Manual for Innovative Learning Environments Toolkit

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Abstract (for dissemination)	Manual for Innovative Learning Environments Toolkit is an user guide document presenting the learning tools that will be used inside ILE training programs and learning processes
Keyword List	Innovative learning environment (ILE), learning tools, learning processes, learning ecosystems, learning actors, training programs, learning tools usage

Content

1   Summary

Manual for Innovative Learning Environments Toolkit is an user guide document presenting the learning tools that will be used inside ILE training programs and learning processes; resuming the instructions for learning tools usage and their application on different target groups users (e.g. learning tools for elders with cognitive impairments like Alzheimer of dementia of maximum 2nd grade; learning tools for elders with cognitive impairments like Alzheimer of dementia of 3rd grade; learning tools for elders with diabetes, 1st grade and 2nd grade cardio-vascular diseases; learning tools for nurses or care givers in palliative care sector; learning tools for nurses or care givers in CVD sectors; learning tools for nurses or care givers in medical emergency services ; learning tools for unemployed or unskilled people aiming for a job in palliative care sector etc).

The manual comprises also recommendation and requirements for mixing the learning tools in the learning process in dependence of: type of users; learning environment (care unit, class, home, online); collaborative methods applied; social and medical status of the users; psychological, mental and cognitive status; gender etc. Another section of the Manual is dedicated to describing the learning tools that were improved for responding to user needs to be accepted by users and to be customized with different learning environments. This section comprises also instructions (when, how, where and who) regarding the requirements and conditions that must be accomplished for optimal use and impact on target groups (users).

2   Manual for ILE Toolkit - description

Innovative Learning Environment Toolkit comprises all the identified tools at a Consortium Level that were later on assessed and the gained knowledge was used for the development of the training programs and the e-learning networking environment.

The steps that were taken in the completion of the current manual are:
1. Creation of a Joint Working Group
2. Developing the methodology for developing ILE Toolkit
3. Exploration process for identifying existing learning tools
4. Development of an assessment scale
5. Organising co-working seminars and assessing preselected learning tools
6. Creation of Assessment reports for each country
7. Creating the ILE Toolkit based on the research and the Design Thinking Methodology
8. Expert Advisory Board validation and feedback for the ILE Toolkit.
9. Communication and Dissemination activities.

3   Joint Working Group

The Joint Working Group is the working group that is comprised of partners representatives and is responsible for the creation and the quality assurance of ILE Toolkit. It was established early in the beginning of 2021 and it comprises representatives from the following Project Partners:

No.	Country	Country Working Group Organisation	Partner number
1	Romania	Universitatea de Medicina si Farmacie "Iuliu Hateganu" Cluj-Napoca	LP
2	Hungary	IFKA	PP2
3	Czech Republic	Jan Evangelista Purkyne University in Ústí nad Labem	PP6
4	Germany	BioLAGO e.V.	PP8
5	Slovenia	Univerza v Ljubljani	PP10
6	Bulgaria	RAPIV	PP13
7	Austria	Johanniter Österreich Ausbildung und Forschung gemeinnützige GmbH	PP15
8	Bosnia and Herzegovina	Chamber of Commerce and Industry of Banja Luka Region,	IPA2

This Joint Working Group was established to comprise members from each country involved in the project, in order to benefit from the expertise and knowledge of each region/country in the Danube region. Each PP that was part of the Joint Working Group assigned one or multiple persons to be part of this team and work on specific activities.

The activity was coordinated by PP2 as one of the central tools will be their e-learning platform that will be customized based on the experience gained through the ILE toolkit. All meetings and the coordination among Project Partners was made through online meetings and all other partners (outside the Joint Working Group) were involved in the activities of identifying tools, Shortlisting, workshop organization, assessment of tools, etc.

4 Exploration process for analysing existing learning tools

During this stage all PPs explored different EU learning tools and applications. The data was collected by members of joint working group and the other Project Partners by exploring innovative learning tools through literature review, technical descriptions from scientific or pedagogical publications, internet search, scientific databases search. Also, Project Partners collected information from relevant stakeholders in each country through the stakeholders workshops, previously organized for designing the architecture of Innovative Learning Environments.

The minimum information collected for each identified tool comprised information regarding:
- name of the tool
- a short description of the tool
- target group that the tool is addressing
- whether the tool is completed or still under construction and how long has it been in used if completed.
- if the tool is currently in use and available
- languages in which the tool is currently available
- the possibility to adapt the tool at an international level
- the learning environment(s) that the tool is suitable for: online/workplace/classroom, etc.

- further development suggestion for the identified tool
- link/reference where the tool can be found.

Also, members of the Working Group searched for tools/applications/methods/software that presented elements of innovation and that related to learning for the stakeholders involved in smart care of elders.

As a result of this research, we've established a database with 37 learning tools. They were described and presented to the rest of the project partners during the regular meetings of the working group.

o   ILE TOOL #1 – Rescue application, version for seniors

Short description	The Czech application, which has 1.3 million users on its mobile phone. The ambulance helps when it comes to life.
Target group	The whole population
Time period of realization	works 5 years
Is it currently used?	Yes
Language the tool is available in	German, Hungarian, Czech, Slovak
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Home, outdoor
Further development suggestion	Novelty, video transmission from the scene to the emergency medical service.
Link/Reference	https://www.zachrankaapp.cz/ and https://www.youtube.com/watch?v=7vMMpCU-cSk

o   ILE TOOL #2 – Moodle

Short description	Freeware for eLearning with a huge availability of tutorials online and interfaces to common database formats for administration.
Target group	Care Givers - Nurses, Emergency Medical Technicians
Time period of realization	Since 2018
Is it currently used?	Yes
Language the tool is available in	English, German
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Online
Further development suggestion	Interface for data import and exchange between e-Learning providers for content sharing, interfaces.
Link/Reference	https://moodle.org/

o   ILE TOOL #3 – talent lms

Short description	Talent lms is a cloud-based learning management system. customized for small and midsized business. The platform provides user-friendly content creation and course modelling.
Target group	no specific target group
Time period of realization	it's an existing tool
Is it currently used?	Yes
Language the tool is available in	English, courses can be held in any language!
Adaptation possibility of the tool at international level (scale 1-5)	5

Which learning environment(s) is it suitable for?	Online
Link/Reference	https://www.talentlms.com/

o   ILE TOOL #4 – Platforms and mobile apps such as: Motify, Ladder, SworkIt, NeoU...

Short description	Whether you are one of those who are trying to lose weight, build muscle or increase fitness, thanks to smart technology you can do all of the above from the comfort of your home!
Target group	users of medical rehabilitation services - patients
Time period of realization	for several years
Is it currently used?	Yes
Language the tool is available in	various
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Online, Home, in spas and other institutions which offer rehabilitation
Further development suggestion	Developing a platform carrying video and other material in form of tutorials for exercises used by patients.
Link/Reference	https://motify.com/, https://teams.joinladder.com/ and similar

o   ILE TOOL #5 – Social One-Stop-Shop

Short description	The Social One-Stop-Shop combines a place where citizens can personally receive information provided social services by the Municipality, for electronic submission of applications for social services, checking the status of submitted applications, an option to communicate in real time with users.
Target group	Low-skilled and unemployed, potential users of social services; provider of social services - Municipality
Time period of realization	since 2017
Is it currently used?	Yes
Language the tool is available in	Bulgarian
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Online
Further development suggestion	IT development for a platform where elder people could easily access the social services - matchmaking between providers and users of the social service
Link/Reference	https://soss.aksakovo.bg/

o   ILE TOOL #6 – Smart Care (as a package of services)

Short description	Smart care allows seniors the maximum of activities to stay self-sufficient and independent for a long time. It allows surveillance 7 days a week and 24 hours a day, it is a quick help when pressing the SOS button, detection of falls and health problems, monitoring activities, GPS position monitoring to capture help, family information portal.
Target group	Care Givers - Nurses, Care Givers - Doctors, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments
Time period of realization	Since 2015
Is it currently used?	Yes
Language the tool is available in	Czech
Adaptation possibility of the tool at international level (scale 1-5)	5

Which learning environment(s) is it suitable for?	Online, Home
Further development suggestion	Dashboard, connection to doctor (medical records)
Link/Reference	https://www.chytrapece.cz/ https://prachaticky.denik.cz/zpravyregion/chytra-pece-pomaha-seniorum-zustat-v-domacim-prostredi-20180614

o   ILE TOOL #7 – Medimonitor

Short description	Software application called Medimonitor for acquisition and aggregation of biomedical signals, from medical devices placed within the patient's environment.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments
Time period of realization	Now developed
Is it currently used?	Yes
Language the tool is available in	Czech
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Unit/workplace, Classroom, Online, Home
Further development suggestion	Localization
Link/Reference	https://shapes2020.eu/2021/02/22/medimonitor/

o   ILE TOOL #8 – CedarNet Elderly's' Visitor - Training Program

Short description	The Elderly's Visitor is one of its products. Young pensioners have much time, while after finishing work they are losing the feeling of being useful. Also their pension fee is very low and some income is needed.
Target group	Care Givers - Family, Care Givers - other, Elders with Cognitive impairments, elder helpers (seniors helping seniors)
Time period of realization	Since 2019
Is it currently used?	Yes
Language the tool is available in	Hungarian
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Classroom, Online
Further development suggestion	IT development for a platform where elder people and their families can get in contact with senior companion visitors, call center for families and elder
Link/Reference	www.cedrusnet.hu

o   ILE TOOL #9 – Ginkonet – Demetia Knowledge Bank in Kecskemét (as part of Demetia Friendly Town Program in Kecskemét, Hungary)

Short description	Online and Classroom Training Programs, Informative videos. Main activities of the whole program: spreading Information, Prevention, screening, Support of life with dementia, Training of social experts, Preparation of relatives, volunteers, Sensitization, building local helping communities.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cognitive impairments
Time period of realization	Since 2020
Is it currently used?	Yes
Language the tool is available in	Hungarian

Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Classroom, Online, Home
Further development suggestion	E.g. interactive learning tools
Link/Reference	https://kecskemet.ginkonet.hu/ginkonet-demencia-tudastar/

- o ILE TOOL #10 – points of power - multigenerational centers in all municipalities of the Primorsko-Notranjska region

Short description	Points of power - multigenerational centers are places in the region where older and younger people meet.
Target group	elderly who want to improve their health and gain new knowledge
Time period of realization	since 2017
Is it currently used?	Yes
Language the tool is available in	Slovenian
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Classroom, Online
Further development suggestion	Possibility of implementing programs on the topic of smart care
Link/Reference	https://tockemoci.si/o-projektu/projekt

- o ILE TOOL #11 – improving the lives of older people and communities through education and culture

Short description	In Municipality Ilirska Bistrica work Slovenian Third Age University. Aims of their work is to provide older people's permanent access to culture and education for personal growth, better employability and active citizenship, to enable older people to get interpersonal support.
Target group	Care Givers - other, Low-skilled and unemployed
Time period of realization	in Ilirska Bistrica since 1996
Is it currently used?	Yes
Language the tool is available in	Slovenian
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Unit/workplace, Classroom, Online, Home
Further development suggestion	IT development for a platform
Link/Reference	http://www.utzo.si/en/

- o ILE TOOL #12 – Simbioza BTC City Lab

Short description	Simbioza Lab, the first living lab is Slovenia, is a hub for smart technologies, solutions, devices and products for users aged over 55.
Target group	Care Givers - Family, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments, Low-skilled and unemployed
Time period of realization	Since 2017
Is it currently used?	Yes
Language the tool is available in	Slovenian
Adaptation possibility of the tool at international level (scale 1-5)	5

Which learning environment(s) is it suitable for?	Classroom, Online
Further development suggestion	An appropriate infrastructure enabling the implementation of workshops.
Link/Reference	https://www.simbiozalab.com/

o   ILE TOOL #13 – CEZAR center for telehealth (telemedicine) services

Short description	CEZAR provides support to patients with long-terms conditions – diabetes type 2 (DM2) and/or heart failure (HF), to better self-manage their disease at home.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cardio-Vascular Diseases, Elders with Diabetes
Time period of realization	Since 2014
Is it currently used?	Yes
Language the tool is available in	Slovenian
Adaptation possibility of the tool at international level (scale 1-5)	3
Which learning environment(s) is it suitable for?	Unit/workplace
Link/Reference	http://www.mks.si/eng/

o   ILE TOOL #14 – E-Care / E-Oskrba

Short description	Smart system of integrated health care and home care in Slovenia.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments
Time period of realization	Since 2017
Is it currently used?	Yes
Language the tool is available in	Slovenian
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Home
Link/Reference	https://www.telekom.si/zasebni-uporabniki/ponudba/e-oskrba

o   ILE TOOL #15 – MAGDA - Mobile phone app for older adults

Short description	Magda is the first mobile application for older adults, where all important content and information for the elderly are gathered in one place.
Target group	Elders with Cardio-Vascular Diseases, Elders with Diabetes, Low-skilled and unemployed
Time period of realization	Since 2021
Is it currently used?	Yes
Language the tool is available in	Slovenian
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Unit/workplace, Online, Home
Link/Reference	https://simbioza.eu/digitalne-resitve/magda

o   ILE TOOL #16 – House of Memories (National Museums Liverpool, UK)

Short description	House of Memories is a museum-led dementia awareness programme, which offers training, access to resources, and

	museum-based activities to enable carers to provide person-centered care for people living with dementia.
Target group	Care Givers - Family, Care Givers - other, Elders with Cognitive impairments, Low-skilled and unemployed
Time period of realization	Since 2011
Is it currently used?	Yes
Language the tool is available in	English
Adaptation possibility of the tool at international level (scale 1-5)	3
Which learning environment(s) is it suitable for?	Unit/workplace
Link/Reference	https://www.liverpoolmuseums.org.uk/house-of-memories/about

o ILE TOOL #17 – The LebensPhasenHaus

Short description	The primary objective of the LPH as an innovation infrastructure is to provide a space for research, testing, demonstration and knowledge transfer. One of the main topics concerns aging or living in place with the aid of social and technical innovations.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments, Low-skilled and unemployed
Time period of realization	Since 2015
Is it currently used?	Yes
Language the tool is available in	German
Adaptation possibility of the tool at international level (scale 1-5)	2
Which learning environment(s) is it suitable for?	Living Lab
Link/Reference	https://lebensphasenhaus.de/en/

o ILE TOOL #18 – Centre for Collaborative Innovation in Dementia

Short description	Through a living lab approach, the Centre aims to generate sustainable solutions to the everyday challenges of living with dementia
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cognitive impairments
Time period of realization	Since 2013
Is it currently used?	Yes
Language the tool is available in	English
Adaptation possibility of the tool at international level (scale 1-5)	2
Which learning environment(s) is it suitable for?	Living Lab
Further development suggestion	It is in the developing stage. A sustainable funding model is currently being developed.
Link/Reference	https://www.ljmu.ac.uk/research/centres-and-institutes/centre-for-collaborative-innovation-in-dementia

o ILE TOOL #19 – Rapid Diagnosis

Short description	Target: improving access to health care by training specialized staff activities coordination and triage
Target group	Low-skilled and unemployed, pensioners
Time period of realization	December 2021

Is it currently used?	No
Language the tool is available in	English, Romanian, Moldavian
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Unit/workplace, Online, Home
Further development suggestion	developing the program to direct emergencies directly to the emergency number 112
Link/Reference	www.helpme.ro

o   ILE TOOL #20 – OnSinch

Short description	Smart and efficient planning in the NGO & volunteers' sector. All-in-one white-labelled tool for project and volunteer management including self-registrations, volunteer portal.
Target group	Care Givers - Nurses, Care Givers - other, Low-skilled and unemployed, all sectors of volunteers
Time period of realization	Since 2012
Is it currently used?	Yes
Language the tool is available in	English, Czech, Slovakian, Polish, Spanish, Dutch. Working on
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Unit/workplace, For NGO & volunteers in whatever place needed
Further development suggestion	Worldwide connection of NGO platforms into one portal to unify volunteers and provide option to react quickly in case of disasters.
Link/Reference	https://onsinch.com/references/

o   ILE TOOL #21 – Santé24

Short description	Telemedicine 24/7 hotline in conjunction with complementary services or devices such as TytoHome.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments, public authorities
Time period of realization	not sure
Is it currently used?	Yes
Language the tool is available in	German
Adaptation possibility of the tool at international level (scale 1-5)	1
Which learning environment(s) is it suitable for?	Home
Further development suggestion	such hotlines could be specialized on elderly needs and provide specific information and services for elders via telephone
Link/Reference	https://www.swica.ch/de/private/gesundheit/medizinische-hilfe/telemedizin

o   ILE TOOL #22 – Courses to help raising awareness among professionals

Short description	Various e-learning offers/courses for the further training and sensitization of specialist personnel
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other
Time period of realization	Unknown
Is it currently used?	Yes
Language the tool is available in	German

Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Classroom, Online, Home
Further development suggestion	Special courses for elderly needs or solutions
Link/Reference	https://pro.healthdataspace.org/weiterbildung-lehrgang-seminar-ehealth-experte/

o   ILE TOOL #23 – Seniors' representatives

Short description	Seniors' representatives are the local contact persons for seniors and their relatives on the subject of care and aging. They represent and express the demands, wishes and needs of the elderly population to the municipal administrations and politicians.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments, Low-skilled and unemployed, public authorities
Time period of realization	Unknown
Is it currently used?	Yes
Language the tool is available in	German
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Unit/workplace, Classroom, Online, Home
Further development suggestion	Seniors' representatives could also be established to introduce and educate fellow elders to new solutions
Link/Reference	http://www.seniorenbeirat-lk-lindau.de/aufgaben.html

o   ILE TOOL #24 – The Hogeweyk® Care Concept and DVA Dementia Village

Short description	De Hogeweyk, operated by nursing home Hogewey, is a gated model village in Weesp, Netherlands. It has been designed specifically as a pioneering care facility for elderly people with dementia.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cognitive impairments
Time period of realization	Since 2009
Is it currently used?	Yes
Language the tool is available in	English
Adaptation possibility of the tool at international level (scale 1-5)	2
Which learning environment(s) is it suitable for?	Living Lab
Link/Reference	https://hogeweyk.dementiavillage.com/#NaN

o   ILE TOOL #25 – eRedbook

Short description	The eRedbook cloud service supports the standard for the electronic Personal Child Health Record (ePCHR) endorsed by the Royal College of Pediatrics and Child Health. This standard defines the care pathway for a new baby and the data that needs to be collected and shared across care settings.
Target group	Care Givers - Nurses, Care Givers - Doctors, Parents

Time period of realization	Since 2012
Is it currently used?	Yes
Language the tool is available in	English
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Unit/workplace, Online, Home
Link/Reference	https://www.eredbook.org.uk/

o   ILE TOOL #26 – "We do good deeds"

Short description	The project "We do good deeds" is a periodically recurring event implemented by students of the study field of Social Policy and Social Work.
Target group	Care Givers - Family, Care Givers - other, Low-skilled and unemployed
Time period of realization	irregularly, since 2018
Is it currently used?	No
Language the tool is available in	Czech
Adaptation possibility of the tool at international level (scale 1-5)	3
Which learning environment(s) is it suitable for?	Unit/workplace, Classroom, Online, Home
Further development suggestion	Intergenerational contacts and education.
Link/Reference	http://cultureline.cz/dobre-skutky/

o   ILE TOOL #27 – ZAVA

Short description	Zava is the popular brand name for an online doctor service and online pharmacy
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments
Time period of realization	2011
Is it currently used?	Yes
Language the tool is available in	English, German
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Online
Further development suggestion	Development of the platform learning environment (not only selling)
Link/Reference	https://www.zavamed.com/uk/

o   ILE TOOL #28 – ALMA CARE

Short description	ALMA.care is a Health as a Service IT company headquartered in Belgium that focuses on telehealth to empower customers in the healthcare process.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cognitive impairments
Is it currently used?	No
Language the tool is available in	English, Dutch

Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Online
Further development suggestion	empowering older adults to take an active role in the management of their health (platform could be more educational - not only monitoring)
Link/Reference	https://www.alma.care/

o ILE TOOL #29 – BIRDIE

Short description	Birdie is a holistic care platform providing tailored preventive care for older adults so they can live independently in their own homes.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments
Time period of realization	2017
Is it currently used?	Yes
Language the tool is available in	English
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Online
Link/Reference	https://www.birdie.care/

o ILE TOOL #30 – CERA

Short description	Cera specializes in providing the right care and continued support to the elderly people as long as they need it.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cognitive impairments
Time period of realization	since 2015
Is it currently used?	Yes
Language the tool is available in	English
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Online, Home
Link/Reference	https://www.ceracare.co.uk/

o ILE TOOL #31 – SAAM - Supporting Active Ageing through Multimodal Coaching - International research project under Horizon programme.

