Care Continuum
Prepared for adoption by a SubGroup of the eHealth Stakeholder Group
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All members have stated their support and contribution to this paper\(^3\)

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\(^1\) CPME is not in the list of contributors since it has not been involved in the activity of the subgroup on care continuum
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Legal Notice
This report is presented by the SubGroup on ‘Care continuum’. The group was set up under the formulation of the eHealth Stakeholder Group.
The group comprised experts in the field of healthcare and continuity of care as well as ICT for health and wellbeing.
RSCN was in the lead of the SubGroup.


The Group mainly contributed to implementing the eHealth Action Plan and to the activities of the eHealth Network.
The opinions and recommendations expressed in this document are those of the SubGroups’ members and do not necessarily represent the views of the European Commission.
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Introduction

Demographic changes are challenging health and social care systems. Increased longevity is an achievement of modern societies but also means more people requiring care due to greater needs. A growing elderly population implies a greater amount of multiple chronic conditions and complex care needs.

New tailored integrated approaches are required to provide person-centred, proactive and well-coordinated care\(^4\). Health and social care systems are a central part of Europe’s high levels of social protection and contribute to social cohesion and sustainable development. While health and social care systems within the European Union are diverse, they all share overarching values of universality, access to good quality care, equity, and solidarity. Together they constitute a set of values that are shared across Europe\(^5\).

Several initiatives have been put into place in the European area to tackle these challenges, including:

- The European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) that aims to increase the average healthy lifespan of European citizens by two years by 2020\(^6\). It gathers the participation through commitments in six action groups and as Reference Sites. Of interest is the B3 Action Group which focuses on integrated health and care.

- Collaborative international innovation projects (i.e. CareWell\(^7\), SMARTCARE\(^8\), Advantage\(^9\), BeyondSilos\(^10\), Scirocco\(^11\), INTEGRATE\(^12\), ICARE4EU\(^13\), ENS4Care\(^14\), ICT4LIFE\(^15\)).

At the same time, successive waves of technological change have transformed human societies and economies, with long-term benefits for both economic growth and quality of life\(^16\).

New information and communication technologies (ICT) can help re-think health and care systems, boost investments and create employment opportunities in the technology and the health and care sectors\(^17\).

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\(^4\) eHealth in integrated care programs for people with multimorbidity Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63

\(^5\) Official Journal of the European Union. Council Conclusions on Common values and principles in European Union Health Systems. 2006/C 146/01

\(^6\) https://ec.europa.eu/eip/ageing/home_en

\(^7\) www.carewell-project.eu

\(^8\) pilotsmartcare.eu

\(^9\) www.advantageja.eu

\(^10\) beyondsilos.eu

\(^11\) www.scirocco-project.eu

\(^12\) www.projectintegrate.eu.com

\(^13\) www.icare4eu.org

\(^14\) ENS4Care - http://www.efnweb.be/?page_id=7060

\(^15\) www.ict4life.eu


\(^17\) 6\(^{th}\) Conference of partners of the EIP on AHA "Digital transformation of the Health and care for active and Healthy Ageing in Europe". 27-28\(^{th}\) February, Brussels (2018)
ICTs have the potential to improve health and social care and, in particular, self-management, information systems, remote monitoring and independent living solutions. Therefore, eHealth tools could play a key role for a better integration of health and social care needs\(^\text{18}\).

In fact, the EIP on AHA B3 Action Group has identified more than 200 commitments and 37.6% of them are identified as “digital health” initiatives.

According to the Eurobarometer\(^\text{19}\), less than 20% of EU citizens use health and care services provided online. However, a half of the population would like online access to their medical and health records. Even more, most of them (65%) are much more willing to share their health and wellbeing data with doctors and healthcare professionals (65%) than with public authorities (21%) even if anonymised and for research purposes.

Within the Digital Single Market (DSM) Strategy for Europe\(^\text{20}\), its mid-term review\(^\text{21}\) identifies the following priority areas for the digital transformation of health and care:

- Citizen’s secure access to and sharing of health data across borders;
- Better data to advance research, disease prevention and personalized medicine;
- Digital tools for citizen empowerment and person-centred care innovation.

The eHealth Stakeholder Group (eHSG) has identified several topics to be taken forward during the coming months. “Care continuum” is one of the 5 working groups proposed within the 2\(^{nd}\) meeting of the eHSG (05.10.2016).

