







This paper was developed for the European Commission by



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### Summary / Introduction and scope

This document presents an overview of the barriers and enablers to the implementation at scale of digital person-centred health and care solutions and the need to mobilise investments, by focusing on both the demand side (policymakers, healthcare providers, patients/citizens, insurers, etc.) and the supply side (large companies, start-ups and SMEs, researchers, etc.). The analysis was carried out as part of the DigitalHealthEurope (DHE) project and is the result of in-depth interviews and a semi-structured online survey with 35 respondents from 14 EU countries representing the relevant stakeholders.

This document presents the strategic, technical, and operational barriers that necessitate mobilisation of investments towards the implementation at scale of person-centred care solutions. In addition, it offers recommendations for European organisations to overcome such barriers and help mobilise investments in person-centred health and care at a local, regional, and national level across the EU.

With 101.1 million older people (65 years and older) living in the EU-28 at the start of 2018<sup>1</sup> and a projected increase up to 149.2 million by 2050, this demographic change will cause a rise in social expenses in forms of pensions, healthcare, and institutional or private care. Digitally-enabled healthcare can play a major role to mitigate the economic and societal challenges.

Digitally-enabled healthcare is one of the key business areas in Europe and beyond where Information and Communication Technologies (ICT such as software, robotics, Artificial Intelligence, etc.) need to be applied collaboratively, as technology convergence - defined as "the integration of various products, technologies and industries today that will lead to the emergence of new, innovative and unique products and technologies"<sup>2</sup> in the near future - is one of the main trends connotating the Fourth Industrial Revolution.

In line with the content of its Digital Single Market (DSM) Strategy<sup>3</sup> and, after analysing the results of an Open Public Consultation<sup>4</sup>, the European Commission published a Staff Working Document<sup>5</sup> and a Communication on the Digital Transformation of Health and Care in the Digital Single Market<sup>6</sup> oriented towards citizen empowerment and a healthier society. These policy documents offer a direction on the EU activities in this field for the coming years. In particular, the Communication<sup>7</sup>, and its three pillars, underpin the work of DHE, including this investigation into person-centred health and care solutions.



European Commission (2017), Public Consultation on Health and Care in the Digital Single Market. Available at: <a href="http://ec.europa.eu/digital-single-market/en/news/">http://ec.europa.eu/digital-single-market/en/news/</a> public-consultation-health-and-care-digital-single-market

<sup>1</sup> Eurostat (2019), Ageing Europe: Looking at the Lives of Older People in the EU. Available at: <a href="https://ec.europa.eu/eurostat/documents/3217494/10166544/KS-02-19%E2%80%91681-EN-N.pdf/c701972f-6b4e-b432-57d2-91898ca94893">https://ec.europa.eu/eurostat/documents/3217494/10166544/KS-02-19%E2%80%91681-EN-N.pdf/c701972f-6b4e-b432-57d2-91898ca94893</a> NOTE: This 2019 edition is based on the EU-28. Figures will change substantially in 2020 as a result of the 'exit' of the UK's 66 million from the figures (i.e., more than one-tenth of the proportion of the EU-28).

Singh, S. (2012). New Mega Trends: Implications for our Future Lives.

European Commission (2017), Digital Single Market: Commission calls for swift adoption of key proposals and maps out challenges ahead. Available at: <a href="http://europa.eu/">http://europa.eu/</a> rapid/press-release IP-17-123

European Commission (2018), Staff Working Document on enabling the digital transformation of health and care in the Digital Single Market; empowering citizens and building a healthier society. Available at: https://ec.europa.eu/digital-single-market/news-redirect/624249
European Commission (2018), Communication on enabling the digital transformation of health and care in the Digital Single Market; empowering citizens and building a healthier society.

Available at: https://ec.europa.eu/digital-single-market/news-redirect/624248 European Commission COM (2017) 228 final, on the Mid-Term Review on the implementation of the Digital Single Market Strategy. A Connected Digital Single Market for All. Available at: http://ec.europa.eu/newsroom/document.cfm?doc\_id=44527



### Digital person-centred health and care solutions

Emerging digital health technology and introduction of digitalisation in care focus on enabling person-centred approaches to organising health and care, to allow citizens to remain independent and to assume responsibility for their health, improve their well-being and the quality of care, and contribute to sustainable health systems. By using digital solutions, such as wearables and mHealth apps, citizens can actively engage in health promotion and self-management of chronic conditions. This in turn can help control the rising demand for health and care, as well as reduce the associated costs.