Short description	The project is about to be fully implemented by the end of the year. Its objective is to develop and validate in a controlled environment.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments
Time period of realization	Since 2017
Is it currently used?	No
Language the tool is available in	English

Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Home
Link/Reference	https://saam2020.eu/

o   ILE TOOL #32 – Educational Program. Do it yourself

Short description	Way of education and deepening skills, intergenerational links in the online space.
Target group	educational system - education
Time period of realization	02/2021
Is it currently used?	Yes
Language the tool is available in	Czech
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Unit/workplace, Classroom, Online, Home
Further development suggestion	Development or use of existing platforms
Link/Reference	www.zsnestemicka.cz

o   ILE TOOL #33 – VR Vitalis - rehabilitation in Virtual Reality

Short description	Virtual reality rehabilitation for patients after injuries, operations and chronic problems
Target group	Care Givers - other, Elders with Cognitive impairments, after surgery, trauma, Parkinson's disease, after stroke, etc.
Time period of realization	From 2021
Is it currently used?	Yes
Language the tool is available in	English, Czech
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Unit/workplace, Hospitals, rehabilitation facilities, etc.
Further development suggestion	Rehabilitation for further diagnosis, expansion of
Link/Reference	www.vrvitalis.cz

o   ILE TOOL #34 – Moudrá sovička (Smart owl)

Short description	Education courses for elders: how to use PC/notebook, smart phone, tablet, wearables.
Target group	Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments, Low-skilled and unemployed
Time period of realization	Since 2016
Is it currently used?	Yes
Language the tool is available in	Czech
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Unit/workplace, Classroom, Online, Home, On the spot (mobile center = van)
Further development suggestion	They are working on more projects: Digital Odyssey
Link/Reference	https://www.moudrasovicka.cz//kurzynapc/

o ILE TOOL #35 – Learning@College (UK)

Short description	Learning @College is an online portal that contains various programs to maintain key objectives for curricula and internships.
Target group	care givers, developers, educational institutions
Time period of realization	since 2014
Is it currently used?	Yes
Language the tool is available in	English
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	online/ classroom
Further development suggestion	delivering of the trainings as well as the topics related with Health and Social Care
Link/Reference	

o ILE TOOL #36 – eHealth Masters Degree of University of Applied Science - JOANNEUM, Graz, Austria

Short description	The eHealth Master's degree programme: challenging, practice-oriented and flexible, with a range of study options and designed to combine work with study.
Target group	Developers of smart care services, care-givers
Is it currently used?	Yes
Language the tool is available in	Information is available in English, but the degree is in German
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	online/ workplace
Further development suggestion	Using of the methodology for organization of the training for developers of smart care services: online learning
Link/Reference	

o ILE TOOL #37 – Do not be alone

Short description	Way of education and deepening skills, intergenerational links in the online space.
Target group	educational system - education
Time period of realization	2/2021
Is it currently used?	Yes
Language the tool is available in	Czech
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Unit / workplace, Classroom, Online, Home
Further development suggestion	Development or use of existing platforms
Link/Reference	

4.1   Shortlisting the tools

Based on the discussions that took place in the Joint Working Group and the internal analysis regarding the long list of tools mentioned above, the project partners decided on a short list of tools that are going to be assessed, along with other stakeholders, in each country.
The shortlist of tools was developed considering the following factors:

- whether the tool is a learning tool (yes/no)
- the quality of the information presented in the tool (scale 1-5)
- relevance for the D-CARE project (scale 1-5)
- compatibility of the learning tool with the e-learning environment (scale 1-5)
- universality for the Target Group (scale 1-5) - whether the tool can be adapted and used for various target groups (elders, care-givers, authorities, companies, etc.)
- transferability among regions (scale 1-5) - whether the tool can be easily transferred to another region than the one originally developed.

As a result of the internal assessment of the longlist of tools, we've decided on a shortlist that will later on be assessed along with external stakeholders in each region.
The following 9 tools were shortlisted through consensus by all Project Partners, as being the most appropriate to assess during the co-working sessions with external stakeholders:

ILE TOOL #2.1 – Moodle

Short description	Freeware for eLearning with a huge availability of tutorials online and interfaces to common database formats for administration.
Target group	Care Givers - Nurses, Emergency Medical Technicians
Time period of realization	Since 2018
Is it currently used?	Yes
Language the tool is available in	English, German
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Online
Further development suggestion	Interface for data import and exchange between e-Learning providers for content sharing, interfaces.
Link/Reference	https://moodle.org/

ILE TOOL #2.2 – talent lms

Short description	Talent lms is a cloud-based learning management system. customized for small and midsized business. The platform provides user-friendly content creation and course modelling.
Target group	no specific target group
Time period of realization	it's an existing tool
Is it currently used?	Yes
Language the tool is available in	English, courses can be held in any language!
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Online
Link/Reference	https://www.talentlms.com/

ILE TOOL #2.3 – CedarNet Elderly's' Visitor - Training Program

Short description	The Elderly's Visitor is one of its products. Young pensioners have much time, while after finishing work they are losing the feeling of being useful. Also their pension fee is very low and some income is needed.
Target group	Care Givers - Family, Care Givers - other, Elders with Cognitive impairments, elder helpers (seniors helping seniors)
Time period of realization	Since 2019
Is it currently used?	Yes
Language the tool is available in	Hungarian
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Classroom, Online
Further development suggestion	IT development for a platform where elder people and their families can get in contact with senior companion visitors, call center for families and elder
Link/Reference	www.cedrusnet.hu

ILE TOOL #2.4 – Ginkonet – Demetia Knowledge Bank in Kecskemét (as part of Demetia Friendly Town Program in Kecskemét, Hungary)

Short description	Online and Classroom Training Programs, Informative videos. Main activities of the whole program: spreading Information, Prevention, screening, Support of life with dementia, Training of social experts, Preparation of relatives, volunteers, Sensitization, building local helping communities.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cognitive impairments
Time period of realization	Since 2020
Is it currently used?	Yes
Language the tool is available in	Hungarian
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Classroom, Online, Home
Further development suggestion	E.g. interactive learning tools
Link/Reference	https://kecskemet.ginkonet.hu/ginkonet-demencia-tudastar/

ILE TOOL #2.5 – Simbioza BTC City Lab

Short description	Simbioza Lab, the first living lab is Slovenia, is a hub for smart technologies, solutions, devices and products for users aged over 55.
Target group	Care Givers - Family, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments, Low-skilled and unemployed
Time period of realization	Since 2017
Is it currently used?	Yes

Language the tool is available in	Slovenian
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Classroom, Online
Further development suggestion	An appropriate infrastructure enabling the implementation of workshops.
Link/Reference	https://www.simbiozalab.com/

ILE TOOL #2.6 – MAGDA - Mobile phone app for older adults

Short description	Magda is the first mobile application for older adults, where all important content and information for the elderly are gathered in one place.
Target group	Elders with Cardio-Vascular Diseases, Elders with Diabetes, Low-skilled and unemployed
Time period of realization	Since 2021
Is it currently used?	Yes
Language the tool is available in	Slovenian
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Unit/workplace, Online, Home
Link/Reference	https://simbioza.eu/digitalne-resitve/magda

ILE TOOL #2.7 – SAAM - Supporting Active Ageing through Multimodal Coaching - International research project under Horizon Programme.

Short description	The project is about to be fully implemented by the end of the year. Its objective is to develop and validate in a controlled environment.
Target group	Care Givers - Nurses, Care Givers - Doctors, Care Givers - Family, Care Givers - other, Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments
Time period of realization	Since 2017
Is it currently used?	No
Language the tool is available in	English
Adaptation possibility of the tool at international level (scale 1-5)	5
Which learning environment(s) is it suitable for?	Home
Link/Reference	https://saam2020.eu/

ILE TOOL #2.8 – VR Vitalis - rehabilitation in Virtual Reality

Short description	Virtual reality rehabilitation for patients after injuries, operations and chronic problems
Target group	Care Givers - other, Elders with Cognitive impairments, after surgery, trauma, Parkinson's disease, after stroke, etc.
Time period of realization	From 2021

Is it currently used?	Yes
Language the tool is available in	English, Czech
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Unit/workplace, Hospitals, rehabilitation facilities, etc.
Further development suggestion	Rehabilitation for further diagnosis, expansion of
Link/Reference	www.vrvitalis.cz

ILE TOOL #2.9 – Moudrá sovička (Smart owl)

Short description	Education courses for elders: how to use PC/notebook, smart phone, tablet, wearables.
Target group	Elders with Cardio-Vascular Diseases, Elders with Diabetes, Elders with Cognitive impairments, Low-skilled and unemployed
Time period of realization	Since 2016
Is it currently used?	Yes
Language the tool is available in	Czech
Adaptation possibility of the tool at international level (scale 1-5)	4
Which learning environment(s) is it suitable for?	Unit/workplace, Classroom, Online, Home, On the spot (mobile center = van)
Further development suggestion	They are working on more projects: Digital Odyssey
Link/Reference	https://www.moudrasovicka.cz//kurzynapc/

The shortlist of tools represents an overall picture of the identified tools at the time of research. This list was later recommended to all project partners that organized country specific co-working seminars, where external stakeholders, involved in providing smart care services and education for elders, assessed the proposed tools in a unified approach.

Due to the specificity of tools related to each country and region, there were many tools that were identified in the initial research, that were not appropriate for international use, and were not included in the list to be presented and discussed among partners. Also, once the invitations for the co-working seminars were launched in each country, many stakeholders suggested/recommended other tools that they have interacted with and that could be included in the assessment and evaluation process. Because of these 2 reasons, other tools were included in the national assessment during the co-working seminars. The decision to include or not certain tools into the assessments was dependent on the partners organizing each seminar. All the tools that were eventually assessed during the co-working seminars are presented in detail in the Manual for ILE Toolkit and in the Assessment Report per each country, developed by the Project Partners.

5   Development of an assessment scale

Based on the design thinking methodology, the research conducted by project partners, the feedback gained from formal and informal discussions with external stakeholders and following the conclusions obtained in the national specific Technical Reports developed during the first stage of the D-CARE Project (AT1.1), the members of the Joint Working Group, in collaboration

and with feedback from all other Project Partners, developed an assessment scale to be used for the unified evaluation of each identified ILE Tool.

The evaluation is made for each presented tool by filling out a voting table and assigning a score from 1 to 5 each one evaluation criteria. Each single score is accompanied by a comment explaining the motivations and other eventual elements which were considered beyond the mere numerical aspect.

The elements that are taken into consideration are:

Contribution: The relevance of the presented tools with reference to the national/regional needs – it should be emphasized that the evaluation of the usefulness and relevance of the individual tool may differ depending on priorities and identified needs of each country/ region. For this scope, it is necessary to focus on the needs and priorities of the various countries/ regions while evaluating tools. The tool could fit with national/ regional requirements at different extend, so an overall judgement is required. The level of innovation of the tool is assessed also with the respect to the current status of the partners' countries/ region.

Consequences: The significance of the impact of the tool – the single impact factors can vary from tool to tool within the project but the question behind this criterion should be: are there measurable effects? Could it be sustainable? etc.

Features: The effectiveness and efficiency of the tool – this concept is a measure of how and to what extend the tool has achieved the desired results – is this tool suitable for e-learning and could it fir with other e-learning features, could it be easily integrated in the learning platform.

Transferability of the tool – i.e. the tangible possibility to transfer the concepts characterizing the tool in the context of the partners' countries/ region.

Once assigned a single score to each one of the evaluation criteria, the overall results for each tool is summarized in the following way:

Every stakeholder who has overseen the presented tool during the co-working seminar or during the individual meetings scales each one of the evaluation criteria as follows: 1 = very poor; 2 = poor; 3 = fair; 4 = good; 5 = very good.

The result per criteria is weighted sum of the scores for each single criterion from the scores given by them.

The 4 major chapters are:

1. Contribution
2. Consequences
3. Features
4. Transferability

The following assessment scale was developed:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?		
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		

Level of innovation	How innovative is the presented tool in your region?		
Consequences			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?		
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	
Features			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?		
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?		
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:			

Based on the assessment scale, partners had the opportunity to personalize this scale, if they felt the improved version would benefit the evaluation at a regional/national level.

The assessment scales were filled in anonymously by all stakeholder, following the presentation and discussion concerning each tool. The scales were filled in either on paper, for the events that took place on site, or online, through online forms (e.g. Google/MS Teams forms) in the case where seminars took place online, through video conferencing. All presentation materials, discussion and forms were translated and presented in national languages.

6   Organising co-working seminars and assessing preselected learning tools

Following the internal assessment of learning tools, all partners preselected 5-10 learning tools that they felt (after preliminary discussion with regional stakeholders also) are relevant at a regional/national level and these tools went into debate and assessment during the co-working seminars, the main purpose of these events being to collect feedback and involve stakeholders outside the project. Beside the longlist of preselected tools, partners had the opportunity to add additional tools in the co-working seminars discussion and evaluation. These additional tools were either not available at the moment of creating the internal longlist, or some tools were suggested by stakeholders when they received the invitation for the co-working seminars. The seminars took place online and on-site as it follows:

1. Austria - online seminar - 11th of May 2021. 10 tools were discussed and assessed:
    Tool #1 – eLearning Johanniter-Unfall-Hilfe
    Tool #2 – 24hQuAAlity, Austria
    Tool #3 – SecureHospitals.eu
    Tool #4 – GOT-it Toolkit
    Tool #5 – FH Campus Wien eLearning Platform
    Tool #6 – Instagram
    Tool #7 – YouTube
    Tool #8 – Moodle
    Tool #9 – Talent LMS
    Tool #10 – JAMES Tablet

2. Bulgaria - online seminar - 13th of May 2021. 5 tools were discussed and assessed:
    Tool #1 - POINTS OF POWER
    Tool #2 - Slovenian University for the Third Age
    Tool #3 - Ginkonet
    Tool #4 - Learning@College
    Tool #5 - Master's Programme in eHealth

3. Bosnia and Herzegovina -on site seminars: 22nd of April 2021 - Banja Luka CCI BL; 23rd of April 2021 - City of Prijedor.
5 tools were discussed and assessed:
    Tool #1 – talent lms
    Tool #2 – Rehabilitation exercises platforms
    Tool #3 – CedarNet Elderly's Visitor – Training Program
    Tool #4 – VR Vitalis – rehabilitation in Virtual Reality
    Tool #5 – Smart Owl

4. Czech Republic - online seminar - 13-15th of April 2021. 6 tools were discussed and assessed:
    Tool #1 – Seniors online (Senioři online)
    Tool #2 - VR Vitalis
    Tool #3 – Do not be alone (Nebuď sám)
    Tool #4 - Ginkonet
    Tool #5 - Master's Programme in eHealth
    Tool #6 - Simbioza BTC City Lab

5. Germany - online seminar - 10th of June 2021. 5 tools were discussed and assessed:
    Tool #1 – House of Memories
    Tool #2 - The LebensPhasenHaus
    Tool #3 – Seniors' representatives
    Tool #4 - Moodle
    Tool #5 - Gerontologische Pflege und Therapie, B.Sc.

6. Hungary - online seminars - 1st of June 2021, 22nd of June 2021. 5 tools were discussed and assessed:
    Tool #1 - PRIMA MEDICA
    Tool #2 - MEDISTANCE
    Tool #3 - Terra 95. Bt.
    Tool #4 - Medinnovest
    Tool #5 - Újbuda Social Service

7. Romania - online seminar - 19th of May 2021. 10 tools were discussed and assessed:

  Tool #1 – Moodle: Freeware e-learning platform

  Tool #2 – Talent LMS: A cloud-based learning management system

  Tool #3 – CedarNet: Elderly's Visitor Training Program

  Tool #4 – Ginkonet

  Tool #5 – Simbioza BTC City Lab

  Tool #6 – MAGDA: Mobile phone app for older adults

  Tool #7 – SAAM: Supporting Active Ageing through Multimodal Coaching

  Tool #8 – VR Vitalis: Rehabilitation in Virtual Reality

  Tool #9 – Moudrá sovička (The Smart Owl)

  Tool #10 – Hospice, Home of Hope: Palliative Care Studies

8. Slovenia - online seminars. Thursday, May 13 (PP10); Thursday, May 20 (PP11 and PP12); Friday, May 21 (PP10). 8 tools were discussed and assessed:

  Tool #1 – Simbioza BTC City Lab

  Tool #2 – Magda smartphone app for older adults

  Tool #3 – GoLiveClip

  Tool #4 – Serious games (Ad-gaming project)

  Tool #5 – E-oskrba

  Tool #6 – Education of lower qualified groups

  Tool #7 – Education for older adults

  Tool #8 – Red button

7 Assessment reports

The results from the assessment of learning tools in each country are presented below:

7.1 Austria

7.1.1 Introduction

The Austrian co-working seminar took place online on May 11th, 2021. Representatives from all groups of the quadruple stakeholders were present and interviewed about existing learning tools familiar to them. As a result, ten tools were collected. A description of the tools is followed by the main conclusion.