On 25 April 2018 the European Commission published its Communitacion on the digital transformation of health and care in the digital single market\(^\text{22}\), which concerns the reforms and innovative solutions needed for health and care systems to become more resilient, accessible and effective in providing quality care to European citizens and to create a healthier society. This document sets the scene for EU key steps to be followed in this field for the coming years, overcoming the barriers and current situation. The areas in which the Commission set out its intention to take further areas are:

- Citizens’ secure access to and sharing of health data across borders;
- Better data to advance research, disease prevention and personalised health and care;
- Digital tools for citizen empowerment and person-centred care.

All of them contribute to a better patient-centred care.

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\(^{18}\) eHealth in integrated care programs for people with multimorbidity Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63

\(^{19}\) Attitudes towards the impact of digitisation and automation on daily life. Special Eurobarometer 460 (2017)


\(^{22}\) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on enabling the digital transformation of health and care in the Digital Single Market; empowering citizens and building a healthier society. COM(2018) 233 final.
Concepts

In this document the concepts to be considered are continuity of care, integrated care and eHealth:

**Continuity of care**

Traditionally, continuity of care is idealized in the person’s experience of a ‘continuous caring relationship’ with an identified health care professional. For providers in vertically integrated systems of care, the contrasting ideal is the delivery of a ‘seamless service’ through integration, coordination and the sharing of information between different providers. As patients’ health care needs can now only rarely be met by a single professional, multidimensional models of continuity have had to be developed to accommodate the possibility of achieving both ideals simultaneously. Continuity of care may, therefore, be viewed from the perspective of either patient/user or provider. Continuity in the experience of care relates conceptually to person’s satisfaction with both the interpersonal aspects of care and the coordination of that care. Experienced continuity may be valued in its own right. In contrast, continuity in the delivery of care cannot be evaluated solely through patients’ experiences and is related to important aspects of services such as ‘case-management’ and ‘multidisciplinary team working’. From a provider perspective, the focus is on new models of service delivery and improved patient outcomes. A full consideration of continuity of care should therefore cover both distinct perspectives, exploring how these come together to enhance the person-centeredness of care.

All these concepts are summarized into the ISO standard 13940:2015\(^{23}\) (Health informatics — System of concepts to support continuity of care), where continuity of care is defined as “an efficient, effective and ethical care delivered through interaction, integration, co-ordination and sharing of information between different healthcare actors over time”, a definition that can be extensible to social care actors too.

**Integrated care**

According to the Expert Group on Health Systems Performance Assessment\(^ {24}\) Integrated care includes initiatives seeking to improve outcomes of care by overcoming issues of fragmentation through linkage or co-ordination of services or providers along the continuum of care. It is not a goal in itself; it is rather a tool that addresses complex care needs of people that require a systematic approach involving professionals and skills from the healthcare, long-term and social care sectors.

The main success factors from integrated care experiences in Europe are political support and commitment, governance, stakeholder engagement, organisational change, leadership, collaboration and trust, workforce education and training, patient focus / empowerment, financing and incentives, ICT infrastructure and solutions, monitoring / evaluation system.


eHealth

According to the eHealth Action Plan 2012-2020 of the European Commission\textsuperscript{25} eHealth is the use of ICT in health products, services and processes combined with organisational change in healthcare systems and new skills, in order to improve health of citizens, efficiency and productivity in healthcare delivery, and the economic and social value of health. Within this framework, eHealth covers the interaction between patients and health-service providers, institution-to-institution transmission of data, and peer-to-peer communication between patients and/or health professionals.

In addition, WHO\textsuperscript{26} remarks that eHealth involves a broad group of activities that use electronic means to deliver health-related information, resources and services: it is the use of information and communication technologies (ICT) for health.

Potential advantages of eHealth services could be summed up as: improved quality of care, better planning and resource allocation, cost efficiency – more efficient health landscape, enhancing the evidence base for health service delivery and policy making, real-time monitoring, providing better, tailored and personalised services, preventive measures.

