Creating CURE-Elderly-Personas

Project Deliverable D1

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Task 2.1: Literature review

Task 2.2: Identification of relevant variables

Task 2.3: Preparation of data, data merging and handling

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Acknowledgements

1 Abstract

This document summarizes the first of three steps towards the creation of a valid set of senior personas applicable in future research and industrial projects within the scope of Ambient Assisted Living.

Task T2.1 included a detailed review and analysis of current AAL and related projects. Collected information was analyzed for the definition of various user group specifications and requirements within the scope of AAL. Results were filtered and clustered due to the included target group, the aims of the developed technological solution as well as the included technology.

Task T2.2 was to identify relevant variables of the SHARE database that can be used to describe the various user specifications and requirements defined in Task 2.1 and therefore act as the essential fundament of the following work. In order to reach this goal a first matching was done based on the scales and single variables of the Database that can be used to describe the user specifications defined in Task 2.1. As SHARE does not cover all aspects needed for the Persona creation, a literature review of existing statistical data and additional sources was done to cover not included information such as "technology usage of elderly users".

Based on the results of Task 2.1 and 2.2, an overview on needed user requirements within AAL and related projects could be laid out as well as a first overview of corresponding variables that can be used for further analysis to create a valid CURE-Elderly-Personas set.

In Task 2.3 first descriptive statistic data analysis was done to filter the requirement specific variables and to prepare the database for higher statistical analysis. Results outline further statistical possibilities and directions of the data analysis and create first connection points between defined requirement categories (through the examination of AAL and related projects) and the matching with the variables included in SHARE. Relevant variables and cluster analysis as analysis method were defined for the ongoing Persona creation process. In a next step (Work Package 3) this method will be applied to form different user groups and the skeletons of the CURE-Elderly-Personas set.

2 Method

The following section outlines the sources for information gathering on requirements of elderly users, the procedure applied for structuring the gathered data and first explorative mapping of requirements and SHARE variables as well as the first statistical analysis of the database.

2.1 Project Evaluation

A detailed online research on national and international AAL (and related) projects was done with a special focus on available information on requirements related to technology for older users needed for the development of AAL technology.

2.2 Project Data Structuring

In a next step familiar information was clustered into groups and higher categories and subcategories were formed. The focus was on basic information concerning the description of the users, the goal of the project and the chosen technological approach. A data matrix was produced including all found aspects referring to user requirements within AAL and related projects allocated to the formed categories and subcategories.

2.3 Explorative Project Data Mapping

Based on the resulting matrix the database was explored to identify scales and variables that can be used to form specific user requirement descriptions. First, higher categories (e.g. Health Status) of the requirement matrix and SHARE scales were compared. With this rough assignment, connections between single variables and requirement aspects within the matrix could be found. This procedure resulted in a first general list of relevant variables that include information that can be used for the Persona generation.

2.4 Descriptive Statistic Data Analysis

In a next step descriptive statistic analysis was done to get a first outline on the characteristics and variations of the identified variables. Results outline the basis for further statistical analysis of the dataset as well as the definition of the advanced statistical method applied in work package 3 to form the CURE-Elderly-Personas.

3 Project Evaluation

The following section describes the sources used for information gathering on requirements for elderly users and shows the results of this procedure.

3.1 Sources for Project Evaluation

Several national and European research programs (see Figure 1) address the various topics of Ambient Assisted Living focusing on technology for elderly users [2][3][4][5].

The Framework Programs of the European Union have a rather wide range of topics [2][5]. One of the largest thematic programs within the FP7 is ICT – Information and Communication Technologies [2]. While ICT does not focus on the target group of AAL per se, some so called challenges of the various calls partly are, e.g. "Challenge 7: Independent living, inclusion and Governance" including the topics aging, accessibility and inclusion.

Both, the European Ambient Assisted Living Joint Program [3] as well as the national program benefit [4] fund projects that strictly address the needs of elderly persons.

Projects from these national and international initiatives were evaluated for recovering needed requirement information of older users for elderly specific technology developments.
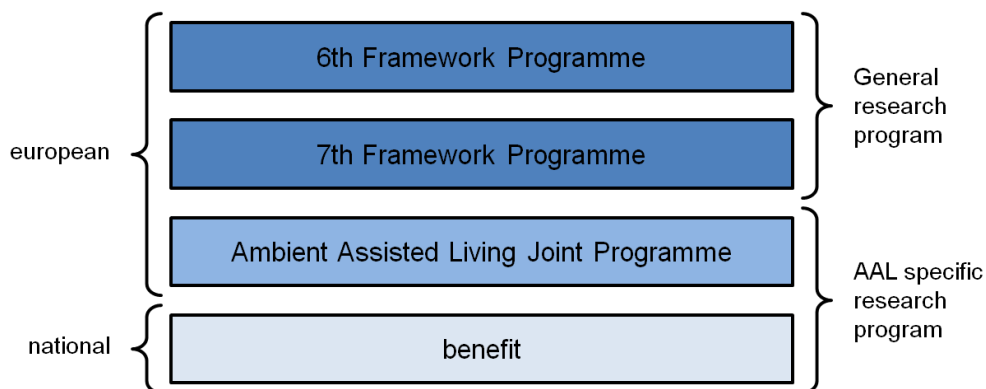

