Virginia first to roll out pandemic app from Apple, Google

August 5 2020, by Matt O'brien and Sarah Rankin

In this June 4, 2020, file photo Virginia Gov. Ralph Northam speaks during a news conference in Richmond, Va. Virginia has rolled out a smartphone app to automatically notify people if they might have been exposed to the coronavirus. It's the first U.S. state to use new pandemic technology created by Apple and Google. The Covidwise app was available on the tech giants' app stores Wednesday, Aug. 5, ahead of an expected announcement from Democratic Gov. Ralph Northam.(AP Photo/Steve Helber, File)

Virginia has rolled out a smartphone app to automatically notify people if they might have been exposed to the coronavirus, becoming the first U.S. state to use new pandemic technology created by Apple and Google.

But hopes for a nationwide app that can work seamlessly across state borders remain unrealized, and there are no known federal plans to create one. State officials say their new app won't work as well outside Virginia, at least until a group of coordinating public health agencies gets a national server up and running and other states join in.

Virginia's free Covidwise app is available in Apple and Android app stores as of Wednesday. State officials, who repeatedly emphasized its privacy-protection features, announced the launch of a statewide public information campaign encouraging people to download and use it.

"Now, I want you all to listen to this very closely. I want to be clear, this app, Covidwise, does not—I will repeat that—does not track or store your personal information. It does not track you at all," Virginia Gov. Ralph Northam said at a news conference.

The technology arrives nearly four months after Apple and Google partnered to create the software for public health agencies trying to contain the spread of the pandemic. Canada and a number of countries in Europe and elsewhere have already rolled out apps using the tech companies' framework.

The app, developed by SpringML, based in Pleasanton, California, relies on Bluetooth wireless technology to detect when someone who downloaded the app has spent time near another app user who later tests positive for the virus. Those who test positive can anonymously notify others to help stop the spread of COVID-19.

Instead of recording someone's geographic location, the app tracks proximity—by keeping an encrypted record of when two phones send short-range signals to one other.

"It doesn't know where you are. It just knows the distance, it just knows how strong the proximity was," said Suresh Soundararajan, the Virginia health department's chief information technology officer.

The department will verify positive test results and issue app users who want to report them a pin number tied to their lab records in order to prevent malicious actors from sharing false positives.

People who receive a warning of possible exposure can seek advice from the health department or their doctor.

Information on Virginia's public health department website says the app measures close contact as within 6 feet of someone for at least 15 minutes, using guidelines from the U.S. Centers for Disease Control and Prevention. The signal strength would diminish if a wall separates two phones, though it's still possible someone would get alerted if a neighbor in an adjacent apartment or dorm room were infected.

A number of states have expressed interest in the Apple-Google technology, including Alabama—which has begun pilot testing—South Carolina, North Dakota and Pennsylvania. Google said that as of Friday there were 20 states and territories exploring an app using the framework. Such apps have already launched in 16 countries and regions across Africa, Asia, Europe, North America and South America, the company said.

"Everyone is trying so hard and there's limited time, limited capacity," said Sameer Halia, who is working to launch an app in Arizona using the Google and Apple software. "Every state will look at what their needs

are and what their population cares about and make a decision."

Several states have introduced apps using other approaches, such as satellite-based GPS location tracking, but there's little evidence they have been successful. Unlike the Apple-Google model, many of these apps make data available to public health officials so they can use it to trace the contacts of infected patients.

One of the first to launch, in Utah, has since disabled location-tracking features. Rhode Island's app uses GPS and has been downloaded by nearly 70,000 people, about 7% of the population, but health officials don't know how often it has led to someone being notified of an exposure. Instead of an automatic notification, it is meant to jog someone's memory by showing them—or health workers—where they have been for the past two weeks.

"While we know that it has been very helpful in many cases, we can't say exactly how many," said Rhode Island health department spokesman Joseph Wendelken.

Privacy advocates have largely favored the approach taken by Apple and Google, but app developers have struggled to explain to privacy-wary citizens why they should trust a model endorsed by giant corporations known for tracking people in other ways. Concern arose in June when both companies made phone setting updates that make the pandemic apps possible, even though phones won't log people's encounters unless they choose to download an app.

The Apple-Google model has also drawn criticism from some health experts who have questioned its effectiveness, especially if there are too many false alarms and if local health agencies don't have the capacity to test enough people.

It remains to be seen if apps from various states will eventually be able to work together effectively, enabling people to use just one as they travel across borders.

The Virginia health department website advises that because a positive diagnosis must be verified with the department through the issuance of a pin number, the app is currently "much less effective outside of Virginia."

State officials say they are working with the Association of Public Health Laboratories, which is leading an initiative to put together and host a "national key server" where the randomly generated Bluetooth keys the app runs on can be stored.

If other states get their own apps up and running, the keys could then be shared, so someone who is exposed to the virus while in another state could still get a notification. Another tech giant, Microsoft, plans to host the server, according to the health agency association.