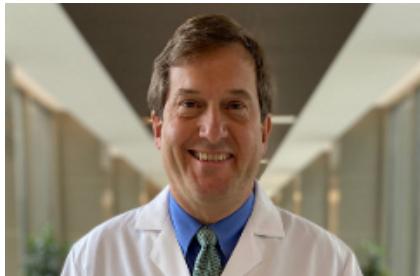


Managing COVID+ Oncology Patients at Home During Treatment

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This blog post is the fourth of a seven-part series highlighting the achievements of the [2021 ACCC Innovator Award winners](#) before their in-depth sessions at the [ACCC 38th \[Virtual\] National Oncology Conference](#). You can learn more about the innovations being recognized this year and the people who pioneered them by [joining us live](#) on November 9-10, 2021.

The COVID-19 pandemic posed many new complications for cancer programs and practices across the United States. As COVID-19 cases increased in early 2020, and with the end of the pandemic nowhere in sight, it became apparent that patients with cancer needed to be able to continue their treatment in a safe environment that protects them and oncology staff from exposure to the virus.

To keep COVID-19-positive patients with cancer out of the hospital where they could potentially infect others, Inova Schar Cancer Institute in Fairfax, Va., implemented remote patient monitoring technology to continually track patients' vitals while they are at home and in between their outpatient treatments. When patients arrive at the hospital for their scheduled treatments, they are isolated in an acute COVID clinic and chemotherapy is stopped if they are acutely infected.

"We didn't want these patients in the hospital if they didn't have to be," says John F. Deeken, MD, president of Inova Schar Cancer Institute. "But we wanted to keep a close eye on them. If patients had COVID-19 but were stable and breathing fine, we took this technology we already had, partnered with Locus Health, and rapidly developed the tools we needed to monitor patients at home between treatments."

In just 10 days, Dr. Deeken's team took the remote patient monitoring technology (e.g., use of iPads and vendor software) the health system uses for parents with babies who go home early from the Neonatal Intensive Care Unit and adapted it for use by patients with cancer who had contracted COVID-19. Using an iPad, automatic blood pressure cuff, oral thermometer, and finger pulse oximeter, patients input their vitals (e.g., temperature, heart rate, blood pressure) remotely three times a day and answer a set of questions. This information is tracked in real time on a master control board video monitor by nurse practitioners at the cancer institute. "If we saw patients' vitals or answers trending in a way that became worrisome, we would call and bring them in for evaluation," says Dr. Deeken.

The Pilot

Any oncology patient who tests positive for COVID-19 is eligible for the remote monitoring program that continues today. Between March 2020 and May 2020, staff at Inova Schar Cancer Institute offered 29 patients with cancer who had tested positive for COVID-19 the

opportunity to participate in the program's pilot study. Twenty-six patients agreed to join. During this pilot, three were brought into the cancer center for triage due to concerns about their vitals, while the remaining patients successfully managed their care at home. "The key to a program like this is the compliance rate," Dr. Deeken says. "We found in our initial pilot that 90 percent of patients were entering data at least once daily, and about 65 percent were entering their vitals three times a day, as requested."

Once a patient who tested positive for COVID-19 tests negative twice, in tests given more than 48 hours apart, they return the iPad and tools to the vendor to be sanitized and used again, and their participation in the program ends. Patients return to the cancer institute to safely complete their targeted or hormonal therapy.

The patient monitoring program was brought to fruition by the cancer institute's clinical leadership team, including Dr. Deeken, the head medical oncologist, head nurse, and two heads of the advanced practice providers (APPs). "We have more than 30 nurse practitioners and physician assistants, and those two APP leaders were key in working with the vendor, setting up the monitoring board, and managing the teams that monitor the patients in the program," Dr. Deeken explains. The team ensured that Locus Health's software was successfully adapted to the needs of the program and were HIPPA-compliant. Members of Inova Schar Cancer Institute's IT team and the cancer team's Epic expert worked together to make sure the technology worked and that there was smooth communication among the vendor's platform, patients' home internet connections, and the cancer institute's tracking dashboard.

A Wider Application

Dr. Deeken's team can now successfully monitor patients with cancer and COVID infection daily while they remain at home with their caregivers. "The goal of the program is to keep people safe, out of the emergency room, and subsequently avoid hospital admissions for complications if we can catch them early," Dr. Deeken explains. "Anything that we can do to reduce the cost of care, such as an emergency room admission for something that was avoidable, is a huge win for our patients and our programs."

The cancer institute first funded the oncology remote patient monitoring program through philanthropy dollars donated by the Mather Family. Plans are in place to expand the program for use beyond patients with cancer and COVID-19 to others, including those with leukemia and lymphoma. Inova Schar also has plans to establish billing for these services under the new Centers for Medicare & Medicaid Services (CMS) rules that allow reimbursement for remote monitoring.

"Remote patient monitoring technology is diverse, and there'll be a growing marketplace for it, especially now, with CMS reimbursing these services," Dr. Deeken says. "If people are getting daily radiation, you can lay eyes on them. But for patients receiving intense therapy, like those with leukemia and lymphoma, whom you are seeing only every two to three weeks when they present for treatment, those are the patients who can benefit from remote monitoring."

To learn more about Inova Schar Cancer Institute's remote patient monitoring program and how the health system partnered with its vendor to quickly implement change amid the darkest hours of the COVID-19 pandemic, [register for the ACCC 38th \[National\] National Oncology Conference.](#)