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WIENER NEUSTADT**

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CARE ABOUT CARE

*Show me what you see*

**Remote Assistance for  
Home Care Workers**

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12 April 2024  
Seamless Learning Conference  
WU Wien

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**AAL** **PROGRAMME** **Federal Ministry Republic of Austria** **FLANDERS INNOVATION & ENTREPRENEURSHIP** **Flanders State of the Art** **Luxembourg National Research Fund** **Schweizerische Eidgenossenschaft** **Insulator - Swiss Innovation Agency**

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**EUROPEAN PROJECT**



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**Project duration: 1 June 2021 – 30 November 2023**

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## Remote Assistance for Home Care Workers



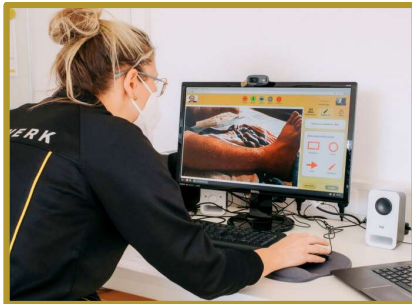
### Remote Care Assist (RCA)

- Provides training and assistance for on-site care workers
- direct video and audio communication
- enables a third person to assist in various situations on-site

Two components:

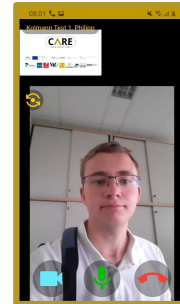
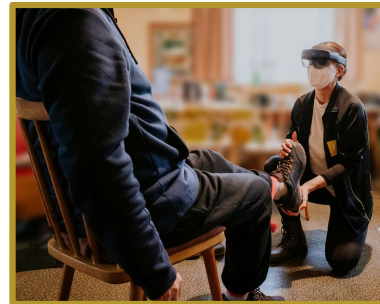
#### (i) Care Expert Center (CXC)

Organisational unit & web app for care experts



#### (ii) Remote Support Apps (RS)

AR/MR app for MS HoloLens and smartphones



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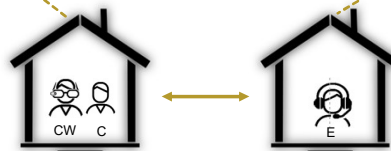
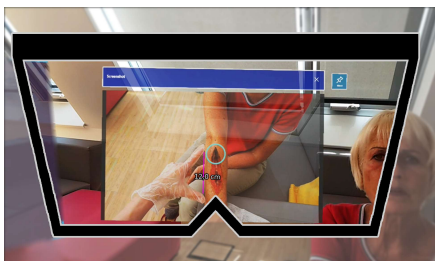
Source: WU 2023

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## Remote Assistance for Home Care Workers



RCA allows the care worker on-site to communicate via RS with a remote care expert in the CXC.




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### Remote Assistance for Home Care Workers



**Main features:**

- Video + audio call (GDPR conform)
- Screensharing & image transmission
- Screenshots & 2D marking
- 3D marking
- Documentation interface
- Visual ruler



