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Linked Care - Information transfer in mobile care and support

Kathrin Mühlhauser, Franz Werner,
Elisabeth Haslinger-Baumann, Theresa Galanos, Doris Zeidler

Kathrin Mühlhauser, BSc MSc

Junior Researcher

FH Campus Wien | University of Applied Sciences, Department Health Sciences

kathrin.muehlhauser@fh-campuswien.ac.at



Kathrin Mühlhauser, BSc MSc

Junior Researcher

FH Campus Wien | University of Applied Sciences, Vienna, Austria

Linked Care - Information transfer in mobile care and support

Scientific/Student Assistant

Ludwig Boltzmann Institute for Digital Health and Prevention, Salzburg, Austria

*EXPEC - Sustainable Healthy Behaviour Change in Cardiac Rehabilitation:
An Exploration of Patient Perspectives*

External Lecturer

FH Salzburg | University of Applied Sciences, Salzburg, Austria

Ambient Assisted Living; Demographic Change; Digitalization in Sector of Public Health

Occupational Therapist

(2014 - 2021)

Gemeinnützige Salzburger Landeskliniken, Salzburg, Austria

Health Assisting Engineering – Master of Science in Natural Sciences

(2018 - 2020)

FH Campus Wien | University of Applied Sciences, Vienna, Austria

Occupational Therapy – Bachelor of Science in Health Studies

(2011 - 2014)

IMC FH Krems | University of Applied Sciences, Krems/Donau, Austria



- 1. Teamwork / Project Partners**
- 2. The Problem**
- 3. The Solution**
- 4. Target Groups**
- 5. Working Packages & Set Goals**

Enduser Partners

Akademie für Altersforschung am
HAUS DER BARMHERZIGKEIT

DIE JOHANNITER 
Aus Liebe zum Leben

Aus Liebe zum Menschen. 
WIENER ROTES KREUZ

volkshilfe.
GESUNDHEITS- UND SOZIALE DIENSTE GMBH

volkshilfe.
WIEN

Technology Partners

LOIDL CONSULTING
& IT SERVICES GMBH

STESZGAL
Informationstechnologie GmbH



A APOVERLAG

 **carecenter**

Scientific/ Research Partners

**FH
TECHNIKUM
WIEN**

 **universität
wien**

 **FH
CAMPUS
WIEN**
UNIVERSITY OF APPLIED SCIENCES

The Problem

- An increase in care effort due to **demographic change**.
- A decreasing offer of nursing and care.
- Immense workload in mobile care and support as well as less time, little recognition & high health risk.
- Finishing **documentation** work in leisure time.
- Standards for communication systems are missing.
- A lack of **information exchange** between health professionals.
- Data gaps in all areas of social welfare and health care.



The Solution

Information and communication technology (ICT) support can bring significant improvements for home care

- clients/patients,
- relatives,
- nursing staff

LICA - Linked Care will provide

- interdisciplinary support,
- the connection of relevant participants in the care process
 - mobile care,
 - therapists,
 - general practitioners,
 - pharmacies,
 - relatives
 - clients/patients

The Solution

LICA - Linked Care investigates the end-users' needs and specifies the processes in workshops



User Centered Design

with local representatives and regional political.

The Solution

LICA - Linked Care allows for the exchange and evaluation of care data (nursing, care, therapy, ...) via standardized interfaces (IHE, HL7, FHIR based) throughout Austria.

LICA - Linked Care develops IT systems that address and support practice-oriented challenges, increase digital data availability and reduce the work-related burdens of professional caregivers.

- Experiences with existing IT systems,
 - Austrian electronic health record system (ELGA)
- serve as

a starting point to enable a continuous information supply in mobile care.

Target Groups

Clients and relatives.



Healthcare professionals (nursing, care, therapy, ...).

Healthcare provider (hospitals, social welfare associations, rehabilitation clinics, health insurance companies, ...).

Working Packages & Set Goals

Timeline	2021	2022	2023	2024	2025
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1. Needs Assessment	Environment Analysis
	User Needs
	Ethics & Law
	Research Report

2. Analysis & Concept	Priorisation
	Quality Criteria, Guidelines & Specification
	Structural Networks
	Prototyping & Usability

3. Specification	Getting Feedback
	Guideline Care Summary
	Function Determination of LICA
	Interfaces
	Integration AAL

Working Packages & Set Goals

Timeline	2021	2022	2023	2024	2025
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4. Solution Development	Linked Care System (App, Portal, ...)
	Integration Test

5. Field Trial & Evaluation	Recruiting Subjects
	Evaluation Plan
	Installation, Launching the System
	Field Phases
	Evaluation

6. Dissemination & Exploitation	Exploitation Strategy
	Publication
	Release
	Laboratory Findings

Thank you for your attention.

Discussion & Questions:
kathrin.muehlhauser@fh-campuswien.ac.at



References:

Antonovsky A.: Unraveling the mystery of health: how people manage stress and stay well. San Francisco: Jossey-Bass, 1987

Firgo M., Famira-Mühlberger U.: Ausbau der stationären Pflege in den Bundesländern. Quantitative und qualitative Effekte des Einsatzes öffentlicher Mittel im Vergleich zur mobilen Pflege. WIFO. Wien. <http://www.wifo.ac.at/www/pubid/47447>, 2014.

Haslinger-Baumann E., Lilgenau A., Binder C., Gugenberger K.: Qualitätsmerkmale in der 24 h-Betreuung aus der Perspektive der Betroffenen Ergebnisse einer Pilotbefragungsstudie in Österreich. In Pflege Die wissenschaftliche Pflegezeitschrift für Pflegeberufe, 2019.

Jung-Joo L: Against Method: The Portability of Method in Human-Centered Design, Doctoral Dissertation, Aalto University, School of Arts, Design and Architecture, Department of Design, Helsinki, 2012.

Mittermann B.: Langzeitpflege: Wo neue Herausforderungen auf ein altes System treffen. Arbeit&Wirtschaft. <https://www.arbeit-wirtschaft.at/langzeitpflege-herausforderungen/>, 2019.

Wright M., Block M., Unger H. v.: Stufen der Partizipation in der Gesundheitsförderung: Ein Modell zur Beurteilung von Beteiligung. In: Gesundheit Berlin (Hrsg.): Dokumentation 13. bundesweiter Kongress Armut und Gesundheit, Berlin, 2007.