IMPROVING ACCESS TO HEALTH CARE AND EMERGENCY MEDICAL SERVICES USING DRONES/UAS



The Opportunity

 Residents of rural and remote areas have long faced challenges with obtaining timely access to health care and needed treatments. Along with shipping and diagnostics delays due to the geographical and rural makeup of the health care service network, these issues pose a challenge for urgent deliveries between hospital facilities, labs and pharmacies and can negatively impact patient outcomes. The pandemic amplified the disparities and created additional challenges, such as labor and supply chain shortages and an increase in specimen, pharmaceutical and medical supply shipments across these rural localities and health care networks.

There is an opportunity to improve Riverside Health System's "last mile" delivery around Riverside Shore Memorial Hospital on the Eastern Shore of Virginia and further to Tangier Island with drones and unmanned aircraft system (UAS) innovations. These systems can increase access to medical supplies to home care patients, improve patient medication and lab sample delivery times from remote locations, support local public safety and emergency services, and much more.

• Explore how UAS can help solve delivery challenges faced by the Fire and Emergency Medical Services community for applications such as delivering Narcan, Automated External Defibrillators, advanced visual assessments, and other use cases. The Tidewater EMS Council will be coordinating across the region for the definition of EMS use cases and concept of operations associated with a UAS delivery of emergency medical supplies.

The Solution

• Working together, Riverside, DroneUp, the Virginia Innovation Partnership Corporation (VIPC), and the Virginia Institute for Spaceflight & Autonomy (VISA) will engage in a multi-phased proof-of-concept period to build community support and study, test, demonstrate and evaluate medical drone delivery.

• Engage the community on the Eastern Shore to build excitement and public acceptance of the project, which will include delivery demonstrations of patient prescriptions faster, and eliminate the use of critical staff to deliver medical supplies, thus enabling homebound patients to receive much-needed medical supplies and prescriptions easily and quickly.



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