

Project annotation

A common challenge for this project is to support social and health services, which are facing a greater pressure of clients as Europe ages. Europeans are living longer than ever before, and the age profile of society is rapidly rising.

The aim of the project is to support the rapid implementation of ICT tools in practice. Assistive technologies, for example in emergency care, must have minimum functional requirements and standards defined in the law. Each of the participating countries has a different way of implementing the standards, but the goal is common. Helping the state, municipalities and social services to make meaningful use of ICT tools in care. Assis. tech. do not replace human contact but save formal (nurses) and informal (family, community, volunteers) caregivers time and energy.

The main output for each partner will be an Action Plan, which will provide guidance for the implementation of standardisation of ICT tools in the health and social care sector - Emergency care. Ministries will be informed which Policy Instruments they should change and how. Municipalities will learn how to support the implementation of ICT tools in care. And social-healthcare providers will receive instructions on how to select ICT tools that will serve them well and effectively in the future.

The project is solved by participatory design. Communication with the target groups (all already mentioned) is important. Technical experts work in line with human-centred design. International involvement is important to create a universal definition of standards for the whole of Europe. Each of the countries involved has different conditions that shape the terrain of service delivery.

Project name

Name: Emergency care social services standards; Abbreviation: EMCASSES





CZECH TECHNICAL UNIVERSITY IN PRAGUE UNIVERSITY CENTRE FOR ENERGY EFFICIENT BUILDINGS

Project target

Emergency care in the Czech Republic is now defined as a tool for transmitting an emergency signal for help. This definition is outdated (over 17 years) and assumes the use of an outdated wired solution that only works in the home environment, not outside the home. This goes against the trend of active ageing and supporting the mobility of seniors outside their home. Some suppliers of technical components for emergency care do not respect the principles of an open system, basic compatibility and, above



all, do not allow personalisation (ergonomic and functional). Such equipment is purchased by social services but not used in practice.

The researchers want to set functional standards in the provision of emergency care social services that will bring modern functional solutions into practice to support active ageing. Technology will streamline care and ease the administrative burden on staff to allow more time for their clients.

In practise the project aims to define and set standards of the emergency care social services by implementing conditions on the innovative technologies used, such as telemedicine, remote monitoring of the clients and the environment in which they live, etc.

To define the standards, the good practices will be collected and assessed, together with the common practice and current legislative requirements.

Activities of the project

- 1) Market Assessment
- 2) Collecting good practices
- Defining the key standards of the Emergency care social services with emphasis on technical solution in the workshops provided and organized on local as well as international level
- 4) Study visits to modern centres providing the Emergency care social services
- 5) Addressing the current policies defining requirements for the Emergency case social services
- 6) Dissemination activities to exchange experiences and good practices:
 - a. Local stakeholder seminars
 - b. Local dissemination seminars
 - c. Local workshops
 - d. International study visits
 - e. International seminars
 - f. International workshops
- 7) Action Plan implementing plan of the standards defined together with the managing authority





Market Assessment

The EMCASSES project will provide a research and assessment of the current conditions of the Emergency care social services provided on the local markets. The assessment will be used to provide experiences exchange between the project partners by comparing the outcomes of the assessment and finding key local conditions and standards.

The assessment will focus mainly on the following areas:

Emergency care

Open platform for supervision/care assessment

This tool enables:

- efficient care delivery, personalization of care, quality control,
- automated data processing, reporting tool, preparation of reports for ministry/insurance company,
- integration of new sensors and devices across communication standards -LoRaWAN, NB-IoT, GSM, ModBus...
- open communication interface to third party applications and easy integration of other modules
- data storage in accordance with health and social data standards e.g. HL7



Personal emergency unit

Mobile personal unit adapted to the needs of the target group.

- mobile wireless communication for data and voice
- indoor and outdoor localization
- easy use voice feedback, wireless charging, one SOS button

Safe home

Using smart solution and sensors to ensure a safe home environment.

- Smoke sensor, flood sensor, door / windows open detection
- Low-resolution IR camera for detection of lying person
- Monitoring of quality indoor environment
 - o Temperature, moisture, CO₂, VOC...



Ambient lighting for day and night mode. Lighting parameters during the day are different than at night. The intensity, spectrum and direction of the light are different. Also important is the automatic control that respects safe movement around the apartment at night.

Communication client – nurse - family

The use of easy video calls is an essential tool for communication between all actors today. For clients, ease of use and a large screen are essential.

But for the family, it is important to keep track of the care and condition of the senior. This information must be available, for example, via a web portal. Reports of care and condition are automatically creating based on data from the platform for care.



Collecting good practices

Collecting the good practices on EU markets describing the services provided and representing the best practise of innovative technologies used to provide services to clients

Dissemination activities

- Local stakeholder seminars
- Local dissemination seminars
- Local workshops
- International study visits
- International seminars
- International workshops

Action Plan

The Action Plan will provide a detailed descriptions of the standards defined and to be set as part of legislation together with the step-by-step plan of implementation of the changes and standards to the legislation process (how to influence the Policy Instruments).

Consortium:

Lead Partner: Czech Technical University in Prague (CZ) Partner: Social care services — Emergency care for elderly

Partners we are looking for:

- University
- Ministry or municipalities that influence the financing of social care services
- Social care services with Emergency care

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