Figure 1. National and international research programs related to elderly users

3.2 Results of Project Evaluation

73 national and international projects related to technology for the target group of elderly users could be found (full project list see Table 3 in the appendix section). Figure 2 outlines the distribution of the funded projects related to their specific R&D program.
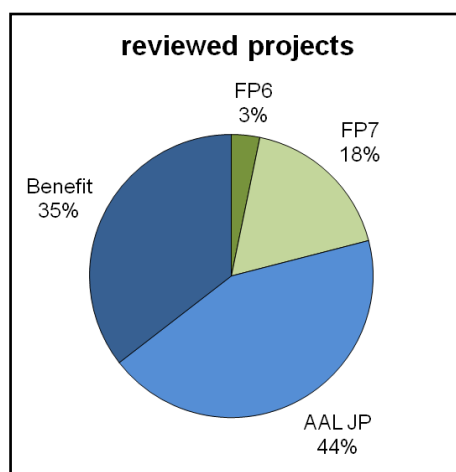
Figure 2. Distribution of funded projects and related R&D programs

The focus of the project evaluation was the exploration of all material including data about the technology developments itself as well as requirement information on the specific target groups. The latter is needed to define the needs and requirements of elderly users referring to the applied technology approaches.

All available public information regarding the 73 national and European projects was collected filtering and scanning the following documents:

- project websites (general information about the project)
- public project documents (e.g. Flyers, project summaries, etc.)
- public project deliverables
- material available on funding institution websites (e.g. project abstracts, project presentations, etc.)
- published project presentations on information events
- published public journal and conference papers

Results show that most of the documents related to requirement phases and included technology approaches are confidential and only for project internal use. Further, most of the European projects publish their results of work and research via project websites, but details on user groups and requirements are seldom included. Via general abstracts and basic project presentations (e.g. posters, flyers, presentations, single project deliverables, etc.) only rough descriptions of the needed information is made public. In the case of national projects, the available information is even less, mostly limited to short descriptions, abstracts or presentations summarizing objectives and goals of the project available at the website of the funding organization.

This fact limits the information collection regarding requirement needs of elderly users in AAL and related projects to the provided public available documents.

4 Project Data Structuring

The next section outlines the procedure and results of structuring collected information on requirement needs on a general and detailed level.

4.1 General Structuring of collected Project Data

To structure the collected data a matrix was created including all information of the collected documents on AAL and related R&D projects. To get an overview on the requirements of elderly users related to technology developments all available information was allocated to the following areas:

- **Target group** (e.g. Cognitive restrictions, Physical restrictions, Chronic Diseases, etc.)
- **Aims of the developed technology solution** (e.g. Therapy/Drug Management, Cognitive Stimulation, Social Inclusion, etc.)
- **Applied technology approaches** (e.g. Mobile Interfaces, Web Interfaces, Speech Interfaces, NFC/RFID Technology, etc.).

4.1.1 Results of the General Structuring

The resulting matrix provides a first overview on the specific target groups of elder users, the diverse aims, the developed technological solutions wants to achieve and the included technology that has to be adapted to the special needs of elderly users. All public available information was gathered and listed in a structured form using Excel resulting in a comprehensive matrix showing target group, aim of the technological solution and included technology of the project. The resulting list builds the base for the creation of the CURE-Elderly-Personas. Figure 3 gives an overview on found elderly specific target groups, the aims technology wants to achieve as well as the applied technical approaches. The font size represents the frequency of the topics – the bigger the more often they were found in our analysis. Given the broad research field of AAL some aspects are more often included as others e.g. chronic diseases and physical impairments, social inclusion and support for independent living as well as telecommunication services and mobile interfaces.

Figure 3. Overview on target groups, aims of the technological solution and applied technology approach

4.2 Detailed Structuring of Collected Project Data

Based on the general structured list (including diverse identified elderly specific target groups, different aims of the developed technology solution, included technical approach) each of the three main categories was further analyzed to create a detailed substructure within these single areas. Clusters of related information were generated to build different subcategories within the gathered information on a detailed level.

