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D-CARE

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Regional Action Plan - Bulgaria

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Content

1. Scope and purpose of the document

The Regional Action Plans derives from the main directions and measures established in the Transnational Strategy for Elders Smart Care Service Models Development and Implementation in Danube region. Regional Action Plan is developed using the input and expertise of the Smart Care Labs members (quadruple helix stakeholders).

All measures are generated, discussed, and designed during the regional workshop with regional stakeholders using the established quadruple helix multi-stakeholder mechanism (4DMC). Measures address strategy priority areas/pillars (Digitalisation, Health and Well-being, Capacity building, Innovative Assistive Technologies, Policy). Measures reflect regional needs, different levels of development and preferences.

2. Short background of Bulgaria

Bulgaria is ranked 4th in the world for its rate of population aging. Bulgaria has one of the highest proportions of older adults in the world with approximately 20% aged 65 and older. Three main demographic factors have led to rapid population aging. These include emigration, high death rates, and low birth rates. These demographic factors have created numerous political, social, and economic challenges for Bulgaria. For example, informal support of older adults is declining as younger generations move abroad or to urban areas for greater employment opportunities. This has increased the need for formal long-term services and supports, which can be at odds with traditional values. Additionally, economic sustainability is a major concern for the nation as population aging and de-population continues. Few gerontological organizations, scholars, or secondary datasets exist in the country. To address these challenges, more research on aging is needed to encourage economic renewal, healthy aging policies, and long-term services and support.

Figure 1.22. The working-age population is shrinking and ageing quickly
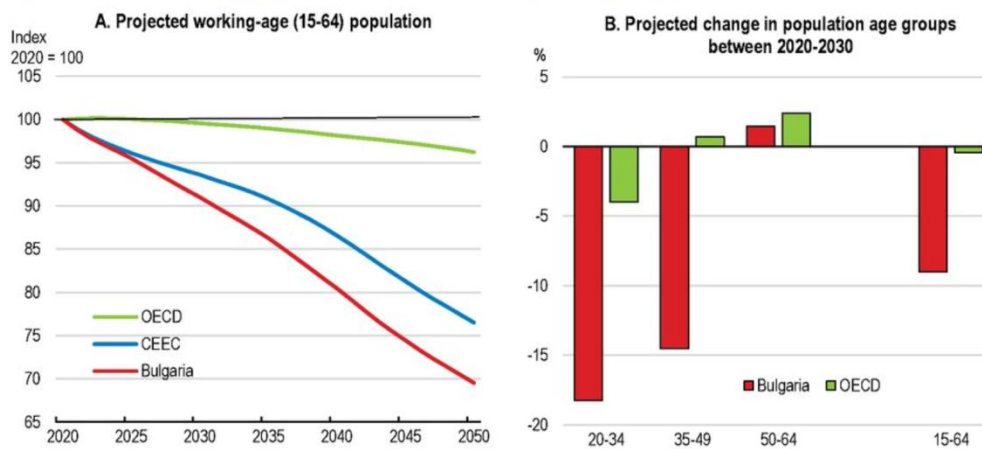
Source: United Nations, Department of Economic and Social Affairs, Population Division (2019), World Population Prospects 2019, Online Edition. Rev. 1.

StatLink ⟶ https://stat.link/2l3t9f

Specific national and regional challenges and opportunities:

It is necessary to promote active aging in good health, so that the knowledge, skills and potential of elder people are used longer in the labour market thus enabling those people to contribute to economic growth, lifelong learning and uptake of new information technologies. (Access to and participation of elder people in education, training and skills development is very low (less than 2%), although it increases over time. A little higher is the share of persons who have participated in self education – 26% in 2011 but compared to 2007 this indicator decreases – from 36% to 26%. Significant impact on the level of participation shows the completed degree of education or the better "educated" a person is, the greater is the possibility that they engage in self learning. Two fifths of the persons with a higher education degree (40.0%) have participated in some kind of self education while the percentage of those with primary or lower education is 12.0%).