**Primarily used for:**

- Wound care
- Dispensing medication
- Care documentation

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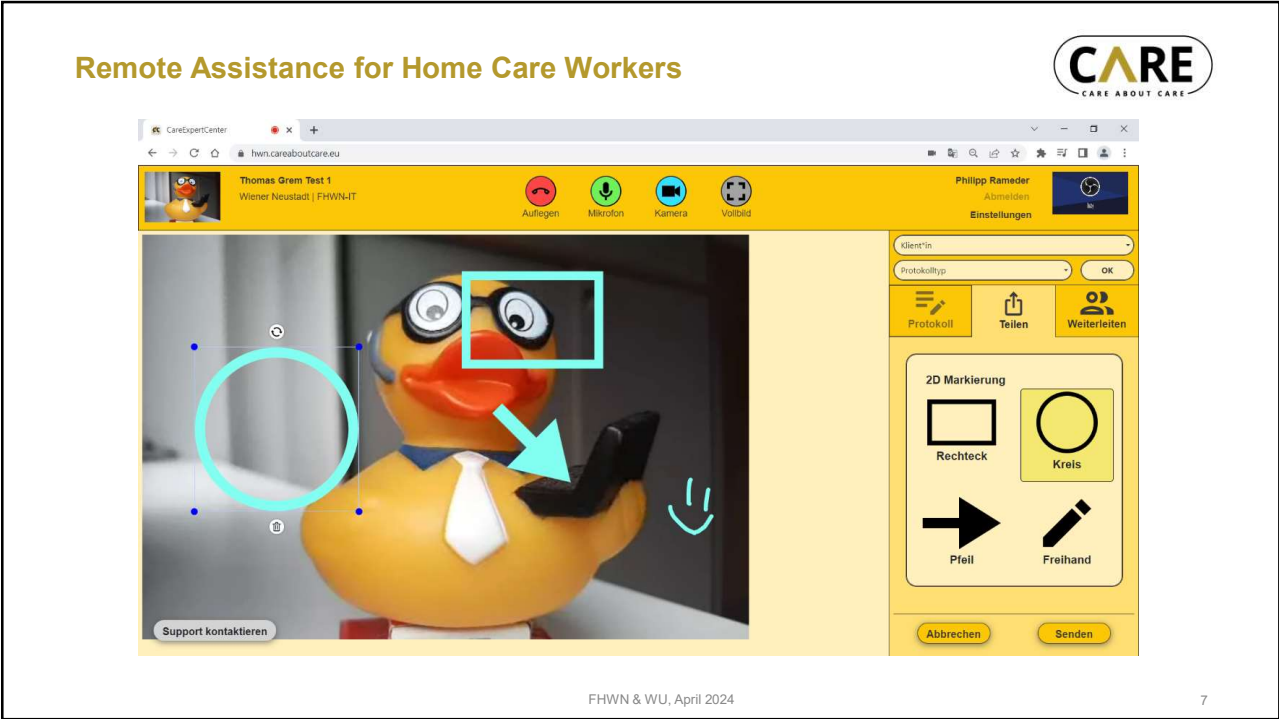
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### Remote Assistance for Home Care Workers