Digital tools hold great potential for prevention, by making scientific knowledge accessible, to help people stay in good health and enabling them to avoid becoming patients. They can be used across all sectors, including in education, transport, and urban policies to promote information and awareness campaigns on healthy lifestyle. Digital tools also enable citizens to provide feedback and data about their health to doctors. This can improve the quality of health services and ultimately people's health and wellbeing. So far, such new care models have typically been deployed on a small scale, but initial evidence indicates their benefits for both patients and health and care systems.

Digital health today is a relatively small market compared to other sectors of healthcare, but it is foreseen to rise more than 24% annually<sup>8</sup>. Among the market segments, the most mature is health systems, which is composed of data management systems such as the Electronic Health Record/Electronic Medical Record (EHR/ EMR), Electronic Data Interchange (EDI), and Health Information Exchanges (HIE). All other segments such as telehealth, mHealth, and health analytics are experiencing high single digit to double digit growth rates due to the general shift to digital health. The COVID-19 pandemic has intensified the way digital technologies accelerate change across the ecosystem and force public and private health systems to adapt and innovate in a short period.

### The demand side

The demand for digital health services is expected to remain high with providers and payers contributing to the business-to-business (B2B) market segment and patients and caregivers contributing to the business-to-citizens (B2C) market9.

Demographic changes and increased longevity of life result in an intensified demand on the health and care systems to work efficiently and effectively. At the same time, the transformation of health and care processes to accommodate these circumstances. is complex and is dependent on several preconditions (chiefly related to finance, investment, and market conditions). Moreover, the public procurement of digital solutions still faces difficulties.

For this transformation to materialise, there will have to be full-scale deployment of new care models that are universal and encompassing all types of care for all populations. Those models require pioneering organisations taking the lead on their development and deployment and acting as "vanguards" called to draw the path for the regional and national systems to move forward.<sup>10</sup>

A pre-requisite to secure successful uptake of new care models is to reduce the digital divide and allow equitable and inclusive access to health services, including considerations on the affordability of digital solutions and the training of all members of the population (including those with lower education levels). Only then will it be possible to deliver better health outcomes for citizens, and achieve efficiency gains for health and care systems.

However, this transformation is complex. It will only be possible if the many different actors potentially involved engage in a joint effort, as outlined below.

#### The change requires:

- → Significant investments at a time when health and social care systems are under even higher financial
- → Commitment and knowledge of how to ensure such investments, as they lead to successful and costeffective implementation of digitally-enabled, personcentred care solutions:
- → Market conditions that can facilitate economies of scale for the suppliers of technology and services.

Some purchasing organisations named several barriers preventing them from triggering public procurements for digitally-enabled person-centred solutions. It is worth highlighting the following four challenges:

- → Difficulty to identify the digitally-enabled solutions available on the market and to obtain reliable information about them;
- → Lack of interoperability, defined as the lack of ability of different information systems and software applications to communicate and exchange data and use the information exchanged11
- → Lack of willingness to acquire generic (digital) solutions on the part of purchasing organisations;
- → Lack of user-friendly solutions. It is important that the industry (the supply side) understands these challenges and how to address them, to better respond to market needs.

Startup Genome (2018), Global Startup Ecosystem Report 2018. Available at: https://startupgenome.com/all-reports

Health Standards (2017), Digital health: Current state & future growth 2017-2025. Available at: <a href="http://healthstandards.com/blog/2017/10/25/digital-health-trends-2025">http://healthstandards.com/blog/2017/10/25/digital-health-trends-2025</a>.

<sup>10</sup> Available at: https://www.england.nhs.uk/new-care-models/about/ 11 HIMSS (2010), HIMSS Dictionary of Healthcare Information Technology Terms, Acronyms and Organizations, 2nd Edition, 2010, Appendix B, p190.