Bulgaria has a strategic location in the center of Southeastern Europe and is sixteenth-largest country in Europe with a territory of 110,994 square kilometres (42,855 sq mi).

•The total population of Bulgaria is 6 951 482 (NSI 2019);

•Sofia is the capital and largest city of Bulgaria, followed by Plovdiv and Varna;

• GDP amounts to 119 772 mln. BGN for 2019;

• In 2019, the share of agriculture in GDP was 3.19 percent, industry contributed for 22.3 percent and the services sector - about 60.68 percent;

• R&D expenditure as a percentage of GDP –0.84% for 2019 (Eurostat)

• Smart specialisation: Within RIS3 four thematic areas were identified for the country where Bulgaria has competitive advantage:

- "Informatics and information and communication technologies"

- "Mechatronics and clean technologies"

- "Industry for a healthy life and bio-technology"

- "New technologies in creative and recreational industries"

• Bulgaria has 51 universities and higher educational institutions with more than 48 000 graduates each year.

3. Smart Care and eHealth environment

Access to health and social services

The most accessible services are provision of food (88,4%) and transport (82,4%), whereas access to social services raises the highest concerns – 41,6%. Social care for elder people and people in need is unusable because of the absence of such service according to 21,1% of the respondents. Other 30,2% are not aware that such type of services exists as an option.

A small share of respondents report having difficulties with the access to health services on account of individual characteristics: ethnos – 3,3%, age – 2,9%, and disability – 1,8%.

Most limited is access to dental care, due to financial reasons (36,4%). Access to dental care (14,3%) and pharmacy (12,4%) also depend on the place of residents and are not usable everywhere. Elder people are the group for which such services are inaccessible in many cases.

Health services are used on a limited basis by 6,8% of respondents because of the shortage of doctors and medical services, other 6,1% do not use them because of absence of doctors and health establishments in their place of residence. As a higher proportion of elder people live in the villages compared to the national average population distribution, elder people are more often found in the groups with limited access to doctors and medical services.

Information and communications technology ICT

Internet uptake by elder people in Bulgaria increases, but the share of elder people using the World Wide Web remains low compared to the other EU Member States. Eurostat data shows that on average 59% of the population aged between 55 and 74 years in all Member States use the Internet whereas in Bulgaria only 27% do so. Besides, Bulgaria registers even lower rates on frequency of use 12% for Bulgaria against 46% for the EU use Internet at least once a week (Eurostat, Individuals frequency of computer use, 2015). The low level of use by elder people could be attributed to absence of technologies at home – only 18% of persons aged between 55 and 74 years report using a computer at home (Eurostat, Individuals places of computer use, 2011).

Support for informal caregivers

In the Bulgarian context, there are still few practices for provision of professional support and training to informal caregivers. There is lack of practices and forms of providing recreation and adequate social protection with a view to preventing the social exclusion of people providing care.

Reasons lay in the absence of non-traditional and flexible social services that can be of help to informal caregivers, in particular to those who provide care for a longer period.

There is also absence of official ways of enabling informal caregivers to receive training or to develop the skills they need.

4. Policy recommendations

The policy recommendations are provided during Regional Workshop that took place on 08th of September 2022 in Varna during the discussion with the regional stakeholders.

The general approach of the RAP Workshop in Bulgaria followed is inviting of all members of the regional stakeholder group for to present the draft Transnational Strategy for Elders Smart Care Services Development and Implementation and identified good practices for policy support. Being aware of the main gaps in smart care and e-health services and based on the provided information, a discussion is also foreseen in order to be shaped the main regional support measures which will be included and described in the RAP.

The following recommendations are provided:

- Social carers and social givers definitely need to be **increased their digital skills and capacity in providing smart services**. Therefore it was suggested to be included in the RAP measures for **promoting of D-CARE platform** as an example of useful innovative tool. It should be presented to the municipalities that are obliged to provide such kind of training when hiring new social care staff.

