Responsive Engagement of the Elderly promoting Activity and Customized Healthcare

Results

Project information

REACH2020

Grant agreement ID: 690425

Project website

Status
Ongoing project

Start date
1 February 2016

End date
31 January 2020

Funded under:
H2020-EU.3.1.4.

Overall budget:
€ 6 078 657,50

EU contribution
€ 4 588 315

Coordinated by:
TECHNISCHE UNIVERSITAET MUENCHEN

Germany

Deliverables

Documents, reports (15)

Detailed dissemination plan

Detailed dissemination plan: Presentation of a detailed dissemination plan coordinates and schedule dissemination activities planned by individual partners (associated with task T 9.8).

User acceptance and motivation strategies, including caregivers

User acceptance and motivation strategies, including caregivers: Presentation of the outcome of the identification and detailing of user acceptance and motivation strategies for whole system and Subsystems and full consideration and detailing of ethical aspects and privacy strategies for whole system (associated with task T7.2 and T7.3). Presentation in the form of text and schematics/visualisations fostering easy understanding of this complex subject/strategy. A data-management plan will be presented by month 14. It will be refined and update until the date for which the deliverable is scheduled (month 31).
PSS concepts based on motivational strategies
PSS concepts based on motivational strategies: Presentation of intervention product service system development concepts based on user acceptance and motivation strategies (associated with task T 4.2 and T 4.3). Presentation in the form of schematics, visualisations and plans showing the relation to the Health Care Platform.

Formalised results of Pretesting I and II activities
Formalised results of pretesting I and II activities: Summarisation of testing and evaluation of pre-testing of mock-ups in laboratory and real-world environments (associated with tasks T6.3, T6.4).

Motivational strategies
Motivational strategies: Summarization of identifying user motivation to adopt new behavior and analyzing existing motivational system for behavior change (associated with tasks T 4.1, T4.2). Presentation in the form of schematics, visualisations and plans showing the relation to the Health Care Platform.

Collaboration network organization
Collaboration network organization: Summarisation of the outcome of the design and the stimulation of the collaboration network (associated with task T8.3).

List of requirements and functions report
List of requirements and functions report: Summarisation of the identifikation of general requirements and functionality for PI²Us with respect to REACH use-case (associated with task T5.1).

Use case scenarios
Use case scenarios: presentation of the outcome of an analysis (including on-site analyses) of the current use cases and practices at Lyngby, SK, Zuidzorg and SK, and formulation of concrete use scenarios (associated with task T 1.1)

Innovative product service systems concepts
Innovative product service systems concepts: Presentation of the outcome of the development of innovative product service systems concepts for the REACH system and the sub-systems and potential IP proposals (associated with task T8.2).

PSS concepts
PSS concepts: Summary of the development of and initial value proposition and product-service-system concept developed based on the involvement of stakeholders (associated with task T 1.3)
System personalisation strategy
System personalisation strategy: Summarisation of the outcome of the Identification and detailing of personalisation strategies and degrees of personalisation for all subsystems (associated with task T7.1). Presentation in the form of text and schematics/visualisations outlining the relation to the Health Care Platform.

Stakeholder networks and active user involvement/early trials
Identification of requirements, benefits and risks in the context of a stakeholder analysis, active user involvement/early trials (associated with task T 1.2)

Stakeholder management plan
Stakeholder management plan: Outline of a stakeholder management strategy that allows the efficient implementation of PSS-concept and health platform (associated with task T 9.7).

Applicable standards and best practice guidelines for all REACH related activities
Applicable standards and best practice guidelines for all REACH related activities: Summarisation of the outcome of the research and assessment of existing standards, of standards under development and the development of standardized cross-compatibility protocols (associated with task T6.1).

Code of Conduct
Code of conduct: Outline of the code of conduct related to the management of intellectual property rights in order to ensure an open atmosphere within the consortium as well as to foster efficient and fast exploitation of project results (associated with task T9.6).

Other (1)
Partly functional / functional mock-ups and prototypes of PI2Us
Partly functional / functional mock-ups and prototypes of PI2Us: Presentation of the outcome of the Building of PI²Us (mock-up/prototype) for testing and demonstration (associated with task T5.4). Presentation in the form of mock-ups and visualisations.

Demonstrators, pilots, prototypes (1)
Final mock-up version of REACH system
Final mock-up version of REACH system: Demonstration of the outcome of the Pre-integration integration to mock-up with other systems (associated with task T6.2).