\textsuperscript{25} eHealth Action Plan 2012-2020 - Innovative healthcare for the 21st century. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2012) 736 final

\textsuperscript{26} From Innovation to Implementation. eHealth in the WHO European Region. http://www.euro.who.int/en/publications/abstracts/from-innovation-to-implementation-ehealth-in-the-who-european-region-2016
eHealth elements to improve continuity of care

The primary goal of most eHealth services and tools is to improve the continuity of care and, therefore, to ease the collaboration of healthcare professionals, also extensible to social care professionals. In this sense, it should be encouraged in the case of the management of the most difficult situations (e.g. complex chronic patients)\(^\text{27}\).

Different eHealth services have been identified that may contribute to enhance continuity of care. The initial list of these services would include:

**Step 0**: Each citizen and their care needs should be correctly identified within the health and welfare system. Moreover, implementing a unique citizen/patient identifier also ensures to provide the correct care to the correct person as well as care follow-up.

- Citizens/patients identifier.

**Improving access to health care services**: Improving access is particularly beneficial to people with complex health and care needs (such as multimorbidity)\(^\text{28}\). In particular:

- Booking appointments on line
- Web-based or telephone healthcare information service
- E-referral systems (enabling communication between health professionals)
- Remote consultation
- ICT tools enabling communication between patients, formal and informal carers and health professionals

**Enhancing care coordination and integration**: eHealth solutions can help with collecting, storing and reporting such data to professionals, and to patients via electronic and/or patient/personal health records (EHRs, PHRs). eHealth tools can also improve communication between these actors through systems\(^\text{29}\).

- Electronic health records - EHRs (According to the WHO\(^\text{30}\), EHRs are real-time, patient-centred records that provide immediate and secure information to authorized users. They typically contain a record of the patient’s health history, diagnoses and treatments, medications -including non-prescription medicines and products-, allergies and immunizations, as well as radiology images, laboratory results and other medical tests results)
- Personal/Patient health records - PHRs
- Telehealth and telemedicine systems
- MHealth
- Telecare systems
- ePrescription systems
- Decision support systems

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\(^{27}\) eHealth: easing the transitions in healthcare. Swiss Med Weekly. 2012;142:w13599


**Enabling self-management:** Self-management tools can provide feedback and support patients to check their behaviours and adherence to treatment\(^{31}\)

- Telehealth and remote monitoring
- Access to EHRs information
- Computerized systems for care management, health advice and reminders
- mHealth and assistive technologies supporting daily activities in the home
- Health, activity and behaviour monitoring systems
- ICT tools enabling integration of informal and formal care
- Reminders (mobile app).
- Access to online health information including electronic patient information leaflets.

**Health data analytics.** Other types of information systems are aimed at analysing population characteristics and the prevalence of people with multimorbidity. A risk stratification system can monitor and predict health risks of a population, as well as indicating recommended strategies for prevention, monitoring and treatment\(^ {32}\).

- Risk stratification systems
- Big data and its potential uses such as predictive models, behavioural patterns, new needs identification, risks reduction, personalised care or population models.\(^ {33,34}\)

Currently there is a huge variation in the adoption of eHealth applications in Europe. Most widespread are EHRs, followed by registration databases with patients’ health data that can support decision-making and digital healthcare communication (mainly intended for communicate among providers). However, other eHealth applications with particular relevance for providing person-centered care continuum and integrated care with great potential for improvement are not yet widely implemented. These include advanced electronic decision support systems for physicians, self-management support of patients/users, and electronic systems for telemonitoring care processes\(^ {35}\).

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35 eHealth in integrated care programs for people with multimorbidity in Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63
Comments and suggestions

Although most European countries are committed to care continuum and patient-centered care, many barriers to its full implementation remain, including, among others:

- Different legal frameworks within and between countries
- Widely diverging views among European policymakers
- Lack of a dedicated legislative framework
- Limited funding and investment
- Uncertainty on privacy issues
- Concerns about secondary and other uses of personal data (how to ensure patient privacy rights, personal data confidentiality)
- Cultural resistance to adopt eHealth tools by healthcare providers and patients
- Different EHR systems among countries
- Limited ICT development and support
- Lack of transparent and integrated monitoring systems
- Lack of assessment procedures
- Lack of education and training for patients and healthcare professionals

Those above-mentioned barriers make it hard to find common ground and thus limit the use of eHealth across Europe.

