**Home robot to nudge older people to stay social and active**

By **Victoria Turk**

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| A ROBOT companion for older people aims to promote activity and tackle loneliness by nudging them to take part in digital and physical activities.A prototype of the ElliQ robot, made by Israel-based start-up Intuition Robotics, will be unveiled at the Design Museum in London this week. ElliQ is a small desktop device that consists of a stylised domed “body” and a separate detachable screen.Created in collaboration with Swiss designer Yves Béhar, the robot is able to tilt and turn to indicate what it is doing and encourage a degree of social engagement. Similar to home assistants like the [Amazon Echo](https://www.newscientist.com/article/mg23231045-700-how-we-fell-in-love-with-our-voiceactivated-home-assistants/), people can simply talk to it, and there are visual cues that could be particularly helpful for those with hearing difficulties.A key purpose of ElliQ is to act as an easy interface to access existing services such as social media, messaging programs, and audio and video streaming. For example, the device could alert the user that their grandchild has posted a new photo on Facebook, show it to them on the screen, and allow them to comment using speech-to-text technology.Unlike most other [home assistants](https://www.newscientist.com/article/dn25881-meet-jibo-the-cute-social-robot-that-knows-the-family/), ElliQ can recommend activities of its own accord. It might ask if you’re interested in watching a video, for instance, or suggest a walk. It can also act as reminder to take medication. |

Having a robot constantly bark suggestions could obviously get annoying, so the device uses machine learning to tailor these nudges to individual preferences. If a suggestion is met with a positive response once, ElliQ might try it again. If not, it might opt for a different tack. The device uses cameras and face recognition so it can detect when the user is nearby and direct its “gaze” at them when they speak.Collecting so much information from a person’s surroundings raises obvious privacy concerns. Like the Amazon Echo, ElliQ only sends speech to the cloud after hearing its name, so it is not constantly transmitting any sounds it hears. Data captured by the camera remains on the device.**“A key purpose of ElliQ is to act as an easy interface to access existing services such as social media”**As populations age, companion and carer robots are becoming popular, with previous examples including robotic baby seal Paro and nursing bot Robear.But Don Norman, director of the Design Lab at the University of San Diego, California, and an adviser on user experience to Intuition Robotics, emphasises that no robot is a substitute for human interaction. Norman, who is 81, says making a device older people will accept requires careful observation of someone’s needs. After unveiling the first working prototype of ElliQ, Intuition Robotics plans a trial with older adults in San Francisco to collect feedback and refine the product.Nick Hawes, a computer scientist at the University of Birmingham, UK, says ease of use is the biggest challenge when designing such robots, especially for those whose physical or cognitive health is declining. “What may be understandable to a 20 or 30-something, just in terms of speech patterns or interface ideas, may not be understandable to an 80-year-old,” he says. Ultimately, he says, the most useful would be capable of physical tasks as well as companionship.