### The supply side

The impact of digital health on patient care is accelerating with the increasing adoption of mobile apps and wearable sensors<sup>12</sup>. In 2018, the number of health-related mobile applications (mHealth apps) available to consumers surpassed 325,000 — nearly double the volume available just two years prior. This rapid expansion in apps, coupled with consumer wearable devices on the worldwide market, provides evidence of digital health's accelerating innovation and increasing demand<sup>13</sup>.

In a holistic approach, start-ups and scale-ups need to be part of ecosystems aimed to step up networks and enhance proximity between stakeholders that are willing to work together and help each other find answers to present and future challenges. Regional innovation ecosystems have a central role in developing and optimising regional capacities, experience, and expertise by crowding in all relevant knowledge and skills of the quadruple helix (industry, government, academia, and users/civil society)<sup>14</sup>. Thus, establishing and nurturing successful regional digital health ecosystems has become a goal for many regions aiming to stimulate economic development and innovation while tackling societal challenges, such as the renovation of the increasingly burdensome health systems.

Digital health ecosystems can be described as regionally-focused, permanent, multi-stakeholder partnerships committed to working together to implement innovative solutions that improve the quality of health and wellbeing of citizens, the effectiveness of the healthcare system and the scope for wealth creation and business opportunities<sup>15</sup>.

Creating and reinforcing these networks/ecosystems help narrow the gaps prevalent in the business community to accelerate the development and innovation of the start-ups and support them to attract capital and prepare the scaleup for (international) growth.

### EU Strategies and Programmes

The EU focus on business potential is justified by the desire to create a new wave of economic growth, jobs, and skills development across Europe. This priority has been leveraged in various strategies and programmes, such as the European Fund for Strategic Investments (EFSI)<sup>16</sup>, the Single Market Strategy<sup>17</sup>, the Digital Single Market<sup>18</sup>, and the Capital Markets Union<sup>19</sup>. However, the results of a public consultation by the EC in a 2016 report indicated a series of obstacles that still need to be tackled<sup>20</sup>:

- → start-ups looking to scale up still face too many cross-border regulatory and administrative barriers;
- → start-ups have few opportunities to find and engage potential partners in finance, business and local authorities;
- → accessing finance is one of the biggest barriers to scaling up.

The 2016 Communication from the European Commission on Europe's next leaders: the start-up and scale-up initiative<sup>21</sup> highlights measures to simplify the life of start-ups:

- → connecting with appropriate partners (e.g., investors, business partners, universities, research centres);
- → accessing commercial opportunities (especially procurement
- → recruiting employees with the right skills, including personnel from outside the EU.

Four years later, these challenges still remain to be tackled both now and in the ongoing future. This can be observed in the main areas of the SME Strategy for a sustainable and digital Europe<sup>22</sup>, released in March 2020. The strategy puts forward actions based on the following three pillars:

- → Capacity-building and support for the transition to sustainability and digitalisation:
- → Reducing regulatory burden and improving market access;
- → mproving access to financing.

The EC and EU Member States are supporting the creation of 'communities' to help start-ups connect with potential partners (e.g. investors, business partners, universities, research centres) through events, platforms, business clusters, networking and supportive local/regional 'ecosystems'23. The Startup Europe initiative is a recognised brand for creating links between ecosystems<sup>24</sup>, through its One Stop Shop for start-ups. While some progress has been achieved, some activities still need to be reinforced, in particular in terms of matchmaking between investors, corporations and entrepreneurs and networking of regional decision-makers. Reinforcement should occur by enhancing:

- → a critical mass of effectively interconnected EU-wide clusters and ecosystems
- → better use of accelerators and incubators;
- → an EU wide platform to connect start-ups with potential partners.