Therefore, the following recommendations could be taken into account:

- **People-centred care**: One of the main key-concepts of each new policy development should be “people-centred”\(^{39}\). The person-centered concept should include the following characteristics: respect, courtesy, competence, efficiency, patient involvement in decisions, time for care, availability and accessibility, information, and communication. In this sense, person’s preferences in the primary care setting determined that communication, partnership, and health promotion were the most important needs, particularly among patients with psychosocial issues or who were symptomatic. Therefore, the general approach for the future is to make people-centered care provision\(^{40}\). This means that the focus is not on patients and their diagnosis but on the persons and their individual needs.

- **Focus on healthy lifestyles promotion** (habits and diet): Lifestyle can contribute to about 80% on our health, but we pay little attention to it. Now, thanks to technology, automatic systems can advise people in each situation\(^{41}\).

- **Stakeholder engagement**: Policy makers, eHealth providers and stakeholders (e.g. clinical professionals, care support, providers, insurers, governments, industry) must realize that eHealth cannot help if healthcarers do not understand what it can do, and eHealth people

\(^{36}\) eHealth in integrated care programs for people with multimorbidity in Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63


\(^{38}\) eHealth in integrated care programs for people with multimorbidity in Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63

\(^{39}\) WHO. WHO global strategy on integrated people-centred health services 2016-2026 (2015).


cannot explain this in healthcare terms. Moreover, it should be ensured that health and social care professionals as well as users are involved in the design and the implementation of eHealth solutions due to the fact that it is essential to ensure the high standard of quality of health and the understanding of diverse needs, cultures, and ethics.

- **Empowering and engaging people (citizens, family, informal carers).** Patients’ involvement needs to be in all policy making that affects their lives, not just restricted to healthcare but to include social and economic policies and regulatory policies. If patients’ needs for better involvement, more effective communication and better coordination of care are built into each healthcare system, it will address the overall health and wellbeing of population. Thus, more focus is required on engaging citizens, providing information, care coordination services, online tools and platforms which empower them to manage their health and wellbeing. Moreover, Patient and users’ organisations should be actively involved in designing better Integrated Care services, especially for complex, frail and elderly groups of patients which existing systems of care are failing to support. In summary, eHealth tools can help secure transitions in healthcare by involving and empowering people and by enabling them new ways to get access to healthcare and welfare systems.

- **A balanced approach:** Through reality-based learning actions would adapt what works, what delivers and what does not, by better articulating a bottom up with the top down one. Therefore, the challenge for policy makers and key stakeholders is to find the right balance between the two approaches: the **top-down approach** to set the frame, create the infrastructure and the necessary conditions for scale-up and a **bottom-up approach** to pragmatically meet the real needs of the users in the field.

- **Sharing information and results:** The European policy should support, encourage and enable those initiatives intended to provide sharing of information and results as a matter of course. In this sense, eHealth tools can help secure transitions in healthcare by improving communication and coordination, by involving and empowering patients, and by enabling new ways to get access to quality care. However, the state of maturity of the health and social care environment and the readiness to scale up before the implementation of a new eHealth aspect should be assessed. On the other hand, most of the healthcare stakeholders are connected to the internet, and usually connected to each other, so the new ways to improve coordinated healthcare should be implemented.

- **Data security and privacy:** Privacy and security of personal data should be guaranteed, particularly to health-related information (i.e. access to EHRs). Lack of security and privacy constitutes an important barrier for a wider deployment of eHealth tools. The new GDPR should be considered.

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49 eHealth: easing the transitions in healthcare. Swiss Med Wkly. 2012;142:w13599
50 Exploring the role of ICT in the provision of integrated care-Evidence from eight countries. Health Policy 111 (2013) 1–13
51 eHealth in integrated care programs for people with multimorbidity in Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63
53 https://www.eugdpr.org/
• **Trust:** The eHealth transitions include the need to foster more trust amongst the multiple and diverse stakeholders, to create a sustainable, open infrastructure on which innovative services can be developed, and to demonstrate their added value, and contribution to improving healthcare and health outcomes\(^{55}\).

• **Health information learning / training** (both for citizens and professionals) about how to effectively use technology, how to search for relevant information, etc., should be addressed. Technology can help a lot, but it can also harm if not used properly. In this sense, an **assessment of the state of maturity** of the health and social care environment and the readiness to scale up before the implementation of a new eHealth aspect (e.g. policies promoting cooperation across tiers of care and continuity; ICT deployment; self-management promotion; information sharing; incentives; stakeholder involvement; or legal framework) should be accomplished\(^{56}\).

