Tech that provides high-acuity home care gets high-profile boost

JUN 23, 2021

Andis Robeznieks
Senior News Writer

A technology platform that enables hospital-level services to be delivered to high-acuity patients in their home is being supported by a joint investment from Kaiser Permanente and Mayo Clinic.

The Permanente Medical Group and Northwest Permanente, members of the AMA Health System Program, are deploying the technology developed by the Boston-based Medically Home Group to launch its KP Advanced Care at Home virtual hospital program in its Northern California and Oregon regions. A medical command center in each region supports care for patients at home in acute and recovery phases.

Meanwhile, the Mayo Clinic has launched its advanced care at home program at its Jacksonville, Florida, and Eau Claire, Wisconsin, locations.

How tech drives safer care at home

"Medically Home showed that they had developed an IT platform to manage the logistics, and they had a computer program that could translate physician orders into a supplier-vendor fulfillment request that would then direct the right services and materials into a patient's home in a timely fashion," said Stephen Parodi, MD, associate executive director of The Permanente Medical Group.

Medically Home's platform was first used in the Kaiser Permanente Northern California and Northwest regions where physicians served as leaders of the command center teams and directed clinical care. Kaiser Permanente's EHR was used for documentation and order entry, while Medically Home's Cesia Continuum handled the logistics of getting care into patients' homes.

Kaiser Permanente began exploring ways to bring more acute care into the home nearly a year before the pandemic. However, the critical need to be able to provide acute services in the comfort
and safety of a patient's home became readily apparent during the COVID-19 pandemic, and both Kaiser Permanente and Mayo Clinic viewed Medically Home as a worthwhile investment.

"Based on our preliminary results that we've seen within the Kaiser Permanente and Mayo Clinic systems, we believe that this is a model that has the opportunity to spread beyond our two institutions and affect the way we care for patients that are acutely ill in the United States," Dr. Parodi said. "This is a joint investment to allow that program to flourish and grow."

John Halamka, MD, president of Mayo Clinic Platform, said the timing was right to establish this partnership.

"Rarely in the history of medicine do we see such a perfect alignment of policy, technology and cultural transformation converging to produce a new care paradigm like acute care at home," Dr. Halamka said in a statement.

**Meeting patients' home needs within hours**

The care provided goes way beyond what is typical for remote patient monitoring or home-health services, said Dr. Parodi, an infectious diseases physician.

"We're taking patients that would typically be admitted on a regular medical surgical hospital floor and keeping that patient in their home," he said. "In addition to remote monitoring, you need the interface between a hospital record and all the physician orders, then getting that translated into literally 18 different services that have to be delivered at the speed of care. We've got to be able to get the doctor's orders, the fluids, the medications delivered to that patient's home within a course of hours—not days."

Redundancies are built in so that if a vendor can't meet an order at the time the patient needs it, there's a second and a third backup. Community paramedics have been used to help examine patients and deliver medications and equipment to homes. If patients need to be admitted to a hospital, the paramedics can transfer them.

Seeing patients in their homes allows for physicians or other clinicians to assess a patient's social determinants, fall risks and diet. It also mitigates patient-transportation barriers and allows for better medication reconciliation.

Kaiser Permanente has provided care this way to more than 500 patients, and Dr. Parodi said satisfaction scores have been "extremely favorable and high" while readmissions have been comparable to, or lower than, rates seen with traditional hospital discharges.

Expanding the use of Medically Home's platform will require IT investments and research into ideal
staffing levels, Dr. Parodi said, adding that both will be done.

"Both Mayo and Kaiser Permanente believe that up to a third of all acute-care hospitalizations within our hospital systems, and probably throughout the U.S., could eventually move to a platform like we're describing," he said.