

Digital applications as a game changer?

How smart technologies and AI
help managing bottlenecks in care.

Summary of the results from the panel discussion "Does artificial intelligence save our elderly care?", on May 9, 2023, Haus der Zukunft, Berlin and the AgeTech study "Evaluation of new digital technologies in care" from March 2023.

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at Haus der Zukunft, Berlin

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EXECUTIVE SUMMARY

Nursing homes under pressure

digital technologies help
manage bottlenecks



Nursing homes are under extreme pressure. Quality of care and the safety of residents is expected to be top-notch. At the same time, staff shortages and high staff turnover are a major challenge for management and operators.

During the debate at Berlin's 'Haus der Zukunft', the experts from science and practice agreed that digital systems that integrate seamlessly into everyday life and are easy to operate can help relieve staff and increase the quality of care at the same time. Yet, employees in care facilities would not have to fear that their work would soon be carried out by a nursing robot. The targeted use of digital aids could save personnel capacities that could be better used elsewhere for humanizing care.

Furthermore, digital solutions hold tremendous potential in the long run by boosting job satisfaction among nursing staff and effectively curbing staff turnover. Encouragingly, the current AgeTech survey reveals a widespread eagerness to embrace new technologies in the caregiving field. Additionally, individuals in need of care experience notable advantages through the use of digital tools, as they alleviate the workload of caregivers. By allowing caregivers to dedicate more time to providing personal attention, these tools contribute to heightened happiness levels and an overall sense of comfort within the facility for both residents and staff.

DISCUSSION

Does artificial intelligence save our elderly care?

May 9, 2023, Haus der Zukunft, Berlin.



Participants

Dr. Kathrin Seibert

University of Bremen, Institute for Public Health and Nursing Research (IPP)

Menia Etrich

German Digital Health Association

Sascha Saßen

Head of CQM Korian

Vera Led

Head of Nobi Smart Lamps DACH region

Roeland Pelgrims

CEO Nobi Smart Lamps

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Head of International Business Development Nobi Smart Lamps

Key discussion outcomes

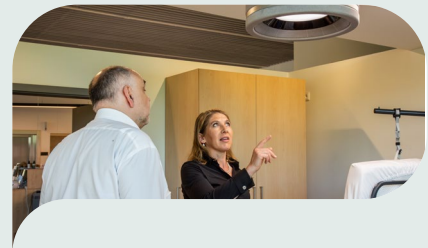


- Digital technologies and AI-driven applications will be indispensable in nursing in the future.
- Digital technologies will not replace caregivers, but will make their work easier and create more room for high-quality, dedicated care services.
- The dialog between providers and practitioners must be intensified. Goal: Development of needs-based technologies.
- All stakeholders (manufacturers, operators, care personnel, care recipients, relatives, SHI, politics, associations) must be involved in the transformation process from the outset.
- Requirement for operators: Participate in testing and development processes: Get out of the lab and into practice!
- In order for these technologies to be used, all facilities need better WiFi/internet connections throughout and employees must be equipped with digital devices.
- The use of digital technologies must play a role in nursing training in the future. Both for trainees and for teachers.



Why are digital technologies and AI-based solutions so rarely used in care?

How do experts assess the opportunities offered by the new technologies?



What needs to happen for digital applications to be used more?



Here's what the experts have to say:

Design to close the gap between people & technology



Roeland Pelgrims
CEO Nobi Smart Lamps

“For the breakthrough of aging technology, we need two things: We need data and we need attractive products. An AI-driven program is only useful if it is fed with extensive data. Then it can meaningfully assist humans with decisions and activities in complex situations. To collect the data, you need solid hardware.”

“In any industry, people expect a lot from manufacturers. For example, clothing. Their main function is to keep us warm. But in reality, we expect much more. Why don't we have the same standards for grooming technology? Boring and unattractive products are not a must. If we want technology to be adopted, then users need to be really excited by it. That is what we are doing at Nobi.”

“If we want older adults and their caregivers to adapt new technologies, then we should stop making care products. We want people to start using new technologies like Nobi, they need to want it, not need it.”

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We need to involve all stakeholders



Sascha Saßen
Head of CQM Korian

“Digitization in care is more than just the electrification of paper or processes. Digitization also always challenges the status quo at all levels of quality.”

