

Tech challenge: Keeping a million people interested in a research project

By Mohana Ravindranath

08/06/2018 10:02 AM EDT

The software company powering the technology for NIH's million-person health study began as a consumer-focused startup without any background in health — and its roots could be its biggest asset, says CEO Praduman Jain.

Vibrent is the recipient of a \$75 million NIH grant to build out the "[Participant Technology Systems Center](#)." It is creating the applications that will enroll volunteers in the research program and return them data about their health.

Its challenge, with the NIH officials overseeing the project, is how to use digital tools to keep a million or more people engaged and participating in a project that will take decades to complete.

All of Us, previously known as the Precision Medicine Initiative, is NIH Director Francis Collins' ambitious concept for a vast research project that will gather genomic, environmental, medical and lifestyle data to gain insights into the causes of illness and health.

After signing up, participants are asked to provide blood and urine samples and to share data from their electronic health records and, in some cases, from wearable or mobile devices. Four leading EHR vendors have agreed to link patient data through Vibrent for the All of Us program in the "Sync for Science" platform. Other patients will provide medical information in surveys.

Around 91,000 people have joined so far, in a beta phase and since the program's official launch in May. The challenge, Jain said, is to meet NIH's goal of encouraging the longterm participation of a cross-section of Americans, including groups who are suspicious of science and government and generally shun such activities.

Most of the early joiners were motivated by "excitement and altruism," Jain told POLITICO. "It can help me, it can help my family, it can help my children.' But that only goes so far, people lose interest over time."

To get this vast group to continually share biospecimens, EHR data and feeds from wearable devices, "you have to keep giving them value," he said.

"We can have this million people donate their data initially. How do you keep them going for 20 years, 30 years," he said. "What's in it for them?"

That's where the company's roots in consumer technology could come in, Jain says. Vibrent got its start almost a decade ago, funded mostly by Jain himself and by federal Small Business Innovation Research grants to study how patients process information about their health.

Jain — who describes himself as an "outsider to health care" — learned about consumer technology adoption in previous jobs at Sprint, Nextel and AOL. In lieu of expertise in the provision of care, he and his team have an "understanding of systems, understanding of how to make something really large scale that can impact the masses."

In previous jobs, Jain oversaw SMS-systems and the production of mobile phones. The All of Us platform, he says, has to "become available to the masses the same way they're all used to using technology today."

Vibrent's other products include a platform virtually connecting dermatologists to patients, and a health and wellness system for the Defense Department.

As All of Us continues enrolling participants, some of the Vibrent employees working on the program are dreaming up ways to give participants useful insights about their own health in a manner they find useful. Those might include designing health records that clearly display the information donors have submitted, or presenting genomics data so participants better understand their health risk factors, Jain said.

The Fairfax-based company has attracted the interest of local lawmakers. Sen. [Tim Kaine](#) (D-Va.) dropped by in July to talk about trends in digital health. Rep. [Gerry Connolly](#) (D-Va.) visited the office Thursday in what was billed as a town hall for the 140 employees of Vibrent.

At the town hall, Connolly urged the Vibrent employees to remain a "beacon of welcome" to immigrants despite anti-immigrant rhetoric from the Trump administration, and emphasized his support for better access to health care. He also argued that the federal government should fund more scientific research.

Jain says Vibrent's mission with All of Us aligns with Kaine's and Connolly's: "to accelerate health research and medical breakthroughs, enabling individualized prevention, treatment and care for everyone. They recognize the return on the investment in achieving better health for our nation's and the world's population."