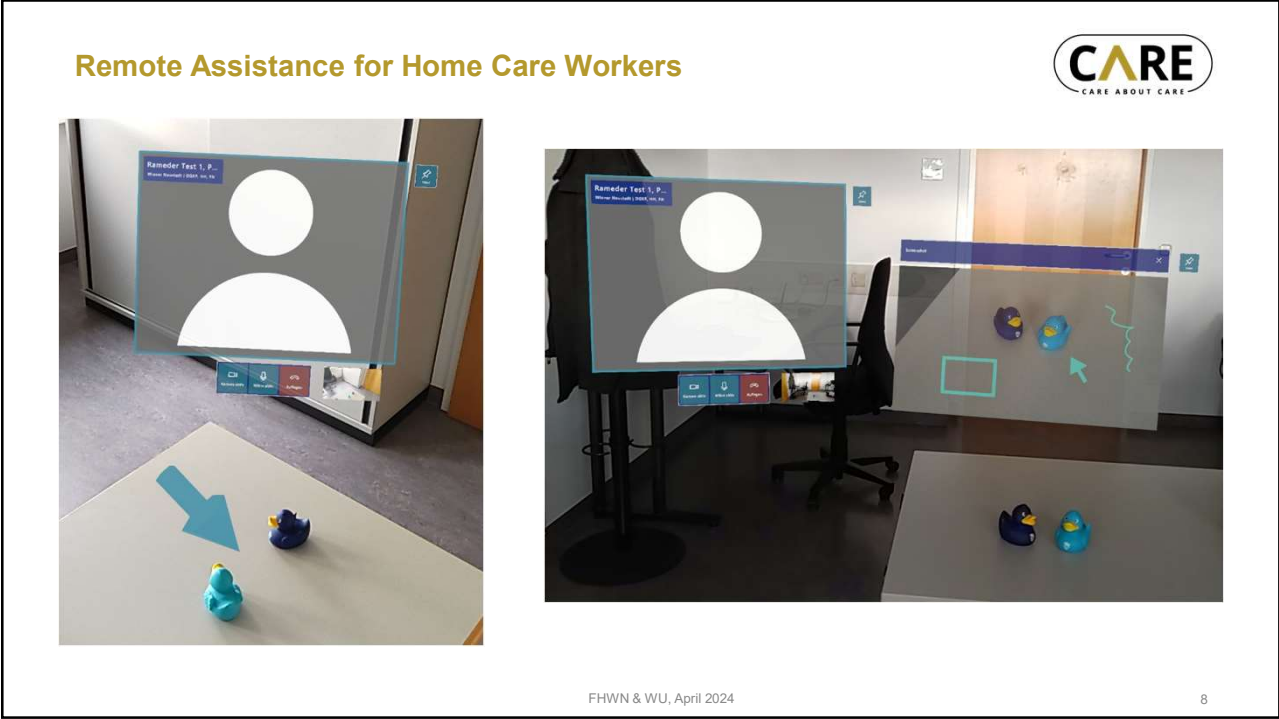


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## Remote Assistance for Home Care Workers




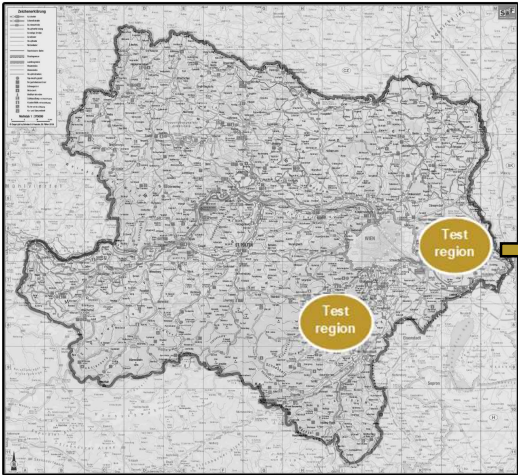



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## Evaluation methods





**2 Mixed-Reality Test regions in Austria:**

- March 2022
- **March to July 2023**

Characteristics	Population (care & nursing staff)	Sample (nursing staff only)	Participated in focus group
<b>Total number of staff (incl. care experts)</b>	<b>39</b>	<b>10</b>	<b>6</b>
Number of care experts	4	3	2
Number of care and nursing staff	35	7	4
Mean age of staff (SD)	47.7 (9.6)	41.2 (8.4)	35.8 (5.2)
Range	29 – 60	29 – 55	29 – 45
Median	49	39.5	35.5
Share of women staff %	92.3%	90%	100%
<b>Total number of home care service users (HCSU)</b>	<b>229</b>	<b>33</b>	<b>-<sup>1</sup></b>
Mean age HCSU (SD)	80 (mean)	82.1 (11.2)	-
Range	(range and median	29 - 93	-
Median	n/a)	85	-
Share of women HCSU %	67.2%	60.6%	-
Average care level 0-7	3.0	3.4	-

Note: <sup>1</sup>... no focus group planned for HCSU  
 Source: WU C<sup>2</sup>C HoloLens test center, data AUT, 2023, and data provided by [biltswork](#) NO

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### Evaluation results (selection): Remote Care Assist system

- **Useful use cases**
  - Wound care (staff & experts) & training on the job (staff)
    - "Yes, it was **good as support**. I got some good **tips from the nurse**. Yes, and also with the **wound progress control**, where I sometimes don't know what kind of wound it is. Because once I called the wound manager and she explained it to me. That was great." (B4, L211-215)
  - Medication issues (staff)
  - Get insights into the work environment (households) (experts)
    - "It's not just related to the wound, but other situations as well, yes? [...] **Interaction between** spouses, married couples, for example." (X1, L45-48)
- **Problematic target groups**
  - Care service users with dementia or hearing problems
  - Not care workers but nursing staff
- **Requirements for a successful implementation**
  - Technological: Linkage to the care documentation
  - Organisational: Experts must be accessible (regional or supra-regional); workplace & workflow
  - Implementation: Training for all eligible staff
  - Policy: Funding for technological innovations for home care / regional internet connection.



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### Contact

**Project coordinator „Care about Care“ (C^C):**



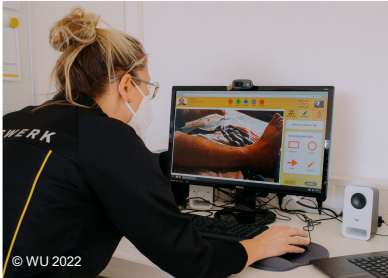
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**Evaluation of the Remote Care Assist system**

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