Publications
**Product-Service-System (PSS) concepts based on motivational strategies**


**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D15 (research report), 2017

**DOI:** 10.14459/2017md1482712

**Stakeholder networks, motivational strategies (promoting physical health), sensor technologies for monitoring daily activity; early user involvement trials, outline of implications for and applicability in REACH**


**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D2 (research report), 2017

**DOI:** 10.14459/2017md1482705

**Theory-based motivational behavior change strategies for the Responsive Engagement of the elderly promoting Activity and Customized Healthcare (REACH) project**


**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D14 (research report), 2017

**DOI:** 10.14459/2017md1482709

**Identification and detailing of personalization strategies and degrees of personalization for all Subsystems**


**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D29 (research report), 2017

**DOI:** 10.14459/2017md1482710

**Personalised Intelligent Interior Units (PI²Us): List of requirements and functions report**

**Author(s):** H. B. Andersen, H. Ehrari, J. D. Jessen, M. Yasuoka; R. T. Larsen, H. Langberg; T. Linner, J. Güttler, A. Kabouteh, R. Hu., B. Schäpers, C. Krewer; G. v. Bakel; Y. Lu; M. Randriambelono

**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D21 (research report), 2017

**DOI:** 10.14459/2017md1482711
Stakeholder management - outline of a stakeholder management strategy that allows the efficient implementation of PSS-concept and health platform

**Author(s):** T. Linner, A. Groth, Y. Lu, G. Solcanu, E. Steinhardt

**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D41 (research report), 2017

**DOI:** 10.14459/2017md1482707

Design, Technology, and IP analysis + Management of intellectual property rights for efficient and fast exploitation of project results


**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D34 (research report), 2017

**DOI:** 10.14459/2017md1482713

IPR management - outline of the code of conduct related to the management of intellectual property rights (IPRs) in order to ensure an open atmosphere within the consortium as well as to foster efficient and fast exploitation of project results

**Author(s):** T. Linner, M.M. Bekker, A. Groth, Y. Lu, G. Solcanu, E. Steinhardt, C.A.L. Valk

**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D40 (research report), 2017

**DOI:** 10.14459/2017md1482706

Presentation of the outcome of an analysis (including on-site analyses) of the current use cases and practices at HUG, SK, ZZ, Lyngby and formulation of initial, concrete use scenarios


**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D1 (research report), 2017

**DOI:** 10.14459/2016md1482702

Detailed dissemination plan - presentation of a detailed dissemination plan that coordinates and schedules dissemination activities planned by individual partners

**Author(s):** T. Linner, G. Solcanu, J. Güttler, C. Georgoulas, T. Bock; Y. Lu, T. Bekker; H. Andersen; Y. Onur, P. Pu; S. Konietzny; S. Lukasiak; S. Forstner, A. Rusu; S. Murali; T. Visser; D. Dietrich

**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D42 (research report), 2017
Product-Service-System (PSS) concepts - summary of the development of and initial value proposition and product-service-system concept developed based on the involvement of stakeholders


**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D3 (research report), 2017

**DOI:** 10.14459/2016md1482704

Systems engineering - coordination and best practice guidelines for REACH system integration activities and standards research

**Author(s):** T. Linner, E. Steinhardt, J. Güttler; C. Fuß, A.-M. Meyer; H. B. Andersen

**Published in:** REACH2020 Deliverables, Issue REACH2020 Deliverable D25 (research report), 2017

**DOI:** 10.14459/2017md1482708

Peer reviewed articles (13)

**Determining design requirements for active aging: Personas, experience maps, and stakeholders**

**Author(s):** Barbara Schäpers, Carmen Krewer, Mika Yasuoka, Daniela Becker, Silke Heller, Marcus Kaiser, Eberhard Koenig, Friedemann Müller

**Published in:** Gerontechnology, Issue 16/3, 2017, Page(s) 139-150, ISSN 1569-1101

**DOI:** 10.4017/gt.2017.16.3.003.00

**Systems engineering for prevention-oriented, assistive technology situated in a multidisciplinary context**

**Author(s):** Thomas Linner, Rongbo Hu, Katja Pawlitza, Jörg Güttler

**Published in:** Gerontechnology, Issue 16/3, 2017, Page(s) 129-138, ISSN 1569-1101

**DOI:** 10.4017/gt.2017.16.3.002.00

**Analysis of the effectiveness of ActivLife training in people over 60 years of age: A pilot study**

**Author(s):** Anna Leś, Ewa Niedzielska, Joanna Piotrowska, Michał Staniszewski, Dominika Kozak

**Published in:** Gerontechnology, Issue 16/3, 2017, Page(s) 189-195, ISSN 1569-1101

**DOI:** 10.4017/gt.2017.16.3.008.00

**REACH: Responsive Engagement of the Elderly promoting Activity and Customized**
Healthcare
Author(s): Thomas Bock
Published in: Gerontechnology, Issue 16/3, 2017, Page(s) 125-128, ISSN 1569-1101
DOI: 10.4017/gt.2017.16.3.001.00

Opportunities and challenges for self-monitoring technologies for healthy aging: An in-situ study
Author(s): Mirana Randriambelonoro, Yu Chen, Onur Yuruten, Pearl Pu
Published in: Gerontechnology, Issue 16/3, 2017, Page(s) 173-180, ISSN 1569-1101
DOI: 10.4017/gt.2017.16.3.006.00