- Information about a success of a project implemented in few Bulgarian municipalities and funded by Norway Funds in development of the dispatch centre and applying of telecare bracelets for elderly people, incl. for those with chronic diseases, Alzheimer and dementia was presented by the Municipality of Varna. It was mentioned that the project helped a lot to the local municipalities and health staff in saving time and

resources in providing health and social care. Recently Municipality of Sofia took a decision to introduce a telecare programme for remote care of old people. Being aware that nurses and medical staff in Bulgaria are underpaid, a lot of qualified medical people go abroad. The constant shortage of staff especially in peripheral areas of Bulgaria could be overcome by applying digital solutions such as telecare tools. It was suggested to be included measure about **development and application of telecare tools in the Region**.

- Measures for ensuring of sustainability of successful projects for smart social and health services implemented by local authorities in the Varna Region.

- Funding sources of the measures could be not only the national budget or municipal budget but also under operational programmes for RDI.

- **Integration of existing platforms on national level in e-health portal** – using the good example of Hungary.

5. Good practices observed

All Project Partners identified 7 Good Practices for the purpose of transnational learning. They were presented during the Transnational Best Practice Event that was held in Varna, Bulgaria in April 2022.

The Good Practices were benchmarked in order to identify the ones that have been the most effective in the smart care services arena.

The methodology applied is:
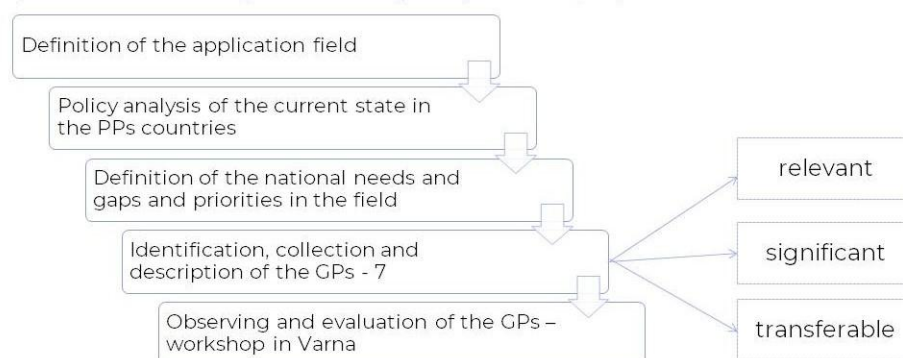
The identified good practices are:

No	Title of the GP	Owner of the GP	Country
1	Wiener Active and Assisted Living TestRegion – WAALTeR	UIV Urban Innovation Vienna GmbH (LP)	Austria
2	Lebensphasenhaus	University of Tübingen, Ministry of Education and Social Services Baden-Württemberg	Germany
3	National eHealth Infrastructure (EESZT)	National Directorate General for Hospitals	Hungary
4	Active Ageing Strategy/ Strategija dolgožive družbe	Ministry of Labour, Family, Social Affairs and Equal Opportunities	Slovenia
5	Simbioza BTC City Lab	Simbioza Genesis, Social Enterprise	Slovenia
6	Lokaal+: future proof education programme for vocational health care students in an aging society	Summacollege Eindhoven	Netherland
7	SMARTCARE - ICT-supported integrated care	Health Authority of Trieste	Italy

6. Actions/ measures

6.1 Capacity building and digitalization

Capacity building can be understood as the general readiness (knowledge, skills, processes, structures) of institutions and individuals to create and implement innovation and digitalization in order to improve their performance. However, this necessarily proceeds by having enough capable and willing employees to engage in the change process. Possible measures may also aim to increase the attractiveness of employment by preparing the organization for digitalization and shifting the activities of social workers to processes that cannot yet be replaced by technology.

Capacity building can be done at institutional or/and regional level. Capacity building refers to different areas and levels, like:

- o coordination – vertical
- o cooperation, co-operation – horizontal
- o education, training
- o Infrastructure
- o human sources
- o financing

Digitalization concerns a process that transforms and improves work operations and processes by using digitized data and technology to change the way in which physical and personal tasks are moved into digital form, automating processes, saving time in routine activities, improving data and quality of life, increasing effectively and efficiency as well as saving costs. In the context of smart care, using digital technologies can help in prevention (e.g., fall prevention),

diagnostics, remote monitoring and usage of telemedicine solutions etc. So, it can cover digitalization in institutions, but in some regions, it is necessary to build digital infrastructure - fast, secure and reliable internet connection as well as ICT equipment and software at care providers. In this context it is always important to pay attention to training measures going along since digital competence is not always and everywhere a given fact.