4.2.1 Results of the Detailed Structuring

Although the applied approach includes a certain degree of fuzziness due to the different levels of detail within the found and collected information, the following categories and subcategories could be identified:

- **Target Groups**
    - Diseases
        - Chronic Diseases (e.g. High blood pressure, diabetes, etc.)
        - Cognitive Diseases (e.g. MCI, Alzheimer's, Dementia)
    - Impairments and disabilities
        - Physical
        - Senses
- **Aims of the developed technology solution**
    - Support social inclusion
    - Support drug management
    - Monitoring
    - Support physical Stimulation
    - Support cognitive Stimulation
    - Support mobility
    - Support activities of daily life/daily routines
    - Support independent living
- **Applied technology approaches**
    - Concepts (e.g. smart home, robotics, ambient intelligence)
    - Technologies (e.g. Mobile, Web, Wearables)
    - Interfaces (e.g. Touch, Tangible, Speech, NFC)
    - Context of Use
        - Place (e.g. home, daycare home, in public)
        - Location (e.g. Stationary or mobile solution)
        - Access to the system (e.g. direct, remote)

The resulting final categories and subcategories build the starting point for the first comparison with information included in the SHARE Database that represent re-

quirement characteristics developers and researchers need when designing technical solutions for the elderly (e.g. Grip Strengh for Tangible and Touch Interactions; Drug Intake for Medication Management Systems, etc.).

5 Explorative Project Data mapping with Database

Based on the resulting categories and subcategories from 4.2.1 all scales and variables of the SHARE database were reviewed in order to discover variables that include relevant information that can be used to define the requirements of elderly users to be included in the CURE-Elderly-Personas set. Following scales (and variables of theses scales) were analyzed (see Table 1).

Cover Screen (CV)	household size, relation of household members, country, language, gender and age information, etc.
Demographics (DN)	country of birth, education, marital status, children, brothers and sisters, etc.
Physical Health (PH)	limitations with activities, self-perceived health, number of chronic diseases, number of symptoms, body mass index, mobility, arm function and fine motor limitations, number of limitations with instrumental activities of daily living, etc.
Behavioural risks (BR)	Smoking, alcohol consumption, sport activities that are vigorous, physical inactivity
Cognitive Function (CF)	numeracy score (Mathematical performance), orientation to date, month, year and day of week
Mental Health (MH)	variables forming the EURO-D scale, depression scale EURO-D, EURO-D caseness
Health Care (HC)	Contact with specialists, time and reasons spent in hospital or nursing home, received home care, received meals on wheels, status of health insurance, etc.
Employment and pensions (MP)	Financial information, employment status, etc.
Grip strength (GS)	maximum of grip strength measures for both hands
Walking speed (WS)	walking speed, walking speed: cut-off point, needed support for walking, etc.
Children (CH)	Number, age, sex, status (e.g. stepchild), education level, etc.
Social support (SP)	Number of different types of help received from outside the household (i.e. care, practical tasks and administrative tasks), Identity of helper from outside the household, The identity of the helper in the household, The total number of different types of help given outside the household (i.e. care, practical tasks and administrative tasks), etc.
Financial transfers (FT)	Kind of, frequency, financial amount of transfers, etc.
Housing (HO)	Housing facilities (e.g. bathroom, toilet, heating, elevator, etc.), kind of housing (flat, house, etc.), etc.
Household income (HH)	Total household income, income from other sources, additional income, etc.
Consumption (CO)	Amount spent on food, telephone, goods and services, etc.
Assets (AS)	Savings and investments
Activities (AC)	Voluntary or charity work (frequency, kind of, etc.), etc.
Expectations (EX)	Chance of receiving inheritance, life expectancy, money for holidays, etc.

Table 1: Scales of the SHARE Dataset and included information (excerpt)

5.1 Results of Explorative Project Data mapping with Database

The SHARE questionnaire consists of more than 100 pages and includes hundreds of variables and items. Due to this fact a reduction of the number of variables used for the generation of the CURE-Elderly-Personas set was necessary. Based on the expert knowledge for data merging and handling of VID following variables were defined to be subject of a first descriptive analysis of the dataset to get an overview on their distribution and information content to define single variables for the further detailed analysis to be done in work package 3.

