In the winter of 2020, inpatient admissions due to COVID-19 infections were continuing to hit upstate New York’s Adirondack region particularly hard. Facilities needed to prioritize patient and staff health while also helping a growing number of those infected with COVID-19. Dr. Keith Collins, a leader in the Infectious Disease community in the region, needed to identify how he could work more efficiently and reach more patients. As the only two infectious disease specialists in the area, Dr. Collins and his colleague, Dr. Madiha Tahir, were called upon frequently to consult for hospitalized COVID-19 positive patients.

Dr. Collins has been a mainstay for nearly 30 years at Champlain Valley Physician’s Hospital (CVPH), located in Plattsburgh, New York. CVPH is one of six partner hospitals in the University of Vermont Health Network (UVMHN) that stretch across upstate New York and Vermont, including the University of Vermont Medical Center. The network itself is as diverse as the mountain range that it sits on and facilities vary greatly in capacity and available resources. CVPH, a Disproportionate Share Hospital (DSH), includes 300 inpatient beds, more than 190 physicians, and serves 88,000. Another UVMHN partner hospital, Alice Hyde Medical Center (AHMC), is located 90 miles north of CVPH in Malone, NY serves 35,000, and has provided community-focused care for more than 100 years. CVPH, including Dr. Collins and Dr. Tahir, provide infectious disease expertise to AHMC.

**COVID-19 Transitions:** In order to address key concerns early on in the pandemic, Dr. Collins, Dr. Tahir and their support staff combined resources with the staff at AHMC to develop a workflow that better served patients. Collectively, they knew the current transport model wasn’t as effective as it needed to be given the time sensitive nature and severity of the pandemic. On average, CVPH had previously received eight infectious disease patient transfers per month, out of 15 consultations that often took place by phone. Minimizing exposure, ensuring patient and staff safety, while reducing transports were all paramount goals of the program Dr. Collins intended to launch. Historically, patients were transferred via non-emergent ambulance for observation at CVPH, which did not meet the new heightened needs that the pandemic presented. Patient safety, financial and workflow considerations all play a large role when transporting patients between facilities and these details were not lost on Dr. Collins or his staff. UVMHN strategists were able to...
work with both health systems on their unique clinical design considerations, and their unique patient needs. This change in workflow helped incorporate telehealth to ensure patients quickly received the care they required, while promoting patient safety and saving costs associated with unnecessary transports.

**Leveraging Telehealth Beyond COVID-19:** As vaccination rates increase and the world begins to look a little more like normal, positive COVID-19 patient admission rates have been on the steady decline. What started off as a program aimed to keep inpatient census down, has evolved and added benefits for a wider scope of patients. For example, Dr. Tahir recently saw a quadriplegic patient with comorbidities who has historically had difficulties traveling between sites. To transfer a patient, even in the most ideal of circumstances, takes careful planning, resources and safety considerations. Rather than have the patient endure the long, painful drive to CVPH, Dr. Tahir utilized an Amwell telemedicine cart and a collaborative approach to care while the patient remained at AHMC. In partnership with Dr. Shalin Shah at AHMC, Dr. Tahir was able to connect to the cart, review any pertinent information and observe the patient in real time. Dr. Tahir utilized the video camera and beamforming microphone to communicate with Dr. Shah and the patient directly. One of the cutting-edge features that this telehealth solution offers is the ability for a user at the spoke site to manipulate the camera with a simple click on the screen. Sitting at her desk in Plattsburgh, Dr. Tahir was able utilize the zoom feature on the cart to provide clinical support and a path forward for the patient while being able observe the patient in real time.

**Feedback from Dr. Madiha Tahir, Infectious Disease, Champlain Valley Physicians Hospital**

1. **How has telemedicine impacted you as a provider?**

   “Telemedicine has been around for a while and I feel like previously we weren’t using it as efficiently as we should have. COVID made everyone realize the real importance of telemedicine when only limited patients were being seen in person. I was fortunate to use telemedicine technology to evaluate patients admitted at Alice Hyde for Infectious Diseases consults from my office at CVPH which was definitely a game changer. It is so hard to weigh in on consults over the phone. But with telemedicine you have the patient right in front of you, who you can talk to and visually examine which is definitely helpful. Having said that, of course it is not perfect but I think it definitely helps me make a better plan for my patients and at the same time gives some comfort to the patient as well.”

2. **What benefits do you see from telemedicine?**

   “Telemedicine has an advantage in a number of settings. It provides access to patients who either live in rural areas or far from health centers. As well as to those patients who are unable to travel due to their medical conditions. It helps those patients stay connected with their health care providers. There are institutions who don’t have specialists available 24/7 for the patients admitted to the hospital. For those places it is a blessing to have a telemedicine program where they connect with other institutions that have the expertise. I feel fortunate to be a part of the telemedicine program at Alice Hyde for Infectious Diseases, so I can continue to provide care to patients.”

*This resource was made possible by grant number GA5RH37459 from the Office for the Advancement of Telehealth, Health Resources and Services Administration, DHHS.*