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Using The Metaverse To Break Down Language Barriers and Improve Diversity In Clinical Trials

by [Hannah Daniel](#)

Wipro's life science and medical device lead Gaurica Chacko's told *Medtech Insight* about why diversity in healthcare matters to her and what her team is doing to increase it.

When Gaurica Chacko's grandmother had a stroke in 2009, all the older woman wanted was a doctor that reminded her of home.

"[My grandmother] split her time between India and the US," Chacko explained. "She'd been doing it for a number of years... so English was not a problem for her."

But when she suffered a stroke, she insisted on seeing a doctor that spoke her language. At that point, "it was a level of comfort," she said.

This is one of the driving reasons behind Wipro's virtual clinical trial project, and why diversity in the healthcare system is so important to Chacko. (Also see "[Tales from HIMSS23: Care In The Metaverse](#)" - Medtech Insight, 24 Apr, 2023.)

"I'm a person who's in the healthcare system... Imagine this happening to somebody who doesn't have all these avenues of access," she said.

Chacko leads Wipro's global life sciences and medical device consulting practice, and the virtual clinical trial project began during Chacko's time at Wipro. Partnering with Microsoft, Wipro created a metaverse-based program that allows patients to find eligible clinical trials in places with high levels of foot traffic, like pharmacies, airports or train stations.

"We want to meet the patient where they are instead of pushing solutions to them," Chacko said.

For instance, if a patient is going to a pharmacy to pick up a prescription, a pharmacist can direct them to one of Wipro's pods. There, the patient is offered educational information about their prescription and an option to match to a clinical trial based on their disease based on an algorithm created by Wipro.

Once matched, patients can put on a virtual reality headset and take a virtual “walk” through the clinical trial center—what the front door will look like, the hallways and the elevator. Simple visualizations like this can ease patient anxiety when they enter the real thing, Chacko said during a demonstration when/where.

The demonstration is also offered in the participant's chosen language, which circles back to Chacko's motivations. Wipro plans to offer 5-7 languages at first, including English, Spanish, Hindi, Chinese, Vietnamese and Tagalog.

“It boils down to trust,” she said. “You're not trusting somebody because you're not comfortable with them, and you're not comfortable with them because of the language.”

If Wipro can provide that, then they provide one more option for patients.

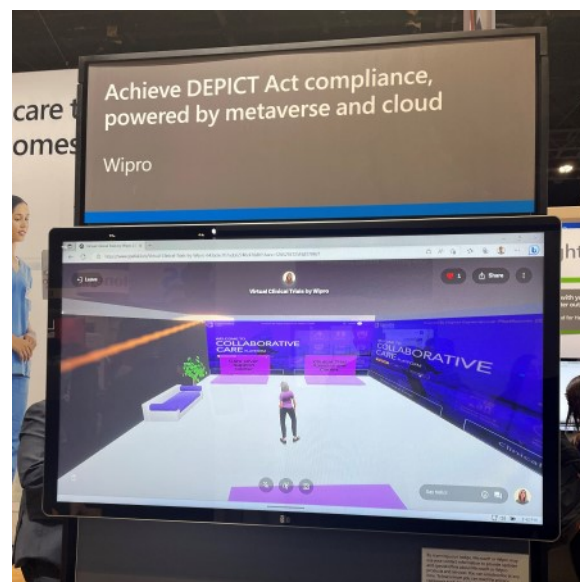
DEPICT Act Amplified The Message

The goal of Wipro's clinical trial is to add a new stream of patients to the pool of clinical trial participants, which is also a focus of the Food and Drug Administration. (Also see "[FDA Draft Guidance Takes Aim At Racial, Ethnic Disparities In Clinical Trials](#)" - Medtech Insight, 13 Apr, 2022.)

Parts of the Diverse and Equitable Participation in Clinical Trials (DEPICT) Act were included in the 2023 Consolidated Appropriations Bill, which requires clinical trial sponsors to include diversity action plans. (Also see "[Legal Expert Weighs In On New US Mandate To Diversify Clinical Trials](#)" - Medtech Insight, 3 Feb, 2023.)

While the DEPICT Act was not the impetus for Wipro's project, it was the “catalyst” that amplified their message, Chacko said.

“For us, it wasn't really a diversity target,” she said, but the legislation gave the project an extra



WIPRO'S VIRTUAL CLINICAL TRIAL DEMONSTRATION AT HIMSS23. Source: Hannah Daniel

leg up.

The metaverse adds a level of intrigue, but patients don't have to interact with the program in the metaverse. Chacko's team also takes into consideration physical accessibility.

Chacko gave the example of someone with carpal tunnel or rheumatoid arthritis who would need alternate options to take their blood pressure, like a wrist cuff instead of an arm cuff.

Ideally, there will also be a person physically in the booth to assist in the virtual clinical trial.

The virtual trial acts as a pre-pre-screen, and once the patient consents, a site coordinator for the clinical trial can contact them. That's when a person would visit a site and trial runners would do diagnostic tests to see if they qualify.

"Now you've got a new patient coming into the funnel that you wouldn't have had otherwise," Chacko said.