Some of the issues that were mentioned amongst priorities:

- o Lack of digital competences of older adults (if not included under capacity building)

- o Lack of digital competences of care staff (if not included under capacity building)

- o Developing digitally based products and services (preferably in cooperation of all stakeholders, see below)

- o Design of technologies based on UX to increase uptake among users

- o Common development of digitally based products and services in co-creation processes including the target group,

- o Reducing the burden in health/care sector with technical support e.g. by automatization of administrative processes

- o Support for the construction of high-speed internet access networks including financing - basic ICT infrastructure

- o Increase usability of smart care service models (eHealth services)

No. & TITLE OF MEASURE	6.1 Increasing of the digital skills and capacity of social carers and social givers for providing smart services through using the established Innovative Learning Environment via D-Care project
Strategy priority area/Pillar:	Capacity Building/ Digitalization
Which problem/need does it address?	Short description of the problem: Support for informal caregivers In the Bulgarian context, there are still few practices for provision of professional support and training to informal caregivers. Reasons lay in the absence of non-traditional and flexible social services that can be of help to informal caregivers, in particular to those who provide care for a longer period. There is also absence of official ways of enabling informal caregivers to receive training or to develop the skills they need Level of the problem: National level

Short description of the measure:	• Promoting and building of possitive awareness about D-CARE project results among municipalities of North-East Region of Bulgaria, including about the esatblished learning platform. • Organizing of regular meetings and worshops for promoting the platform among social cares and givers. • Providing a technical and other support to participants in the training
Responsible institution:	municipalities
Who does provide the support?	Municipalities, Social partners, NASO RAPIV
How the objective is monitored?	Monitoring of the number of social staff within the NE Region; job satisfaction questionnaire; number of certificates issued.
Timeframe:	On-going
Financial dimension of the support measure:	Suitable financial source: As far as D-CARE learning platform is free of charge, there is no need for additional payment for using it. Organization of the regular events could be foreseen under the budget of each municipality, as well as providing the technical and other support of the participants. Expected costs: 10 000 euro/ year

6.2. Technical and social innovative support / AAL

The Active and Assisted Living (or Ambient Assisted Living, AAL) refers to the use of (new) information and communication technologies (ICT) to create a supportive and inclusive environment for active and healthy ageing which enables older or impaired people or persons with disabilities to live self-determined and independently in their preferred environment and stay active longer in society. It can be understood as a complex and/or modular innovative system with various functionalities and features which might be complementary (and interoperable) with smart home solutions. Some examples are:

o Alert and emergency systems for home or institutional care including fall prevention and detection

o Active assisted living solutions for smart homes e.g. window and door security, stove switch-off, presence detectors, etc.

o Digitally assisted solutions and ICT for senior homes

- o Apps that support active and healthy ageing

- o Quality seal for supportive technologies would be needed for better orientation of users (private and institutional)

No. & TITLE OF MEASURE	6.2 Support for development and application of telecare service in the North-East Region of Bulgaria
Strategy priority area/Pillar:	*Technical and social innovative support*
Objective:	Establishment of telecare service in the North-East region of Bulgaria
Which problem/need does it address?	*Short description of the problem* Being aware that nurses and medical staff in Bulgaria are underpaid, a lot of qualified medical people go abroad. The constant shortage of staff especially in peripheral areas of Bulgaria could be overcome by applying digital solutions such as telecare tools. *Level of the problem: regional level*
Short description of the measure:	Establishment and equipment of a pilot call-center for provision of telecare services in the city of Varna; Development and introduction of the system for provision of the telecare services in the North-East region; Selection of beneficiaries, needs assessment, development of individual care plans and provision of community-based health and social services incl. telecare to vulnerable people in need both in urban and rural areas; Elaboration of effective models of social inclusion of long-term unemployed people through provision of qualitative vocational training thus creating opportunities for employment in the area of integrated community-based medico-social services; Recruitment and training of volunteers to support the work of the telecare services; Raising the awareness and promoting integrated health and social services and telecare services among the general public.
Responsible institution:	Ministry of Health Ministry of Labour and Social Policy Municipalities
Who does provide the support?	Municipalities, Social partners, NASO Red Cross