Along an assessment grid template that was provided by PP13 RAPIV, scores from 1-5 were given with regard to the rated usability of the tools. Categories of analysis included several topics (e.g. contribution, consequences, features and transferability with respective sub-questions).

This assessment report and its collection of tools is to be understood as a first step towards the development of the Manual for the ILE Toolkit.

7.1.2 Selected ILE Tools

JOAFG and UIV analysed the following ten tools, as they were directly discussed during the co-working seminar by the experts.

These tools are also suitable for Austrian training needs of specific target groups within the D-CARE project: nurses and care givers; older adults with diseases; unemployed or unskilled working people and developers of policy tools for smart care support.

Tool #1 – eLearning Johanniter-Unfall-Hilfe, Austria

Tool #2 – 24hQuAAlity, Austria

Tool #3 – SecureHospitals.eu
Tool #4 – GOT-it Toolkit
Tool #5 – FH Campus Wien eLearning Platform, Austria
Tool #6 – Instagram
Tool #7 – YouTube
Tool #8 – Moodle
Tool#9 – Talent LMS
Tool#10 – JAMES Tablet

Description of the Presented Tools

Tool #1 – eLearning Johanniter-Unfall-Hilfe, Austria

Owner: Johanniter-Unfall-Hilfe, Austria

Description: The eLearning Johanniter-Unfall-Hilfe portal offers training opportunities for employees of Johanniter Austria and ranges from courses such as "Advanced training for rescue service personnel", "Safe handling of data", "Data protection" and "Introduction and training in life saving measures" to "First Aid Basics". There is the opportunity to invite external participants for specific courses.

The courses are partly in German, partly in English. They are designed in a self-study format. An online quiz serves as an exam to conclude the course. It is based on Moodle, a free and open-source learning management system (LMS) that will be covered as Tool#8.

Target groups: Employees of Johanniter Austria

Possibilities for transfer: Implementing courses on the topic of smart care as it can impact rescue service, nursing and patient transport and all other areas.

Assessment:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4	It is relevant to the need for improvement of the digital skills of care givers.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative the presented tool is in your region?	2	Not very innovative
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	4	There are no numbers yet, but it was very helpful to continue education during the Covid-19 lockdown.
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	Such information is not available therefore could not be assessed

Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	5	Very sustainable as the courses are online and ready to be taken
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	3	Fully compatible & sustainable. At this point it is mostly available for Johanniter employees but external candidates can be added. As it is Moodle-based, user communication is possible.
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	Very easy
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**23**	/30

Tool#2 - 24hQuAAlity

Owner: NOUS Wissensmanagement GmbH, Johanniter Österreich Ausbildung und Forschung gem. GmbH, CARITAS: CARITAS Rundum zu Hause betreut, ÖGKV: Österreichischer Gesundheits- und Krankenpflegeverband, ipb - Institut für Personenbetreuung, Home-Care-Management ALEXANDER WINTER e.U., SMA: Smart assets Development GmbH

Description: The goal of the 24h QuAALity project is the development and evaluation of a distributed client-server software solution for quality assurance of 24h care. The application software for informal caregivers contains an information and training portal for recurring situations in German, Slovakian, Hungarian and Romanian language, an electronic care documentation electronic care documentation to support quality assurance and transparency, as well as an integrated emergency management in order to be able to react professionally to emergency situations. The intervention increases the quality of care and consequently the quality of life of the persons cared for.

Target groups: informal caregivers

Possibilities for transfer: Implementing on the topic of smart care as it can impact all care service areas.

Assessment:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?		

The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?	5	Very well adjusted to current and future needs of elders and care givers
Level of innovation	How innovative the presented tool is in your region?	4	Very innovative
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	N/A	Such information is not available yet therefore could not be assessed
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	Such information is not available yet therefore could not be assessed
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	5	Very sustainable, users just need a device that can use apps.
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	3	The application software for personal caregivers already has a training portal. The software is not open for public yet, because it is still in the evaluation phase.
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	An adaption should be easy
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		21	/30

Tool #3 – SecureHospitals.eu

Owners: INTERSPREAD GmbH, Erasmus University Rotterdam (Department of Media and Communication), Timelex, Fundació Privada Hospital Asil De Granollers (Research and Innovation Department and IT department), COOSS Marche ONLUS (Department of Research and Training), Arbeiter-Samariter-Bund Wien (Gesundheits- und soziale Dienste gemeinnützige GmbH – Department of Home care and IT Department), Johanniter International, European Ageing Network (EAN)

Description: The SecureHospitals.eu project has the goal of 'Raising Awareness on Cybersecurity in Hospitals across Europe and Boosting Training Initiatives Driven by an Online Information Hub'. It seeks to aggregate knowledge on existing cybersecurity practices across healthcare organisations.

Target groups: Hospitals across Europe

Possibilities for transfer: Can be transferred across all healthcare organisations

Assessment:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	5	The raising of awareness on cybersecurity and its gaps, is very important in the field of social and health care. It addresses the needs of all patients, including elders and care givers.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative the presented tool is in your region?	4	Very innovative, especially in its online innovation and awareness hub
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	4	There are no measurable results available yet, but the methodology of the tool is easy to be applied and could ensure high impact
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	Such information is not available therefore could not be assessed
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	5	Very sustainable through its online training activities
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	4	Fully compatible Partners can join an online community. Within the training activities user communication is possible
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	Very easy to transfer, across all Europe
Transferability among target groups	How easy can the tool be used for other target groups?		
Total		**27**	/30

Tool #4 – GOT-IT Toolkit

Owner: Roessingh Research and Development, Pharos Expertisecentrum Gezondheidsversc hillen, TU Wien: Institute of Visual Computing and Human-Centered Technology – Human

Computer Interaction Group Austria, Johanniter Österreich Ausbildung und Forschung gemeinnützige GmbH Austria, Danish Committee for Health Education

Description: GOT-IT aims to respond to the need for inclusive and understandable eHealth solutions by developing a toolkit that supports the design of understandable, actionable and inspiring eHealth applications for older adults with low eHealth literacy. The GOT-IT toolkit is unique, as it consists of an openly available, dynamic and living toolkit that will be extended with tools, best practices, and use cases in the future by a community of designers and developers.

eHealth solutions developed with the GOT-IT toolkit will improve health- and digital literacy, closing the health disparities gap and digital divide, and thus reducing the costs caused by health inequalities and promoting social innovation.

Target groups: older adults with low eHealth literacy

Possibilities for transfer: GOT-IT has the potential to create new markets, by supporting the development of eHealth solutions that are usable and accessible to people in the whole eHealth literacy spectrum.

Assessment:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	5	Low eHealth literacy is an important factor that can hinder the access to social and health care. Elders are the specific target group, as well as low skilled people.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative the presented tool is in your region?	4	There is no toolkit like this on the market yet
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	N/A	Such information is not available yet. Therefore, could not be assessed
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	Such information is not available yet. Therefore, could not be assessed
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	5	As soon as the toolkit is completed, it is very easy to sustain.
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	5	Very suitable

Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	4	Very easy to transfer. Other low literacy target groups in other fields could be approached
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		23	/30

Tool #5 – FH Campus Wien eLearning Platform

Owner: FH Campus Wien (University of Applied Sciences)

Description: **Innovative teaching and learning** are part of FHWien der WKW's strategy. The top priority is the **integration of digital elements**; giving students the freedom to study at a time and place that is suitable for them. The e-learning project began in 2005 with funding from the city of Vienna and deals with all matters relating to **technologically enhanced teaching and learning.** The eLearning is based on Moodle as the main communication platform. A **virtual classroom** is available for each module, where scenarios such as blended learning or inverted classroom can be implemented and a student-cantered approach can be used for higher education teaching. Holding **virtual classes** using the web conference software Adobe Connect gives students' flexibility in where they learn. FH Campus Wien caters for different types of learners and their needs by using **training videos** and **web 2.0 tools.**

Target groups: Students of FH Campus Wien

Possibilities for transfer: Other educational institutions

Assessment:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4	The platform addresses students with a high technical literacy. There are specific health science classes that can address potential care givers
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders?		
	• Care givers?		
	• Unemployed/Low-skilled?		
Level of innovation	How innovative the presented tool is in your region?	2	Many educational institutions use similar approaches
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	N/A	Such information is not available therefore could not be assessed

Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	Such information is not available yet. Therefore, could not be assessed
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	4	Easy to sustain
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	4	Ready to go. Tool is restricted to FH Campus Wien students and employees; User communication is possible
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	Easy to adapt
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		19	/30

Tool #6 – Instagram

Owner: Facebook Inc.

Description: Instagram is a photo and video sharing social networking service. Different health topics are very popular on this platform and there are many influencers (health-lay persons), as well as health institutions/ companies, or other health-related content available. Edutainment plays a big role for educational purposes.

Target groups: Social media users

Possibilities for transfer: Other social media platforms or mainstream media.

Assessment:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	3	Addresses current and future needs, but one has specifically to look for them. Elders and low-skilled people may not be included.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative the presented tool is in your region?	3	Specific target group that uses social media. Still innovative in its informal learning approach
Consequences			

Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	N/A	Such information is not available yet. Therefore, could not be assessed
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	Such information is not available yet. Therefore, could not be assessed
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	4	Easy to sustain as contributions stay online
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	5	The combination of social media with eLearning has potential. Open for everyone
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	4	Already accessible almost worldwide. Other target groups just have to join social media
Transferability among target groups	How easy can the tool be used for other target groups?		
Total		**19**	/30

Tool #7 – YouTube

Owner: Google

Description: *YouTube* is an online video sharing and social media platform. There are many channels created by healthcare professionals that contribute to informal learning about health and health related topics.

Target groups: Social media users, everybody interested in low-threshold and informal learning

Possibilities for transfer: Other social media platforms or mainstream media.

Assessment:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	3	Addresses current and future needs, but one has specifically to look for them. (Elders and) Low-skilled people may not be included.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative the presented tool is in your region?	3	Specific target group that uses social media. Still innovative in its

			informal learning approach
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	N/A	Such information is not available yet. Therefore, could not be assessed
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	Such information is not available yet. Therefore, could not be assessed
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	4	Easy to sustain as contributions stay online
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	5	The combination of social media with eLearning has many potentials. Open for everyone; There are comment functions available
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	Already accessible almost worldwide Other target groups just have to join social media
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**20**	**/30**

Tool #8 – Moodle
Described in the Shortlisting of Tools.
Assessment:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4	Moodle courses can specify on the topics of social and health care. Gaps may be addressed depending on the course and needs.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders?		
	• Care givers?		
	• Unemployed/Low-skilled?		
Level of innovation	How innovative the presented tool is in your region?	1	Very popular in many countries. A lot of educational institutions use it as their standard LMS

Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	5	Moodle is the world's most popular learning platform.
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information provided
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	4	Courses have to be implemented once and then can be accessed eternally
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	5	It is an eLearning system. Open for everyone, different channels of communication available
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	Very easy
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**24**	/30

Tool#9 – TalentLMS
Described in the Shortlisting of Tools.
Assessment:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4	Courses can specify on the topics of social and health care. Gaps may be addressed depending on the course and needs.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders?		
	• Care givers?		
	• Unemployed/Low-skilled?		
Level of innovation	How innovative the presented tool is in your region?	4	Not very well known yet
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	N/A	There is no such information provided
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information provided

Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	4	Courses have to be implemented once and then can be accessed eternally
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	5	It is an eLearning Tool. Open for everyone, different channels of communication available
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	Very easy
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**22**	/30

Tool#10 – JAMES Tablet

Owner: ilogs healthcare GmbH

Description: The JAMES Tablet combines the core areas of safety, health and community. The focus is on a digital device consisting of an Android tablet and a charging station with integrated loudspeakers and several apps.

Target groups: older adults

Possibilities for transfer: Available on the market (e.g. via internet), can be used in German speaking areas (distribution partners in Italy, Spain, Poland, UK, USA, Scandinavia, Benelux and Australia).

Assessment:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	5	Meets the needs of older adults for social integration and health assistance
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of:		
	• Elders?		
	• Care givers?		
	• Unemployed/Low-skilled?		
Level of innovation	How innovative the presented tool is in your region?	5	Functional tool that serves the purpose of fostering social integration and offers health assistance
Consequences			

Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	N/A	No sales number available
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	N/A	
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	3	It is suitable for individual usage but not as an e-learning tool for institutions It connects with health devices or a safety watch
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	3	The tool has potential for adapting it for other regions.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**16**	/30

7.1.3 Conclusions

All assessed tools presented in this report have a set of advantages and disadvantages and range from classic eLearning platforms via assistive technologies to social media channels. They serve different target groups (e.g. employees, personal care givers, students, social media users, older adults, hospitals), have diverse transfer possibilities (e.g. healthcare organizations, educational institutions, social care), but all underline the importance of lifelong learning as well as informal learning settings and the necessity of general digital literacy of the target groups.

The tools range from traditional content management platforms and smart care labs via assistive technologies to thematically very strongly differentiated learning environments.

Based on the results from the assessment of the learning tools it can be recommended to include them in the D-CARE learning process and use them for the development of the Manual of the ILE Toolkit e.g.:
- Informal learning through social media (tool#6 and tool#7)
- Big LMS like tool#8 Moodle and tool#9 TalentLMS can stand for themselves but also provide opportunities to be included or offer a base for other (new) projects
- Already target group specific tools like tool#2, tool#3 and tool#4
- Highly professionalized tools like tools#5, 8, and 10

7.2 Bulgaria

7.2.1 Introduction

During Stage 1 all PPs explored different EU learning tools and applications. As a result is established a database with 37 learning tools. They were described and presented to the rest of the project partners during the regular meetings of the working group.

After a review of all tools, PP 13 – RAPIV shortlisted 5 of them which were identified as most suitable for the smart care needs described in the Technical Report for Bulgaria under A.T1.1.:

- Business to be attracted in the development of new smart care products/ services.
- Smart care solutions are often very expensive and there is a niche for development of more affordable smart care solutions which would make them available to more people.
- Social providers and elderly people, users of the social services need to be provided with the specific training and skills necessary to use smart care digital tools.
- The pandemic has negatively affected the end users of social services due to the social restriction measures. Social service providers and researchers in the field point out the need to provide better communication and orientation for the most vulnerable and to give priority to prevention and focus the attention on psychological health.

The co-working seminar in Bulgaria was organized on 13th of May 2021 in online format via google meet. Representatives from all groups of the quadruple stakeholders were invited. Due to some engagements few of them were not able to attend. Therefore, separate meetings were organized in the following days, so these members were interviewed about the pre-selected tools and their opinion is reflected in the following evaluation of the tools. A questionnaire for each presented tool is developed and disseminated during the seminar/meting. Additionally, some aspects of the assessment criteria were discussed and clarified.

The total number of the participants during the co-working seminar is 14 out of 9 organizations. The represented stakeholders are: 4 - interested groups, NGOs; 1 from the business group, 1 university and 1 public authority. Additional meetings were organized and held with 1 representative of the business group, 1- academia and 1 - public authority.

The structure of all interviewed stakeholders is presented in the following chart.
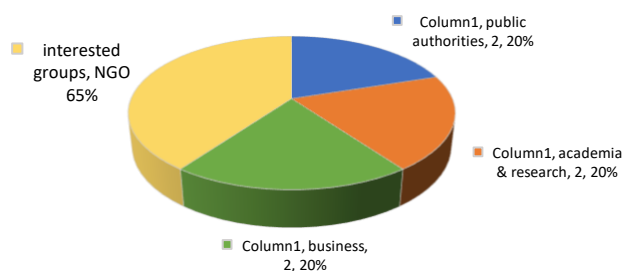
7.2.2 Selected ILE Tools

The 37 learning tools identified by the PPs are grouped depending on the specific need they correspond to, e.g. training needs, policy improvement, and technology for delivering/ using of smart care services.

Being focusing on the development of the Manual for developing Innovative Learning Environments Toolkit, RAPIV pre-selected 5 most suitable tools which could face the Bulgarian training needs for the specific target groups set in D-CARE project: nurses and care givers; elderly people with diseases; unemployed or unskilled working people, developers of policy tools for smart care support, etc:

Tool # 1 - POINTS OF POWER - Multigenerational centers in all municipalities of the Primorsko-Notranjska region, Slovenia

Described in the Shortlisting of Tools.

Assessment scale:

Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
Contribution			
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4	It is relevant to the need for improvement of the digital skills of elderly people. Not relevant to all target group needs
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	3.7	not so innovative
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	3.9	There are no measurable results available but the methodology of the tool is easy to be applied and could ensure high impact
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	Such information is not available therefore could not be assessed
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	3.4	The tool provides possibilities for e-learning, but is mostly designed for on-site meetings. The training materials could be easily integrated in learning platform because of covid-19 most of the trainings are held online
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	4.1	It is easy to be transferred and adapt to Bulgarian conditions but concerns only one target group
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**19.1**	/25

Tool # 2 - Slovenian University for the Third Age, an Association for education and social inclusion

Owner: Slovenian Third Age University, National Association for Education and Social Inclusion

Description: Its mission is to improve the lives of the elderly and communities on the basis of education and culture. Since 1984, Slovenian Third Age University has steadily grown to become a national network of 54 universities in 52 localities with about 21.000 students, more than 1.000 mentors and 1.000 volunteers. Its practice has been extensively researched: as a result, the university follows its own generalisations and is based on its own educational and organisational model. It is about supporting social inclusion and participation as well as dialogue among generations. Older adult education fosters active citizenship and respect for environment. It is a way towards maintaining and developing older people's knowledge and skills, helping them to use them for their own benefit as well as for the benefit of society and in cooperation with other generations.

Some of the Study programmes, taught at the University:

My parents are old – critical geragogy: Age, younger or older, is under the impact of stereotypes. The program is designed to address individual and societal issues related to later years of life. Selected topics from transactional analysis, such as: life scenario, defence mechanisms, emotions, etc. The purpose of the program is to get to know your behaviour (and others), understand its roots, and manage communication and emotions.

Development of cognitive skills: The program includes the development and training of attention and concentration, the training of memory through various mnemonics, the development of verbal and numerical skills, the processing of information with an emphasis on logical reasoning

Interior design and living culture: modern living culture and living trends, basic methods for interior design. Students learn how to equip the living space usefully, aesthetically and environmentally friendly. They will also focus on the problems of the elderly living in un-adapted architecture and learn about possible adaptations of the home environment for comfortable aging, an overview of critical places and suggested solutions.

Thinking body: Somatic education is a discipline based on methods of learning to be aware of the body moving in space. The program is designed for exercises to improve mobility, coordination, balance and endurance, and understanding the body. The exercise is accompanied by a theoretical explanation of the operation of individual somatic techniques, their impact on the body and mind (physiological, psychological and sociological aspects of the body). Basics of relaxed breathing, the basics of relaxation and improving psychophysical well-being.

Target groups: care givers; elderly people; unemployed or unskilled working people.