A Bayesian Approach to Intervention-Based Clustering
Author(s): Kulev, I.; Pu, P.; Faltings, B.
Published in: ACM Transactions on Intelligent Systems and Technology (TIST), Issue 9(4), Jan. 2018, Page(s) 44:1-44:23, ISSN 2157-6904

Towards personalized persuasive strategies for active ageing
Author(s): Carlijn Valk, Yuan Lu, Xipei Ren, Marjolein Wintermans, Ivar Kraaijvanger, Jim Steenbakkers, Vincent Visser
Published in: Gerontechnology, Issue 16/3, 2017, Page(s) 160-172, ISSN 1569-1101
DOI: 10.4017/gt.2017.16.3.005.00

Business model innovation for value and technology based preventive health care
Author(s): Thomas Linner, Gabriela Solcanu, Camilla van den Boom, Hans Lingegard, Tifanny Istamto, Gavin Proctor, Yuan Lu, Jim Steebakkers
Published in: Gerontechnology, Issue 16/3, 2017, Page(s) 200-206, ISSN 1569-1101
DOI: 10.4017/gt.2017.16.3.010.00

Standardization in REACH in the context of active and healthy ageing
Author(s): Christine Fuß, Ann-Morla Meyer
Published in: Gerontechnology, Issue 16/3, 2017, Page(s) 196-199, ISSN 1569-1101
DOI: 10.4017/gt.2017.16.3.009.00

Identifying factors for personalized strategies to motivate seniors to adopt a more active lifestyle
Author(s): C.A.L. Valk, M.C. Wintermans, Y. Lu, M.M. Bekker, R.G.A. Brankaert
Published in: Gerontechnology, Issue 17/s, 2018, Page(s) 63-63, ISSN 1569-1101
DOI: 10.4017/gt.2018.17.s.063.00
Physical activity monitors to enhance the daily amount of physical activity in elderly—a protocol for a systematic review and meta-analysis

**Author(s):** Rasmus Tolstrup Larsen, Jan Christensen, Carsten Bogh Juhl, Henning Boje Andersen, Henning Langberg

**Published in:** Systematic Reviews, Issue 7/1, 2018, ISSN 2046-4053

**DOI:** 10.1186/s13643-018-0733-6

A functionality, safety and validity study of innovative REACH devices

**Author(s):** Dominika Kozak, Simon Burgermeister, Jean De Buretel De Chassey, Adrien Naef, Alexandre Maringue, Damien Dietrich

**Published in:** Gerontechnology, Issue 16/3, 2017, Page(s) 181-188, ISSN 1569-1101

**DOI:** 10.4017/gt.2017.16.3.007.00

Can technology adoption for older adults be co-created?

**Author(s):** Yuan Lu, Carlijn Valk, Jim Steenbakkers, Tilde Bekker, Thomas Visser, Gavin Proctor, Omna Toshniwal, Henning Langberg

**Published in:** Gerontechnology, Issue 16/3, 2017, Page(s) 151-159, ISSN 1569-1101

**DOI:** 10.4017/gt.2017.16.3.004.00

**Conference proceedings (6)**

Cross-domain integration for the development of technology-based detection-analytics-intervention chains in the REACH project.

**Author(s):** Linner, T.

**Published in:** Proceedings of CIB International Conference on Smart, Sustainable and Sensuous Settlements Transformation (3SSSettlements) 2018, Issue CIB W119 (yearly symposium), 2018

**DOI:** 10.14459/2018md1482637

Technical systems promoting customized activity in a rehabilitation setting

**Author(s):** Müller, F.

**Published in:** Proceedings of 10th World Conference of Gerontechnology, Issue 10th World Conference of Gerontechnology, 2016

Development of a Non-Contact ECG Application Unobtrusively Embedded into a Bed

**Author(s):** Stefan Pehr, Daniel Zollitsch, Jörg Güttler, Thomas Bock

**Published in:** IEEE Sensor Application Symposium, Issue 2019 IEEE Sensors Applications Symposium (SAS), 2019

Co-creating product-service-system with and for the ageing society in different socio cultural contexts
Design of a Multifunctional and Modular Bed System

Author(s): Pawlitza, K.

Published in: Proceedings of CIB International Conference on Smart, Sustainable and Sensuous Settlements Transformation (3SSSettlements) 2018, Issue CIB W119 (yearly symposium), 2018

DOI: 10.14459/2018md1482638

Designing for technology acceptance of wearable and mobile technologies for senior citizen users

Author(s): Valk, C.A.L., Lu, Y. Randriambelonoro, M., Jessen, J.

Published in: 21st DMI: Academic Design Management Conference (ADMC 2018) - London, United Kingdom, 2018

Thesis dissertations (1)

Development of a Non-Contact ECG Application Unobtrusively Embedded into a Bed

Author(s): Yürüten, O.

Published in: 2017

DOI: 10.5075/epfl-thesis-7973