“We should distill the best out of artificial intelligence for us with a great deal of creativity and imagination in order to be able to deal with demographic change in an appropriate manner, to relieve the system as a whole, and to provide caregivers with the time and resources they urgently need for the subject of relationships, physical care, and emotion. That which is really in demand on the care recipient side.”

“In my experience, when it comes to the acceptance of new technology, the involvement of all those affected, i.e. all stakeholders, plays a very, very important role. Starting with the person in need of care himself and his personal preferences, which must flow into the solution. Acceptance on the part of the users, i.e., the employees, where there are also different circumstances that have to be taken into account, and of course also from us as facility operators. It’s necessary to select solutions that fit exactly, and I think that from the entire intersection, the best possible solution will then also be found very quickly.”

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“Out of the labs, into the field”



Dr. Kathrin Seibert

University of Bremen, Institute for Public Health and Nursing Research (IPP)

“The benefits of care technology must be tangible in practice for those in need of care, caregivers and family caregivers.”

“We have a lot of potential for digital technologies to fill the gap created by staff shortages and help caregivers who are still providing care do their jobs.”

“I think it’s quite critical to learn about the technologies. So, an appeal to manufacturers and technology: get development out of the labs and into practice. Caregivers who experience technologies and feel the benefits in the care they provide in practice are absolutely open to using digital technologies. The same applies to people with care needs and their relatives. They need to know about available technological offerings and be able to experience them themselves.”

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AgeTech must be reliable, easy to use and non-intrusive



Vera Led

Head of Nobi Smart Lamps DACH region

“We can bury our heads in the sand and wait for conditions to change, or we can do good today, for residents and employees alike, by using innovative, secure solutions.”

“Digital technology will play a big role because it is reliable. Because it gives us the ability to be completely unobtrusive. And because it comes to the aid of both the seniors, whose well-being is at stake, and the care-givers.”

“For the residents, the technology must not be visible as such. It has to be in a way that it just integrates into their daily lives. It’s a nice element that they feel comfortable with. For the people who provide the care, the technology has to be reliably there all the time and work really quickly, without any complicated operator interface. And for the people who are ultimately responsible for care facilities, for example, it clearly has to increase quality, reduce costs, but also be able to document the service claim that is being met. And it has to be audit-proof.”

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Acceptance is based on usability



Peter Henrich
*Managing Director Uckert
Technology Service*

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“AI will help us shorten decision-making paths, make processes more efficient, meaning quality of care for everyone involved in care.”

“AI and digital products will go a long way toward closing the gap created by staffing shortages.”

“Today it has become clear once again that there is a need for an information center. It definitely needs more information, more education. And we can only succeed in this if we get all the stakeholders and all the interested parties around the table so that we can really educate all the target groups well.”

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“Everything goes digital these days, and it’s an absolute necessity.”

“Digital technology is there to support. It will not replace anyone, but will make the work of caregivers easier. The support of the work and the support of the caregivers is so immense through digital technology that in the future care without digital technology will not be possible at all.”

“Acceptance is based on usability. It has to be easy, understandable, without complicated IT knowledge or IT handling.”

We need more information, more education



Menia Ettrich
German Digital Health Association

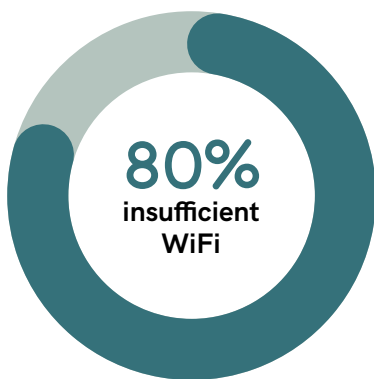
AgeTech survey 2023 proves employees' openness to new technologies

Over 90% of caregivers want to use digital technologies!

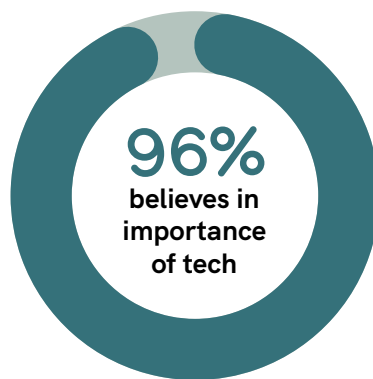
Only one of the key findings of the AgeTech 2023 survey on the topic of "Evaluating new digital technologies in care" among caregivers in nursing homes and hospitals.

