

NATIONAL REPORT ON TECHNOLOGY'S ROLE IN CARE PROFESSIONS: AUSTRIA

TRAINING NEEDS, DIGITAL COMPETENCE, AND PROVISION GAPS FOR CARE ASSISTANTS AND HOME CARERS



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DiMiCare DESK RESEARCH - AUSTRIA - ÖJAB

EXISTING PRACTICES

THE PRESENT STATE OF TECHNOLOGY USE IN LOWER QUALIFIED CARE PROFESSIONS IN ELDERLY CARE

In recent years, the adoption of technology in elderly care has seen significant growth in Austria. However, the extent of this adoption can vary based on the level of care and the qualifications of the caregivers involved. For instance, lower qualified care professionals, such as nursing assistants and caregivers, have increasingly integrated various technological tools into their daily routines. These tools include electronic documentation systems, telemedicine solutions, and assistive technologies.

Electronic documentation systems have become a staple in many nursing homes and elderly care facilities across Austria. These systems provide a centralized platform for care professionals to efficiently access and update patient data. Important information, such as medication schedules, care plans, and patient histories, is stored in an organized manner, allowing for quick retrieval and updates. This not only enhances the efficiency of the care provided but also ensures that all team members are working with the most up-to-date information, thereby improving overall care coordination.

Telemedicine has emerged as a valuable tool in elderly care, particularly highlighted by its increased use during the COVID-19 pandemic. Technologies such as video conferencing have enabled care facilities to connect residents with healthcare professionals remotely. This approach has been instrumental in limiting in-person contact, thereby reducing the risk of infection while still providing necessary medical consultations and check-ups. Telemedicine has proven to be a vital resource in maintaining the health and well-being of elderly residents during times when traditional healthcare access is restricted.

Various **assistive technologies** have also been integrated into the daily lives of elderly residents in Austria. These include devices and systems designed to aid with mobility, communication, and daily activities. Examples include sensor-based monitoring systems that track the movement and health status of residents, automated medication dispensers to ensure proper medication management, and communication aids for those with speech or hearing impairments. These technologies help improve the quality of life for the elderly by promoting independence and ensuring their safety.

Despite the evident benefits, the adoption of technology in elderly care is not uniform across all care professionals. This variability can be attributed to differences in training, access to resources, and the specific needs of the care environment. Lower qualified caregivers may face challenges in fully utilizing these technologies due to a lack of training or familiarity. Additionally, the availability of resources can significantly impact the extent to which technology is integrated into care practices. Facilities with limited funding may struggle to invest in the latest technologies, leading to disparities in the quality of care provided.



ANALYSIS

NATIONAL PROJECTS AND INITIATIVES

In Austria, there is no legal regulation that deals specifically or exclusively with telemedicine (Telemed Austria: https://www.telemedaustria.at/).

However, in recent years, the Austrian government has implemented a number of initiatives aimed at increasing the use of technology, covering elderly care as well, with the aim of improving the quality of life for elderly citizens and reducing the burden on the healthcare system.

- Telemed Austria is the central interest group for applied telemedicine and eHealth in Austria,
 Liechtenstein and South Tyrol. The focus is on the promotion, dissemination and
 implementation of evidence-based and innovative solutions in telemedicine and eHealth.
 Telemed Austria combines findings from university research with the practical use of
 telemedicine applications from the medical industry.
- AAT Living Lab: This is a research centre that focuses on developing and testing new ambient
 assisted living (AAL) technologies. The Living Lab works closely with elderly people to design
 and test new technologies, with the aim of improving the quality of life for elderly people and
 reducing the burden on caregivers.
- 3. <u>IN-ICT-CARE</u> by Synyo is an Erasmus+ funded project focusing on digitalisation in the field of care in Türkiye and the EU.

These are just a few examples of the good practice initiatives in Austria. These initiatives demonstrate how technology can be used to support elderly people and improve their quality of life. By providing training, developing new technologies, and offering support, these initiatives help to ensure that elderly people in Austria can benefit from the latest technological advances.