- Age
- Medical Conditions
- Limitations in daily living
- Marital status

Figure 4. illustrates the first explorative mapping of requirements of elderly users and data included in SHARE.
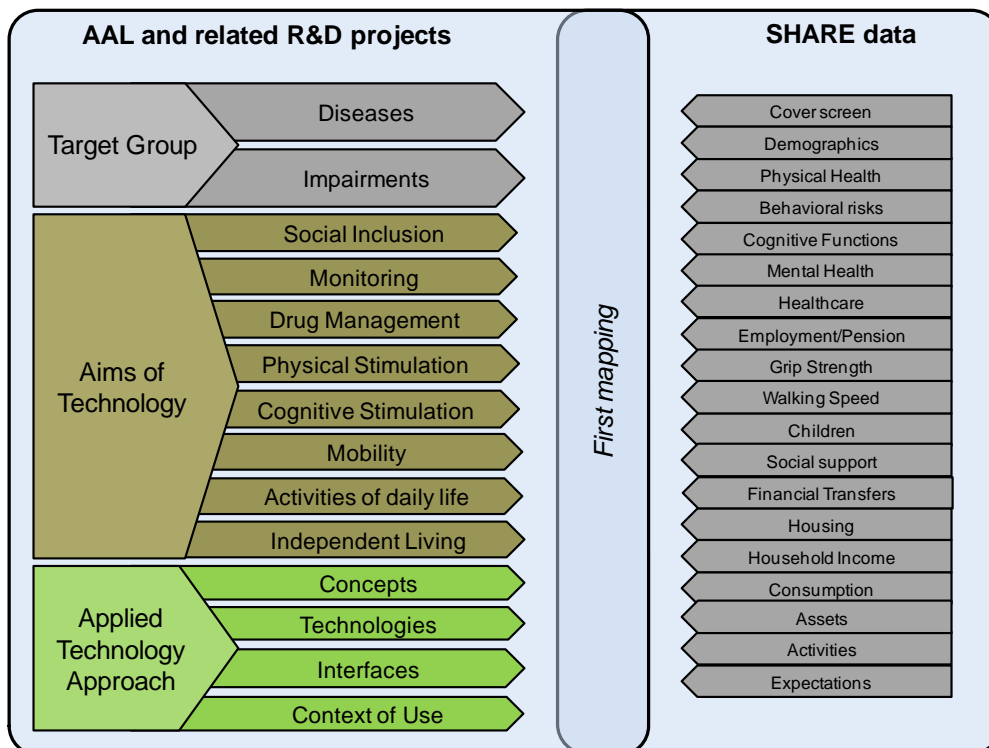

Figure 4. Explorative mapping of AAL and related R&D project requirements and SHARE data

6 Descriptive Statistic Analysis of Database

A first descriptive data analysis provides an overview on the distribution of relevant variables. It is important to start with descriptive statistics, as the occurrence and variation of various diseases and limitations reveal the relevance of our identified variables. Descriptive analysis inform about the health status, conditions and limitations of older persons. They were carried out by 10-years-age groups, since age is a crucial in determining and describing health, especially of older persons.

Numerous analysis on physical health and limitations in daily living have been carried out so far. The first deliverable includes examples of medical conditions, limitations in daily living and marital status and was based on a subset of the available data. The analysis was reduced to the available data of Austria, Germany and Switzerland. There were several reasons for this reduction: a) the expert knowledge of VID could be exploited best, b) the items surveyed in those countries are similar and c) still a big part of the dataset is used.

6.1 Results of Descriptive Statistic Analysis

The medical information provided in the dataset is extensive and contains detailed information on diseases, impairments and treatments that are of interest for AAL projects. Among the conditions included in the dataset we find rather high prevalence of high blood pressure, high blood cholesterol, arthritis or rheumatism as well as cataracts (see Figure 5). Other conditions like asthma, Parkinson disease as well as hip or femoral fracture were stated only by few interviewed older persons and we might assume that they will not be of importance for creating CURE-Elderly-Personas.
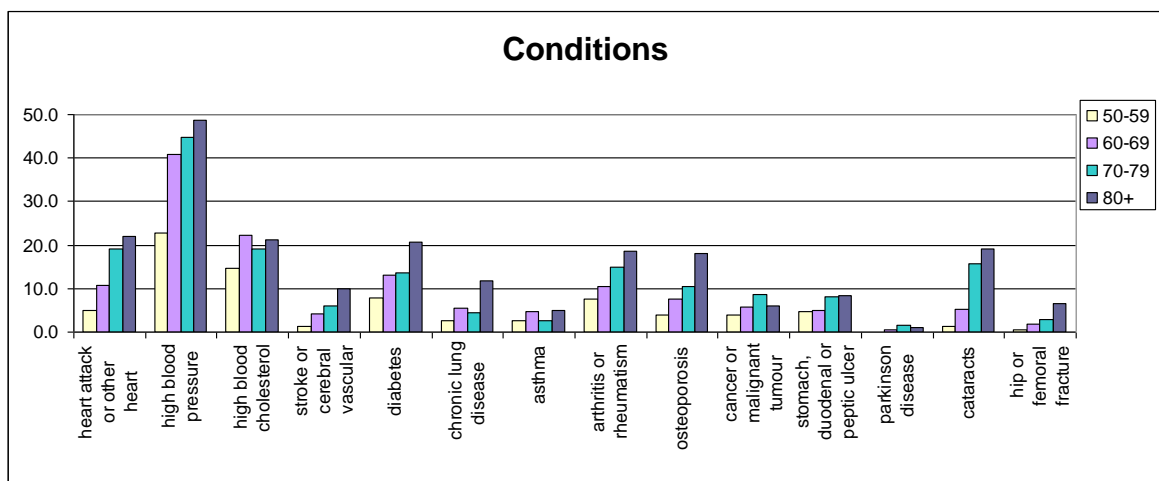
Figure 5. Distribution of specific conditions, by age

