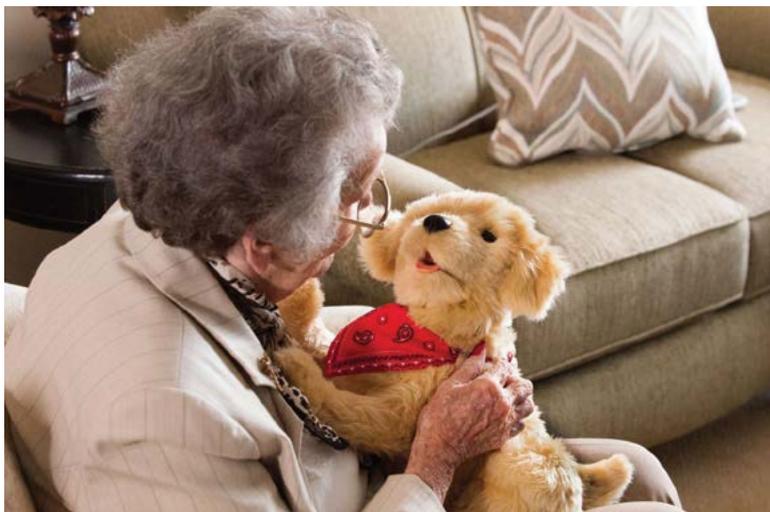


Reducing Loneliness With Robots

By Keren Etkin



The world's population is aging faster than ever. In some countries, like Japan, 60+ year olds already make up one third of the population. Considering the decrease in birth-rates in recent years, this means we have a demographic time-bomb ready to explode.

There simply aren't enough younger adults to care for older adults. By 2020, 45 million Americans will care for 117 million seniors. The global number of people 60+ years old is projected to reach 1.4 billion in 2030 and 2.1 billion in 2050.

More people are deciding to age in their own homes as well rather than move in with family or go to an assisted living facility. As they age in their homes, alone and farther away from loved ones who may have moved to other states, loneliness becomes a real concern as it's been proven to have detrimental effects on physical and mental health.

So how can the world deal with the aging of its population and the dangers of loneliness, assuming there aren't enough humans up for the job?

There are a multitude of robots on the market today to help aging adults live longer at home while avoiding the pitfalls of loneliness. To simplify things, we can divide domestic robots into two types: service robots and companion robots.

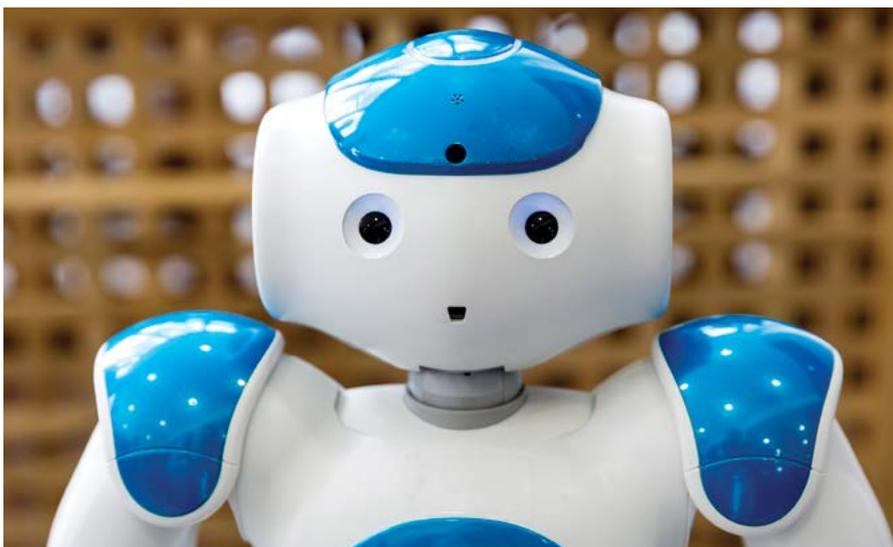


Service or assistive robots can manipulate the physical world and perform certain tasks like clean the floor (*iRobot*) or carry our luggage (*travelmate*). They make it easier for adults who can still live at home alone but need a bit of physical help to carry out daily tasks and chores.

In eldercare, we see robots that can lift patients like *Robear* that was designed to look like a giant teddy bear to make it less intimidating or Toyota's *HSR* that helps people with physical disabilities be more independent.

When it comes to assisting older adults, AI-powered devices like the *Amazon Echo Show* or the *Google Home* are becoming more and more ubiquitous in homes all around the world.

For engagement and to create an emotional bond between the user and the device, you need to look at the social robot category.



Social robots, or companion robots, are designed to address the social and emotional needs that we, as human beings, have.

Many older adults live on their own and hence suffer from loneliness and social isolation but companion robots have been making great strides in combating these problems.

Hasbro's *Joy For All* companion pets are designed to bring older adults the companionship and comfort of pets, minus the related chores like going to the vet.

Paro, the therapeutic seal, stimulates patients with dementia and is in use in care facilities around the world and *Elli-Q*, the active aging companion, proactively keeps older adults active and engaged with suggestions for mental and physical activities.

With the right design, these robots can make users feel less lonely and help ease the problem of not enough caregivers.

Karen Etkin is a gerontologist at Intuition Robotics. To learn more about home robots for seniors, visit IntuitionRobotics.com.