How the objective is monitored?	Number of older people benefited by telecare service Number of call-centre established in Varna Number of information events for awareness and promoting integrated health and social services and telecare services among the general public
Timeframe:	*4 years*
Financial dimension of the support measure:	*Suitable financial source: national budget, municipal budget, funding programmes* *Expected costs (preparation, investment, operational costs): 4 mln euro*

6.3 Policy

This is an overarching pillar, which is closely linked to all the others and includes all levels of politics (from local to top-level politics) including interactions with interest groups and lobbies. The aim of this pillar is to secure long-term funding for smart technologies, to create a suitable environment in which policy makers discuss with experts and civil society, an environment open to experimentation and innovation with sufficient support.

Policy measure may cover, but not exclusively, the following areas:
- o   Integrated care opposed to isolated solutions
- o   Development of goals and targets for smart care and smart health
- o   Development of a regulatory policy framework for digital skills for older adults
- o   Ensuring appropriate funding beyond piloting level (region/nation-wide regular operation as opposed to projects, proof of concepts, pilots etc.)
- o   Crisis management including preparation for pandemics

No. & TITLE OF MEASURE	6.3 Establishment of policy environment for integration of existing platforms on national level in e-health portal
Strategy priority area/Pillar:	Policy
Objective:	Establishment of favourable policy environmet for development and implementation of integrated platform for e-health and smart care services
Which problem/need does it address?	In order to push for systemic changes, political support is always needed to push them through. To ensure political support for decision-making and subsequent implementation, it is necessary to coordinate multiple departments and levels from different Ministries, both strategically and methodologically. Practice and experience show that, despite the formal existence of interdepartmental management, there are reservations in communication and cooperation between departments of different ministries, the more active inclusion and facilitation of the opinions of other

	departments, experts in the field, affected entities and target groups who have knowledge of a given problem and other participants. Despite political support, implementation may fail if cooperation is only verbal and formal and lacks resources and defined responsibilities.
Short description of the measure:	For the creation of a quality applicable methodology, policy and strategy, it is important to maintain active cooperation with other departments and not only with them, but also with other entities that are engaged in the given problem and have quality information about the given environment, as well as with the general public. These institutions can provide expert advice and support to the developers of these methodologies, strategies and policies. Consulting companies, innovation agencies or other professional facilitators who do not have the motivation to promote specific solutions and can revitalize the co-creation process with new and creative working methods can also be used to facilitate. For the implementation of specific steps and political instruments, it is necessary to provide financial resources (from public budgets, also by engaging private resources). For their more effective use when determining the conditions for receiving subsidies and grants, it is necessary to take into account the needs and withdrawal possibilities of the relevant institutions. Specific actions include: 1. Setting up of expert working group that will include experts from different ministries, regional and local authorities and experts in the field of smart care services and eHealth; 2. Organization of workshops and meetings with interested parties; 3. Deep investigation of Hungarian good practice – National eHealth Infrastructures 4. Creation and implementation of policy, based on exchanged expertise and dialogue with actors 5. Collaboration across regions to share experience in policy making and implementation 6. *Implementation of joint project for development and integration of joint eHealth platform*

Responsible institution:	Involved institutions are: Ministry of Health Ministry of Labor and Social Policy Ministry of Innovation and Growth Municipalities NASO
Who does provide the support?	State and/or municipal budgets
How the objective is monitored?	The existence of an expert coordinator specializing in cooperation not only in the creation of methodologies; the number of implemented workshops in the field of application of smart technologies; Number of memoranda on cooperation with other regions in the field of application of smart technologies; the number of implemented cooperation projects
Timeframe:	3 years