• **Continuous professional education:** In terms of education and skills development, the focus must be brought back to the basic elements of effective care, starting with the consultation, information skills, team and community working, people management and inter personal skills as well as the fundamental clinical elements\(^{57}\). However, one of the barriers that hampers the use of eHealth tools is the lack of skills in using eHealth among providers\(^{58}\). The eHealth transitions should be linked to training about how to effectively use technology, how to search for relevant information, etc. Thus, these subjects should be taken into account within education plans and Continuous Professional Development (CPD) for a new generation of providers\(^{59}\).

• **Electronic Health Records, shared case work flows:** Sharing information should build on existing eHealth solutions which are crucial in the context of Care Continuum and Integrated Care. (e.g. citizen/patient identifiers, primary and acute electronic patient records, patient portals, longitudinal health records and shared care workflow)\(^{60}\).

• **Conceptual, semantic and technical standards:** Improvements of healthcare systems are dependent on common systems of concepts with shared understanding of the clinical content and context. Information structuring and clinical improvements need to be based on the common and shared clinical/business concepts. Standards for system of concepts are required for both purposes and to be effective the conceptual basis should be common and shared. Semantic standard need to be based on this conceptual basis to optimize the contribution of information management to better health and healthcare systems. Information sharing should build on existing eHealth solutions which are crucial in the context of healthcare (e.g. citizen/patient identifiers, primary and acute electronic patient records, patient portals, longitudinal health records and shared care workflow). However, compatibility/interoperability problems between different tools are frequently found\(^{61}\). Therefore, semantic and technical standards need to be promoted and implemented for allowing a properly sharing of information among eHealth solutions from different providers. However, limited funding can negatively impact investment in adequate ICT development and support\(^{62}\).

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\(^{55}\) eHealth: easing the transitions in healthcare. Swiss Med Wkly. 2012;142:w13599

\(^{56}\) Exploring the role of ICT in the provision of integrated care—Evidence from eight countries. Health Policy 111 (2013) 1–13

\(^{57}\) Policy lessons from a decade of eHealth — bringing a new direction into focus. A Briefing Paper. EHTEL, 2011

\(^{58}\) eHealth in integrated care programs for people with multimorbidity in Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63

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\(^{60}\) COCIR eHEALTH TOOLKIT. INTEGRATED CARE: BREAKING THE SILOS (Fifth Edition, MAY 2015).

\(^{61}\) eHealth in integrated care programs for people with multimorbidity in Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63

\(^{62}\) eHealth in integrated care programs for people with multimorbidity in Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63
- **Adequate funding and business models**: Limited funding can negatively impact investment in adequate ICT support and in training services for both users and providers\(^\text{63}\). Therefore, taking into account that care providers should pursue optimizing costs and resource efficiency, a designed eHealth implementation plan should include provisions for multi-year funding. Moreover, these plans may include incentives and appropriate business models for facilitating health and welfare professional involvement and collaboration for better clinical outcomes\(^\text{64}\).

- **Cultural and organizational change**: In the framework of eHealth implementation at all levels, what is needed is cultural change. In other words, new ways of working are needed and communicating, as well as new flexibilities within existing structures\(^\text{65}\). Moreover, the lack of electronic skills among patients and providers, perhaps also nurtures cultural resistance in using eHealth tools\(^\text{66}\). Cross-organizational agreements, new organizational and financial models (including incentives), and redefined roles where appropriate may enable collaboration which allows the entire care team to work together on an agreed plan\(^\text{67}\).

Evidently, this needs alignment with the priorities and domains of implementing activities of the recent Commission Communication COM(2018)233 on enabling the digital transformation of the health and care in the Digital Single Market. Stakeholders should leverage synergies with the actions identified by the EC, MS and stakeholders to empower citizens and contribute to a healthier society.

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\(^{63}\) eHealth in integrated care programs for people with multimorbidity in Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63

\(^{64}\) COCIR eHEALTH TOOLKIT. INTEGRATED CARE: BREAKING THE SILOS (Fifth Edition, MAY 2015).

