Elder Care Robots Are Necessary and Imminent, Say European Experts

Managers and end users are still unsure of whether robots like Lilly are friend or foe.

*By Ulla Meyrick*

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Lilly is very dear to Mrs. Rosenberg, but not someone she would meet for a glass of wine. Lilly is a so-called welfare or elder care robot, and the likes of her are on their way into our homes, as healthcare providers around the world are under pressure to deliver services to a growing population of elderly people.

“Lilly, can you come over and help me, please?”

“Sure, Mrs. Rosenberg! How can I help you?”

“I need to go to the bathroom, Lilly.”

“OK, let me help you with that.”

On this sunny day in 2017, Mrs. Rosenberg is very happy to have Lilly in her life, supporting her in so many ways at home with her one strong arm. No more embarrassment of going to the bathroom in front of her daughter. Lilly also reminds Mrs. Rosenberg to take her medicine, challenges her to do exercises, and gently nudges her to attend the Thursday night bingo at the local community center.

The story about Lilly and Mrs. Rosenberg is fiction, but not science fiction. It is in fact based on real events, as witnessed by Monique van der Linde during trial programs to implement [robots in healthcare in the Netherlands](https://www.washingtonpost.com/news/innovations/wp/2015/05/27/how-a-robot-ended-up-teaching-exercise-classes-in-a-dutch-retirement-home/). She is the owner of [Opinar](http://www.opinar.org/) (Optimising People in Applying Robotics), working as an implementation coordinator and trainer in new technologies.

Van der Linde has no doubts as to the advantages of letting robots help people with tasks they are no longer capable of carrying out themselves.

“People who need help to go to the bathroom find it embarrassing to perform this very private activity in front of someone else,” she said. “And that’s understandable—nobody likes doing that!”

“It is scientifically proven that people in this situation do not go to the toilet as often as they need to, because they feel ashamed—with the consequence that they risk infections,” van der Linde continued. “That’s when the well-known vicious circle begins, where people need more healthcare, more medicine and more doctors’ consultations.”

**Robotic reality coming soon**

The Lilly robot is not yet available on the market, and when it does become available, as expected in 2017, it will be under a different name. Apart from that, elder care robots are absolutely real and are undergoing testing with real people right now. Van der Linde is convinced that robotic technology will be welcome in the homes of ordinary people.

“I believe in the possibilities of social and healthcare robots and how they can be of value for people,” she said. “In my view, there’s no doubt at all that we need these new technologies in healthcare, which allow people to stay independent and improve their quality of life.”

“[Research shows](https://www.sciencedaily.com/releases/2016/02/160201125514.htm) that most people in need of care actually do not have a problem at all [being assisted by a robot](https://www.good.is/articles/robots-elder-care-pepper-exoskeletons-japan),” van der Linde said. “In fact, it allows them to take care of themselves and maintain their dignity.”

Van der Linde’s point about robot technology in healthcare is viewed from the perspective of the user. Dan Kara, practice director at ABI Research, also sees robots as [an answer to the huge challenge societies are facing](http://www.techinsider.io/japan-developing-carebots-for-elderly-care-2015-11), particularly in Europe and Asia, in providing sufficient healthcare to an increasing number of elderly people.

“Hospitals and other healthcare centers are under enormous pressure to reduce costs and improve the quality of healthcare services,” he said. “For these healthcare providers, robotics technology can act as a cost-reduction enabler, as a means to improve the efficiency and efficacy of healthcare services, or both.”

“Similarly, governmental agencies and scientific advisory groups across the globe have targeted robotics technologies as being critical to the process of improving healthcare in the 21st century,” Kara said.

ABI Research predicts that [the home care robotics market will quadruple](https://eresearch.fidelity.com/eresearch/markets_sectors/news/story.jhtml) by 2025 to $5.9 billion and that the technology will eventually merge with smart-home systems.