POLICIES

Several governmental policies in Austria aimed at improving the digital competences of care assistants and promoting the use of technology in elderly care. Here are a few examples:

1. <u>Digital Roadmap</u> presents around 150 specific measures in twelve fields of action in order to ensure that Austria can optimally exploit the potential of digitization. The Roadmap brings together the activities of all government departments in a joint Federal Government strategy paper for the first time.

More specifically, in the field of care, the following measures have been identified:

- Implement and continue to develop the electronic health record scheme (<u>ELGA</u>) in the intramural and extramural sectors nationwide
- Design an electronic vaccination record, electronic mother-and-child medical card and electronic prescription (eRezept)



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- Set up contact and advice centres for the whole population, e.g. in the form of an electronically supported initial contact and advisory service (TEWEB)
- Develop a patient summary that contains key medical data on the patient, such as blood group, allergies and drug intolerances, and can be viewed in other countries subject to the patient's consent
- Encourage the widespread use of assistance systems to help elderly people and people with special needs
- Prepare a framework for electronic health services in areas such as telemedicine
- 2. <u>Digital Austria</u> is the Austrian Federal Governments initiative for a successful digitalisation in Austria. The aim is to consolidate Austria's role as a leading digital nation to guarantee and expand prosperity, job opportunities as well as the quality of life in the long term.

These policies demonstrate the commitment of the Austrian government to promoting the use of technology in healthcare and social care, and to improving the digital competences of healthcare professionals, including care assistants. By supporting the development of new digital tools and providing training and support for care assistants, the government is helping to ensure that elderly people in Austria receive the highest quality of care possible.



MAPPING OF NATIONAL TRAINING NEEDS AND OFFERS FOR HOME HELPERS AND CARE ASSISTANTS WITH REGARD TO DIGITAL COMPETENCES

The Austrian government has launched a number of initiatives aimed at improving the digital competences of the population in general, including care assistants and home helpers. These initiatives include the National Digital Skills Strategy, which includes measures aimed at improving digital literacy and increasing the availability of digital training and support.

There are also several training programmes offered by private providers in Austria aimed at improving the digital competences of home helpers and care assistants. For example, the Austrian Workers' Samaritan Association (ASBÖ) offers training courses covering topics such as basic computer skills, using the internet, and working with electronic health records.

Overall, there is a growing recognition in Austria of the importance of digital competences for home helpers and care assistants, and several initiatives and training programs are available to support the development of these skills. However, more work may be needed to ensure that all care assistants and home helpers have access to the training and support they need to make the most of digital technologies in their work. It is essential to mention that no trainings on digital literacy were found in Austria focusing solely on health care professionals, but only those providing trainings and education to the general population.

MAPPING OF NATIONAL FORMAL CARE PROFESSIONS/ NATIONAL VET SYSTEMS AND REGULATIONS OF CARE PROFESSIONS

In Austria, the formal care professions are regulated by the Federal Ministry of, Social Affairs, Health and Consumer Protection (BMASGK). The BMASGK is responsible for overseeing the national vocational education and training (VET) system for care professions and for setting the regulations and standards for care professionals.

The BMASGK has established a number of formal care professions, including nursing, geriatric nursing, health and nursing assistance, and social work. Each of these professions has its own specific training requirements and career paths.

The BMASGK is responsible for setting the training requirements and standards for care professionals, as well as for accrediting and monitoring the training programs offered by vocational schools and other training providers.

In Austria, the VET system for care professions includes both school-based training and apprenticeships. Care professionals can also pursue additional training and education to specialise in specific areas of care, such as geriatric care or palliative care.

In addition to the national regulations and standards for care professions, each of Austria's nine federal states has its own laws and regulations governing the provision of care services. These regulations may vary by region, and may impact the training and career opportunities available to care professionals.

Overall, the national VET system and regulations for care professions in Austria are designed to ensure that care professionals receive high-quality training and are equipped with the skills and knowledge needed to provide effective care to patients and clients. However, there is ongoing debate and



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discussion around the need to improve training and education opportunities for care professionals, particularly in the context of an aging population and growing demand for care services.