Possibilities for transfer:

basic concept for establishment of the study circles: The study circle counts from 10 to 15 people. Educational meetings with the mentor they usually run twice a week study hours. The mentor uses different forms of learning (individual learning between one and two weekly meetings, visiting the exhibition, observing the phenomenon in you, a conversation with an individual who already knows this, collecting pictures, looking for some answers between friends and relatives, educational excursions, watching educational television or radio broadcasts, etc.).

Networking events for elderly people.

Assessment:

Project co-funded by European Union Funds (ERDF, IPA, ENI)

www.interreg-danube.eu/d-care

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.5	It is related with the need for improvement of skills of elderly people and care givers.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4.9	The tool is innovation for Bulgaria as such concept is not used so far
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.9	For the last 36 years of its existence, it became a national network of 54 universities in 52 localities with about 21.000 students, more than 1.000 mentors and 1.000 volunteers.
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information provided
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	4.4	It could be easily integrated in e-learning platform as most of the meetings could be organized online
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	3.75	It would be easy to transfer the concept used.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**22.45**	/25

Tool # 3 - Ginkonet – Dementia Knowledge Bank in Kecskemét (as part of Demetia Friendly Town Program in Kecskemét, Hungary)
Described in the Shortlisting of Tools.
Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**

The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.43	It is related with the: need for development of more affordable smart care solutions which would make them available to more people; need to provide better communication and orientation for the most vulnerable and to give priority to prevention and focus the attention on psychological health
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4.43	It is an online communication and learning tool
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.57	It is linked with specific policy instrument used for raising awareness and knowledge of residents about Alzheimer and dementia
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information provided
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	4.28	It is easy to be used. All the training materials are as video and online tests. Additionally FB groups are used for self-help
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	4.43	It is very easy to transfer and to adapt the approach used. The tool can be used by all type of target groups.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**22.14**	/25

Tool # 4 - Learning@College - Creating accessible learning environment, UK

Described in the Shortlisting of Tools.

Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**

The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.5	It is related with the need for improvement of skills of all target groups
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4.67	It is very innovative for our region
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.67	More than 200,000 trained people on various topics. More than 50 courses about Health and Social Care
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information provided
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	4.5	It is very easy to use. The methodology is universal and does not need modifications for to be integrated in learning platform. It also can serve as communication channel between trainers and trainees. It is mainly online trainings and in some cases – presence workshops.
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	4.67	There are no indications for restrictions for transfer or adaptation of the methodology used. In case of some topics of the courses it might be that special fee to be paid
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**23.01**	/25

Tool # 5 - Master's Programme in eHealth, University of Applied Sciences, JOANNEUM in Graz, Austria

Described in the Shortlisting of Tools.
Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score**	**Justification**

		(1-5)	
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.71	It responds to the need for improvement of digital and smart care knowledge and skills for care givers/ unemployed and low-skilled; need for providing of smart care tools
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4.43	The methodology for organization of the education is considered as innovative – using of smart devices, and latest technologies, developing of innovative solutions
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.67	The masters programme has a high impact in the region. It is linked with the methodology for networking and partnership of stakeholders with trainees for achieving of better results from the training activities
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information available
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	4.42	The programme is developed for class work. It is not suitable for use in e-learning, but some aspects could be used for integration in the online learning process, e.g. development of project for smart care and eHealth with the support of the PPs
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	3.85	It is not very difficult to transfer or adapt part of the master programme, but this process might need additional efforts and funds for providing
Transferability among target groups	How easy can the tool be used for other target groups?		

			of the necessary equipment
Total:		**22.08**	/25

Overall Assessment of the tools:

Contribution
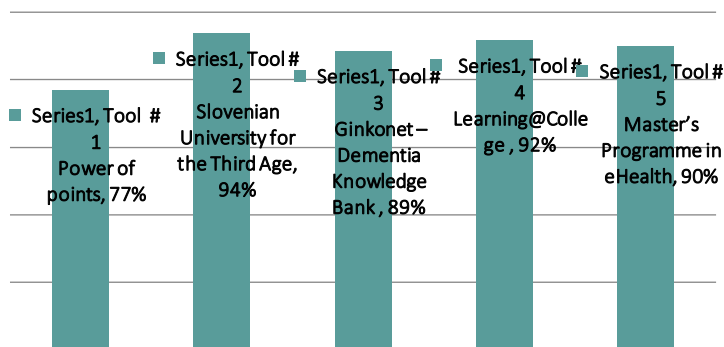
Almost all presented tools are relevant to the identified regional needs. They could help to address the needs for improving of the skills of elderly people (Tool#1, Tool #3), improvement of the communication between elderly people and care givers (Tool #1, Tool #2, Tool #3), improvement of skills of care-givers, social workers, unemployed or unskilled workers (Tool #3, Tool #4, Tool #5), and providing opportunities of the business for development of more smart care apps through improvement of skills and knowledge for eHealth (Tool #5).

When we speak about the level of innovation, the concept of Tool #2 is found as most innovative for Bulgarian stakeholders, followed by the methods of e-learning presented for Tool #4. Establishment of network with business, social and health organizations and supporting of students for development of practical solutions is also found as quite innovative approach by Bulgarian stakeholders involved in assessment process.

Consequences

The stakeholders concluded that the presented tools have very high impact. The highest impact of Tool #2 is a result of a quite long period of applying it comparing to the other tools. For the last 36 years of its existence, the Slovenian Third Age University has steadily grown to become a national network of 54 universities in 52 localities with about 21.000 students, more than 1.000 mentors and 1.000 volunteers. On the other side, more than 200,000 people are trained on various topics through using the facilities of Learning@College. More than 50 courses about Health and Social Care are available on the platform.

The stakeholders agreed that it is difficult to evaluate the efficiency of the tools in terms of resources used (cost/ budget of the tools, number of people involved, or specific equipment used, etc.) as such information is not available for all of them. Therefore, it was suggested that in case it will be decided that some aspects of the presented tools will be transferred in D-CARE activities, PPs could contact the owners of the tools and ask for the specific information.

Features

When we talk about e-learning suitability and openness and flexibility, the involved in the assessment stakeholders indicated that most of the tools are suitable for e-learning systems. The learning methodology provided by Tool #4 received the highest score because it is mostly online oriented and could be applied directly in e-learning environment without additional adjustments.

None of the tools received the highest score mainly because the stakeholders considered that the face-to-face contact should be omitted when the training modules will be developed especially when the target group of the training will be elderly people.

Transferability

All the selected tools are indicated as transferable. There are not known any regulatory restrictions or other obstacles which could cause difficulties in the transfer of the model, methods or concepts used by presented tools. Some barriers could be identified on later stage in case huge investments will be needed, or licence or permission fees need to be paid for specific training materials.

The presented tools and their methods seem very easy to be used by the target groups.

7.2.3   Conclusions

Based on the results from the assessment of the learning tools it could be recommended the following methodologies/ activities from the learning tools to be included in the D-CARE learning process and to be used for development of the Manual of the ILE Toolkit:

- o Educational and organizational model of tool #2 and tool #3, including: involvement of mentors and volunteer in the learning process; organization of educational meetings with mentor in a group of up to 10 people (online or face-to-face); organization of networking events for elderly people. Online and face-to-face training programs.
- o Organization of the learning process by videos and testing of the gained knowledge (tool #3 and tool #4) – trainings could start with a live streaming to present its content; trainings are designed to convey important key facts to learners; report on the progress of the trainees can be easily generated from the platform, as well as a description of how the result of each trainee is formed; Each course has a "how to" screen for to help

trainees; what is learned is checked after each topic of the course through a questionnaire with a choice of multiple answers, thus personalizing the gaps; all courses to have audio for easier perception of the material by the learners;

- o The approach used for raising awareness on the problems of the old people with dementia, methodology for presenting of the basic information about Alzheimer, dementia, COVID-19, etc through digtal tools - video (tool #3)
- o Learning through self-help closed online group, which is formed with the participation of elderly people with disease, their relatives, and health and social care professionals; (tool #3)
- o The methodology used for development of projects by trainees in partnership (tool #5);
- o Exchange of experience from abroad, e.g. some PPs could support training process of trainees from Bulgaria or other country different from their own – webinars, workshops (tool #5).

7.3 Bosnia and Herzegovina

7.3.1 Introduction

Assessment Report – Bosnia and Herzegovina is a result of:

- Exploring of different EU learning tools and applications by CCI BL and City of Prijedor team in collaboration with main three stakeholders,
- Analysing the database with 37 learning tools established by D-CARE partnership and Shortlisting the top five most applicable in BH done by CCI BL and City of Prijedor teams,
- Stakeholders' analysis of top five learning tools under the co-working seminars organized by CCI BL and City of Prijedor.

The co-working seminar was a three day event organised by CCI BL and City of Prijedor in April and May and with the representatives of all four sectors – business, government, education and cares users.

First day, on 22nd of April 2021, in Banja Luka CCI BL met the providers of care and representatives of retirement homes. In Prijedor, City of Prijedor continued on the second co-working day on April 23rd, meeting with the Hospital, creative industry representatives and Health RTD Cluster. Third coworking day was reserved for discussion with the IT sector in Banjaluka.

Coworking day 3: May 15, 2021

Participants discussed the pre-selected tools and their opinion is reflected in the following evaluation of the tools. CCI BL and City of Prijedor teams have made a final conclusion regarding the evaluation of five tools on each working day which participants verified on site. Additionally, during the input of evaluation scores for each tool some aspects of the assessment criteria were further discussed and clarified with several stakeholders by phone.

The total number of the participants during the co-working seminars is 25 out of 9 organizations.

The represented stakeholders are: 4 from the business group; 1 - research, 1 government/local authority representative and 3 institutions representing citizens/care users.

Coworking day 1: April 22, 2021

Coworking day 2: April 23, 2021

7.3.2 Selected ILE Tools

The 37 learning tools identified by the PPs are grouped depending on the specific need they correspond to, e.g. training needs, policy improvement, and technology for delivering/ using of smart care services.

Being focusing on the development of the Manual for developing Innovative Learning Environments Toolkit, CCI BL and City of Prijedor pre-selected 5 most suitable tools which could face the BH training needs for the specific target groups set in D-CARE project and recognised by BH stakeholders as stated in the technical report (DT1.1.1): care givers; elderly people and tenants of retirement homes; developers of policy tools for smart care support; organizations developing and offering services of care (decision makers, project managers, technical and supporting staff…), etc:

Tool #1 – talent lms
Described in the Shortlisting of Tools.

Tool #2 – Rehabilitation exercises platforms
Owner: n/a
Description: There are various smart technology solutions for those who are trying to lose weight, build muscle or increase fitness and for those who want to do all of the above from the comfort of their home. Same type of solutions can easily be developed to be used in the process of medical rehabilitation. We all need a little help when it comes to fitness, especially if we are not experts who have been spending their time for years trying out different types of exercises and ways to perform them. Fitness apps are a great tool to help you track your own goals and provide much-needed information on performing exercises correctly. One can also get a personalized workout designed exclusively for you and your physical capabilities. It makes it easier to exercise and provides motivation and varied, fun training that can easily be done in home.
Some active tools are: and similar
Target groups: users of medical rehabilitation services - patients
Possibilities for transfer: once developed by an individual medical institution solution can be shared to other institutions and diversified for the use of patients with different needs
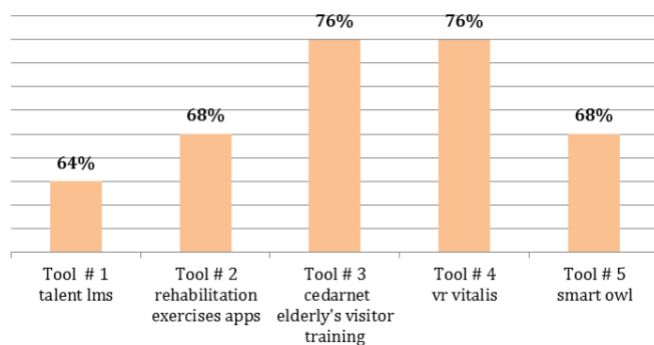
Tool #3 – CedarNet Elderly's Visitor – Training Program
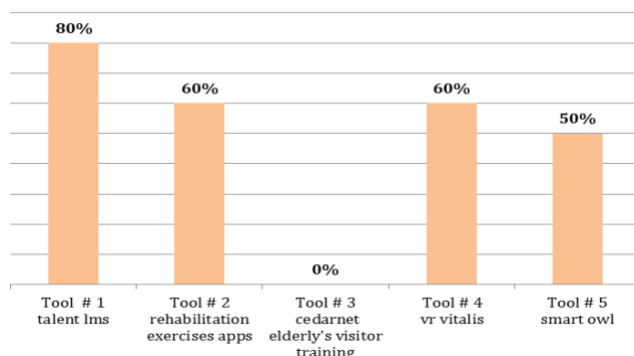**Described in the Shortlisting of Tools.**

Tool #4 – VR Vitalis – rehabilitation in Virtual Reality
Described in the Shortlisting of Tools.

Tool #5 – Smart Owl
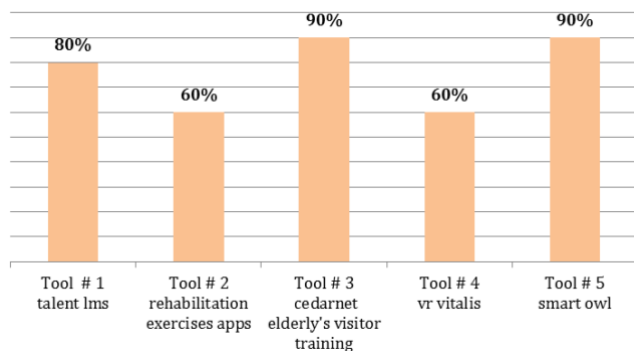**Described in the Shortlisting of Tools.**
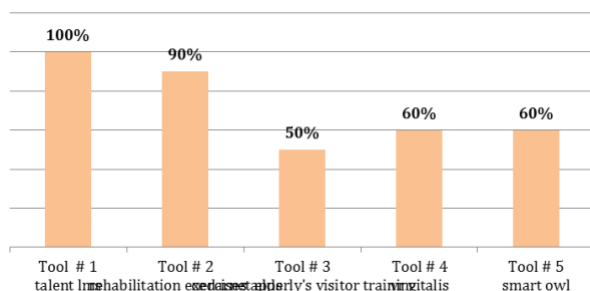**General Assessment of the tools**

Contribution


Consequences

Features

Project co-funded by European Union Funds (ERDF, IPA, ENI)

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Transferability

7.3.3   Conclusions

Overall assessment results reflect the high level of awareness of stakeholders regarding the necessity of development of learning processes in the region but also the understanding about the limitations of target groups. Talent lms and similar large scale e-learning supporting systems as well as service providing tools tailor made for the target group (such as fitness platforms) are evaluated as the best tool for introduction and development of new ways of learning within the social care sector. On the other side old school on site trainings are found to be very appropriate given the target group (among them especially care users) has limited skills regarding the use of new technology overall, hence also in the learning process.

Positively commented option is the combination of two above mentioned tools and with well-designed objectives and methods. Generally, it is necessary to insist on the life-long-learning principles. In short term, ILE should apply more on site trainings for the preparation of all target groups for the implementation of new technologies in social care system as well as in the process of learning. In middle term, ILE should combine both e-learning and on site practice for the use of smart technologies.

Given the pace of technological development it is strongly recommended to repeat the process of analysis of learning tools market and to apply this assessment process in order to keep the level of quality and efficiency of the education process.

Overall assessment results
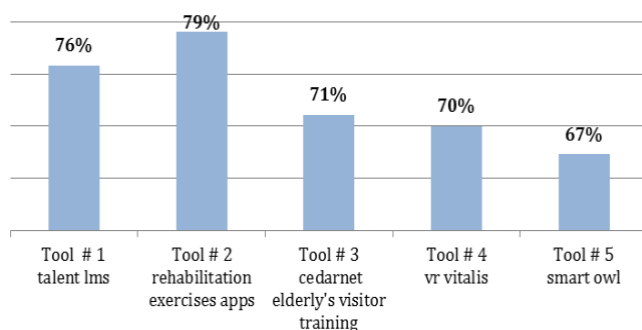
The assessed tools serve different target groups (e.g. employees, personal care givers, students, social media users, older adults, hospitals) and have different characteristics in accordance with their main purpose. Nevertheless, stakeholders have assessed the tools which are classic eLearning platforms and more on site oriented programmes for elders.

Project co-funded by European Union Funds (ERDF, IPA, ENI)

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Attending stakeholders who represent all four helixes of D-CARE have concluded that various tools need to be included in the D-CARE learning process and used by Innovative Learning Network in Republika Srpska and other ILEs.

In order to support various types of learning for various target groups all available tools would be useful but it is necessary to continuously assess tools in order to ensure the use of best one in the current moment and situation.

Tool #1 – large scale eLearning platforms which serve to the most of users and sets the rules for development of such tools

Tool #2 – specialised tools for communication with customers mainly used by digital or hybrid companies which model can be adopted by many care givers as a example of tool for digitalisation of business

Tool #3 – CedarNet Elderly's Visitor – Training Program

Tool #4 –example of use of VR technology which can serve as a role model for numerous services mostly in physical rehabilitation but extremely complex and costly technology

Tool #5 – Smart Owl

7.4   Czech Republic

7.4.1   Introduction

After a review of all tools, PP 06 – UJEP in cooperation with DC shortlisted 6 of them which were identified as most suitable for the smart care needs described in the Technical Report for Czechia under A.T1.1.

The co-working seminar in Czechia was organized April 13-15, 2021 in online format via Microsoft Teams with a possibility of asynchronous attendance. Each day had a different focus: elders, care givers, unemployed/low skilled when various practices were introduced. Representatives from all groups of the quadruple stakeholders were invited. A questionnaire for each presented tool was introduced during the seminar/meeting and data collected based on the good practice via Google Form in a follow up communication. The total number of the participants during the co-working seminar is 36 out of 29 organizations (2 without explicit affiliation).

The represented stakeholders are: 11 – citizens, NGOs; 5 from the business group, 5 university/research organisation and 13 public authority (and 2 unassigned)

The structure of the all interviewed stakeholders is presented in the following chart (5 from NGOs, 5 from Public authorities, 2 from Business, 1 from academia):
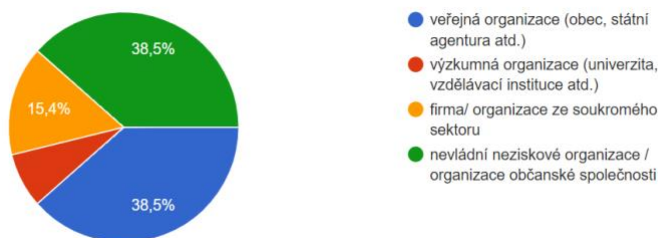
Existing Learning Tools

The 37 learning tools identified by the PPs are grouped depending on the specific need they correspond to, e.g. training needs, policy improvement, and technology for delivering/ using of smart care services.