Turning to limitations regarding instrumental activities in daily living (IADL) age turns out to be an important determinant. For example, whereas IADL limitations are rare

among persons in their fifties, almost every second interviewed individual aged 80 years and more mentioned such limitations (see Figure 6).
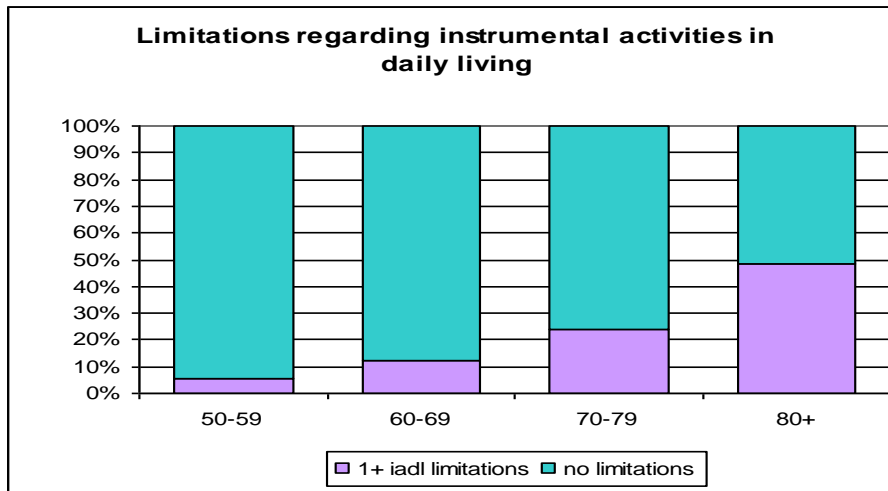
Figure 6. Distribution of limitations in instrumental activities in daily living (IADL) by age

Finally, the results on marital status show a substantial variation by age and gender (see Figure 7), underlining the importance of this variable for our project.

Based on the first descriptive results, we decided to create age-specific CURE-Elderly-Personas and to continue our multivariate analyses differentiating by 10-year age groups.
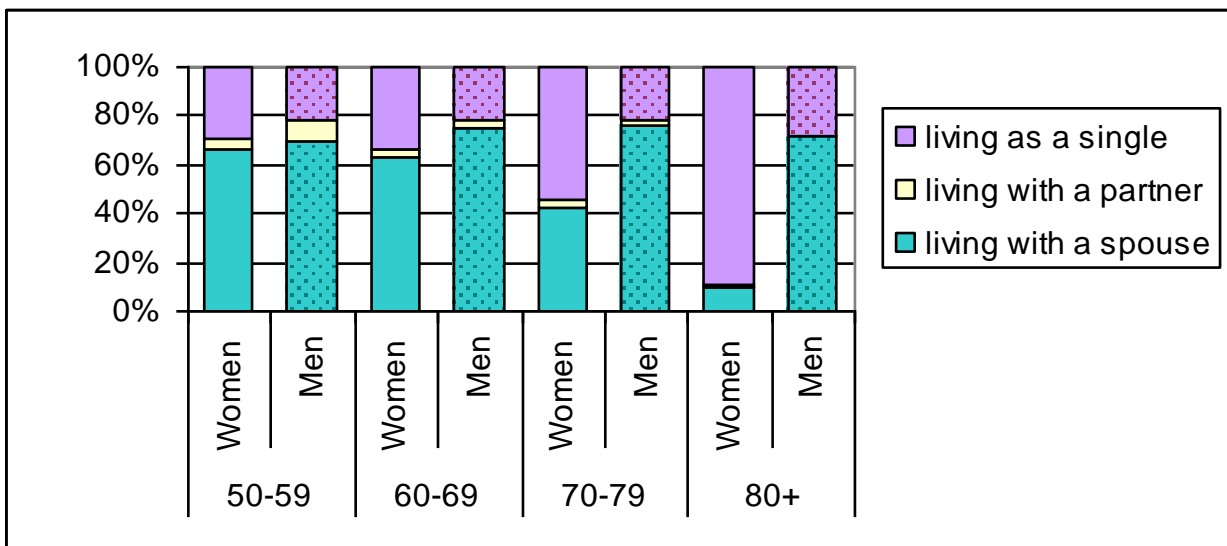
Figure 7. Age groups of the CURE-Elderly-Personas set

6.2 Definition of statistical method and variables for further analysis

For further analysis, the cluster analysis method will be used to classify relevant variables (see Table 2) into groups. Considering similarity or dissimilarity in the values of these variables the resulting groups will consist of items with a high degree of similarity. The degree of similarity between groups is thereby minimized. The goal is to identify groups of variables sharing the common limitations, diseases and medical needs.

