Alexa Goes HIPAA

Trend Watch: HIPAA-Compliant Voice Assistants and Clinical Applications

An invite-only program from Amazon allows select healthcare groups, including hospitals and health insurers, to develop HIPAA-compliant skills for its voice assistant Alexa. The big change is that Alexa can now be used in certain applications that collect and transmit protected healthcare information.

Developers that participate in the program, including HIPAA-covered entities and their business associates, are able to build voice skills that transmit protected health information in Amazon Alexa's HIPAA-eligible environment.

One of the HIPAA-compliant skills, developed by Providence St. Joseph Health in Renton, Wash., allows Alexa users to schedule appointments at nearby urgent care centers. Users prompt, "Alexa, open Providence Health Connect," at which point the application will suggest appointment times at the clinic closest to their home.

The scheduling capability is available across 37 of the health system's urgent care centers on the West Coast.

Charlotte, N.C.-based Atrium Health released a similar urgent care locator and scheduling service as part of Alexa's new service.

Livongo, the digital health company tackling chronic conditions while scooping up former executives from Allscripts and Cerner, has also built a new skill as part of the HIPAA-compliant service. Alexa users can now ask the voice assistant to pull up their last blood glucose reading and to provide personalized health tips, according to the company.

The three other initial program participants are Boston Children's Hospital, Cigna, and Express Scripts.

This capability opens a whole new world of voice applications beyond basic Q&A including remote patient monitoring, population health, medication adherence, and clinical trial optimization.

Until now, Alexa's use in healthcare has been mostly limited to question answering services, voice apps, or "skills" in Alexa parlance, that answer general questions about health conditions, treatments, symptoms, etc. Amazon Echo users, for example, can access health benefit information from a skill such as Answers by Cigna, or tap into one of many symptom checkers in the Alexa marketplace.

"Congratulations to Amazon; their news about Alexa and HIPAA compliance is a solid step forward," says Orbita CEO and Co-Founder Bill Rogers in his blog. "Amazon is joined by a full range of innovators seeking to leverage voice, chatbots, and conversational AI to improve healthcare. We are truly in the midst of a digital revolution and I'm confident it will bring positive change to patients and clinicians."

Device Generates Insulin From Within The Body USING "TEA BAG" IMPLANT

A team of researchers and supporters of diabetes research — JDRF, Novo Nordisk, St. Vincent's Institute, the University of Alberta, and the University of Arizona — are working to create a device that can generate insulin from within the body. This artificial pancreas relies on donated islet cells. Islet cell transplantation is currently used to treat some patients, but it requires the use of immunosuppressants, which are dangerous, particularly to children. The implant uses transplanted islet cells, but keeps them insulated from the body's immune system, preventing them from being damaged. The researchers describe the technology as a high-tech tea bag for islet cells through which only insulin can seep out.

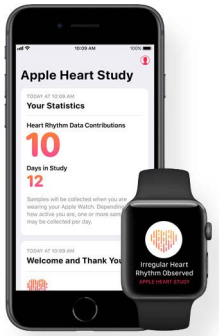
"It's like a tea bag," says Dr. Klearchos Papas, scientific director of the UA Institute for Cellular Transplantation. "The tea leaves stay inside but tea, or insulin, comes out. And the tea bag keeps out the immune cells that would normally attack the islets."

The researchers are now working toward preparing the technology so that it can be tested properly in preparations for clinical trials. "This is not pie-in-the-sky crazy science," Dr. Papas says. "We believe, engineering-wise, it is achievable. The cells and the biology were the difficult part and they have come a long way in the past five years."

Resistance-Sensing Needle Helps Improve INJECTION ACCURACY

Investigators at Harvard's Brigham and Women's Hospital have designed a new form of mechanical injector, the I2T2, which detects changes in resistance to safely deliver injections. The I2T2 works by mounting the needle on a sliding support, allowing it to move along the syringe barrel, and enabling pressure to build on the internal fluid. In testing on an animal model of the suprachoroidal space, the device was demonstrated to have reliable injection accuracy without any additional training or reliance on specialized techniques.

Apple Watch Not Ready for HEART MONITORING



Stanford University researchers and Apple are conducting a very large research study to improve the technology used to detect and analyze irregular heart rhythms, like atrial fibrillation — a leading cause of stroke.

The results concluded that the Apple Watch may not be ready to be used as a default atrial defibrillation monitor in the general population, due to too many false positives. However, analysts say the study was an important first step in determining the future for such evidence-based technologies. Physicians not involved in the study felt even with the high percentage of false positives, the device has potential in the future.

In the study, about 2,160 people, or 0.5%, received notifications of irregular heart rhythms. In older people, 65 years and older, the rate was higher, about 3.2%, compared to 0.16% in people ages 22 to 39.

The ECG patches confirmed atrial fibrillation in only 34% of 450 patients who returned the patches. The remaining, about 66%, had no confirmed atrial fibrillation.

Be dedicated.
Be inspired.
Be proud.

2019 Woman of the Year Award Recipients

WOMAN OF THE YEAR
Sharon Callahan
TBWA\WorldHealth

HONORABLE MENTOR
Peter Anastasiou
Lundbeck

STAR
Taren Grom
PharmaVOICE

Congratulations

PharmaVOICE