Due to our focus on the development of the Manual for developing Innovative Learning Environments Toolkit, UJEP in cooperation with DC pre-selected 3 Czech and 3 Foreign most suitable tools which could face the Czech training needs for the specific target groups set in D-CARE project: nurses and care givers; elderly people with diseases; unemployed or unskilled working people, developers of policy tools for smart care support, etc:

Tool # 1 – Seniors online (Senioři online) – online education, Czechia

Tool # 2 - VR Vitalis – VR for rehabilitation, Czechia

Tool # 3 – Do not be alone (Nebuď sám), Czechia

Tool # 4 - Ginkonet – Dementia Knowledge Bank in Kecskemét (as part of Demetia Friendly Town Program in Kecskemét), Hungary

Tool # 5 - Master's Programme in eHealth, University of Applied Sciences, JOANNEUM in Graz, Austria

Tool # 6 - Simbioza BTC City Lab: A hub for smart technologies, solutions, devices and products for users aged over 55, Slovenia

7.4.2   Selected ILE Tools

Tool # 1 – Seniors online (Senioři online), Czechia
Described in the Shortlisting of Tools.
Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.62	It is relevant to the need for improvement of the digital skills of elderly people. Not relevant to all target group needs. Mobile services were appreciated.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders?		
	• Care givers?		
	• Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4.08	Regionally very innovative
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.38	Services have been tested, and are scalable.
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	Such information is not available therefore could not be assessed
Features			

E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	3.85	The tool provides possibilities for e-learning. The training materials could be easily integrated in learning platform.
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	3.54	It is easy to be transferred and adapt from Czech conditions, but does not concern all target groups.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**20.46**	/25

Tool # 2 - VR Vitalis – VR for rehabilitation, Czechia
Described in the Shortlisting of Tools.
Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.08	It is related with the need for improvement of skills of elderly people and care givers.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4.38	The tool is innovation for Czechia (and our region) as such concept is not used so far
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.0	It has already presented results and has potential for applicability to various situations/problems.
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information provided
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems?	3.15	It could be only in a limited way integrated (it needs VR device)

	Is it fully compatible, or does it need some modification? Or is not suitable at all?		
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	2.69	It is not suitable for all subgroups.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**18.31**	/25

Tool # 3 - Do not be alone (Nebuď sám), Czechia

Described in the Shortlisting of Tools.

Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.31	It supports intergenerational cooperation and increases sensibilisation of ageing by children.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	3.77	Innovation (in regional context) is in its intergenerational aspect.
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.15	Already tested at local scale with national media coverage.
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information provided
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	3.77	It is easy to be used. All the training are as videos.

Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	3.08	Transferability is rather average. Not suitable for all target groups. Some of the activities might not be popular in other regions.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**19.08**	/25

Tool # 4 - Ginkonet – Dementia Knowledge Bank in Kecskemét (as part of Demetia Friendly Town Program in Kecskemét), Hungary

Described in the Shortlisting of Tools.

Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.38	Covers many areas.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4.08	It is very innovative for our region
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.08	It is linked with specific policy instrument used for raising awareness and knowledge of residents about Alzheimer and dementia
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information provided
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	3.46	It is relatively easy to be used. All the training materials are as video and online tests.

Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		Additionally FB groups are used for self-help
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	2.92	It is not so easy to transfer and to adapt the approach used. The tool can be used by all type of target groups.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**18.92**	/25

Tool # 5 - Master's Programme in eHealth, University of Applied Sciences, JOANNEUM in Graz, Austria

Described in the Shortlisting of Tools.

Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs relate to social and health care in your region? Which challenges and gaps it helps to address?	4.23	It responds to the need for improvement of digital and smart care knowledge and skills for care givers/ unemployed and low-skilled; need for providing of smart care tools
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4.08	The methodology for organization of the education is considered as innovative – using of smart devices, and latest technologies, developing of innovative solutions
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.38	The masters programme has a high impact in the region. It is linked with the methodology for networking and partnership of stakeholders with trainees for achieving of better results from the training activities
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information available

Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	3.08	The programme is developed for class work. It is not completely suitable for use in e-learning, but some aspects could be used for integration in the online learning process, e.g. development of project for smart care and eHealth with the support of the PPs
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	2.69	It is not very easy to adapt part of the master programme, but this process might need additional efforts and funds for providing of the necessary equipment
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**18.46**	/25

Tool # 6 - Simbioza BTC City Lab: A hub for smart technologies, solutions, devices and products for users aged over 55, Slovenia
Described in the Shortlisting of Tools.
Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs relate to social and health care in your region? Which challenges and gaps it helps to address?	4.15	It responds to the need for improvement of digital and smart care knowledge and skills for care givers/ need for providing of smart care tools
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4.08	The concept of living labs is considered as innovative – using of smart devices, and latest technologies, developing of innovative solutions in real environment.
Consequences			

Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.31	The impact of the concept is clear, supports synergies and collaboration, accelerates acceptance.
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	N/A	There is no such information available
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	3.38	Due to its character and complexity, only a smaller part is suitable for use in e-learning.
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	2.92	It is relatively difficult to transfer or adapt the concept, it needs additional efforts and funds.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**18.85**	/25

General Assessment of the tools

Consequences

The stakeholders agreed that it is difficult to evaluate the efficiency of the tools in terms of resources used (cost/ budget of the tools, number of people involved, or specific equipment used, etc.) as such information is not available for all of them. Therefore, it was suggested that in case it will be decided that some aspects of the presented tools will be transferred in D-CARE activities, PPs could contact the owners of the tools and ask for the specific information.

Features

When we talk about e-learning suitability and openness and flexibility, the involved in the assessment stakeholders indicated that most of the tools are on average suitable for e-learning systems (at least partly). The learning methodology provided by Tool #1 received the highest score because it is mostly online oriented and could be applied directly in e-learning environment without major additional adjustments. The stakeholders considered that the face-to-face contact is still very beneficial for learning efficiency.

Transferability

All the selected tools are indicated as transferable in general and on average. However, the transferability might be limited by the level and pace of acceptance at the institutional level. Transferability might be problematic among few subgroups due to their specific conditions and necessity of individual approach (e.g. VR might not be suitable for certain diagnosis). Among the problems discussed, there are concerns about the initial and operation cost. However, it is relatively more complicated to secure sustainable financing after the pilot phase. So far, there

have not been identified any major regulatory restrictions or other obstacles which could cause difficulties in the transfer to the target regions. From the presented tools, the services of Smart Owl are considered as the easiest to use.

7.4.3   Conclusions

Most of the tools need combination with physical form of learning (e.g. mentoring) to be most efficient. This means the e-learning integration is possible with certain limitations.
Although, the institutions can find funds for piloting, there are still worries about the financial sustainability.
Conservative approach might be a limitation for adoption. Some very innovative tools (e.g. VR) still need individual approach and can't be fully used for some specific subgroups.

7.5   Germany

7.5.1   Introduction

In the first stage all project partners collected a database of tools and applications suitable for E-learning/an ILE. The collection of tools was presented and discussed in the internal project meetings and a shortlist nominated comprising nine tools. They cover different areas and target groups while also originating from a broad range of national contexts. For Germany, the shortlisted tools were reviewed in detail and a selection of five tools was made. This choice was informed by the information on needs, current challenges and developments which had been gathered during a seminar with quadruple helix stakeholders before. The choice was informed by the following aspects relevant for the German context:

- Lack of qualified personnel; need to also attract lateral recruits
- Exchange between all stakeholders is rare, platforms to interact on a larger scale are needed
- Insufficient expansion of internet especially in rural areas
- Lots of friction loss at intersection points
- Dualism between traditional and modern forms of organisation, care documentation, care services etc. which makes any process very resource-heavy and inefficient

The co-working seminar in Germany took place on the 10th of June 2021 as an online event using the platform Zoom. Representatives from all four helix branches participated. In total there were three participants from academia, six company representatives, two participants from government and administration and two members of interest groups. Below is an impression of the seminar.

7.5.2   Selected ILE Tools

Tool #1 – House of Memories (National Museums Liverpool, UK)
Described in the Shortlisting of Tools.
Assessment scale:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4	Addresses the rising issue of dementia for society as a whole and the health care system in particular
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders?	4	Offers elders suffering from dementia a chance to get in touch with others and obtain good care
	• Care givers?	4	Good and praxis oriented online training; especially informal caregivers benefit from the program
	• Unemployed/Low-skilled?	4	Quite demanding
Level of innovation	How innovative the presented tool is in your region?	5	There is no existing tool that targets dementia, formal and informal carers as well as elderly in such a comprehensive fashion, especially the training of informal caregivers is a completely new focus
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	4	Used in several regions in the UK, running successfully, small scale studies available
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	2	Unclear, there is no reliable data on the effectiveness of the tool
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	2	Hosted by a network of publicly owned museums. Quite resource-intensive, no information about funding and economic sustainability.
Features			

E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	4	App for the elderly, online courses for formal and informal carers, online exchange, and networking for professionals in the field
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?	2	One provider institution necessary (e.g. museum); other partners can join easily. Might be used as a communication platform Limited in terms of applicable diseases
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	3	Museums have to be on board, sufficient funding and investments in training is required
Transferability among target groups	How easy can the tool be used for other target groups?	1	Fits dementia patients and their caregivers/support structures, transferability to other diseases questionable

Tool #2 – The LebensPhasenHaus
Described in the Shortlisting of Tools.
Assessment scale:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	5	Focuses on co-creation, innovation, research and testing of solutions for smartcare and active ageing Addresses many elderly needs like inclusion, health, care and societal perspectives
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders?	5	Experiments to meet their needs and cooperates with them
	• Care givers?	4	Not so represented
	• Unemployed/Low-skilled?	3	Generates potential new jobs Even low-skilled persons can be integrated quickly into the system.

Level of innovation	How innovative the presented tool is in your region?	4	There is awareness but unique in the German context
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	5	Services and tools are continuously evaluated by University of Tübingen
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	5	Won several national and international awards and is a "EU Reference Site"
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	4	Focusing on a self-sustaining system; in the first place, however, strong partners from all four helix strands necessary
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	2	Activities mainly onsite, only few courses and conferences online
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?	5	- Concept similar to D-CARE, explicitly open for all quadruple helix actors to use; needs a strong and tightly knit eco-system of quadruple helix partners to function
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	2	Concept itself is quite flexible, someone needs to set up the network and structure though Strong and sustainable partnerships are needed that are willing to invest and collaborate
Transferability among target groups	How easy can the tool be used for other target groups?	5	Can host any type of need, service, used as a broadcasting platform etc. All target groups can somehow participate

Tool #3 – Seniors' representatives
Described in the Shortlisting of Tools.
Assessment scale:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4	Already in place in many municipalities; good connection point for all interest groups Makes elders' needs visible to the local municipality and other local stakeholders
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders?	5	Task is explicitly to be a vocalizer for seniors' needs; be a point of information and advice Gives a voice to the concerns of elders
	• Care givers?	4	As an information or advocacy tool Indirectly benefit from the tool
	• Unemployed/Low-skilled?	3	
Level of innovation	How innovative the presented tool is in your region?	3	Already widely used and approved, more and more municipalities use the tool
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	3	Widely used and approved; clear measurability questionable
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	4	The representatives work on a voluntary basis; are useful to interest groups and well connected to all relevant SH
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	5	Only needs volunteers; willingness of the municipality to install a senior representative
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	1	Can be a point of advice for elders and their support networks on how to engage with e-learning structures; might even publish e-learning content themselves

Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?	4	Can easily be used by all relevant interest groups; depending on the openness of the system, senior rep can communicate with all relevant actors
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	Easily transferable
Transferability among target groups	How easy can the tool be used for other target groups?	5	Easily transferable

Tool #4 – Moodle

Described in the Shortlisting of Tools.

Assessment scale:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	3	Already present in the region; for it to work you need an actor to adapt in to the smartcare field
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders?	3	Could serve as an e-learning platform but needs adjustments and/or digital training for elders
	• Care givers?	4	Accessible platform for e-learning courses
	• Unemployed/Low-skilled?	4	Potentially easily accessible tool for acquiring new skills
Level of innovation	How innovative the presented tool is in your region?	2	Already widely used in an educational context (schools, universities etc.). Not new or user friendly
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	5	Many users worldwide, generally well established, effectiveness proven
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	4	Freeware, but needs adaptation to the respective context
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	4	Free license, investments for hosting and customization

			required; someone needs to maintain the platform; content needs to be produced/uploaded
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	5	
Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?	5	Fully automated environment; platform can be used by any user group; offers channels for communication; customizable
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	Easily transferable
Transferability among target groups	How easy can the tool be used for other target groups?	5	Easy to use for any target group

Tool #5 – Gerontologische Pflege und Therapie, B.Sc.

Owner: University of Kempten

Description: Gerontologische Pflege und Therapie is a bachelor of science program at the University of Kempten, Germany. In seven semesters the focus lies especially on the needs of elders and the challenges of a demographically shifting population. To enter the program, students need to have some form of professional training in the care and health sector. The bachelors studies are then conceptualized as a training on the job; thus, the course program is adapted to the needs of people working in health and care while studying. The studies comprise different courses on the fundamentals of gerontolgy, practices of elderly care, medical aspects in gerontology, organisation and management as well as project modules. An optional module offers students training in the management of care facilities. The University of Kempten has designated social innovation one of their four focal research areas and offers several BA and MA programs in the area of care, health management and gerontology. It hosts the Bavarian Centre for Digital Care, an autonomous research institution which aims to be an innovation and research hub as well as an advisor for local authorities and the health economy.

Target group(s): caregivers, nurses, doctors, health professionals

Possibility of transfer:

The program follows the more general model of study disciplines and program design in Germany and therefore could be and already is offered at other universities. To obtain fruitful interconnections between the academia and practice in the health and care area, the hosting university should have strong ties to the sector and should designate health and care a research focus. In the German context there is a more fundamental question as to whether an academisation of disciplines such as care is desirable in general. Since it leads to potential tensions over competences and roles with students and graduates of medical studies which in the long run impedes productive cooperation.

More information:

https://www.hs-kempten.de/soziales-und-gesundheit/bachelor/gerontologische-pflege-und-therapie
https://www.hs-kempten.de/forschung/forschungsprofil/forschungsschwerpunkt-4-soziale-innovationen
https://www.hs-kempten.de/forschung/forschungsinstitute/bzpd-bayerisches-zentrum-pflege-digital

Assessment scale:

Contribution			
Evaluation criteria	Meaning of the evaluation	Score (1-5)	Justification
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4	Aims to qualify personnel for the evolving needs of a demographically changing population
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders?	4	Generates better qualified care giving personnel
	• Care givers?	5	Offers excellent basis for later work or research that is up to date to current developments and needs Professionalizes care work giving workers opportunities/perspectives
	• Unemployed/Low-skilled?	1	Diploma needed to enroll in an university/bachelors degree
Level of innovation	How innovative the presented tool is in your region?	4	Several similar study programs all over Germany but still rather new and not fully established. Very innovative as a study discipline as it addresses the demographic change in the German society.
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…)	4	Highly qualified graduates; more research in the area Good employment rate of alumni
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	4	Costs money in the education system but benefits the society in terms of more knowledge and better services
Sustainability	How is the toll (economically) sustainable? What are requirements for running it?	4	Can be regarded part of the general education system and the expenses a society must make for that Long-lasting benefits
Features			
E-learning suitability	How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	3	Can be done partially online

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Openness and flexibility:	How the tool is open for other partners to be used? Is it possible to integrate with other tools? Does it allow automation? Does it allow to communicate with among user, e.g., can it serve as a communication platform?	4	Through the university other partners are integrated as research cooperations; on the job training also offers a connection to practical challenges; university as a connection platform for several interest groups to communicate
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	3	Suitable universities can develop and offer a similar course adapted to the respective regions' needs
Transferability among target groups	How easy can the tool be used for other target groups?	4	Only for people generally interested in academic training; care giving professionals Simplification for education of informal health workers may be possible

7.5.3 Conclusions

The analysed tools have different particularities and application that can be extracted from the assessment of each one.

7.6 Hungary

7.6.1 Introduction

After a review of all tools, PP 17 (on behalf of PP 2) – IFKA shortlisted 5 of them which were identified as most suitable for the smart care needs described in the Technical Report for Hungary under A.T1.1.:

- Business to be attracted in the development of new smart care products/ services.
- Smart care solutions are often very expensive and there is a niche for development of more affordable smart care solutions which would make them available to more people.
- Social providers and elderly people, users of the social services need to be provided with the specific training and skills necessary to use smart care digital tools.
- The pandemic has negatively affected the end users of social services due to the social restriction measures. Social service providers and researchers in the field point out the need to provide better communication and orientation for the most vulnerable and to give priority to prevention and focus the attention on psychological health.

In the first day of the co-working seminar, IFKA has introduced the D-CARE project to its potential stakeholders and interviewed them to summarize their project-relevant existing tools. Following the seminar, IFKA has distributed the Assessment Scales among the stakeholders and asked each of them to presents their tools during the next seminar. The aspects of the

evaluation were discussed afterwards. Based on the presentations, stakeholders and IFKA experts filled out separate Assessment Scales, and rated the existing tools.

The total number of the participants during the first co-working seminar is 10 out of 6 organizations.

Most of the interested stakeholders came from various health care business organizations (3), public authorities (2), and from associations (2). Following the constructive presentations and discussions, the below listed tools were collected.
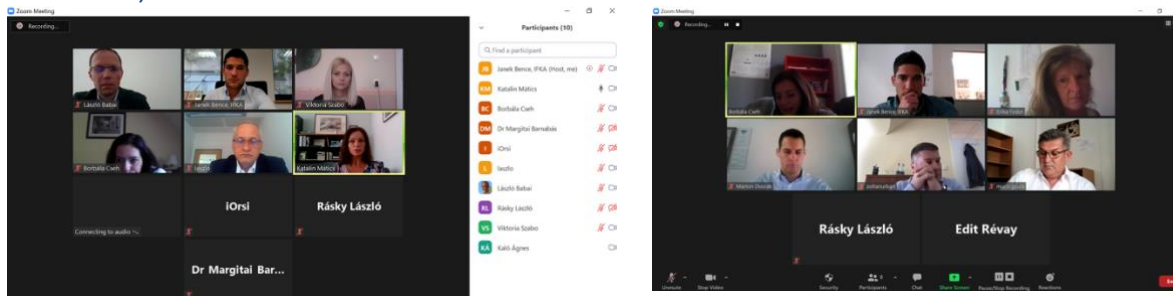
Existing Learning Tools

Being focusing on the development of the Manual for developing Innovative Learning Environments Toolkit, we have pre-selected 5 most suitable tools which could face the Hungarian training needs for the specific target groups set in D-CARE project: nurses and care givers; elderly people with diseases; unemployed or unskilled working people, developers of policy tools for smart care support, etc:

- o Tool # 1 - PRIMA MEDICA - The organization uses tools to monitor health conditions (cardiovascular disease, diabetes) that meet the needs of patients, Hungary
- o Tool # 2 - MEDISTANCE - Used for health preservation, therapy, telemedicine, and health data analysis, Hungary
- o Tool # 3 – Terra 95. Bt. – Hospice Home Care Service, Hungary
- o Tool # 4 - Medinnovest - Research and development, healing and remote monitoring, Hungary
- o Tool # 5 - Újbuda Social Service – providing basic and specialized social and child welfare care services, Budapest, Hungary

7.6.2   Selected ILE Tools

Tool #1 – PRIMA MEDICA Software - The organization uses tools to monitor health conditions.
Owner: Prima Medica, Hungary
Target groups: people with diet and movement problems
Description: PRIMA MEDICA is among the oldest private medical practice networks in Hungary with focus on monitoring tools to make the life of patients more comfortable. The organization has six sites with 18 Health Centers and owns a unique fleet of equipment and several test types. Prima Medica participates in several research and development programs at the national level. The online telemedicine tool was designed for lifestyle medicine purposes with 1) dietary and 2) physiotherapy fields. It is primarily used by dietitians and physiotherapists. For dietitians or for those needed diet consultancy, the software includes online counselling, online cooking courses and nutrition diary plans (heathy side dishes, health-condition specific diet, recipes). The online physical training function includes home fitness tests, consultancy on proper physical

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exercises, and the use of smart watches with pulse control function. With the approval of the patients, the software also makes it possible for the professionals to check the medical documents of each client, make anonym statistics and to follow their medical conditions. At the same time, the patients have access to their customer portal, where they can participate in video consultancies, schedule an appointment, or adopt the designed diet and physical activity plan. The software also has an e-learning platform constructed to educate patients about proper measurement techniques (blood pressure, breathing techniques, blood sugar).