More information available on: https://www.sozialministerium.at/Themen/Pflege/Pflegereform/Ausbildung-in-der-Pflege.html

MAIN FINDINGS OF THE FIELD RESSEARCH

MAIN FINDINGS OF INTERVIEWS

In Austria, **five interviews** were conducted by ÖJAB with the relevant stakeholders in order to gather first-hand information on the needs and current state of the use of digital tools in the elderly care and health sector. The stakeholders that were interviewed are **four mobile and stationary care assistants and home aides in the elderly care sector, and one trainer/manager at a nursing school.**

TEACHER/TRAINER AT NURSING SCHOOL

In order to collect relevant information on digitalisation among care assistants, an interview with the **course director of care at a nursing school** was conducted who provided an insight into the training units implemented at a nursing school in Vienna.

Overall, the use of digital tools is very present in nursing schools for care assistants. Foremostly, various digital tools are used for communication within the school, as well as documentation of various data (staff at school, but also courses). It is outlined that there are many tools that can be used for documentation and that they vary from institution to institution, but there are no specific (known) regulations provided by the Austrian government, which gives the institutions the flexibility to use tools that are most suitable for their needs. One of the tools used by this school for documentation purposes is **Vivendi**.

In order to prepare future care assistants for their job, the school also puts a special focus on developing their digital skills. It has been recognised that everything starts in the training phase, which resulted in the school implementing a digitalisation strategy which is not always simple, but is crucial for improving digital literacy and efficiency of future care assistants.

All trainees have access to a PC at school and one the first training units is the development of general computer skills. Here, they have the opportunity to learn the very basics, such as how to turn on and use the computer, how to use MS Office, how to access different platforms on their PCs etc. Besides, at the very beginning, they have trainings on media competences, where they are taught how to write emails, while also considering GDPR, and how to upload documents and data onto different learning platforms.

There are also training units with gamification elements, which are useful not only for the care assistants, but also the patients. During school, the trainees are also used on how to use various **digital**





tools relevant for the patients (blood sugar monitor, blood pressure monitor, etc.) as it is crucial for their everyday work, but also – in case patients have issues with applying their own devices – the care assistants are the first persons to be asked to support them. Therefore, being able to handle different digital tools/devices is essential for care assistants.

When considering the existing digital competences of trainees in the school, it has been recognised that these may vary among them. However, **the age is not a significant factor** in this context. The school has trainees from the age of 18 to 56 with various backgrounds: people with no previous education or experience, people with academic backgrounds, with many years of experience, people with migration experience etc. These factors do affect the level of digital literacy, and there are many cases where young people are not proficient in using digital tools, whereas more senior trainees with previous education or experience encounter no difficulties.

Digitalisation at this school is very much supported and the interviewed trainer considers to have the skills to use such tools and also recognises their benefits. They also expressed interest to learn about new digital tools applied in other countries as well.

A special attention is given to GDPR at the school as well. Already at the second class, a data protection officer from the managing organisation facilitates a training on GDPR with the trainees, where they learn how to handle different data using different platforms. As indicated above, they are made sensible about the proper use of emails as well.

Overall, digitalisation and digital literacy are very important topics at the nursing school. It must be mentioned, however, that there have also been some difficulties in the past, especially at the beginning of the COVID-19 pandemic. Given that most trainees at the school decide to pursue this career is human contact and support, and interpersonal communication, many have left the school after the online courses were introduced, due to the reduced face-to-face units.

Besides, many people have had negative experiences with digital tools in the past, which result in them being more sceptical about their application in their everyday work. It is necessary to outline that the negative experiences are rooted in the bureaucratic procedures needed to be followed, and not digitalisation. The complex procedures were and are still present in both analogue and digital approaches, whereas they were simplified by digitalisation.