**Overcoming objections to care robots**

So if both users and experts in the field of robotic technology agree that hone and elder care robots are a solution to one of society’s biggest challenges, how come decision-makers within the healthcare sector are still hesitating to bring them on?

The inertia is due to a lack of knowledge about the new technology’s potential, claims Ib Oustrup, director of [COK](http://www.mynewsdesk.com/robobusiness/pressreleases/cok-increases-focus-on-automation-in-the-public-sector-1377015), the Center for Development of Competencies in the Public Sector, in Denmark.

“As a top manager, you need to be able spot the types of technology that could be interesting,” he said. “You need to have actually tried a robotic toilet and a feeding robot yourself. But they haven’t.”

“When you ask leaders about what they consider top priority in their managerial work, implementation of new technology comes in last out of nine issues,” Oustrup said. “The speed at which technology is progressing is considerable—unfortunately, so is the general resistance against new technology. That is why leaders need to be in front and show that technology is exciting, fun and useful.”

If people like van der Linde, Kara, and Oustrup, who represent users, advisors, and decision-makers within the healthcare systems, are all positively inclined towards implementing robots in healthcare, how can robotics providers overcome reluctance to let robots into workplaces or homes?

Despite widespread worker shortages in healthcare and the service industry, many people fear that robots and automation will steal jobs. [Some politicians](http://www.computerworld.com/article/3045123/it-careers/robots-and-immigrants-reduce-jobs-sen-sessions-warns.html) and [media outlets](http://thenextweb.com/us/2016/03/10/americans-fail-math-automation) have stoked that fear.

Another [objection to welfare robots](http://www.theguardian.com/society/2016/mar/09/robots-are-no-answer-to-the-looming-care-crisis) could be described as “warm hands versus cold hands.” The belief is that people should be cared for by fellow humans, not machines. Elderly people are often alone in their homes with nobody to talk to. Daily visits by a nurse or another caregiver are often their only contact with other human beings.

“Of course, we also need to be critical and think carefully about how we use new technology and make sure that robots don’t take over our lives or put us out of jobs,” van der Linde replied. “We do not want [to rule out human contact](http://www.theguardian.com/lifeandstyle/2016/mar/14/robot-carers-for-elderly-people-are-another-way-of-dying-even-more-miserably). But we prefer human contact in a quality-time kind of way, not in a toilet-time kind of way.”

Oustrup is absolutely certain that robots are here to stay and work along with us in the healthcare sector, because it’s necessary that we let them.

“We have talked about technology as something that takes something away from us, and which controls us, rather than the other way around,” he said. “Some professionals in the healthcare system are insecure and afraid of new technology.”

“If we are going to be able to tackle the challenges of the demographic development, there’s no way that we can avoid taking new technology into use,” said Oustrup. “We need to talk about technology in a new way as something which is fun and exciting and look at it as something that will free up time and resources in the healthcare sector.”

**Learning more about robotic care**

Attendees at [RoboBusiness Europe 2016](http://www.robobusiness.eu/) next week will have an opportunity to learn more about care robots.

“We are organizing the healthcare theme on this year’s conference because it is an extremely important issue that we need to confront,” said Marianne Andersen, [CEO of RoboBusiness Europe](http://www.roboticsbusinessreview.com/article/robobusiness_europe_is_reborn). “To me, robots are the key to freedom and better quality of life for elderly people and others who need help.”

“New technologies will allow us to stay in our own homes, if we want to and ensure our dignity and freedom to live our lives on our own terms. I think it’s awful that anybody should have to plot toilet visits into the diary and not be able to have a bath whenever they want to,” she said.

“Robots can relieve care persons of straining work and allow them to spend the time in a different way—take the elderly person out for a walk, help them write an email or a letter, drink a cup of coffee, do something that [will make a real difference for people](http://www.roboticsbusinessreview.com/article/vecna_cares_about_robotics_standards_absorbs_vgo)!” Andersen said.