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THE NEW OLD AGE

In Isolating Times, Can Robo-Pets Provide Comfort?

As seniors find themselves cut off from loved ones during the pandemic, some are turning to automated animals for company.

By Paula Span

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When Linda Spangler asked her mother, in a video chat, what she would like as gift for her 92nd birthday, the response came promptly.

"I'd like a dog," Charlene Spangler said. "Is Wolfgang dead?" Wolfgang, a family dachshund, had indeed died long ago; so had all his successors. Ms. Spangler, who lives in a dementia care facility in Oakland, Calif., has trouble recalling such history.

Her daughter, a doctor, considered the request. Before visitors were barred from the residence because of the Covid-19 pandemic, Dr. Spangler had seen her mother every other day, often taking her to Lake Merritt in her wheelchair to see the ducks and to pat passing dogs.

In her facility, Charlene Spangler had eaten meals with several other residents, joined art classes and listened to visiting musicians.

Now activities and communal meals have vanished. Aside from one quick visit in the lobby, she has not seen her daughter in person in six months; they communicate through 15-minute video calls when staff members can arrange them.

"She's more isolated in her room now," Dr. Spangler said. "And she misses having a dog."

Knowing that her mother couldn't manage pet care, even if the residence had permitted animals, Dr. Spangler looked online for the robotic pets she had heard about.

She found a fluffy puppy with sensors that allow it to pant, woof, wag its tail, nap and awaken; a user can feel a simulated heartbeat. Unable to deliver the robot personally, she asked a staff member to take it inside. In a subsequent video chat, Dr. Spangler learned that her mother had named the robot dog Dumbo.

Such devices first appeared in American nursing homes and residences for seniors several years ago. A Japanese company began distributing an animatronic baby seal called PARO in 2009, and Hasbro started marketing robotic cats in 2015.

But the isolation caused by the coronavirus, not only in facilities but also among seniors living alone in their homes, has intensified interest in these products and increased sales, company executives said. It has also led to more public money being used to purchase them.

Long before the pandemic, loneliness and social disconnection were acknowledged public health problems for older people, linked to measurably poorer mental and physical health. Now, their risk for serious illness from the coronavirus has denied many seniors the stimulation and comfort of personal visits, cultural events, volunteering, even grocery shopping.

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Isolation particularly threatens people with dementia, who are less able to embrace online diversions and communication.

"Covid has created a bizarre world where nobody can hug anybody," said Laurie Orlov, a veteran industry analyst and founder of the newsletter Aging and Health Technology Watch. "The idea of a pet you can hold — a tactile experience — transcends that somewhat."

In part because of its \$6,120 price tag, PARO (the name echoes the Japanese term for "personal robot") has primarily been adopted by institutions: hospitals, nursing homes, assisted living facilities. Because the Food and Drug Administration classifies the robot as a biofeedback device, Medicare will cover its purchase and use by therapists.

Since the pandemic, "we're seeing a lot of interest," said Tom Turner, general manager of PARO Robots U.S., which sells about 50 robot seals annually but expects a big increase as insurance coverage broadens.



A PARO robot in a nursing home in Amsterdam. Ilvy Njiokiktjien for The New York Times

Researchers have reported benefits from interacting with PARO, although the studies were often small and short-term. At facilities in Texas and Kansas, for instance, investigators followed 61 residents with dementia who had 20-minute group sessions with a PARO three days a week for three months. Their stress and anxiety decreased, the researchers found, and they needed less medication for pain and problem behaviors.

Front Porch, a nonprofit senior living provider, acquired several PAROs in 2015 and tracked their effects through about 900 surveys reporting residents' interactions. Over six months, the staff reported that the robots — which acquired names and, at holidays, festive outfits — helped calm residents, increased their social behavior and improved mood and appetite.

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More recently, researchers have started analyzing the use of robotic pets outside institutional settings, by seniors living in their own homes. Of particular interest is the Joy for All brand sold by Ageless Innovation, a spinoff of Hasbro, and available from retailers like Walmart and Best Buy for about \$120.

One of the largest studies, underwritten by United HealthCare and AARP, distributed free Joy for All robots to 271 seniors living independently.

All the seniors suffered from loneliness, according to a screening questionnaire. At 30 and 60 days, "there was improvement in their mental well-being, in sense of purpose and optimism," said Dr. Charlotte Yeh, chief medical officer of AARP's business subsidiary and a study co-author. The study also found "a reduction in loneliness," Dr. Yeh said, although the questionnaires showed that participants remained lonely.

Armed with such findings, Ageless Innovation has been offering discounted robots to state agencies working with seniors. (Both Joy for All and PARO robots can be sanitized to prevent viral transmission, the companies said.)

New York State ordered and distributed 1,100 pets after a pilot study found that participants reported less isolation and loneliness. "Families were sending me thank-you notes," said Becky Preve, executive director of the Association on Aging in New York. Florida purchased 375.

Ageless Innovation said that a dozen states had placed orders totaling 6,000 devices. But that's small potatoes compared to the sales potential if Medicare Advantage plans, offered through private insurers, agree to cover robotic pets.

One already does — HealthPartners, in the Midwest — and "we are in conversations with many other Medicare Advantage plans," Ted Fischer, chief executive of Ageless Innovation, said in an email. The company is also eyeing certain Medicaid programs.

The idea of a robot, however fuzzy, as an antidote to loneliness produces both enthusiasm and revulsion. "These animals are helping people," said Ms. Preve, a fan.

But Sherry Turkle, a psychologist at the Massachusetts Institute of Technology who has long studied how older people use technology, objected. "The promise is that it becomes a companion and you have a relationship with it," she said of a robotic animal. "As though there's mutuality. There's not mutuality. It's a bunch of bits and bytes."

Sister Imelda Maurer, who, as a member of the Sisters of Divine Providence of San Antonio, has long been involved with elder care, dislikes the notion of deceiving people who have dementia and may think robots are actual pets. "There's an element of ethical dishonesty about it," she said.

Both she and Dr. Turkle pointed out that the enthusiasm for robots spotlighted the many failings in the way our society cares for older people, whether in understaffed facilities or isolated at home.

Moreover, how seniors will react is unpredictable. Emily J. White, a social work consultant in Sunnyvale, Calif., watched in amazement as her 96-year-old mother, who had dementia and depression and had largely stopped eating, warmed up to a Joy for All cat — and promptly asked for a piece of cake.

But Timothy Livengood, a planetary scientist in Columbia, Md., said his 80-year-old mother, who has dementia and lives in a facility, largely ignored a robotic cat. "She never really attached to it," he said. "It didn't have a personality."

As for Charlene Spangler, during a recent video chat she mentioned that her dog was barking and that she could feel its heartbeat. "It seems like there's some interaction," her daughter said.

But a caregiver must repeatedly present the dog and remind her mother to pet or talk to it; otherwise, she forgets about it. How often that will happen, and whether it will assuage the pain of isolation, remains an unanswered question.

"I'm not sure how well this is going to work," Dr. Spangler said. "But for \$120, it was worth a try."

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