<sup>12</sup> Dantas C., et al (2019), A review of successful initiatives and models on Patient Summary standards in mHealth apps. Journal of Ageing and Innovation. Retrieved from

http://journalofagingandinnovation.org/wp-content/uploads/6JAIV8E2.pdf

13 Research2Guidance (2017), mHealth App Economics 2017/2018. Current Status and Future Trends in Mobile Health. Retrieved from <a href="https://research2guidance.com/product/">https://research2guidance.com/product/</a> mhealth-economics-2017-current-status-and-future-trends-in-mobile-health/

<sup>14</sup> https://www.tandfonline.com/doi/full/10.1080/08276331.2019.1643134 15 https://echalliance.com/ecosystems/

<sup>16</sup> https://ec.europa.eu/growth/industry/innovation/funding/efsi\_en
17 European Commission COM (2015) 550 final, Upgrading the Single Market: more opportunities for people and business. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/ PDF/?uri=CELEX:52015DC0550&from=EN



### Public procurement

Another major issue addressed by the EC is the use of public procurement contracts that could support scaling up activities to become a €2 trillion market. However, although public procurement represents a great potential for helping start-ups/scale-ups to grow, it is not adequately used by SMEs (which are still under-represented<sup>25</sup> in particular for the so-called 'above-threshold' procurement).<sup>26</sup>

The DECIPHER project analysed pre-commercial procurement (PCP) as an EU tool for contracting research, development, and implementation (R&D&I) services on the supplier perspective. The main objectives referred are the possibility of integration of mHealth solutions with existing healthcare systems in different countries; better information on strategies and existing ICT infrastructure of public procurers; and an increased participation of the private sector and insurance companies in the PCP process.<sup>27</sup>



# Strategic, technical and operational barriers to demand and supply side for the implementation at scale of person-centred care solutions

In the specific area of the support to demand and supply, there is a need to overcome barriers for the implementation at scale of digital person-centred health and care solutions.

DigitalHealthEurope acknowledges that the two sides (demand and supply) need to examine together sets of over-arching questions or common denominators, i.e., challenging questions to which both parties have an interest in finding a constructive/positive solution - in social psychology known as "super-ordinate goals".

DigitalHealthEurope's review and consultation under this topic aimed to address the following topics:

- → Long-term investment strategies meeting the reform needs of the health and social care systems.
- → Investments integrating infrastructure, technology, service model and workforce needs that are being developed or are already in place.
- → Innovative contractual and payment models, blended financing approaches, and innovative partnership models as core components of the planned investments that are being developed or implemented.
- → Architecture, solution features and requirements that are being considered to ensure citizens' access to EHRs and, more widely, to personal data and to enable better patient/professional/provider communication.

 <sup>18</sup> European Commission COM (2015) 192 final, A Digital Single Market Strategy for Europe. Available at: <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1447773803386&uri=celex.52015DC0192">http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1447773803386&uri=celex.52015DC0192</a>
 19 European Commission COM (2015) 468 final, Action Plan on Building a Capital Markets Union. Available at: <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52015DC0468">http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52015DC0468</a>

<sup>20</sup> European Commission (2016) Public consultation under the Start-up Initiative. Available at: <a href="http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item\_id=8723">http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item\_id=8723</a>

<sup>21</sup> European Commission (2016) Europe's next leaders: the Start-up and Scale-up Initiative. Available at: <a href="https://ec.europa.eu/growth/content/europes-next-leaders-start-and-scale-up initiative-1">https://ec.europa.eu/growth/content/europes-next-leaders-start-and-scale-up initiative-1</a> en

<sup>22</sup> European Commission COM(2020) 103 final, An SME Strategy for a sustainable and digital Europe Available at: <a href="https://ec.europa.eu/info/sites/info/files/communication-sme-strategy-march-2020">https://ec.europa.eu/info/sites/info/files/communication-sme-strategy-march-2020</a> en.pdf