However, it has been recognised that people who do not have developed digital competences, can be very slow when using the provided tools, which results in the later mentioned reduced focus on the patient. On the other hand, people who develop and improve their digital skills are able to finalise their tasks on the tools faster with more accuracy, which increases their efficiency and allows them to be more present for their patients. Therefore, equipping future care assistants with necessary digital skills is crucial for increasing the quality and efficiency of their work.

One of the important factors to be considered with digital tools is the need to have backup systems in place in case the digital tools cease to work. Besides, digital tools do represent a financial burden to different institutions, which often limits them and does not allow for a uniform system used by all health care institutions/elderly homes equally. Therefore, it was recognised that the state should be more involved, and should develop and support more digitalisation initiatives in the field of health care.



CARE ASSISTANTS AND HOME AIDES

Job Satisfaction

All interviewees emphasised the importance of interpersonal relationships and direct interaction with patients as the most rewarding aspects of their jobs. The home aide highlighted the value of building intimate relationships within the personal sphere of clients' homes and appreciated the inherently social nature of the job. The care assistant and the trained (dipl.) nurse both stressed the meaningful impact of their work on patients' lives and the importance of collaborative patient care.

Utilisation of Digital Tools in Nursing and Care

Digital tools are viewed positively by all participants for their role in enhancing care quality through ease of use and improved accuracy. The care assistants and home aides noted specific tools such as fall sensors, which they found particularly helpful. The care assistant also appreciated the clarity and accessibility of digital documentation over traditional handwritten notes. The home aide mentioned that digital tools provide significant support to both clients and caregivers, aiding in communication and efficient record-keeping.

The following digital tools are used in elderly care homes by staff:

- smartphones
- tablets
- PCs
- SpO2 (Oxygen saturation) monitor
- Blood pressure monitors
- Movement sensors
- Fall sensors
- Clocks reporting a patient has left the home (patients with dementia)

Digital Infrastructure at Workplace

The interviewees reported varying levels of digital infrastructure at their workplaces. The trained (dipl.) nurse described a medium to poor setup with a blend of digital and manual processes. The care assistant found the digital infrastructure generally good, equipped with several digital tools, but noted that it varied across different work locations. The Heimhelferin emphasized the extensive use of smartphones for safety and communication, indicating a well-integrated digital environment.

Digital Tools Used by Clients

Digital tools such as fall detectors, hearing aids, mobile apps, e-cards, and digital prescriptions are commonly used by clients. All participants observed that older clients often require assistance with these devices, highlighting a gap in digital literacy among this demographic.



The following digital tools are requently used by patients:

- Alexa
- Fall detectors
- Sensory mats under the mattresses (movement outside the bed frame reported to the staff)
- Hearing aids/devices
- Bracelets or pendants to be pressed when help is needed (in mobile care, many of them are not attended during the day, so these enable them to call an ambulance, etc.)
- Mobile phones (very few have smartphones)
- Hoisting lifts (provided by hospitals)
- Blood sugar monitors
- Digital scales

Necessary Digital Competencies

Basic competency in smartphone operation and digital documentation was deemed essential by all participants. The care assstantns and home aides and stressed the importance of being proficient with specific digital health tools, such as blood pressure readers. The trained (dipl.) nurse emphasised the need for ongoing training, particularly for older colleagues, to enhance digital skills.

Implementation and Challenges of Digital Tools

Digital tools are perceived as well-implemented by the care assistant and home aide, though technical issues were occasionally mentioned. The trained (dipl.) nurse noted suboptimal utilisation of digital tools by some staff, especially older colleagues. Common challenges cited included technical glitches, reliance on backup analog methods, and the time required to familiarize oneself with new systems.

Effectiveness and Usefulness of Digital Tools

Digital tools were unanimously regarded as beneficial for improving care quality and efficiency. The home aide expressed a desire for more extensive digitalisation across all healthcare levels. Both the care assistant and home aide appreciated the role of digital tools in streamlining communication and administrative tasks.

Data Protection and Ethical Issues

Data protection and ethical handling of sensitive information were significant concerns for all interviewees. They underscored the importance of privacy and proper data management, with specific practices such as locking laptops and securely disposing of sensitive documents highlighted by the home aide.

