes of illness and disability among adolescents. Suicide is the fourth leading cause of death among 15-29 year-olds. Studies in adults and adolescents have shown that integrated care in primary care settings is an effective model of treatment of mental disorders. After providing an overview of the mental health treatment gap in this developmental period, the argument is made for research focused on integrated care models specifically tailored for young adults that takes into consideration the various needs and challenges that they face and addresses the mental health treatment gap in young adulthood.[54] Kodish et.al. found that there is a growing evidence-base supporting the provision of integrated care for adolescent depression in primary care. This encourages that psychiatrists can partner with paediatric primary care providers to improve access to high-quality treatment of depression among adolescents.[55]

Autism

Autism is another mental disorder. According to the WHO[56], it is estimated that 1 in 100 children has autism. To deliver a successful neurodevelopment pathway, it is recommended to make the move to integrated commissioning. This offers an opportunity to redesign services and to bring together teams, instead of separate single condition pathways.[57] Another study showed that an integrated plan within a defined care pathway for the diagnosis, continuative interventions, and periodic redefinition of care of autistic people is essential for better outcomes. This is currently missing in the studies that were under investigation. Challenges include delivering services across all domains or life stages and effective coordination between health/social care providers and services. In practice there is a big variety in service provision and significantly weighted towards diagnosis and children's services rather than treatment and support or adult care. [58]

Preventive psychiatry

Early detection and intervention of mental health problems or disorders is essential for patients. The current state of knowledge on delivering promotion and preventive interventions addressing youth mental health

was performed by Colizzi et al. in 2020.[59] This review learned that integrated and multidisciplinary services are needed to increase the range of possible interventions and limit the risk of poor long-term outcomes, with also potential benefits in terms of healthcare system costs. Mental health professionals have the responsibility to orient social, political, and overall healthcare actors involved in the promotion and maintenance of mental health status. Early detection combined with integrated care significantly led to higher proportions of patients achieving combined remission.[60]

Low-income and integrated care

Davis et.al.[61] investigated how HealthySteps (one approach to integrated care for families in the US) impacted their functioning and their clinic in an urban low-income community. This research has been done from the perception that parents and young children in low-income communities have compounding risk factors for their health and mental health. Integrated primary care has been identified as an effective approach. Clinicians opined that HealthySteps improved their work and found that it improved their relationships with families and case conceptualisation.

Overweight and obesity

According to the WHO, obesity and overweight affect almost 60% of adults and nearly one in three children (29% of boys and 27% of girls) in the WHO European region. It is considered the fourth most common risk factor for non-communicable diseases, after high blood pressure, dietary risks and tobacco.[62] Childhood obesity is seen as a chronic disease by Halberstadt et.al.[63] with negative physical and psychosocial health consequences and argue that integrated care is needed. Thereto a national model was developed, led by a university-based team and eight selected Dutch municipalities. The model contains four components: Vision (overweight and obesity are multifactorial in origin), Process (six-step trajectory that facilitates assessing the factors and offering tailored care), Partners (children, parents, healthcare professionals and professionals in the social domain) and Finance (funding focusing on the actions instead on the professional who performs the action).

Because childhood obesity is a complex disease resulting from the interaction of multiple factors, Koetsier et.al.[64] studied available scientific literature on psychosocial and lifestyle assessments for childhood obesity, and experiences and views of healthcare professionals with regard to assessing psychosocial and lifestyle factors within Dutch integrated care. Relevant factors to assess are: child, family, parental and lifestyle (nutrition, physical activity and sleep), and structured in psychological and social aspects. How to assess was defined as talking, lifestyle and weight, professional-patient relationship and attitude.

According to Sachar et.al. [65], there is good evidence around the high prevalence of co-morbidity between diabetes and mental illness. Detecting and managing the mental health co-morbidity improves outcomes, but the evidence suggests that detection and access to appropriate mental health resource is poor and generally inadequate. Thereto a Working Group of Diabetes UK developed a model for the Mental Health Pathway. It consists of five core principles: Care for all, Support and information, Needs identified, Integrated care and Specialist care.

Technology-supported integrated care innovations to support diabetes and mental health care were investigated in a scoping review conducted by Racey et.al.[66] Their conclusion is that there is a growing body of literature on integrated care for diabetes and mental health enabled by technology. They found that still gaps exist with how to best equip healthcare professionals with the knowledge and skills to offer integrated care.