Further relevant variables of the database were identified that include requirement information needed for AAL technology developments. For this, projects within the research field of AAL and related application areas were examined regarding the needs of the involved target users as well as their technological approach (see section 4.2.1). In order to connect the requirements and specifications of AAL and related projects with the scales of the dataset, a detailed categorization of the found information was created (see Figure 4). While some aspects can be matched easily (e.g. medical information) others (e.g. social life) needs to be mapped with various single variables of different SHARE scales.

Results of first descriptive statistics referring to all variables of the Database give first directions to variables of most important interest.

The following variables were defined to be included in the further analysis of the Database to generate the CURE-Elderly-Personas set (see Table 2):

Health aspects	Self-perceived health
	Health conditions
	Chronic Diseases (2 or more)
	Symptoms (2 or more)
	Drugs
	Eyesight, Hearing
Limitations	with activities
	with (instrumental) activities of daily living
	with arm function
	fine motor skills
Behavioural Risks	Current smoking
	Drinking more than 2 glasses of alcohol
	Physical Inactivity
Cognitive and Mental Health aspects	Cognitive function
	Orientation to date
	Depression scale
	Reading / Writing Skills
Health Care aspects	Hospital
	Home Care

Activities	Type
	Frequency
Social aspects	household size
	marital status
	children
Economic aspects	able to meet ends

Table 2. Variables to be included in the further analysis of the SHARE Database

7 Limitations

7.1 Scope of the Project

The evaluation of available project documents showed that detailed information on user definitions as well as on user requirements for technical solutions in the field of AAL is not commonly available. While projects funded under the EU Framework Program do publish some information, national funded projects only provide rudimentary descriptions without special focus on requirements of elderly users.

Although various data of 73 projects was collected and analyzed, this analysis is limited because of the non-standard descriptions of single information on user requirements as well as the different level of abstraction and detail of available documents.

7.2 Limitations of the Dataset

During the evaluation of the SHARE Database additional limitations could be found referring to the following facts:

- The database does not include any information about technology use or ownership of technical devices, that would be relevant to be included in the CURE-Elderly-Personas set.
- The database includes only data from elderly persons living at home. Data from hospitalized and institutionalized persons are not included.
- Different persons for wave 1 and wave 2 of the data acquisition have been interviewed (e.g. person died, person was not at home, person did not like to give a second interview, etc.). Data from different waves cannot be compared.
- Wave 1 includes more data than wave 2 (wave 1~ 30 000 persons; wave 2 ~ 21 000 persons) and has less missing data. Wave 1 does not include data from certain countries (e.g Eastern Europe).

7.3 Strategies for handling Limitations

To cope with these limitations following strategies have been defined:

- Additional literature research will be done to discover alternative data sources and information that can be used to refine the CURE-Elderly-Personas set with information not included in SHARE (first results see section 7.3.1).
- The fact that the CURE-Elderly-Personas set will be generated based on data of elderly people living at home (excluding data from hospitalized and institutionalized persons) will be included in the manual of the final CURE-Elderly-Personas set.

- Since different persons have been interviewed in wave 1 and wave 2 no changes between wave 1 and wave 2 will be calculated (e.g. cognitive functions). In addition, the fact that wave 1 includes more data and less missings than wave 2 the generation process of CURE-Elderly-Personas will focus its statistical analysis on this dataset. Data from countries that were not regarded in wave 1 but in wave 2 (e.g Eastern Europe) will be taken from wave 2.

7.3.1 Possible alternative information and data sources

Due to the limitations of the information included in the SHARE Database relevant to generate the CURE-Elderly-Personas set (e.g. technology use, technical devices at home, etc.) additional literature research will be done to identify alternative information sources. The section below represents first results of possible alternative information and sources.

7.3.1.1 Statistik Austria

Statistik Austria – Austria's national institution for statistic research [7] – presents annually the usage of information and communication technologies in households and by individuals [1]. This report includes computer and internet usage as wells as online shopping behaviors on various levels. The data is mostly split up into six age groups ranging from 16 to 74 years and includes the following data:

- Number of computer users
- Frequency of computer usage
- Computer skills
- Number of internet users
- Frequency of internet usage
- Internet services used
- Online shopping activities

Further, the Austrian Mikrozensus is surveyed by Statistik Austria: The Mikrozensus is a sample survey conducted quarterly on national level. It includes, besides demographical data, questions regarding education, avocation and housing.