The interviews reveal a general consensus on the positive impact of digital tools in the healthcare sector, though experiences vary depending on the specific roles and workplace environments. The reports underscore the necessity for ongoing training and support, particularly for older staff and





clients, to enhance the effective use of digital tools. Moreover, improvements in digital infrastructure could further empower healthcare professionals to deliver high-quality care.

MAIN FINDINGS OF QUESTIONNAIRE

An online questionnaire was shared with relevant stakeholders across Austria in order to collect quantitative data on the topic of digitalisation in the field of health/elderly care, as well as digital competences among lower qualified health care professionals (care assistants and helpers, etc.)

The **five respondents** outlined that basic digital competences are necessary for care professions, such as using PCs, using smart phones and tablets, but also the acceptance and flexibility to use digital media. Data protection and application of technologies relevant to care are also considered essential.

According to the respondents, lower qualified care professionals sometimes do lack digital skills, but it does not depend on their qualification level, but on their general digital competences acquired in the past (use of PCs, smartphones, apps). Very often, the there is a language barrier as the systems and devices are set up in German, so it might represent an issue to assistants with migration experience.

Some of the challenges when applying digital tools are usually data protection and user-friendliness of the provided systems, as well as the amount of training and finding enough time to input information into device while on the job.

The majority of the respondents to feel qualified to use and apply digital tools at work as they had trainings during their onboarding process.

It was highlighted that certain quality standards and official regulations are necessary for documentation purposes, as currently there are no uniform approaches, and assistants therefore, record best to their knowledge. It is recommended to have defined digital documentation requirements and possibilities, as documentation is essential because it protects workers and clients as well.

Overall, it is found that digital technologies should be user-friendly and should comply with data protection regulations. They also must not additionally burden care assistants, but should replace existing approaches in order to optimise the workflow.



CONCLUSION

The findings of this report highlight the crucial role of technology in the elderly care sector in Austria. It is evident that digital tools have been increasingly adopted, enhancing the efficiency and quality of care provided. Electronic documentation systems, telemedicine solutions, and assistive technologies have become integral to the daily operations of care facilities, significantly benefiting both caregivers and residents. Despite these advancements, the extent of technology integration varies, influenced by factors such as the caregivers' digital literacy and the availability of resources.

National initiatives and policies, such as the Digital Roadmap and Digital Austria, demonstrate the government's commitment to promoting digital competence among care professionals. However, there is a recognised need for further investment in training programmes to ensure all caregivers are adequately equipped to use these technologies effectively. The report emphasises the importance of continuous education and support, particularly for lower qualified care professionals, to bridge the digital skills gap.

Interviews with stakeholders reveal a positive reception towards digital tools, with caregivers acknowledging their benefits in improving care quality and administrative efficiency. Nevertheless, challenges such as technical issues, data protection concerns, and the need for user-friendly systems persist. The variability in digital infrastructure across different care settings underscores the necessity for standardised approaches and government support to ensure uniform access to technological resources.

The questionnaire responses further corroborate the need for basic digital competencies in care professions, highlighting common challenges and the importance of defined digital documentation standards. The overall sentiment points towards the essential role of digital tools in optimising care delivery, provided that caregivers receive appropriate training and support.

In conclusion, while significant strides have been made in integrating technology into elderly care in Austria, ongoing efforts are required to enhance digital literacy and ensure equitable access to technological advancements across the sector. This will not only improve the quality of care but also empower caregivers to perform their roles more effectively, ultimately benefiting the elderly population they serve.



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Annexes

The following documents are attached to this report:

- DiMiCare Online Questionnaire AT (German) PDF. Link: https://forms.gle/fZ7WZ1U9H7hTWHmbA
- DiMiCare Interview Guidelines AT (German) PDF. Link:

 https://docs.google.com/document/d/13Api_GxZIAZN2wnw_bBBUnnjeo12rXAX/edit-2usp=sharing&ouid=116771449746283331251&rtpof=true&sd=true