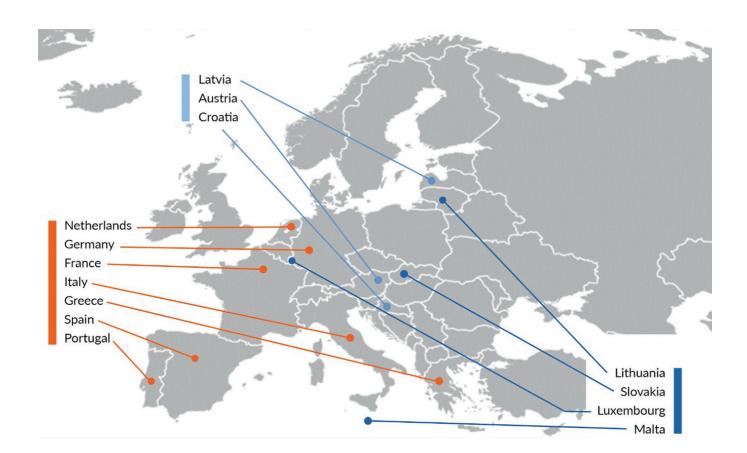


### Enablers, Barriers and Challenges

DHE consortium members conducted a survey of stakeholder representatives from countries grouped into categories as seen in the map below: countries with less references (dark blue) and countries with more references (orange). Moreover, the task team proposed to add three additional countries (light blue) to broaden the geographical coverage of the analysis in Central and Eastern Europe.

A total of 35 stakeholders responded to the survey, which was framed within four main areas:

- → Legal Framework, Governance and Strategy
- → Funding / investments
- → Bridges to organisational and professional boundaries
- → Innovation management and procurement.



<sup>23</sup> The 'entrepreneurship ecosystem approach' explains why some cities/regions have many more start-ups/scale-ups than others, despite having the same framework.
24 e.g. the Start-up Europe Summit, Start-up Europe Accelerators Assembly, Start-up Europe Universities network; raising awareness of the funding and networking opportunities available; linking large corporates and start-ups (Start-up Europe Partnership), and celebrating entrepreneurship.

<sup>25</sup> Flash Eurobarometer 417 on barriers to procurement for small companies.
26 Procurement with a value equal to or higher than the thresholds set in EU legislation.

A. Sachinopoulou, S. Ikävalko, and J Lähteenmäki (2016), "Suppliers view on benefits and challenges of the PCP process for healthcare providers and SMEs: Anna Sachinopoulou". European Journal of Public Health, Volume 26. Available at: https://academic.oup.com/eurpub/article/26/suppl\_1/ckw175.147/2449604



#### Main enablers for the demand side

Comparing the main enablers identified by the demand and supply sides, the ones referred as being the most important for the demand side are the following:



- → Health and care professionals who influence other personnel even if more awareness and knowledge on person-centred care is still needed
- → Health providers (whether public or private) with knowledge and experience in providing person-centred care services
- → Health and care professionals who are aware of person-centred care and try to bring it in to their daily work
- → The existence of a long-term digital strategy (vision, roadmap, action plan or other) addressing agreed health and care system (reform) needs
- → The existence of a multi-stakeholder engagement framework, whether national, regional or local, that includes public and private sector, and citizens' and patients' involvement in the implementation of care (e.g. ecosystem, Reference Site)

### Main enablers for the supply side

There was considerable similarity among the top enablers provided by both the demand and supply sides. The two differentiating aspects considered enablers by the supply side, when compared to the demand side, are connected to the engagement of citizens and communities.

This choice can be interpreted as an outcome of the consistent public messages over the last decade in particular that highlight the importance of users as part of the creation and development of digital solutions in order to achieve a good market acceptance and a successful product or service. It seems that the companies participating in the DHE study understand also the importance of building a solid relationship with the communities where they want to reach the market.

- → The existence of a national or regional health and care strategy where users and citizens are considered an important component and participate as co-creators
- → Health providers (whether public or private) with knowledge and experience in providing person-centred care services
- → The existence of an established or informal network at local/national levels facilitating the uptake of shared strategies/activities
- → The existence of a long-term digital strategy (vision, roadmap, action plan or other) addressing agreed health and care system (reform) needs
- → The existence of a multi-stakeholder engagement framework, whether national, regional or local, that includes public and private sector, citizens' and patients' involvement in the implementation of care (e.g. ecosystem, Reference Site)



The main challenges connected to implementation of digital solutions for person-centred care:

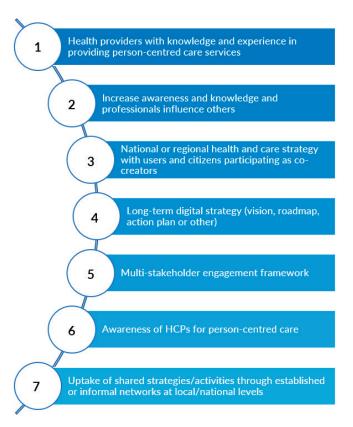


Figure 1: Ranking results from stakeholder consultation - Enablers

### Integration of health and social care and citizen empowerment.

From a societal perspective, the low levels of integration of health and social care are still a big challenge. The participation and empowerment of citizens needs to be improved to foster system transformation. Health and care services still tend to be mostly organised around the efficiency of the service itself, and do not take into consideration citizens' needs and capabilities as the starting point for their creation.

### Technical considerations.

From a technical point of view, most interviewees stated that interoperability is a major barrier for digital innovation in health and care; data backup in handwritten form is excessive; low digital literacy of the staff and citizens, as well as low digital access are also barriers for a larger implementation of eHealth.

### Regulations.

While several countries (such as France, Lithuania, Italy, Portugal or Spain, have made progress with regulations devoted to eHealth and the digital transformation of health systems, regulatory documentation often overlaps or duplicates information; requirements for the installation of ICT are not supported with corresponding funding schemes; and IPR, ethics and certification systems are often confusing, long and bureaucratic, hindering agile processes.

#### Investments.

According to the interviewees contributing to this report, the main investments in many countries are related to EHRs, improvement of health facilities, and the integration processes between hospitals and the communities. However, there are still low levels of investment for eHealth services addressing prevention, diagnosis, and treatment. There are barriers to embedding new eHealth solutions into clinical practice, including a lack of infrastructure, difficulties in Intellectual Property Rights (IPR) protection, lack of reimbursement policies, lack of harmonisation in regulations, and low levels of investment in the private sector (also in consideration of an unpredictable and slow return on the investments).

### Digitalisation.

In this direction, digitalisation can therefore optimise access to services, reduce costs, increase efficiency, and enable better opportunities for civic participation, especially for people with disabilities or specific care needs. However, digitalisation will only materialise if ICT complies with the "triple A" rule: availability; affordability; and accessibility.<sup>28</sup>



## The main challenges for scaling up digital products:



Figure 2: Ranking results from stakeholder consultation – Barriers

In summary, there is an agreement between the demand and supply stakeholders engaged in this consultation on the four most important topics to be considered:

- Impact assessment, considering that digitally enabled person-centred health and care is not monitored or assessed in terms of mid- or long-term impact and in regard to cost benefits
- Reimbursement policies, agreeing that the organisations that reimburse health and care are very often not open to innovation, implementing top-down financing frameworks and not available to be proven the impact of digital health
- **Differences among health and care systems**, as they impede easy escalation of innovative solutions across Europe
- Digital literacy, considering citizens in general need to improve their health literacy and digital skills in order to make full use of digitally enabled person-centred health and care

### Regulations.

Differences between national and regional health and care systems and differences in the legal frameworks imply an endless need to redesign, adapt or change the products and services to be able to expand to new markets, which implies the need to know the different systems and regulations; constant reinvestments in development; and difficulties in implementing cross-border initiatives.

#### Investments.

For many of the respondents, the lack of a continuous funding and the challenges involved in the existing reimbursement schemes is a huge obstacle; many refer the existence of funding for innovation but even when a project or a solution as good results, there are no appropriate mechanisms to ensure it is integrated in the reimbursement schemes for a stable and permanent use in the health and care systems. Thus, the funding invested in the development is often not duly monetised and leveraged for the actual wellbeing of citizens.

### Technical considerations.

Siloed and unstructured repositories of data that do not allow for eHealth solutions to be implemented in different EU countries (without being tailored or specifically adapted to each national/regional context) is also referred to in many of the answers as a huge obstacle for scaling-up.

In addition to these common four obstacles, the interviewees from the demand side highlight the difficulties in certification (e.g. as medical device) while the supply side reinforces the lack of flexibility in public funding programmes.