Possibilities for transfer:

− Adaptation of the good practices of the platform and the tools;
− Immediate information transfer about each patient's health condition;
− E-learning platform education.

Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	3.5	The organization uses tools to monitor health conditions (cardiovascular disease, diabetes) that meet the needs of patients. The use requires a **high level of info communication skills** so it can cause difficulties for elderly users
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders?		
	• Care givers?		
	• Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4	a private healthcare provider is a distributor
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4.5	It has evidence based functions
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	3	The results are based on individual responsibility.
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	4.25	It has perfectly suitable, developed educational films and applications. Following the language

Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		data adaptation, it can be used well for other partners. The service has limited integration with other devices, and automation is possible to a small degree. As an information platform, it can be linked to telemedicine services.
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	4.25	It can be easily integrated in regions with similar health structure and specialist competence. Used for target groups in other age groups.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**23.5**	/30

Tool # 2 – MEDISTANCE - Used for health preservation, therapy, telemedicine, and health data analysis.

Owner: Slovenian Third Age University, National Association for Education and Social Inclusion

Target groups: care givers; elderly people; unemployed or unskilled working people; relatives of elderly people

Description: MEDISTANCE offer services in the field of digital health and facilitates mobile health data transfer for their target group: elderly people. With the help of the available products, the patients can continuously monitor their blood pressure and blood glucose level from any point of Hungary. After data has received in a web-based platform through GSM-based mobile data, the relatives and the doctors can check the measured values. The measured values include blood pressure, blood glucose, cholesterol, triglyceride, ECG and they can be viewed on a web surface. The healthcare service runs on an SAP Business One application operated by SAP Hana management system. The software offers the following features:

- Data transmission is done when software communicates with other software, however, in case of emergency, human intervention takes place. In order to improve the elderly people's health management, after the data transmission has carried out, an immediate diagnosis can be established.
- It also ensures the health control of elderly people and the transparency of health care service.
- Identity based remote monitoring of lifestyle and behavioural issues with health risk calculations.
- Users can forward their blood pressure or blood glucose level data to the data centres.
- The service also offers a web-based surface, where client's data is stored and organized by their name and social security number. Available data can be viewed in a graphic mode or a table form.

Possibilities for transfer:

- presentation of web-based platform for elderly people;
- monitoring health issues.

Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.4	The organization uses tools to monitor health conditions (cardiovascular disease, diabetes) that meet the needs of patients. Unemployed are not target group, due to its price.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	3.5	Pilot programs usually used in social institutions maintained by municipalities
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	5	Its impact can be measured by a number of indicators: number of users, number of alerts, avoidable hospital referrals.
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	4	One-time fixed investment (asset purchase cost) + continuous monitoring dispatcher service
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	5	Easily implemented by other partners. Software communicates with other software, in case of emergency, human intervention. Not a communication platform, but communication is established between user and service provider.
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	4.75	Only language adaptation is necessary. It can be used by other age groups.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**22.45**	/30

Tool # 3 – Home Care Service – Terra 95 Bt., Hungary

Owner: Terra 95 Bt.

Description: In Hungary, the option of home care service or hospice was first introduced in 1995-96 and businesses related to such assistance spreaded all over the country. Hospice care is largely defined by the practices of the medicare system in Hungary, which provides an opportunity for patients to recover at home. The main advantages of hospice care are:

- Takes place at the patient's home;
- Service provider can act immediately;
- Its connection system has a direct establishment either with the service provider or the patient.

Terra 95. Bt provides home care services with focus on the northeaster Hungary area, specialized on elderly people. Its relevance for D-CARE project is characterized by their service to present tools for their e-learning surface users in the patient's home. It can be advantageous for educating clients with limited skills to handle various tools, the Internet or show the practical use of other platforms. In many cases, patients have limited capability to get familiar with their possible options to improve the quality of their life and health, however, hospice care can also provide services for such purposes. In addition to that, home care facilitates health management by

- Participating in the development and testing of applications that present the modelling of aftercare monitoring;
- Installation and training on how to use tools;
- Feedback on measurement and research: The patient can choose from various aftercare types and check how these affect his/her health condition.

Target groups: care givers; elderly people needed home care.

Possibilities for transfer:

- Teaching method to present tools about their e-learning surface users in the patient's home.

Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.3	Proven integrated home care service. Its main disadvantage is that the service can be only used with medical indications.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	4	In the field home care services, the use of e-learning and smart tools is

			considered innovative.
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	5	Yes, a high number of users of smart devices and innovative technologies compared to the practice of caregivers in other home care providers
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	4	As a result of the service, the number of smart application users increased.
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	5	The service itself is the education of the e-learning system for the users. The methodology of education service can be adapted by other partners.
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	4	The methodology of education service can be adapted by other partners. Other target groups might be considered
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**26.3**	/30

Tool # 4 - medInnovest – Research and development, healing and remote monitoring

Owner: MedInnovest

Description: The primary mission of medInnovest is to introduce telemedicine in the field of healthcare and the establishment of an immediate monitoring system of chronic diseases. It also:

- Collects health care data, used for the improvement of therapies;
- Provides medical tools: Some of these practical methods are applied at the Svábhegyi Children's Clinic, where doctors use certain smart tools to heal chronically ill children. All received data are processed by the smart tools and evaluated by professionals to set up the most feasible therapy methods.
- and health care start-up mentoring programs: Due to the outbreak of the COVID-19 and the lack of financial income, about 60-70% of the medical start-ups reported bankrupt. MedInnovest provides support in three major ways: 1) process and leadership management; 2) market research and assistance to enter the market; 3) support of cooperation with authorities. Within the framework of the mentoring program,

medInnovest provides services such as telemedicine development, fetal hypoxia detection, biomarker and clinical trial design.

Besides the above listed activities, medInnovest provides:

- Home monitoring system development that transfers real time data into a cloud system. From the cloud system, the AI processes the received data and forwards all information to the emergency centre, where professionals can prepare therapy plans.

MedInnovest is also involved in device development. The homecare spirometer is paired with a mobile phone which enables the interaction with the telemedicine centre, and makes it possible to monitor the patient's health condition.

Target groups: care givers; elderly people; start-ups.

Possibilities for transfer: Mentoring program can be adapted by bankrupted start-ups, and smart tools for care givers/elderly people.

Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	3.875	It mainly focuses on existing health problems (pulmonology, cardiology, diabetes). It requires basic IT knowledge. Unemployed people are not direct target group.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		
Level of innovation	How innovative is the presented tool in your region?	5	The tool is in direct contact with the health institution, a care function can be also setup in the application. The caregiver can also monitor his or her therapy on his or her own mobile device.
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	4	Number of users, caregivers, parameters of logging measurement
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	4	number of definitive benefits, number of avoided referrals sent to the health care institutions
Features			

E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	4.5	Application learning can be adapted with an e-learning system The tool can be implemented with further development for other partners and tools to meet the needs of target groups.
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	Easy to adopt with proper translation. The tool can be implemented with further development for other partners and other tools to meet the needs of target groups
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**26.375**	/30

Tool # 5 - Újbuda Social Service – providing basic and specialized social and child welfare care services.

Owner: Újbuda Social Service, ÚJBUDA in Budapest, Hungary

Description: The Újbuda Social Services provide various assistance in five different fields in the 11ᵗʰ district of Budapest. The service operates several elderly clubs, dementia clubs and home care assistance with alert system. The alert system has:

- Personalized settings;
- Caring home medical alert system function;
- Bodyguard system that transfers immediate emergency call to the centre.

In addition, Újbuda Social Services offer day care to mentally/physically challenged people and for individuals with psychiatric issues. It also operates a call centre that supports elderly peoples' healthy lifestyle. The application form for such services shall be submitted through the head of the institution by phone, e-mail or in person, and information can be requested at all places of interest.

Target groups: elderly people with dementia, mentally/physically challenged people.

Assessment scale:

Contribution			
Evaluation criteria	**Meaning of the evaluation**	**Score (1-5)**	**Justification**
The relevance of the presented learning tool with the regional needs	How does the tool address current and future needs related to social and health care in your region? Which challenges and gaps it helps to address?	4.5	It satisfies both, health care and social needs. With the institutional and municipal cost-sharing of public services, unemployed/low-skilled group can also easily access the service.
The relevance of the presented learning tool with the target groups	How does the tool meet the needs of: • Elders? • Care givers? • Unemployed/Low-skilled?		

Level of innovation	How innovative is the presented tool in your region?	4	N/A
Consequences			
Impact	Does the tool have already measurable results? (e.g. number of users; improvement…) Is it in particular linked to any methodological or application aspects the project specifically addresses?	5	Number of users, number of alerts, number of actions. Measurement of the customer and relative satisfaction.
Effectiveness and Efficiency	What are the results in relation to resources (Return on Investment etc.)	4	N/A
Features			
E-learning suitability	Is it friendly user? How is the tool suitable for use in E-learning systems? Is it fully compatible, or does it need some modification? Or is not suitable at all?	4.5	Compatible. Other partners can use it, but it is not compatible for integration with other devices.
Openness and flexibility:	Is it possible to be integrated in learning platform? Does it allow automation? Does it allow communicating with among user, e.g., can it serve as a communication platform?		
Transferability			
Inter-regional transferability	How difficult is it to transfer and adapt the present tool to other regions?	5	Easy to adopt, easy to use by other target groups, including disabled people.
Transferability among target groups	How easy can the tool be used for other target groups?		
Total:		**27**	/30

7.6.3 Conclusions

Contribution

The five analysed tools are relevant to the identified regional needs. They could help to address the needs for improving of the skills of elderly people (Tool#2, Tool#3, Tool#4, Tool#5), improvement of the communication between elderly people and care givers (Tool#2, Tool#3, Tool#4, Tool#5), improvement of skills of care-givers, social workers, unemployed or unskilled workers (Tool #5), and providing opportunities of the business for development of more smart care apps through improvement of skills and knowledge for eHealth (Tool #1).

Consequences

The stakeholders concluded that the presented tools have very high impact. The highest impact of Tool #2 is a result of a quite long period of applying it comparing to the other tools. For the last 36 years of its existence, the Slovenian Third Age University has steadily grown to become a national network of 54 universities in 52 localities with about 21.000 students, more than 1.000 mentors and 1.000 volunteers.

On the other side, more than 200,000 people are trained on various topics through using the facilities of Learning@College. More than 50 courses about Health and Social Care are available on the platform.

The stakeholders agreed that it is difficult to evaluate the efficiency of the tools in terms of resources used (cost/ budget of the tools, number of people involved, or specific equipment

used, etc.) as such information is not available for all of them. Therefore, it was suggested that in case it will be decided that some aspects of the presented tools will be transferred in D-CARE activities, PPs could contact the owners of the tools and ask for the specific information.

Features

When we talk about e-learning suitability and openness and flexibility, the involved in the assessment stakeholders indicated that most of the tools are suitable for e-learning systems. The learning methodology provided by Tool #4 received the highest score because it is mostly online oriented and could be applied directly in e-learning environment without additional adjustments.

None of the tools received the highest score mainly because the stakeholders considered that the face-to-face contact should be omitted when the training modules will be developed especially when the target group of the training will be elderly people.

Transferability

All the selected tools are indicated as transferable. There are not known any regulatory restrictions or other obstacles which could cause difficulties in the transfer of the model, methods or concepts used by presented tools. Some barriers could be identified on later stage in case huge investments will be needed, or licence or permission fees need to be paid for specific training materials.

The presented tools and their methods seem very easy to be used by the target groups.

7.7 Romania

7.7.1 Introduction

A shortlist of 9 tools was developed following WPT1 WG discussion and deliberation. After reviewing of all tools in the shortlist, LP – UMFCJ selected all 9 of them and added a 10th leaning tool, developed and in function in Romania.

- Business to be attracted in the development of new smart care products/ services.
- Smart care solutions are often very expensive and there is a niche for development of more affordable smart care solutions which would make them available to more people.
- Social providers and elderly people, users of the social services need to be provided with the specific training and skills necessary to use smart care digital tools.
- The pandemic has negatively affected the end users of social services due to the social restriction measures. Social service providers and researchers in the field point out the need to provide better communication and orientation for the most vulnerable and to give priority to prevention and focus the attention on psychological health.

The co-working seminar in Romania was organized on 19th of May 2021 in online format via Zoom Platform. Representatives from all groups of the quadruple stakeholders were invited. A questionnaire for each presented tool is developed and disseminated during the seminar/meting. Additionally, some aspects of the assessment criteria were discussed and clarified.

The total number of the participants during the co-working seminar is 14 out of 9 organizations. The represented stakeholders are: 4 - interested groups, NGOs; 1 from the business group, 1 university and 1 public authority. Additional meetings were organized and held with 1 representative of the business group, 1- academia and 1 - public authority.

The structure of the all interviewed stakeholders is presented in the following chart.

7.7.2   Selected ILE Tools

Focused on the development of the Manual for developing Innovative Learning Environments Toolkit, LP-UMFCJ selected all 9 tools which could cover the Romanian training needs for the specific target groups set in D-CARE project: nurses and care givers; elderly people with diseases; unemployed or unskilled working people, developers of policy tools for smart care support etc.
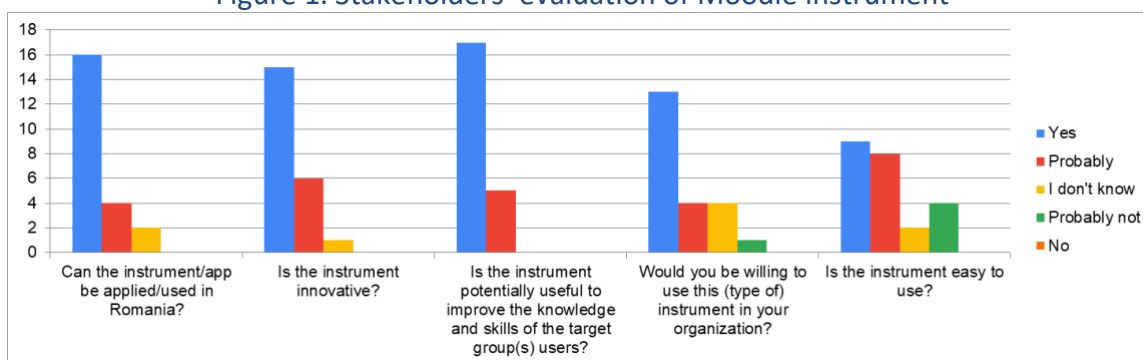
Description of the tools submitted for review/feedback

Tool # 1 – Moodle: Freeware e-learning platform
Described in the Shortlisting of Tools.
Assessment scale:

Figure 1. Stakeholders' evaluation of Moodle instrument

Tool # 2 – Talent LMS: A cloud-based learning management system
Described in the Shortlisting of Tools.
Assessment scale:

Project co-funded by European Union Funds (ERDF, IPA, ENI)

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Figure 2. Stakeholders' evaluation of Talent LMS instrument
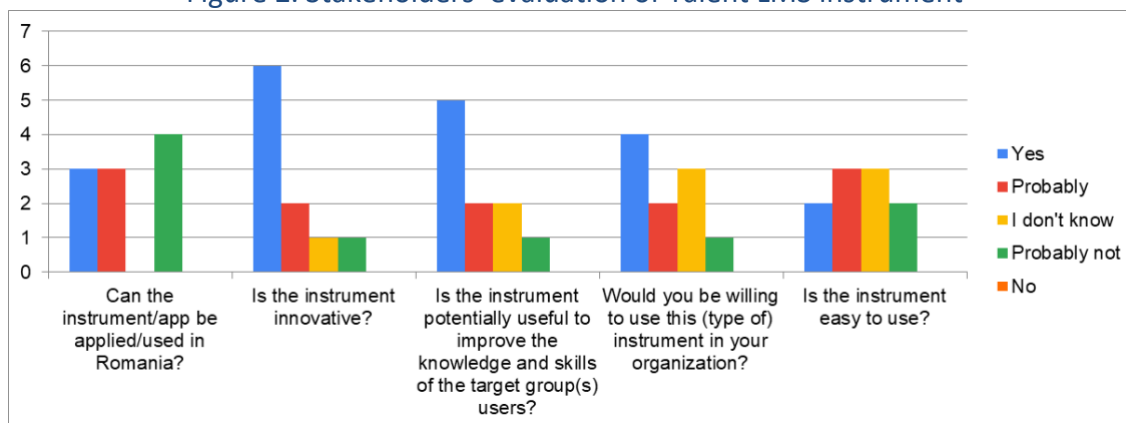
Tool # 3 – CedarNet: Elderly's Visitor Training Program
Described in the Shortlisting of Tools.
Assessment scale:

Figure 3. Stakeholders' evaluation of Elderly's visitor instrument
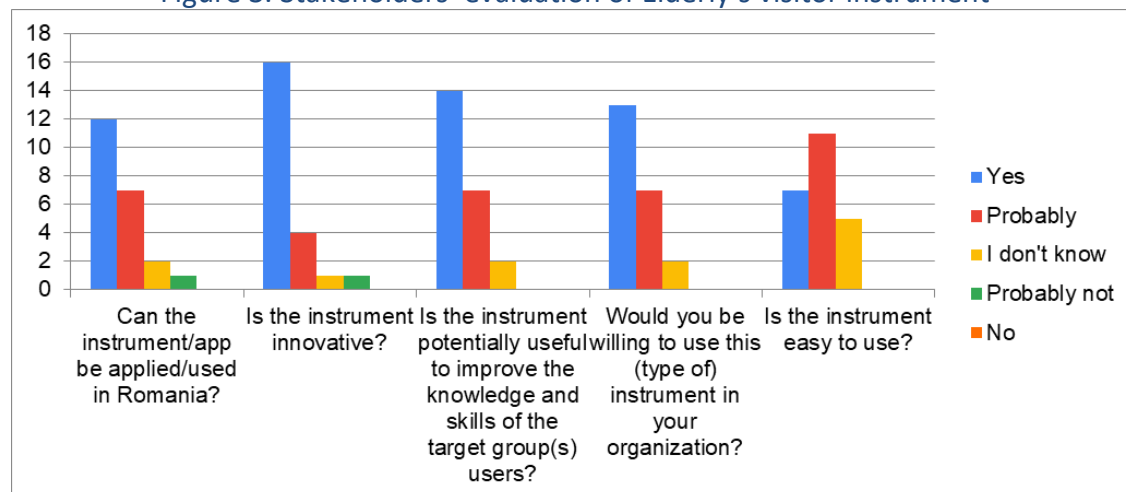
Tool # 4 – Ginkonet: Dementia Knowledge Bank in Kecskemét (as part of Demetia Friendly Town Program in Kecskemét, Hungary)
Described in the Shortlisting of Tools.
Assessment scale:

Figure 4. Stakeholders' evaluation of Ginkonet instrument
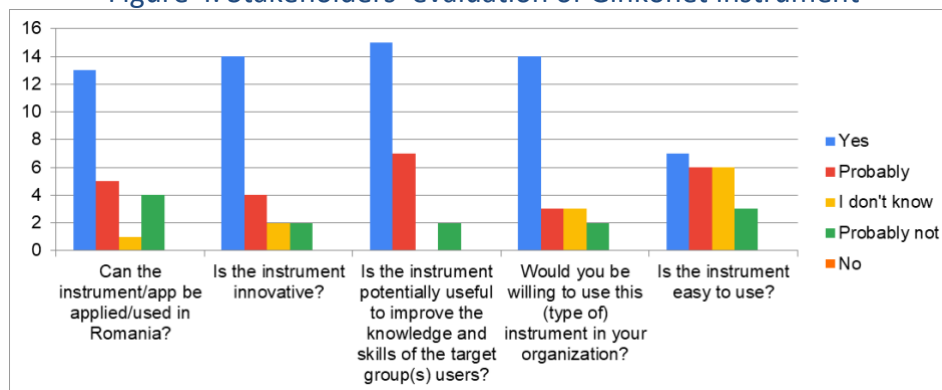
Tool # 5 – Simbioza BTC City Lab: A hub for smart technologies, solutions, devices and products for users aged over 55

Described in the Shortlisting of Tools.