Why are digital technologies and AI-based solutions so rarely used in care to date? Is this purely a budget issue or is it perhaps due to the inadequate digital infrastructure of our nursing homes?

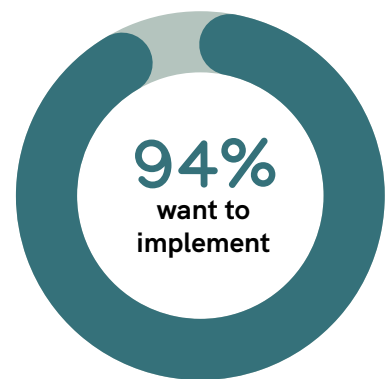
As the current Nobi AgeTech survey shows, almost **80% of all facilities do not have stable and reliable WiFi** in all rooms. So the minimum technical requirements are often not met.



At any rate, this is not due to a lack of interest on the part of nursing staff. According to the survey from March 2023, nurses are very positive about the use of digital systems.



More than **96% of respondents are convinced** that these tools will play an important or even very important role in their everyday work in the future. **94% are happy to integrate these technologies** into their everyday work.



[DOWNLOAD THE FULL SURVEY](#)

A real-world example of how digital technology helps in nursing care

Fall detection with AI

An overview of the results of the 6-month pilot at the Gerstjens nursing home in Belgium (starting August 2022):

- **80% more falls reported**
- **Elimination of long waiting time after falls ('long lies')**
- **No false positive alarms**
- **Short-term assistance for all falls**

Caregivers constantly live with the fear that one of the older people in their care will fall unnoticed and then lie on the floor for longer, possibly injured, without help. Research has shown that elderly people who have been on the floor for more than an hour after a fall have a 50 percent risk of dying within the next six months. That's why nursing rooms are constantly checked, even at night. It's a big hassle for staff and an ongoing disruption of privacy and nighttime rest for residents.

80% more falls reported – long periods of lying down no longer occur

In August 2022, Nobi started a six-month pilot test at the Belgian nursing home Gerstjens. The result surprised and shocked everyone involved at the same time: 62 falls were

detected in the 20 rooms equipped with the Nobi lamps. This means that 80% more falls were detected compared to 20 rooms without the system. So, it's safe to assume that without Nobi, many falls would go undetected.

AI reports 100% of falls

Residents who are able to get up on their own after a fall often do not report it. Often out of shame or because they don't want to be a bother. However, those affected are hardly aware that even small, seemingly harmless incidents can sometimes have major consequences. Thanks to Nobi, the staff at Gerstjens nursing home now have an overview of 100% of all fall incidents and can provide help quickly if needed after a fall. Even falls that would otherwise have remained under the radar because residents were still able to get up independently after a fall are now reported in the nursing file. This works automatically, without staff entering everything manually into the record.

The Care-Ion operator group was so impressed with the pilot that it plans to equip another 700 rooms in its various facilities with smart Nobi lights by the end of 2024.

Underestimated impact of prolonged waiting time after a fall

The impact of waiting a long time for help after a fall is too often underestimated today. A study found that people who were helped 10 minutes after a fall were 50% less likely to die than those who were helped only 30 minutes after the fall.*

source: https://www.physio-pedia.com/Long_Lie#:~:text=Thirty%20percent%20of%20fallers%20i.e.,direct%20injury%20from%20the%20fall.

Quick help after a fall is about:

- Making the difference between life and death
- Saving qualitative life years of residents
- Shorter hospital stays
- Significantly lower care costs during and after hospital admission
- Reduced need for care when returning to residential care centers and thus reduced pressure on care staff.

“Today I saw a great example of how smart technology can support staff and thus improve the quality of care. Technology in care can add significant value.”



Hilde Crevits

Flemish Minister of Welfare, Public Health and Family, during her visit to Gerstjens.

50%
of elderly die within
6 months when they
lie on the floor longer
than 1 hour

65+
Falls main cause
of death by injury

Conclusion: investing in fast intervention after a fall will have significant benefits in terms of reducing suffering, saving time, money, and effort for both individuals and society as a whole.

The future of elderly care starts today



Fall detection and fall prevention

www.nobi.life