



International Support of a Common Awareness and
Knowledge Platform for Studying and
Enabling Independent Living

CAPSIL Project Periodic Report Two
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Project Objectives for Period

3.11 Home and Mobile Monitoring Systems Roadmap 2 R PU Month 3

The following are the objectives for the Home and Mobile Monitoring System Work Package Roadmap:

- Identify factors that limit independent living that could be addressed by monitoring elders in the home and community setting.
- Determine sets of measures that would be useful for diagnosis, treatment and care giving of elders in the context of conditions (e.g. high blood pressure) that affect this population.
- Compile and review existing static or nomadic sensors and sensor systems for gathering of physiological and behavioural data from elders in homes or in residential facilities.
- Compile and review existing mobile sensor systems for monitoring of physiological and behavioural data in ambulatory elders.
- Compile and review existing sensor data communication infrastructures and sensor networks deployed in environments such as homes and residential facilities.
- Compile and review existing algorithms for processing of raw data and for detection and classification of the information derived from the sensor data.
- Compile and review existing methods to monitor quality of the data gather using home and mobile monitoring systems including sensor failure, low battery operation, etc.
- Perform a meta-analysis to assess the impact of issues such as social acceptability, privacy and security that could affect the adoption of home and mobile monitoring technologies.
- Explore the impact of policies and reimbursement mechanisms on the policies and reimbursement mechanisms on the potential adoption of monitoring technologies to foster independent living in the elders

Work Progress and Achievements during the Period

April

- Initial resources assigned to CAPSIL road mapping activates from OHSU (Prof. Misha Pavel and Dr Holly Jimison)

- Attended the initial CAPSIL Workshop held in Imperial College London. Initial subject areas for Home Monitoring roadmap reviewed and agreed with partners. The following areas were identified as the initial targets for road mapping activities.
 - Cognitive Training
 - Ethics
 - Sensors (in cooperation with WBSN work package)
 - Falls
 - Chronic Disease Management e.g. CHF/COPD
 - Barriers to Independent Living
 - Measurement markers that enable independent living

May-June

- Literature review of the current state of the art in Home and Mobile Monitoring System and identification of the current gaps and trends to address these gaps.

Highlight clearly significant results

- Initial structure of the Home and Mobile Systems Monitoring roadmap identified and agreed.
- Literature review.

Deliverables

D3.1: Home Monitoring and Mobile Systems Roadmap (O, M24)

Milestones

- M1.1: Workshop #1 – Outline of Roadmap and structure of Wiki entries (M3)
- M1.2: Workshop #2 – Initial Home and Mobile System Roadmap document presented and prototype Home and Mobile System Wiki entries (M9)
- M1.3: Workshop #3 – First draft of Home and Mobile System roadmap document and initial Home and Mobile System Wiki entries (M15)
- M1.4: Workshop #4 - Final draft of Home and Mobile System roadmap document and Home and
- Mobile System Wiki entries (M21)