7.3.1.2 Eurostat

On behalf of the European Commision EUROSTAT [8] prepares and compiles various statistical data for the member states. These include not only economical data but also analysis of specific topics such as ICT and Health. As aging is one of the grand challenges the EU has to face in the next decades, specific publications are already available (e.g. "Health Life Years in the European Union: Fact and Figures 2005" [6])

8 Conclusion and Next Steps

Work Package 2 was the first step in creating the CURE-Elderly-Personas set. Starting with a comprehensive analysis of completed and ongoing research projects in the field of AAL as well as related fields a general view on the needed requirements of elderly users, to be described within the CURE-Elderly-Personas set, could be generated.

While 73 related projects could be found a first limitation encountered as the user descriptions, requirement information and referring documents are not always available for public use. Further, the needed data had to be extracted from various documents with different levels of abstraction ranging from public project deliverables to short project presentations and summaries.

Through structuring and clustering (generating categories and subcategories) of the collected requirement information, an overview matrix on the elderly target users, the aim of the projects and the applied technological solutions was created. Again, a certain level of fuzziness must be taken into account due to the fact that the available information was of different levels of detail.

Based on this matrix an explorative mapping of the found project data with the SHARE dataset was done. First, mapping the generated categories and subcategories against the scales of the dataset. Further, on a detailed level, discovering single variables from relevant scales. The resulting set of variables that include relevant information for describing requirements of elderly users will be used for the detailed analysis in the following work package 3. Moreover, with descriptive statistic analysis on a basic level, important variations of these variables could be found (e.g. marital status, medical conditions, and limitations in daily living).

The results of this work package include not only the identification of relevant variables used for further statistical analysis and the definition of cluster analysis as method but also finding and knowing the limitations of the available data. These limitations will be balanced using additional statistical data other than the SHARE dataset.

While in the first analysis step the data used was limited to single countries (Austria, Germany, Switzerland), the subsequent steps will focus on a broader view including several groups of countries (e.g. northern and southern states). Cluster analysis will be applied to the identified relevant variables to form groups of persons with similar characteristics. Based on these results a draft of CURE-Elderly-Personas skeletons as well as the number of Personas will be defined.

9 Appendix

The following table 3 includes all R&D projects related to technology developments for elderly users that were evaluated for the generation of CURE-Elderly-Personas.

Companionable	Integrated cognitive assistive and domotic companion robotic systems for ability and security
Oasis	Open architecture for accessible services integration and standardization
Smiling	Self mobility improvement in the elderly by counteracting falls
Capsil	International support of a common awareness and knowledge platform for studying and enabling independent living
VM	Vital Mind
AALiance	European ambient assisted living innovation alliance
Epal	Extending professional active life
Hermes	Cognitive care and guidance for active aging
Confidence	Ubiquitous care system to support independent living
Senior	Social ethical and privacy needs in ICT for older people: A dialogue roadmap
A²E²	Adaptive Ambient Empowerment of the Elderly
Agnes	User-Sensitive Home-based Systems for Successful Ageing in a Networked Society
Aladdin	A Technology Platform for the Assisted Living of Dementia Elderly Individuals and their Carers
Amica	Autonomy, Motivation & Individual Self-Management for COPD Patients
Bedmond	Behaviour Pattern Based Assistant for Early Detection and Management of Neurodegenerative Diseases
Capmouse	Development of a Non-Invasive Capacitive Sensor Oral Mouse Interface for the Disabled Elderly
Care	Safe Private Homes for Elderly Persons
CCE	Connected Care for Elderly Persons Suffering from Dementia
Domeo	Domestic Robot for Elderly Assistance
eCAALYX	Enhanced Complete Ambient Assisted Experiment
Emotionaal	The Emotional Village: Integrated Preventive AAL Concept for the Rural Aging Society in Europe
H@H	Health@Home
Happy Ageing	A Home Based Approach to the Years of Ageing
Help	Home-based Empowered Living for Parkinson's Disease Patients
Hera	Home Services for Specialised Elderly Assisted Living
HMFM	Hear Me Feel Me - Compensating for Eyesight with Mobile Technology
Hope	Smart Home for Elderly People
IS-Active	Inertial Sensing Systems for Advanced Chronic Condition Monitoring and Risk Prevention
Pamap	Physical Activity Monitoring for Ageing People
Remote	Remote Health and Social Care for Independent Living of Isolated Elderly with Chronic Conditions
RGS	Rehabilitation Gaming System
Rosetta	Guidance and Awareness Services for Independent Living

