Mayo Clinic to use drones to deliver prescription drugs to patients' homes

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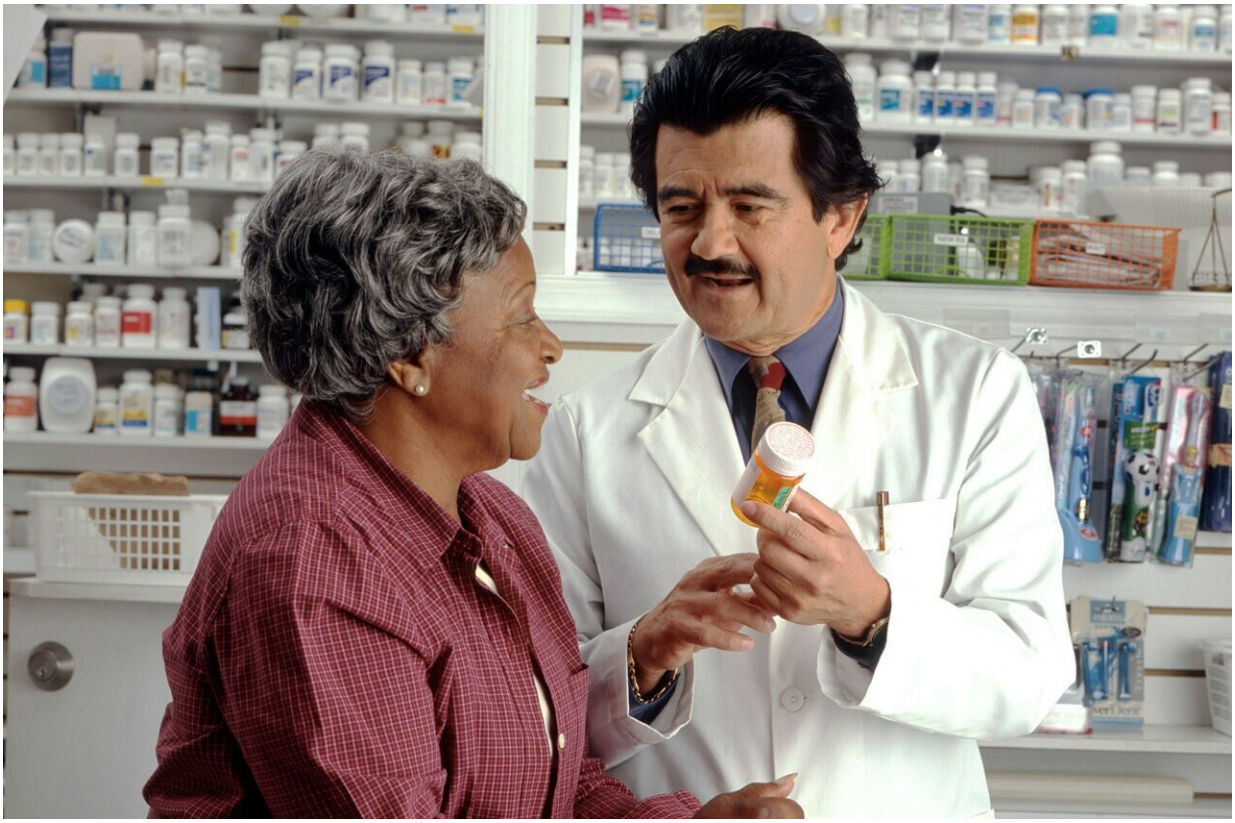

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Mayo Clinic is looking to take its at-home care model to new heights with the assistance of autonomous drones capable of making same-day prescription deliveries.

The Rochester-based hospital system recently signed an agreement with Zipline, the world's largest commercial drone delivery company, with the goal that medications could be delivered directly to patients' doorsteps beginning in 2025.

"Anyone who has driven to a pharmacy while sick and contagious has wished for a better way to do things," said Jeff Williams, head of U.S. operations for Zipline. "It's a far more convenient experience, and it makes care more accessible for everyone: from people without reliable transportation to folks who are just too busy to take on another errand."

Mayo is among a growing number of health care providers, pharmacies, and retailers that have signed similar agreements with Zipline, which has been handling medical deliveries in Rwanda and other African countries since 2016. Among them is Mayo health care rival Cleveland Clinic, which announced a deal in the fall and also plans to begin using drones to deliver medications by 2025.

The deals follow the rollout of Zipline's latest aircraft, the Platform 2 (P2) delivery drone, which is capable of reaching speeds up to 60 mph while carrying 6 to 8 pounds of weight. For a patient living within a 10-mile radius of the provider, that could mean a delivery landing on their doorstep in 10 minutes or less.

"Drone delivery is one example of our Bold. Forward. strategy at work," Jim Francis, chair of Supply Chain Management at Mayo Clinic, said in a statement, referring to Mayo's planned multibillion-dollar buildout of its Rochester campus. "It helps 'complete the sentence' in a telehealth or virtual care setting, creating a seamless and convenient means to deliver products directly to a patient without requiring the patient to leave their home."

While there are a number of details left up in the air—Mayo declined to

make a representative available for an interview—the hospital system plans to use Jacksonville, Fla., as the initial testing grounds, before integrating the drones into its operations in Rochester. In addition to the delivery of prescriptions, Francis said the drones will likely be used for the transportation of samples and tests across its campuses.

Zipline began medical deliveries in the U.S. in 2020 amid the pandemic and purports to have now made more than 1 million commercial deliveries worldwide. While its previous technology relied on the Zip—as the drone is called—floating deliveries down via a parachute, its P2 model is much more precise, the company says. Using GPS and multiple sensors, the Zip is able to reach a zone as small as a patio table before dropping down a droid and releasing the package. The droid then zooms up and flies back to its docking station.

While instances of drones running into cable lines or landing in restricted areas have drawn headlines, officials from Zipline said there have been no reported instances of their technology going haywire. They point out that despite the drones flying autonomously, the flights are monitored in real time for weather and air traffic. Patients, they added, will also be able to schedule deliveries down to the second to ensure they are home, reducing the chances that medicines are stolen.

At the Cleveland Clinic, officials are already in conversations with local and federal entities regarding its drone program. While there are sporting events and critical infrastructure they will have to plan around, they are confident the drones will be able to navigate the dense urban landscape around its pharmacies in northeast Ohio.

Like Mayo, Cleveland Clinic plans to slowly roll out its medicine-by-drone capabilities before widespread implementation. Geoff Gates, senior director of technology for Supply Chain and Support Services at Cleveland Clinic, said in an interview he expects it could take

a year or two to get the whole network up and running, which would mean the potential to reach up to 2.5 million patients.

"It's about the timeliness and the accuracy around deliveries, and becoming more predictive," said Gates. "I also think timing-wise it's ripe because there's not necessarily a model in place as everyone tries to figure out how best to serve patients at home—which is where I think [the drones] could fit in very nicely."