Assessment scale:

Figure 5. Stakeholders' evaluation of Simbioza BTC City Lab instrument
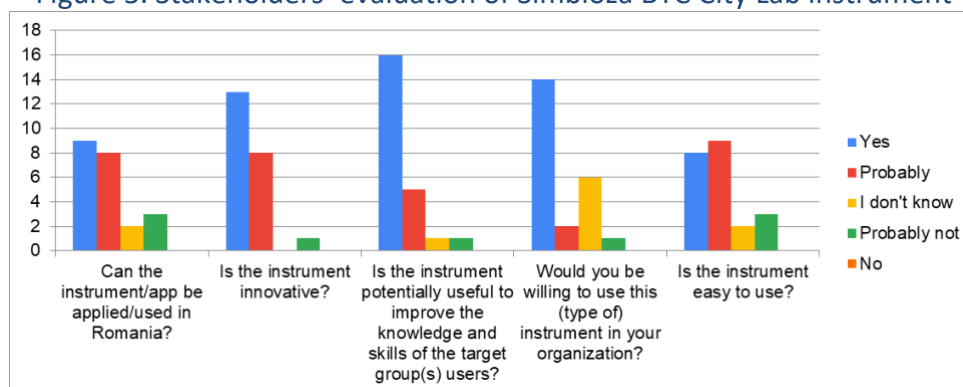
Tool # 6 – MAGDA: Mobile phone app for older adults

Described in the Shortlisting of Tools.

Assessment scale:

Figure 6. Stakeholders' evaluation of MAGDA instrument
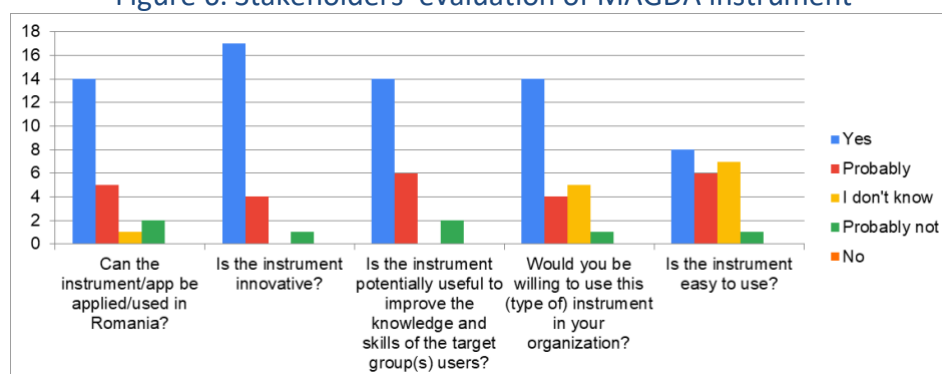
Tool # 7 – SAAM: Supporting Active Ageing through Multimodal Coaching - International research project under Horizon programme

Described in the Shortlisting of Tools.

Assessment scale:

Figure 7. Stakeholders' evaluation of SAAM instrument
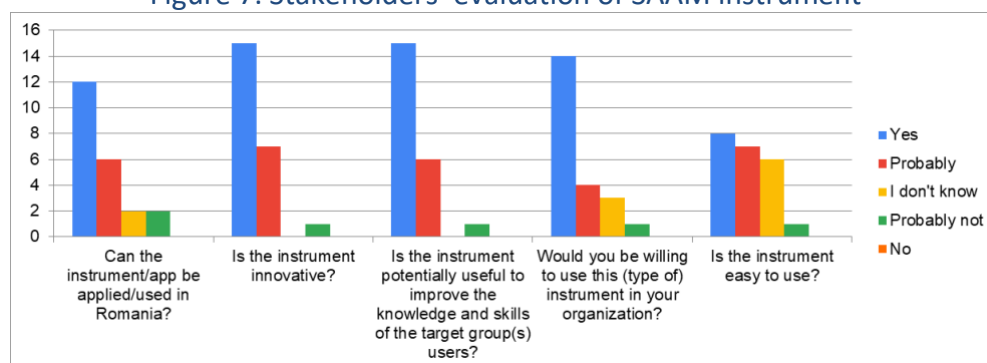
Tool # 8 – VR Vitalis: Rehabilitation in Virtual Reality

Described in the Shortlisting of Tools.

Assessment scale:

Figure 8. Stakeholders' evaluation of VR Vitalis instrument
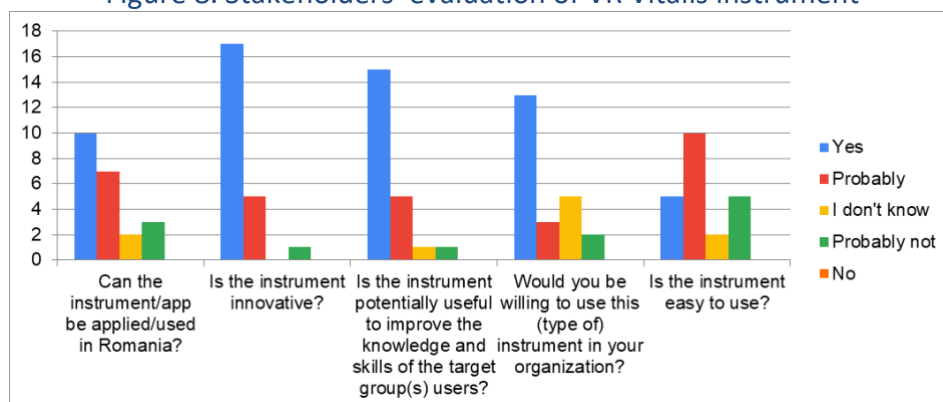
Tool # 9 – Moudrá sovička (The Smart Owl)

Described in the Shortlisting of Tools.

Assessment scale:

Figure 9. Stakeholders' evaluation of Smart Owl instrument
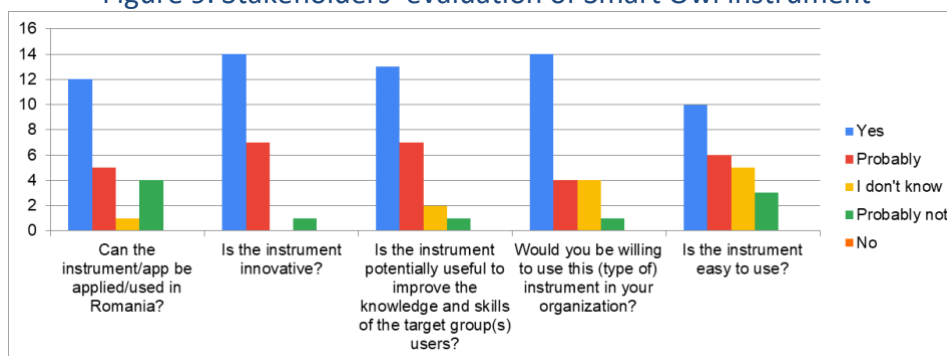
Tool # 10 – Hospice, Home of Hope: Palliative Care Studies

Instrument/App Title	Hospice Home of Hope – Palliative studies
Target groups	Target groups Elders with Cardio-Vascular Deseases, Elders with Diabetes, Elders with Cognitive impairments, Low-skilled and unemployed
Instrument/ App description	Online learning platform dedicatd to palliative care. These will be accesible for two categories of users: nurses and multi-disciplinary teams (social workers, spiritual counselors – priests, psychologists and kineto-therapists) Depending on the desired specialization: basic palliative care or specialized palliative care, courses with a certain number of hours are chosen. The courses involve both access to study materials and meetings on the Zoom platform with the staff of the organizing institution. For evaluation there are grid tests and a final project that involves the presentation of a case study.

	The platform in the standard version is useful for any institution that wants to offer training courses and can adapt to the specific needs of each institution.
Development level	Functional
Language availability	Romanian
Learning environment	Online
Development suggestions	N/A
Tutorials / More information:	http://www.studiipaliative.ro/

Assessment scale:

Figure 10. Stakeholders' evaluation of Hospice, Home of Hope instrument
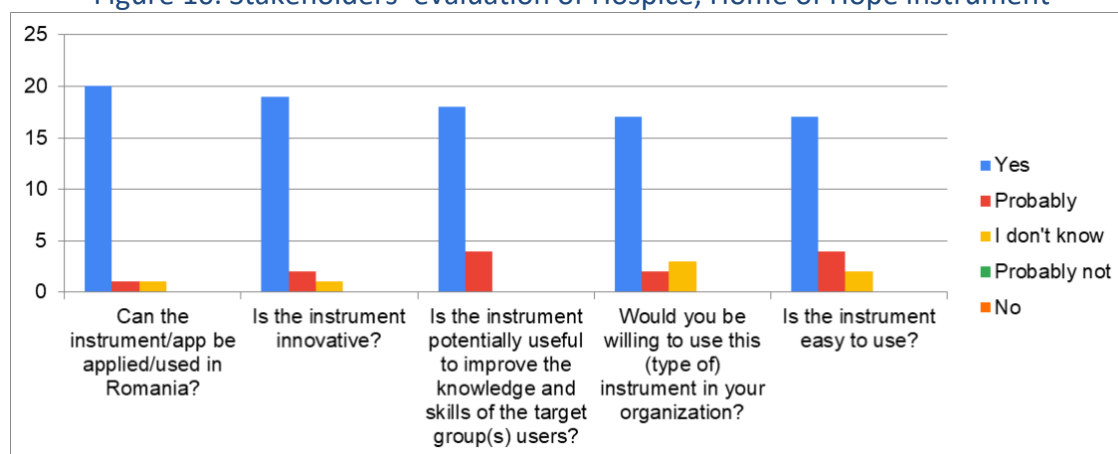
7.7.3   Conclusions

Based on the data presented above, resulted from the online assessment of the learning tools the following conclusions and discussion points can be extracted:

- All 10 instruments presented for stakeholders' evaluation rated very well in terms of perceived/assessed applicability/utility in Romania, Hospice and Moodle being the ones that gathered the most votes in "Yes" answer category for this criterion (20, respectively 16)
- All 10 instrument presented for stakeholders' evaluation rated very well in terms of innovation, Hospice, Magda and VR Vitalis gathering the most "Yes" answers in this category (19, 17 and 17 respectively)
- In general, all 10 instruments presented for stakeholders' evaluation also rated very well in terms of potential to use for improving target groups' knowledge and skills. There we slight differences that cannot be considered relevant, especially given the small sample size of respondents.
- If for the first 3 evaluation criteria all 10 instruments rated very positive, for criteria 4 and 5, willingness to use instrument in own organization and easiness to use the instrument, the stakeholders' answers were more moderate.

- Criterion 5, easiness to use the instrument, was the one that rated the most "moderate", in all 10 presented instruments. This might be due to the lack of possibilities of the respondents to actually use each of the instruments, their responses being based only on the presentation of the tools delivered as part of the online networking events and in the online questionnaire.
- As a general conclusion it can be stated that the respondents to this survey, identified relevant project stakeholders, are very interested to use innovative learning tools in and open to learn how to use them.

7.8 Slovenia

7.8.1 Introduction

PP10 (UL) and PPs 11 and 12 (RDA Green Karst and Ilirska Bistrica Municipality) examined the list of the learning tools/services and prepared two separated lists in line with national and regional learning needs and needs for smart care and health.

Tools/services were selected in line with the needs identified during the first regional workshops organised by UL and RDA Green Karst:

- Large share of population lives in rural areas which adds to the resistance towards using new ICT-supported solutions. In Slovenia, society as a whole is also quite reluctant to changes. Mistrust and fear are present at potential users, especially the elderly. Care provision is often based on informal care, whereas technology is perceived as an intruder. Another reason underlying low adoption rates is lack of information on smart solutions available for end-users. Moreover, smart solutions are often not enough user-friendly and designed without having them on mind.
- There is no support from the state or municipalities in the field of developing an innovative environment in the scope of smart health and care. The development of innovations is enabled mainly within the framework of individual EU projects, these are individual cases, which, however, are not further developed after the completion of the projects.
- Stakeholders involved in smart health and care in the region work with each other rarely and mostly on an occasional basis. At the system level, such networking and cooperation is not guaranteed. The need to connect with national stakeholders (universities, already existing e-service providers...) was also identified.
- During the pandemic, the need for ICT services increased, and the elderly became even more vulnerable.
- The pandemic situation has reminded us of the importance of ICT-enabled services - not only in terms of telemedicine, but also as a means of communication for all generations.
- COVID-19 pandemic revealed the potential of telemedicine solutions. Indeed, in several Slovenian "COVID" hospitals there is a segment of COVID patients who are remotely monitored by telemedical solutions. These patients have had to learn how to use the technology in some ways, and their reactions to the technology and its use have been very positive. The patients are cooperative and the nursing staff are satisfied with the process of remote monitoring overall.
- The epidemiological situation should be a spur to the development and wider adoption of smart health and care services. The pandemic has highlighted the importance of these

services and all stakeholders involved should recognise their development and implementation as a priority.
- Young people have the potential to teach older people and could be involved in the process to help them learn about smart health and care solutions.
- The growing loneliness of the elderly, who would need both: e-care and physical assistance or at least contacts at home, has become an increasing problem.

In Slovenia, three co-working seminars were organised – two were organised by PP10 (UL) and one was organised by PP11 (RDA Green Karst) and PP12 (Ilirska Bistrica Municipality) in collaboration with PP10. Seminar were organised on:
- Thursday, May 13 (PP10)
- Thursday, May 20 (PP11 and PP12)
- Friday, May 21 (PP10)

All seminars were organised online via Zoom. Meetings organised by PP10 were attended by representatives of Faculty of Social Sciences, RDA Green Karst, Ilirska Bistrica Municipality, Association of Social Institutions of Slovenia and Social protection institute of the Republic of Slovenia. Meeting organised by PP11 and PP12 was attended by Faculty of Social Sciences - University of Ljubljana, Centre Pristan, Slovenian third age university from Ilirska Bistrica, University for adult education Postojna, Social Work Centre Cerknica and Point of power Postojna.

During the first PP10 co-working seminar, five smart health and care (learning) tools/services were presented (see chapter 1.1 for their detailed description). Afterwards, participants were invited to fill in online assessment survey to assess whether they address current and future needs for learning in the field of smart health and care; to what extent they address challenges in the field and which one; to what extent they address the needs of specific target groups and how suitable are they for e-learning The survey results were further discussed during second part of the seminar. During the co-working seminar organised by PP11 and PP12 seven smart and health care services/tools were presented (the data you can find in chapter 1.1.) At the end, there was a discussion on the possibility of using the presented good practices (services, tools) in the field of smart care and health in the Primorsko-Notranjska region.

Existing Learning Tools/Services

The 37 learning tools/services identified by the PPs were grouped depending on the specific needs they address and needs recognised by stakeholders, e.g. training needs, policy improvement, and technology for delivering/ using of smart care services.

By focusing on the characteristics of the tools/services and needs they address, the following tools were selected:

PP10	PP11 and PP12
• Simbioza BTC City Lab • Magda smartphone app for older adults • GoLiveClip • Serious games (Ad-gaming project) • E-oskrba	• Simbioza BTC City Lab • Slovenian third age university Ilirska Bistrica • The Coastal Retirement Home in Koper and their Little Prince Home Help Center • Magda smartphone app for older adults

	• Serious games (Ad-gaming project)
	• E-oskrba
	• GoLiveClip

7.8.2   Selected ILE Tools

Tool #1 (PP10) - Simbioza BTC City
Described in the Shortlisting of Tools.
Assessment:
- Moderately addresses the knowledge and learning needs in smart health and smart care.
- Addresses the current and future challenges in smart Health and smart Care in the country to a moderate extent.
- Addresses the needs of older people to a high extent, addresses the needs of the unemployed and low-skilled over 55 to a moderate extent, and addresses the needs of formal carers and dementia sufferers to a small extent.

Is highly suitable for use in e-learning.

At the regional level (in the Primorsko-Notranjska region) we have related practices e.g., Points of power (regional centers of intergenerational cooperation), which could upgrade their operation with the Simbioza's model. Participants of the coworking seminar were interested to improve intergenerational cooperation and consequently affect to the use of e-health and care among old people.