7. CONCLUSIONS

7.1 Main findings

The lives of human beings are a continuum of genetic, biological, social, cultural and economic processes. Each stage in life influences the next and determines the health effects or risks. A life course perspective of an integrated conceptual approach is needed to enable long-term health gain. For younger people, the integrated care approach should mainly focus on mental health, lifestyle, income and health inequalities. When people reach the situation of co-morbidities, such as physical decline, reduction of cognitive functioning or chronic diseases, the necessity of integrated care becomes even more urgent. According to the WHO, integrated care should focus on the following:

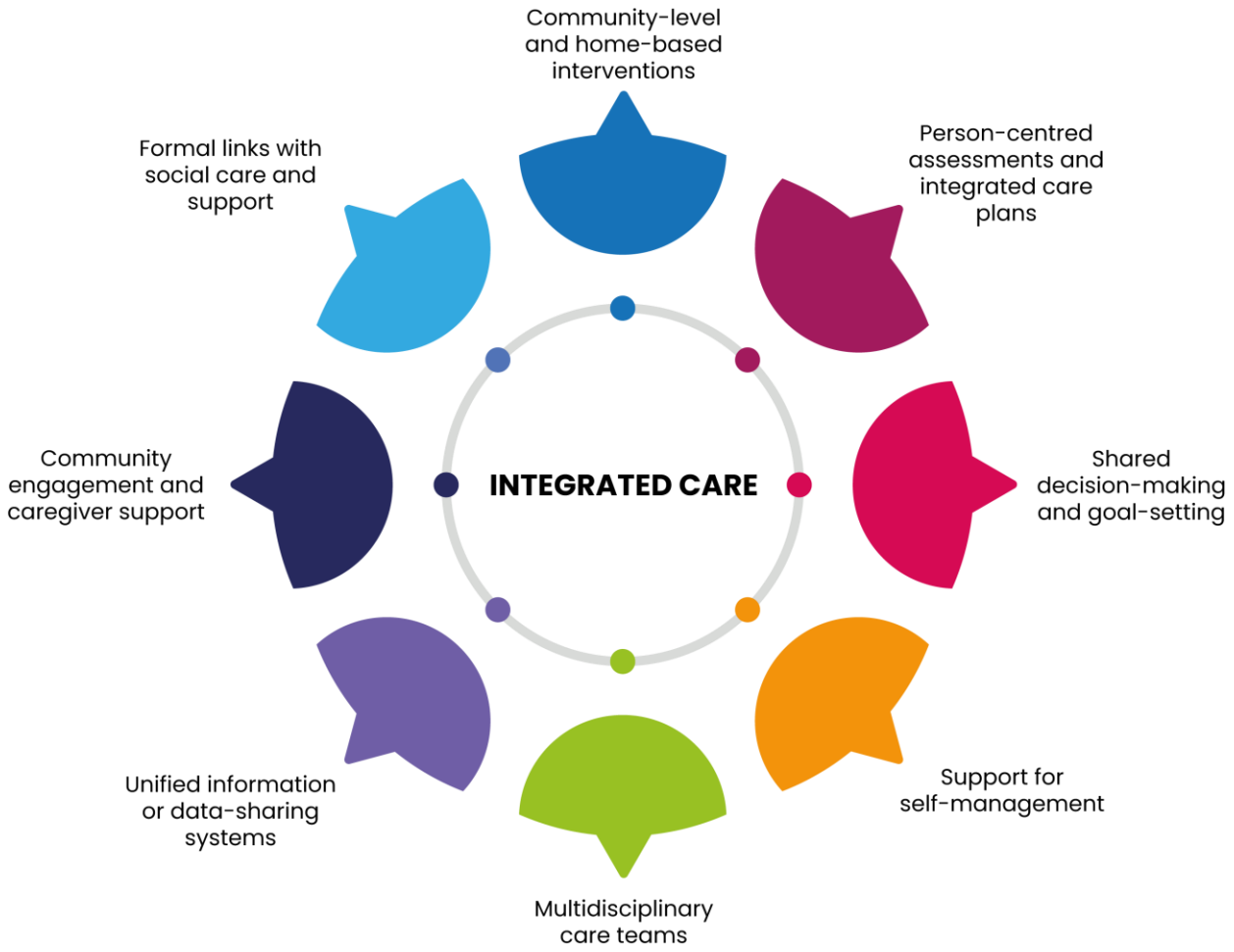

Figure 5 - Integrated care focus according to WHO

7.2 Recommendations for the Reference Framework

To avoid repeating what is already written above, it is recommended that the modules focus on:

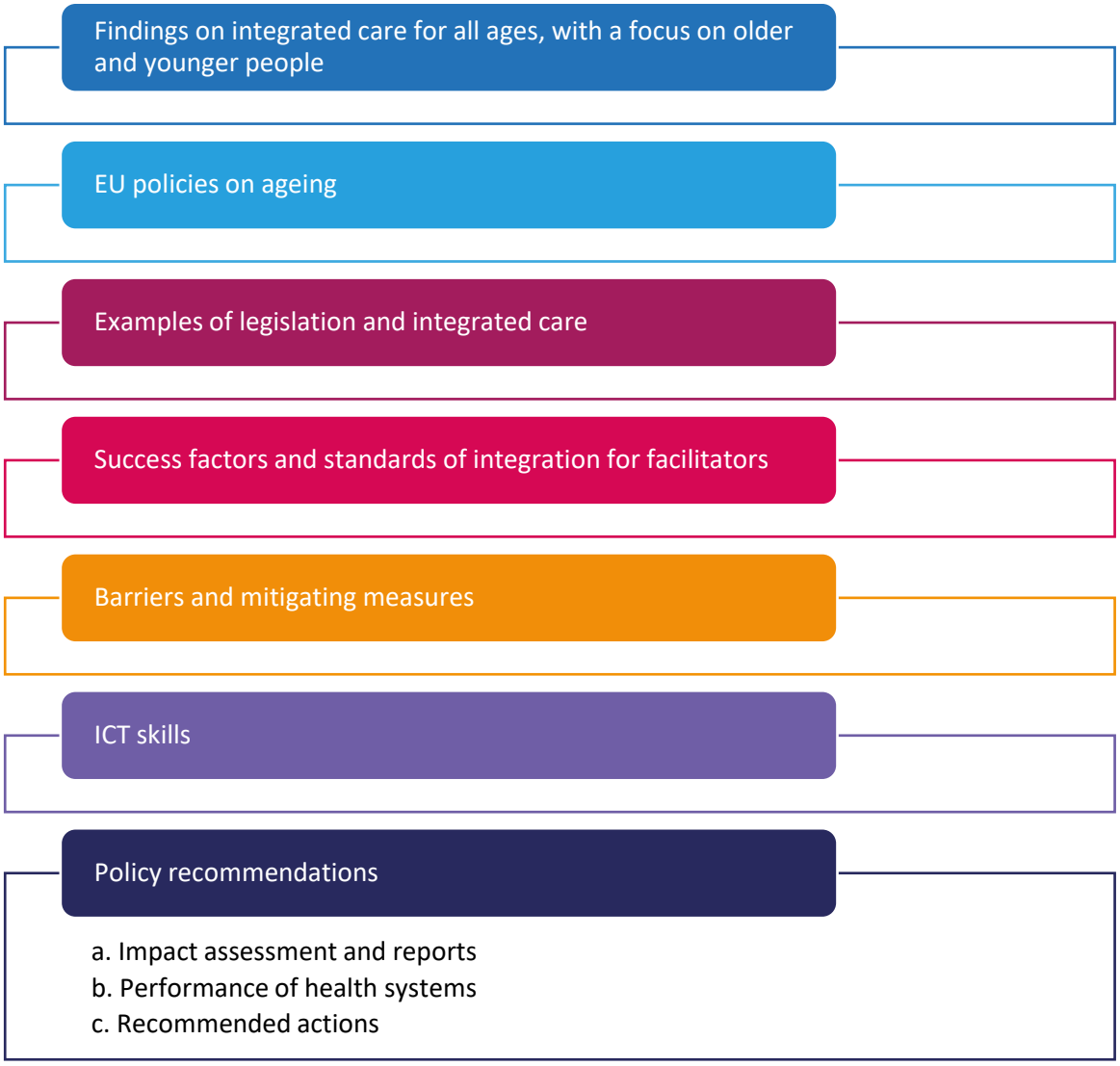

Figure 6 – Modules focus recommendation for the Reference Framework

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