

MAPPING METHODOLOGY FOR REVIEW OF INNOVATIVE SOLUTIONS IN CARE

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Brief description of methodology

Partners PP2, PP3, PP4, PP5, PP7, PP10 will do a recherche/overview of existing digital solutions related to the digitals tool defined in proposal:

- Intelligent monitoring tool
- Monitoring tool "AP-nurse"
- Advanced GPS-based tracking tool
- Digital tool for monitoring of frail elderly and preventing cognitive decline
- "Monitoring Grid" for the management of "frailty"
- Methods of care of frailty patients discharged from hospitals

Tool	Responsibility	Person
Intelligent monitoring tool	BUT	Radim Burget
Monitoring tool "AP-nurse"	STU	Branislav Vrban
Advanced GPS-based tracking tool	ISRAA	Oscar Zanutto
Digital tool for monitoring of frail elderly and preventing cognitive decline	LEPIDA	Teresa Gallelli
"Monitoring Grid" for the management of "frailty"	AUSTRIA	Sylvia Lomosits
Methods of care of frailty patients discharged from hospitals	FNOL	Michal Stybnar

For recherche/overview will be used EIP AHA repository of good practices and each partner which is responsible will prepare the list of digitals tools related to the defined tools from WP T2. It will be also compared with pubmed research and result of this activity will be the list of digital solutions which can be used as an improvement of Bologna's GP. Overview will used as a basis for WP T2. The set of needs and requirements will be based on results from review of Bologna's GP. Before the desk research will be arranged online meeting with each partner where will be summarized all need and requirements from involved stakeholders/target groups:

Regarding the research of technologies that are similar in scope to each digital tool It will start from the EIP AHA repository or AAL, which are focused more on general information and on the system concept, so from technical point of view are used online libraries focused on medicine and social care like Medline / Pubmed through especially systematic reviews (EBM - evidence based medicine).





At the same time, will be done recherche/overview focused on current and completed projects across Europe (EU projects - Horizon 2020 etc, Interreg ...). For recherche will be also used resources from the IEEE (Institute of Electrical and Electronics Engineers) and JMIR (Journal of Medical Internet Research) - JMIR with its subcategories focused on the scope of the project (Biomedical Engineering, mHealth, uHealth, Aging, etc.)

Links to the websites:

EIP AHA - European innovation partnership on active and healthy ageing

The Repository of innovative practices is the basis for the European scaling up strategy. The scaling up strategy constitutes another step in the development of the EIP on AHA to mobilise sufficient resources and expertise, which combined with the collection of innovative practices will ensure implementation of innovative solutions for active and healthy ageing on a European scale.

https://ec.europa.eu/eip/ageing/repository_en

NCBI - The National Center for Biotechnology Information

The National Center for Biotechnology Information (NCBI) is part of the United States National Library of Medicine (NLM), a branch of the National Institutes of Health (NIH). The NCBI houses a series of databases relevant to biotechnology and biomedicine and is an important resource for bioinformatics tools and services. Major databases include GenBank for DNA sequences and PubMed, a bibliographic database for the biomedical literature. Other databases include the NCBI Epigenomics database. All these databases are available online through the Entrez search engine.

https://www.ncbi.nlm.nih.gov/pubmed/

AAL - Ageing Well in the Digital World

AAL is a funding programme that aims to create better quality of life for older people and to strengthen industrial opportunities in the field of healthy ageing technology and innovation.

The specific aims of the AAL Programme are to:

- Foster the emergence of innovative ICT-based products, services and systems for ageing well at home, in the community, and at work.
- Create a critical mass of research, development and innovation at EU level in technologies and services for ageing well, including the establishment of a favourable environment for participation of SMEs.





 Help create the market conditions for the industrial exploitation of healthy ageing products by providing a European framework that supports the development of standardised solutions and facilitates their adaptation to local, regional and national levels to account for varying social preferences and regulatory requirements.

AAL is co-financed by the European Commission (through Horizon 2020) and 17 countries until 2020 for an approximate budget of €700 million.

http://www.aal-europe.eu/projects/

The Community Research and Development Information Service (CORDIS)

The Community Research and Development Information Service (CORDIS) is the European Commission's primary source of results from the projects funded by the EU's framework programmes for research and innovation (FP1 to Horizon 2020). CORDIS has a rich and structured public repository with all project information held by the European Commission such as project factsheets, participants, reports, deliverables and links to open-access publications. CORDIS is managed by the Publications Office of the European Union on behalf of the European Commission's research and innovation Directorates-General, Executive Agencies and Joint Undertakings, supported by specialised contractors for editorial, data and technical services. CORDIS is one of the cornerstones of the Commission's strategy to disseminate and exploit research results and it is governed and funded as part of the Horizon 2020 framework programme.

https://cordis.europa.eu/projects/en

Interreg Europe

https://www.interregeurope.eu/policylearning/good-practices/

Institute of Electrical and Electronics Engineers

IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity. IEEE and its members inspire a global community to innovate for a better tomorrow through its more than 419,000 members in over 160 countries, and its highly cited publications, conferences, technology standards, and professional and educational activities. IEEE is the trusted "voice" for engineering, computing, and technology information around the globe.

https://ieeexplore.ieee.org/Xplore/home.jsp

The Journal of Medical Internet Research (JMIR)

The Journal of Medical Internet Research (JMIR), now in its 21st year, is the pioneer open access eHealth journal and is the flagship journal of JMIR Publications. It is the leading digital health journal globally in terms of quality/visibility (Impact Factor 2019: 5.03, ranking Q1 in the medical informatics





category. The journal focuses on emerging technologies, medical devices, apps, engineering, and informatics applications for patient education, prevention, population health and clinical care. As a leading high-impact journal in its disciplines (health informatics and health services research), it is selective, but it is now complemented by almost 30 specialty JMIR sister journals, which have a broader scope. Peer-review reports are portable across JMIR journals and papers can be transferred, so authors save time by not having to resubmit a paper to different journals.

https://www.jmir.org/

https://aging.jmir.org/

https://biomedeng.jmir.org/

Recherche will be based on MAST (A Model for Assessment of Telemedicine Applications) tool which is assessment frameworks that relate to specific types of innovation and it will be combined with Momentum tool and with requirements from review of Bologna's good practice. In MAST methodology are described 7 domains which are used as a basis for our recherche of digital solutions:

1) Health problems and characteristics of the application

 Does the app contribute to solving a health problem? Does the application respect international standards, including technical standards for data communication?

2) Safety

• Can the application be considered as safe? Can the results be transferred to other patient groups?

3) Clinical effectiveness

• Can the results of the Good Practice be considered as valid, is there any evidence?

4) Patient perspectives

• Is it suitable for the target group of patients and is it user-friendly for them?

5) Economic aspects

• Cost effectivity of Good Practice - investment and operation. How does the cost change with the number of patients?

6) Organisational aspects

 Demands of organizational measures for Good Practice. Can barriers to its implementation be removed?

7) Socio-cultural, ethical and legal aspects

• The difficulty of Good Practice in terms of legal measures? Does Good Practice fit from an ethical and cultural point of view?