### Recommendations to overcome strategic, technical and operational barriers and help mobilise investments on person-centred health and care

From the main barriers and enablers uncovered, DHE elaborated a set of recommendations that intend to answer to these challenges, and that can be addressed cooperatively, by the different European Member States and also by the European Commission. Even if specific incentives may be considered for the different actors or for some of the EU countries, the current economic and societal context is more likely to demand for concerted responses and, in a way, flatten the differences between Member States on the investment availability for digital innovation on person-centred health and care. The major challenge will be to foster resilience on health and care services and promote the acknowledgement that digital innovation and person-centred policies may be essential to increase mid- and long-term sustainability, even more in the current context of emergency that will most likely not end soon. Therefore, the main changes that need to be implemented to ensure the breakdown of the barriers for the implementation of person-centred care lie on the policy-making side. They are summarised in the figure below, although still under refinement, through the inputs and contributions of additional stakeholders participating in the project's events.



Legal Framework, Governance and Strategy

The EU is recommended to foster a network with the Member States for more harmonised policies in digital solutions for healthcare and wellbeing that allow for cross-border implementation:

- → Implement uniform standards and regulations across the EU for digital solutions for health and care and wellbeing, such as the Standards for Quality and Reliability of Health and Wellness Apps.<sup>29</sup>
- $\rightarrow$  Accelerate the implementation of EHR and their cross-border communication.
- → Agree on minimum standards for ethics and legal requirements of digital solutions, aiming to avoid multiple requests to different municipalities, regions and countries and the full knowledge of all the diverse regulations when trying to internationalise a product.
- → Agree on a common long-term digital strategy that includes the implementation of reforms and a multi-stakeholder engagement framework - national, regional and local, that includes public and private healthcare providers, SMEs and companies, professionals and informal caregivers, citizens and patients in the implementation of care.
- → Accelerate the implementation of the European Health Data Space.





It is recommended that the Member States reorganise their national and regional reimbursement schemes to allow agile introduction of digital healthcare and wellbeing solutions:

- → Align EU funding schemes with national programmes (namely ERDF) in a collaborative work with the EC, to ensure that the results from the innovative projects that are successful are leveraged and implemented in the health and care systems.
- → Create mechanisms to facilitate the answers to procurement opportunities, either by diminishing bureaucracy and conditions, but also by creating local teams that can support the SMEs and companies in understanding the requirements.
- → Implement a mid-term strategy and funding programme for digital infrastructure – not only on the health services, but that includes also social care, community services, broadband infrastructure, etc. and that allows for the reorganisation of data collection, treatment and storage, including interoperability, privacy and security requirements.

<sup>28</sup> https://age-platform.eu/policy-work/news/digital-divide-european-civil-society-calls-accessibility-co-creation-and

<sup>29</sup> https://www.ehealth-standards.eu/en/projects/european-development-of-a-quality-standard-for-evaluating-health-apps/





Bridging organisational and professional boundaries

It is recommended to acknowledge the human capital as the most relevant enabler for the transformation of health and care, by creating an eHealth stakeholders' coalition that includes a specific timeframe and a dedicated programme of initiatives:

- → Invest in digital literacy, now updated into a dedicated crossover programme with health literacy – a Digital Health Literacy programme for citizens is recommended as a potential flagship initiative to be framed by the EU and implemented in the MS.
- → Create a framework for the professionalisation and reinforcement of social and community care that ensures that the integration of health and care becomes feasible and that pressure is relieved from hospital care and traditional health services.



- → Implement a plan of investment on the education of professionals, that includes multisdisciplinary collaboration and lifelong training for innovation.
- → Foster a dedicated investment on the testing of citizen-centred data sharing governance models, that empower citizens and increases their trust in eHealth and digital solutions for health and care.



The creation or adaptation/refinement of a common model for the long-term impact assessment of digital healthcare and wellbeing solutions is recommended, allowing to prove cost-benefit when compared to traditional care:

- → Develop a model applicable to wellbeing, social care and community care solutions, contributing to healthier lives and not only to eHealth solutions on a strict perspective.
- → Make public information on the costs of health and care services available and harmonised in terms of calculations so that they are comparable to the new solutions proposed.



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