11 Mar 2024 | **Analysis**

In Five Years, People Will Navigate Their Health Care With An Al Advisor – Verily's Andrew Trister

by Marion Webb

The digital "agent" on the horizon will draw on users' entire health record, data from wearables and other sources to steer them in making health decisions. In this second part of a two-part series, Andrew Trister, chief scientific officer and chief medical officer at Verily, discusses his vision for the future and current obstacles.

In the next five years, people will have their own artificial intelligence "agent" using their own personalized data to help them make health decisions, predicts Andrew Trister, chief medical and scientific officer at *Verily*, formerly Google Life Sciences.

Verily is <u>Alphabet Inc.</u>'s research organization that's leveraging AI, data science and cloud-based analytics to develop solutions for health care clients.

Trister, who joined Verily eight months ago as chief scientific officer and added chief medical officer to his title two months ago, recently spoke to *Medtech Insight* about his vision for precision health, an approach that brings together data from a wide range of sources, including wearables, lab tests, diagnostics, and social determinants, such as where someone lives, to personalize how they manage their health.

"What I would want is a trained model for myself where I can give all of the stream of data from my wearables, my entire health record, my address ..., and then know that what I'm going to get back is a more personalized, 'Here, Andrew, this is the thing you should do next, if I have a question,'" Trister explained.

This digital agent would augment doctors, nurses and other health professionals by providing users with answers to questions normally asked to health professionals. But "it turns out that

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most doctors don't practice personalized medicine," he said.

During his previous work as deputy director of digital health and artificial intelligence at the Bill & Melinda Gates Foundation, the foundation funded a related model in South Africa, a chatbot designed for people at risk for contracting HIV.

"It was an opportunity to answer the questions that people had and introduce the idea of 'here is what you may be able to do,' such as other safe sex practices and things that historically would have been in the health care setting," Trister said. "But here we were meeting people where they were."

The proliferation of increasingly sophisticated chatbots and voice assistants are setting the stage for the

Verily's Andrew Trister On Uniting The Pieces To Create Personalized Health, Equity

By Marion Webb

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Andrew Trister, Verily's chief medical and scientific officer sat down with *Medtech Insight* during the recent ViVE conference to talk about how Verily is leveraging AI to address public health issues and global health inequities and the new web-based version of the Onduo platform, the use of GLP-1s to combat chronic diseases, and more. This is the first part of...

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personalized health agents Trister envisions and provides lessons on contexts in which patients are more likely to engage with or place trust in such technologies.

Trister noted an example involving telehealth visits with veterans who were suffering from mental health issues, such as post-traumatic stress disorder, which showed the patients felt more secure speaking to an avatar rather than a human. This allowed the veterans to open up more and speak more freely.

"The avatar was literally just a picture on the screen, and the person who was typing on the backend was still the psychiatrist," Trister said.

Trister expects that in the near term, AI and large language models largely will be deployed in health care for lower-risk tasks to ease administrative burdens and reduce physician burnout. Down the line, they may begin associating more with patient data to provide feedback to physicans and patients.

Currently, the prevailing view is that electronic health records are "not built for humans," he noted.

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"Patients, I think, are starting to understand that too, because the experience has been reduced to what the EHR wants to collect, which is all billing, as opposed to the natural human experience of 'I have a question, please help me,' which is what all physicians want and all patients need," he said. "I think in the longer run, it's going to become an enabler for more rich conversations so that the patients have a conduit for education."

Ambient listening will have a role in that. More than 150 hospitals and health systems reportedly already use ambient listening technology made by Nuance Communications, part of <u>Microsoft Corporation</u>, to draft physicians' notes during patient visits, which now can be integrated into Epic electronic health records.

"It's the device that's sitting between the doctor and the patient that can just dictate a note," Trister explained. Right now, that benefits the physician, but not necessarily the patient.

"It's going to be more important when I'm no longer in front of the doctor, how do I still get help? How do I have somebody that's going to remind me, what was it exactly that [the doctor] said? Where do I go for that information today? Most people don't even have access to their clinical notes."

Trister added, "That's the five-year horizon piece. It's going to be patient-enabled information."

Obstacles

At a broad platform level, Verily manages clinical, sensor, imaging and omics data to scale research and enable new decision-making models for care.

Its solutions include <u>Onduo LLC</u>'s Onduo, a virtual care management system for people living with type 1 or 2 diabetes and hypertension. The firm has partnered with Good Measures to provide pre-diabetes and weight management support as well. Good Measures says it combines clinical coaching, proprietary technology, and personalized food prescriptions to impact health outcomes and social determinants of health for health plans, government programs, and private payors.

Verily offers other products in areas including clinical research, health financing and public health.

One of the major challenges that Verily and others are continuing to face in their quest to realize the promise of personalized care is how to bring data together from various sources.

Many datasets of interest are siloed. Health care data sits in electronic medical records and data from wearables are sitting on servers. Additionally, many individuals are reluctant to give away their data due to privacy concerns, and for good reason. While tech giants including Amazon,

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<u>Apple Inc.</u>, Facebook and Google are able to capitalize on user data and generate revenue through targeted advertising, users tend not to benefit when their data is sold.

A survey from the <u>Pew Research Center</u> shows that the majority of Americans feel like they have little or no control over the data companies collect from them and are concerned about how their data is collected.

Some in the industry, including Trister, believe the current data landscape in terms of ownership could change in the next few years. He believes data should belong to patients and consumers and they should get a say, and ideally some form of compensation, in its use by other parties.

"I should have the choice of what I do with my data, and then companies should be able to say, 'For you giving us your data, here's the value that I'm going to give you back,' and then I can decide in a free market whether it's worth it to me," he said. "I think that's where the future state will be like two, three years from now, not in 2024."

He continued, "We can get better personalization, better humanitarian approaches if we were to include this multitude of data and have the right agent built," he added. "Now the question is who's going to build that agent and who is going to pay for it? That's on the verge where things are."