

New Tech-Enabled Remote Care Service Results in 98% Dose-Level Medication Adherence

Summary

The goal of this pilot was to demonstrate video direct observation of therapy (VDOT) via the Ōmcare Home Health Hub® (Hub) in a home-setting enabling dose-level medication adherence and related cost avoidance, lower cost of care and a high-quality care experience for patients and caregivers.

Medication adherence among older adults with chronic conditions taking multiple medications can be hindered by forgetfulness, the complexity of regimens, functional status, and other factors. Establishing the Hub as a viable conduit to overcome common barriers to medication adherence and enhance patient-caregiver communication will provide a useful tool to augment and facilitate current care practices for polypharmacy seniors.

The Hub is a two-way audiovisual device that can dispense pharmacy prepared medication pouches and provide visual confirmation of correct dosing and timing of therapy. Easy interface, multiple cameras, and a corresponding smartphone app allow for patients and caregivers/clinicians to interact, discuss therapy, and directly observe ingestion of medication at the appropriate time(s) during the day.

Pilot metrics

- **Evaluate medication adherence among participants:** Adherence at its most basic level is how well those who are prescribed medication adhere to taking their medication as prescribed. With the pilot, we wanted to know whether the Hub could improve the pattern of medication-taking behavior among participants using both visual confirmation and the unique time-stamping feature that accompanies medication dispensing.

Pilot metrics continued

- **Examine patient and caregiver satisfaction:** Using a survey with answers on a five-point scale (ranging from strongly disagree to strongly agree), we want to collect data on the perception of the Ōmcare Home Health Hub on convenience, self-perceptions of adherence, satisfaction, preference for using the Hub versus traditional pill bottles, recommendation of the system to others, and overall health improvement.
- **Evaluate costs:** A decrease in medication adherence can increase costs for loved ones and their families. There is also the increase in costs beyond monetary value, like time spent on additional visits to the doctor, trips to the pharmacy, and calls to insurance companies.

We evaluated how well the Hub could help reduce costs for participants and their families using the built-in features that facilitate adherence and remote care.

Pilot participants

- 12 participants aged 65 or older living independently.



- All participants take 4 or more medications daily.



- All participants currently have their medication sorted and managed by a caregiver or family member.

Pilot methodology

The pilot ran for approximately three (3) months. The Hub was installed in each participant's home, and was preloaded with a 30-day supply of pouched medication mailed directly to their homes by Thrifty White Pharmacy. Each participant received two video calls a day from Ecumen caregivers to their Hub when it was time for medication. All participants were surveyed before the pilot, 2 weeks after their start date, midway and at pilot completion.

Pre-pilot survey results

Before the pilot, we wanted to get a baseline of our participants' thoughts and feelings on their medication-taking habits.

- 63% of participants noted that forgetting to take their medication is the biggest challenge they face



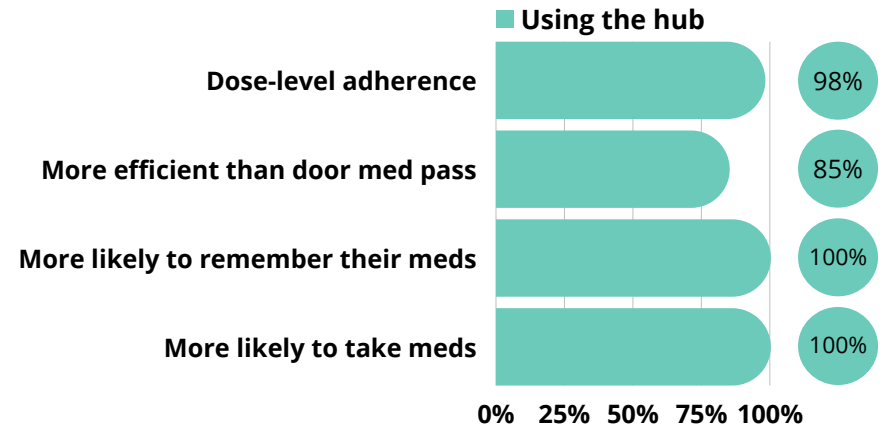
- 100% of participants use either a pill organizer or pill bottles to organize their medication
- 3 participants noted that reminders would help them take their medication correctly 100% of the time

Final pilot survey results

Overall, the pilot for the Ōmcare Home Health Hub was a huge success across key metrics. All of the pilot data is based on 780 calls, with the average call duration lasting three (3) minutes.

- The participants had 98% dose-level adherence
- The service with the Hub and caregiver calls is 85% more efficient than door med pass
- 100% agree the Hub helps them remember to take their meds
- 100% agree they're more likely to take their meds using the Hub

Final pilot survey results continued



Through conducting the pilot, we saw major themes come to fruition. These validated that the Hub has a place in home to increase health and in senior care businesses to increase efficiency.

Efficiency for businesses: Current medication delivery systems are labor-intensive and promote dependence on caregivers of all types for administration of prescribed drugs. Coupled with the healthcare workers shortage that is only anticipated to grow inversely for the aging population, there is great efficiency, both in time and money, for using the Hub to make reminder calls.

Better health outcomes for patients: When patients can receive dose-level reminders and medication assistance, everyone wins. They're less likely to go to the hospital, saving time and money for all parties. They also feel better day-to-day which has ripple effects on nearly every other aspect of living a healthy life.

Next steps

The Ōmcare Home Health Hub will be available in early 2023. We are seeking to conduct large commercial market trials with strategic partners to continue to validate clinical and economic value.