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\(^{66}\) eHealth in integrated care programs for people with multimorbidity in Europe: Insights from the ICARE4EU project. Health Policy 122 (2018) 53–63

\(^{67}\) COCIR eHEALTH TOOLKIT. INTEGRATED CARE: BREAKING THE SILOS (Fifth Edition, MAY 2015).
Examples

Case 1

Mrs. Markovic is a 70-year-old patient diagnosed with diabetes many years ago. She is a vital patient, capable to use new technologies and mobile phones. She lives alone in the apartment and takes her insulin therapy herself. She enters results of her blood sugar and blood pressure levels in the mobile application. Her GP then can see her results in EHR and make corrections of the therapy accordingly.

Future situation: Mrs Markovic results will be entered in insulin diary through mobile application and/or portal. Nutrition recommendations (which products she can and cannot eat) will be created for her by the healthcare team and will be electronically available on her mobile device and/or portal. Set of alarms will be about regarding schedules of administration of insulin and/or medications. In the absence of new entries for defined period (one or two days) an alarm will warn her healthcare team to contact Mrs. Markovic and check up if everything is in order.

Case 2

Mr. Molina is an 83-year-old patient, suffers from diabetes, high blood pressure and chronic heart failure. He goes to his primary care doctor for routine follow-up and twice a year he visits the specialist in the hospital. His overall situation worsened and was hospitalized for a short stay. He is being discharged from hospital where his doctor, Dr. Pérez informs him that the liaison nurse from his primary care centre will take care of him at home. The nurse will go and visit him twice a week to check his recovery and will manage the health care needed at home: blood samples will be collected at home, wheelchair provided, etc. Mr. Molina lives with his 78-year-old wife, who is his caregiver. Dr. Pérez warned Mr. Molina’s wife she might need extra help. As they had never felt the need of social support measures, they are not familiar with the social system, although they are enjoying some benefits as tele-care services. Mr. Molina may benefit from certain social care services but neither he nor his caregiver is aware of it.

Future situation: At discharge, the healthcare professional gives Mr. Molina information about his healthcare follow-up and a number of resources in the social system he may opt to. This information is also available for his wife. They decide the most suitable service for him is a day care centre. Mr Molina and his wife review all day care centres close to their home since this information is geo-localized.

Case 3

Mr. López is living in a nursing home where he is provided with health care. However, his doctor in the nursery home, Dr. Puértolas, can only perform a limited case follow-up because he has just a general overview about his co-morbidity and treatment based on the information given by the patient. Although this complicates his first health assessment, later consultations and follow-up are easier because Dr. Puértolas already knows the patient. The doctor keeps Mr. López’s health information in a data base specifically created for the nursery home. After a critical health episode, Mr. Pérez is transferred to an emergency centre, but they have no access
to the information kept by Dr. Puértolas. The healthcare staff at the emergency room must make quick decisions disregarding the information stored by the doctor in the nursery home.

**Future situation:** Dr. Puértolas has full access to Mr. López’s eHealth record and he could feed it with new information concerning the follow-up in the nursery home. As professionals of the public system can access too, the healthcare professionals’ decision in the emergency room is better informed.

**Case 4**

Ms. Sánchez is a non-professional caregiver who looks after her spouse, Mr. Soto. Although he had multimorbidity, he was dealing quite well with his medicines. Now, as his health situation turns more critical and he gets disoriented due to his incipient dementia, she does not know that much about his health concerns, which makes her hesitant about his due daily care. Unfortunately, she has no other recourse but going to his doctor to try to get some information or guessing according to her own perception of the situation.

**Future situation:** When Mr. Soto is diagnosed dementia, his wife, Ms. Sánchez, is recognised by the healthcare system as his caregiver, regardless any procedure of competence determination that may be undertaken in the future. This gives her the possibility to access his health record to check prescriptions or any modification in the treatment. As access is not limited in time, she will be able to consult the needed information in Mr. Soto eHealth’s record as often as necessary, check prescription and dosage and make appointments on behalf of Mr. Soto. Likewise, the system will offer her the possibility to control her performance through checking lists. Simultaneously, she gets information about the social services, especially the existence of the School of Patients and she is recommended to become user of telecare, which she will use as caregiver and can also be useful for her husband. Whereas two different users will be registered, there will be a link between both records so that the teleoperator can jump from one profile to another.
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