Softcare	Kit for Elderly Behaviour Monitoring by Localisation Recognition and Remote Sensoring
Avatars@Home	Avatar-Interfaces for the Assistive Home ("face-lifting" user dialogues in smart home environments)
Compliance Betreuung	Bedienbarkeit und Akzeptanz von Compliance Messgeräten zur kontinuierlichen ärztlichen Betreuung und Verlängerung der Verbleibquote von Senioren in häuslicher Umgebung
IU	Integrative räumlich-technologische Rahmenbedingungen für aktives Altern
PDR-Eval	Evaluation of a Personal Drug Reminder
Tendenzen 2020	Entwicklungstendenzen in den Wirkfeldern des aktiven Alterns und des resultierenden Konsumverhaltens bis zum Jahr 2020
WAAL 2009	Workshop-Reihe AAL 2009
ATTEND	AdapTive scenario recogniTion for Emergency and Need Detection
AID	AID - Interactive Awareness Displays for Elderly People
MuBisA	Multivariate Bildfolgenerkennung für selbstbestimmtes Altern
GEN_TT	Ist ein Haus der Generationen - Drehscheibe der Anbieter und Nachfrager intergenerativer IKT Produkte - sinnvoll und machbar?
Lebensqualität im Alter	Lebensqualität im Alter - Grundlagen und Anwendungen des Lebens und Lernens mit assistiven Technologien
MiAZen	Machbarkeitsstudie über interdisziplinäres Kompetenzzentrum "IKT Lösungen für Menschen im Alter "(Arbeitstitel, z.B. auf LOIs "BTS-Beratungsstelle Technologie für SeniorInnen)
Windows Wide Open	Windows Wide Open – Gegen die Vereinsamung älterer Menschen - MACHBARKEITSSTUDIE
AMASL	Ambient Assisted Shared Living
EinfachWir	EinfachWir – Das Mitmach WEB
Health@Home	Heimbasiertes Krafttraining für ältere Personen als Fortsetzung der Herz-Kreislauf Rehabilitation
VITALIshoe	IKT-unterstütztes Smart Textile basiertes System zur Aktivitätssteigerung und Sturzprophylaxe
VitaSmart	Smart Home Companion für Vitalmonitoring
Balance 60+	Durchführbarkeitsstudie zur Entwicklung des idealen Trainings- und Analysegerät zur Sturzprävention bei älteren Menschen
Psychologie und Gerontotechnik	Psychologische Einflussfaktoren auf das Nutzungsverhalten und die Akzeptanz von Gerontotechnik am Beispiel der tiefen Hirnstimulation
Voice-over-IP-Widget	Browser basierte Internettelefonie für soziale Netzwerke
CURE-Elderly-Personas	Entwicklung von PERSONAs aus dem SHARE Datensatz
Ambrosia	AMBient environment for Realising Open & Safe Independent Ageing
Magig	MAGIc Glasses: a personal system for elderly people's interactions with the external world.
MedEld	Multi-parameter Platform for the Management of Chronic Conditions in Elderly Population
3rd Life	3D VIRTUAL ENVIRONMENT FOR SOCIAL INTERACTIONOF ELDERLY PEOPLE
Amcosop	Ambient Communication for Sense of Presence
Brickables	BRICKABLES: Promoting social interaction with a novel tangible interaction concept
Community 60	A social Net for Strengthening and Improving the Social Interaction and Quality of Life of Elderly people Based on Internet Protocol Television Technology (IPTV)
Easy-TV	Elderly enAbled Social and dYnamic services toolbox through TV
Fosible	Fostering Social Interactions for a Better Life of the Elderly
MAM	Make a Memory

SeniorEngage	Virtual Network to Empower the Integration of Seniors into an active Community in the Post Retirement years
Uniqueness	UNobtrusive system for social Inclusion and QUality of life of Elderly persons NEeding Surveillance and Services
WEInteractBox	a WEbbased services platform for the social INclusion of The eldERly
CASBliP	Cognitive Aid System for Blind People
DIADEM	Delivering Inclusive Access to Disabled and Elderly Members of the Community
Hearing at Home	support at home for elderly people who are hard of hearing
I2Home Project	Intuitive Interaction for Everyone with Home Appliances based on industry Standards
SOPRANO Project	Service-oriented Programmable Smart Environments for Older Europeans

Table 3. Found FP 6, FP 7, AAL JP and Benefit projects related to technology for elderly users

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[6] http://ec.europa.eu/health/ageing/publications/index_en.htm (30.09.2010)

[7] http://www.statistik.at/ (30.09.2010)

[8] http://ec.europa.eu/eurostat (30.09.2010)