Tool #2 (PP10) - Magda smartphone app for older adults
Described in the Shortlisting of Tools.
Assessment:
- Moderately addresses the need for knowledge and learning in the area of smart Health and smart Care.
- Addresses to a moderate extent the current and future challenges in smart health and smart care in the country.
- Addresses to a moderate extent the needs of older people, while on the other hand addresses to a small extent the needs of formal caregivers and dementia patients.
- It is moderately suitable to be used in e-learning.

Magda is mobile app and it could be easily accessible to end users. The problem is the financial burden of paying the costs of using such services. Furthermore, participants proposed to try find different solutions (less demanding tools) for people over 80 years of age, for old people under 80 this application is very suitable.

Tool #3 (PP10) - GoLiveClip
Owner: Gociety Solutions, Netherlands
Description: GoLiveClip is the first activity monitor, alarm button, fall risk analyser and fall detector in one device. It works together with GoLivePhone application, installed on user's smartphone and communicates with smartphone via Bluetooth connection. GoLiveClip keeps track of user's activity level, has an alarm button near at hand at all times, sends notifications to friends or family and receive notifications as soon as user's fall risk increase. It is non-invasive

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and easily attachable to user's clothes. When user feels unsafe or in need of assistance the only thing that needs to be done is to press GoLiveClip's alarm button and notification is immediately sent to pre-defined emergency contacts with included exact location. GoLiveclip also automatically keeps track of user's movements – the amount of steps user takes total time of activity, the calories user burns, the distance walked – and many more variables. The CLIP even measures the difference in "MET-value" of the activity. The GoLivePhone app provides user with a clear overview of all collected information, which can be used as a personal motivator to become more active or to reach certain specific goals. In addition, 'warning' function can be turned on and contacts are notified if user is unactive for an abnormally long time, so that they can contact user immediately to see if everything is ok.

Target groups: Older people, older adults with chronical conditions, informal caregivers

Possibilities for transfer: GoLiveClip can be used with any Android or iOS smartphone. The only possible barrier for its transfer is language, therefore it should be translated before implementation.

Assessment:

- Addresses to a small extent the knowledge and learning needs in smart Health and smart Care.
- Addresses to a large extent the current and future challenges in smart health and smart care in the country.
- Addresses to a large extent the needs of older people, to a moderate extent the needs of older adults with chronic conditions, while on the other hand it addresses to a small extent the needs of formal caregivers and unemployed and low-skilled people over 55.
- It is not suitable for use in e-learning.

The participants of the coworking seminar were interested in the application being tested or implemented in our region as well. We intend to present the application to end users within the University for adult education in *Postojna and Ilirska Bistrica. Interested users will also be able to test the application.*

Tool #4 (PP10) - Serious games (Ad-gaming project)

Owner: This project has been funded with support by the European Commission under the ERASMUS+ initiative (project number 2016-1-ES01-KA204-025313)

Description: AD-GAMING Project (Development of a Training Program for the Improvement of Quality of Life of Persons with Alzheimer through "Serious Games") aimed to increase the technological and digital skills, as well as the ICT literacy of people with Alzheimer's Disease, their families and caregivers through the use of 'Serious Games'. In doing so, the research seek to enhance the overall Quality of Life, social inclusion and well-being of this population.

The AD-GAMING Project promoted the equality and inclusion of people with Alzheimer's Disease, enabling them to undertake an active role within their communities through gaming with their families and peers. Furthermore, it is hoped that developing people's skills, competencies and confidence in using ICT, will encourage them to engage with other forms of technology to support their well-being, such as ICT-Based Assistive Technologies.

The AD-GAMING contents are structured in four sections:

- General materials with information about serious games for people with dementia and the main cognitive dimensions that can be used with serious games;

- Search games that allows you to find specific games addressed for people with dementia;
- Help/Tutorials; and the
- Collaborative Workspace that is a Forum where registered users can leave comments, ask questions or start discussions about games, activities, etc.

Target groups: dementia patients, informal caregivers

Possibilities for transfer: the solution is easily transferable to any region or country.

Assessment:
- Moderately addresses the knowledge and learning needs in smart health and smart care.
- Addresses to a large extent the current and future challenges in smart health and smart care in the country.
- Moderately addresses the needs of dementia patients and their informal caregivers and to a lesser extent the needs of unemployed and low-skilled persons over 55 years of age.
- Are moderately suitable for use in e-learning.

This application is transferable to Primorsko-notranjska region, we should inform about it Association Spominčice - the Slovenian Association for Dementia Assistance which is an independent, non-profit, interdisciplinary professional association, whose primary goal is to provide professional and effective assistance to people with dementia, their relatives and caregivers. We have two units of Association Spominčice in our region, in Ilirska Bistrica and Postojna, we will check the interest in using the application among the members of the mentioned associations.

Tool #5 (PP10) – E-oskrba
Described in the Shortlisting of Tools.
Assessment:
- Addresses to some extent the knowledge and learning needs in smart health and smart care.
- Addresses to a large extent the current and future challenges in smart health and smart care in the country.
- Addresses the needs of older people to a large extent, the needs of dementia patients and older adults with chronic conditions to a moderate extent, and the needs of unemployed and low-skilled people over 55 to a small extent.

The possibility of using the application is immediate. The problem is in paying a monthly subscription, which is too high for seniors who receiving low pensions. The Municipality of Postojna co-finances this service for users, and the Municipality of Ilirska Bistrica also follows this example. Within the D-care project, we will try to motivate other municipalities in the region to co-finance this kind of services.

Tool #6 (PP11 an PP12) – Education of lower qualified groups
Owner: University for adult education Ilirska Bistrica
Description: The tasks of the institute are, in cooperation with socio-political organizations, school institutions and economic organizations, to offer assistance for political and professional education, organize courses, improve school and professional education and youth education.

Funds for free learning are fully contributed by the Ministry of Education, Science and Sport and the European Union from the European Social Fund. Through computer courses, through lifelong learning training programs, they enable hard-to-employ people and people with lower education to attend basic literacy programs. They organize computer courses, Slovene language courses for foreigners and German and Italian language courses for everyone. Unemployed and employed people over the age of 45 with a maximum secondary education have priority when enrolling in courses. The University implements programs that are in the national interest and are an integral part of the National Adult Education Program in the Republic of Slovenia, following the needs of the place.

Target groups: people furthest from the labour market, foreigners, companies

Possibilities for transfer: With their help target groups would gain important knowledge. They would continue to be important for the development of this field, as they would organize courses through which potential users of "smart care" would gain the knowledge needed to use such tools.

Tool #7 (PP11 an PP12) – Education for older adults

Owner: Slovenian third age University (Ilirska Bistrica)

Description: culture and older adult education are a way of decent and contributing living, meeting individual and community needs as well as anticipating social changes and adapting to them. It is also a way towards achieving greater social fairness on distributive, cultural and symbolic level. It is about supporting social inclusion and participation as well as dialogue among generations. Older adult education fosters active citizenship and respect for environment. It is a way towards maintaining and developing older people's knowledge and skills, helping them to use them for their own benefit as well as for the benefit of society and in cooperation with other generations.

Aims:

- to provide older people's permanent access to culture and education for personal growth, better employability and active citizenship
- to provide integrated counselling and guidance as well as opportunities for active ageing
- to enable older people to get interpersonal support (knowledge, skills, information, emotional support)
- to conduct research of older adult education and specific learning difficulties
- to enable professionals of all generations to be active in the field of older adult education and/or to enter labour market and remain there
- to raise awareness about older people, old age and and the role of older adult education

Target groups: retired people, older workers, workers in the pre-retirement period and professionals

Possibilities for transfer: With their help target groups would gain important knowledge. They would continue to be important for the development of this field, as they would organize courses through which potential users of "smart care" would gain the knowledge needed to use such tools.

Described in the Shortlisting of Tools.

Assessment:

In Primorsko-notranjska region we have third age universities in Postojna and Ilirska Bistrica, there is a need to expand the activities of these universities through all the region. The providers of the ICT education emphasized that the elderly most often express the need for help in applying for medical examinations and are unskilled in using applications designed for health services. Participants perceive lack of free courses regarding the use of ICT, in general, the problem is seen also in the lack of funding for home help. Additionally, participants emphasize the importance of promotion – adult people need to be trained to the use of technology

Tool #8 (PP11 an PP12) – Red button
Owner: Coastal retirement home Koper, Gerontology centre – Centre for home help Little prince
Description: It is performed 24 hours a day, every day of the year. Help is available with the help of an alarm device at the user's home, by simply pressing the "key" of the pendant, which they have with them at all times. At the same time, the device connects the user in difficulty with the Centre for home help Little prince, who help them to organise everything they need to get the help they need. It can be help in calling emergency medical care in the event of a fall at home, feeling unwell when no one else is around, or just talking. In addition to providing emergency assistance, the program offers even more. Employees in the program maintain regular telephone contacts with users, tailored to each individual. In this way, they monitor their well-being, remind them to take medication regularly, and arrange small errands for them, e.g. they order them for a medical examination, reduce their loneliness through conversations, monitor the mood and health condition of the elderly person. With their action, they act preventively and relieving, both for the elderly and relatives.
Target groups: persons over 65 years of age, invalid persons, chronically ill in persons with long-term health impairments
Possibilities for transfer: In the region, the use of this kind of care is very poor, but it would be very welcome as there are many older adults, which would help them to stay home longer
Described in the Shortlisting of Tools.
Assessment:
This model, which includes e-supply, is more personalized - in addition to basic services (eg red button) staff provide personal advices. The model is also suitable for use in our region. Activities could be carried out within a retirement home or centers for social work.

General Assessment of the tools – PP10 (UL)
The assessment of the tools was made in compliance with the D-CARE assessment scale. The evaluation was made for each presented tool/service.
PP10 (UL) and PP11 and PP12 (RDA Green Karst and Ilirska Bistrica Municipality) used different approach to assess selected tools/services.
During the first part of the PP10 co-working seminar tools/services were presented. Afterwards, participants were invited to fill in online assessment survey in the 1KA survey tool to assess:
- whether the tool/service address current and future needs for learning in the field of smart health and care;
- to what extent does the tool/service address challenges in the field and which ones;
- to what extent does the tools/services address the needs of specific target groups; and
- how suitable is the tool/service for e-learning

Listed categories were assessed using combination of 1-5 assessment scale and open questions *(see Appendix 1)*

The survey results were further discussed during second part of the seminar.

Stakeholders have listed the following needs for learning and knowledge in the field of smart health and smart care:

- Digital illiteracy in the elderly population and the possibility of acquiring new knowledge.
- Opportunity for one-to-one advice on the use of smart health and care services.
- Opportunity to meet face to face and share knowledge.
- The problem of accessibility of initiatives such as the Simbioza BTC City Lab - such an operational concept is more suitable for urban centers.
- Bridging the digital divide, which is often linked to socio-economic status.
- The question of how much prior knowledge is necessary for individuals to be able to take on the learning to use new services.

Stakeholders have listed the following features that help target groups to learn:

- ICT literacy of older people.
- The great importance of considering the inter- and intragenerational principles of e-learning for older people and adapting the content to the interests of the individual.
- Encouraging the use of other ICT-based tools.
- Bringing ICT-based services to the end-users.

Stakeholders highlighted the following challenges and gaps in smart health and smart care that are addressed by the tools and services presented:

- They break down older people's reluctance to embrace new technologies and bring them closer to new solutions.
- They reduce fears and prejudices about their use.
- They enable people to get to know each other across generations.
- They give the opportunity to test the performance of devices in practice.
- Knowledge about the use of ICT is a basic prerequisite for the use of smart care and smart health services.
- They enable older people to live at home for longer.
- They address older people's needs for safety, health, well-being, physical activity, etc.
- For people with dementia, they strengthen cognitive abilities and enable them to engage with and maintain their social network.
- They enable monitoring of the older person on the one hand and informal carers about what is happening to the person on the other.
- They allow for rapid response to falls, which can be fatal to the elderly, while also allowing for the measurement of vital signs.
- They meet the needs of informal caregivers while providing an important complement to formal care.
- In addition to falls, they also enable the timely detection of situations such as water spills or smoke.

7.8.3   Conclusions

In the discussion, stakeholders emphasized the importance of acquiring knowledge for people living in smaller communities/villages. As they often do not have the opportunity to participate

in e-learning and use ICT-based services, we need to find a solution that addresses this issue and gives them the opportunity to meet. In general, two groups of older people can be identified - 'younger' older people and those who are 80 or older. The former are much more flexible and have more knowledge in ICT. Older people who are 80 years or older need very simple solutions. Accordingly, e-learning courses and teaching materials should be organized on two levels - simple programs should be organized for older people aged 80 or older and those who are ICT illiterate, and more complex ones for "younger" older people and those who are already ICT literate. The challenge is that learning how to use ICT and implement smart health and care services is multi-faceted - we need these kinds of solutions and training, but it will be a big challenge to address such a broad target group (older adults, older adults with chronic conditions, dementia patients, formal caregivers, informal caregivers, unemployed and low-skilled people over 55) with very different levels of knowledge, so different levels of courses will probably be needed in defining and designing educational programs. Another thing we have neglected that could be crucial - older people also need motivation, which is not necessarily available in e-learning. We need to organize workshops that convince them of the potential of ICT and the importance of using ICT-based services and devices. We need to make them aware that ICT-enabled tools and services are valuable, meaningful and useful to them. Motivation is related to the identified need. Formal caregivers (doctors, nurses, etc.) are also important - if they need to incorporate a service into the work process, they will be much more interested than if they see no point in doing so. Another problem is that both formal caregivers and seniors don't know what is currently available on the market. It is also important to educate them on what is available in the first place. **The key to implementing smart care and health services and e-learning tools is motivating the target groups and their actual identified needs**.

In terms of evaluated tools and services, the following matters have been highlighted: the philosophy behind the GoLiveClip is to reach out to older people even before they are acutely in need of assistive devices. In this way, people are introduced to the technology earlier, making it easier to use when there is a real need. Even with dementia, it is much easier for people to implement solutions into their daily lives in a timely manner. It's a great way for people to become familiar with these services and use them earlier when they don't need everything yet. They address a specific aspect of informal caregivers' needs. Informal carers will still be actively involved in care, particularly in relation to (instrumental) activities of daily living. However, assistance services reduce their burden in caring, give them a sense of reassurance and a feeling that they are not alone and have some support in informal care. All in all, smart care will not relieve the caregivers themselves, but it is a much lighter burden to know that the person is doing well. Making medical appointments via e-services needs to be simplified for low-skilled individuals. We need a simple application that anyone can easily use to make the appointment. It's hard to talk about interest in services when people don't know about them. Therefore, it is important to make people familiar with the service first so that it can be used sooner. Similarly, with paid help in the home, people choose it very late. If they had made the decision earlier, people might have stayed fit longer. The solution would be pre-retirement training, where people can get important information about all aspects of everyday life after retirement. On the other hand, the good thing is that every year there will be more people with ICT skills, the trend will be in a positive direction. It will no longer be necessary to focus on simplicity alone when designing services, but also on their functions. As there are social networks (e.g. peasant women's associations) in villages and local areas and they are very strong, we should take advantage of these social networks or 'local influencers' - e.g. nurses in smaller places. In this

way, services could be brought into the community. Another target group - informal carers - they also have unique needs and need to be considered. They themselves are the ones who would sometimes need some help.

8   Conclusions and recommendations

The majority of ILE Tools identified are computer and internet-based solutions. In this context, we've identified the need for increasing digital skills for all stakeholder and in all countries.

All assessed tools presented in this report have a set of advantages and disadvantages and range from classic eLearning platforms via assistive technologies to social media channels. They serve different target groups (e.g. employees, personal care givers, students, social media users, older adults, hospitals), have diverse transfer possibilities (e.g. healthcare organizations, educational institutions, social care), but all underline the importance of lifelong learning as well as informal learning settings and the necessity of general digital literacy of the target groups.

Based on the results from the assessment of the learning tools it could be recommended the following methodologies/ activities from the learning tools to be included in the D-CARE learning process and to be used for development of the Manual of the ILE Toolkit:

- o Involvement of mentors and volunteer in the learning process; organization of educational meetings with mentor in a group of up to 10 people (online or face-to-face); organization of networking events for elderly people. Online and face-to-face training programs.
- o Organization of the learning process by videos and testing of the gained knowledge – trainings could start with a live streaming to present its content; trainings are designed to convey important key facts to learners; report on the progress of the trainees can be easily generated from the platform, as well as a description of how the result of each trainee is formed; Each course has a "how to" screen for to help trainees; what is learned is checked after each topic of the course through a questionnaire with a choice of multiple answers, thus personalizing the gaps; all courses to have audio for easier perception of the material by the learners;
- o The approach used for raising awareness on the problems of the old people with dementia, methodology for presenting of the basic information about Alzheimer, dementia, COVID-19, etc through digtal tools - video
- o Learning through self-help closed online group, which is formed with the participation of elderly people with disease, their relatives, and health and social care professionals;
- o The methodology used for development of projects by trainees in partnership);
- o Exchange of experience from abroad, e.g. some PPs could support training process of trainees from Bulgaria or other country different from their own – webinars, workshops.

In order to support various types of learning for various target groups all available tools would be useful but it is necessary to continuously assess tools in order to ensure the use of best one in the current moment and situation.

Most of the tools need combination with physical form of learning (e.g. mentoring) to be most efficient. This means the e-learning integration is possible with certain limitations.

Although, the institutions can find funds for piloting, there are still worries about the financial sustainability.

Conservative approach might be a limitation for adoption. Some very innovative tools (e.g. VR) still need tndividual approach and can't be fully used for some specific subgroups.

In general, two groups of older people can be identified - 'younger' older people and those who are 80 or older. The former are much more flexible and have more knowledge in ICT. Older people who are 80 years or older need very simple solutions. Accordingly, e-learning courses and teaching materials should be organized on two levels - simple programs should be organized for older people aged 80 or older and those who are ICT illiterate, and more complex ones for "younger" older people and those who are already ICT literate. The challenge is that learning how to use ICT and implement smart health and care services is multi-faceted - we need these kinds of solutions and training, but it will be a big challenge to address such a broad target group (older adults, older adults with chronic conditions, dementia patients, formal caregivers, informal caregivers, unemployed and low-skilled people over 55) with very different levels of knowledge, so different levels of courses will probably be needed in defining and designing educational programs. Another thing we have neglected that could be crucial - older people also need motivation, which is not necessarily available in e-learning. We need to organize workshops that convince them of the potential of ICT and the importance of using ICT-based services and devices. We need to make them aware that ICT-enabled tools and services are valuable, meaningful and useful to them. Motivation is related to the identified need. Formal caregivers (doctors, nurses, etc.) are also important - if they need to incorporate a service into the work process, they will be much more interested than if they see no point in doing so. Another problem is that both formal caregivers and seniors don't know what is currently available on the market. It is also important to educate them on what is available in the first place. The key to implementing smart care and health services and e-learning tools is motivating the target groups and their actual identified needs.