

# Impact of Deploying the Wanda Patient Management Platform



Over the last 12 months Wanda has delivered dramatic results across several patient cohorts and in a variety of care models. Wanda uses patented machine learning health algorithms, developed from an eight year UCLA research project, to predict pending adverse events before they occur and then facilitates virtual clinical interventions to prevent those events. The evidence from the clinical studies showed Wanda capable of predicting 90% of adverse events for high-risk patients.

## The Current Clinical Evidence

The impact Wanda brings to providers, payers, and patients solves many of the common issues across the healthcare continuum. The clinical research compiled by our data scientists validate the positive effects of the Wanda platform. The recent clinical evidence includes:

Metric	Impact	Cohort	Details
Readmissions	46% reduction in 30-day readmission rate	Heart Failure (all conditions) where HF was the primary diagnosis.	24-month analysis of HF patient population. 6-month comparative intervention study of Wanda intervention versus non-Wanda users on avoidable readmission rates. 6-month results from 468 patients during Q4 2017 – Q1 2018.
Patient Adherence	74% compliance with daily care plan	High risk, comorbid CHF	Average patient compliance to care plan measured by daily interaction with Wanda for daily check-ins including symptom review and vitals
Length of Stay	7.9 day reduction in length of stay	Orthopedic surgery patients, post-surgery included in The Comprehensive Care for Joint Replacement Program (CJR) for Total Knee Replacements (TKR)	Pilot conducted with Orthopedic surgeons to collect metrics in the patient's home that track patient outcomes post-surgery to find gaps in clinical information not captured during the critical time frame from 3 to 14 days of post-operative care. 6-month analysis showed a decrease in length of stay (LOS) from 19.4 days to 11.5 days. Results demonstrated a decrease in cost per case of 18% compared to cases not involved in the pilot.
Clinical Outcomes	Achieved desired patient outcomes 41% faster	Orthopedic surgery patients, post-surgery included in The Comprehensive Care for Joint Replacement Program (CJR) for Total Knee Replacements (TKR)	In the pilot study (see LOS), a 12 comparative month analysis showed that patients achieved desired outcomes 41% quicker than prior to the pilot for outcomes including: Knee Flexion, Knee Extension, Pain with Activity, Knee Circumference, and Quadriceps Strength.

## Expected Impact of Wanda

Our data scientists are collaborating with customers to expand on the other positive effects being experienced. While not validated, preliminary analysis suggests Wanda will have a positive impact on metrics including:

Metric	Impact
Utilization	The impact of Wanda to decrease the cost of care will be reflected in: a) Replacement for a portion of in-home or in-office visits with virtual communication features, b) Supports more timely care decisions before they become emergent, c) Expands ability to support a larger load of patients
Patient Satisfaction	The virtual intervention tools combined with the real-time data facilitates more frequent and meaningful "visits" than conventional models; at a fraction of the cost: a) Patients, and their families, will build a stronger bond with their care team leading to increased patient satisfaction scores, b) There is expected to be an additional halo effect of increased clinician satisfaction due to expanded abilities to positively support patients
Clinical Outcomes	Wanda provides clinicians with early warning on pending patient issues allowing them to more quickly engage patients in corrective care plan actions. a) The outcomes for patients on Wanda should stabilize and/or improve at a more rapid rate when compared to conventional care models.

## Common Issues Where Wanda Will Help

The impact of Wanda is having profound effect on how providers and payers are able to simultaneously expand care, reduce risk, and streamline costs. Using the proactive approach allows the clinical teams to modify patient behavior with corrective interventions, thus avoiding the adverse event before the damaging effects happen. The Wanda platform model also facilitates higher level of appropriate care, anytime, anywhere care at a higher frequency, increasing the satisfaction of the patient, family members, and clinician teams. National care benchmarks for comparison include:

- Readmissions, especially heart failure, place a huge burden on healthcare providers and payers. A single readmission for a heart failure is estimated at \$13,000 per readmission and \$13,800 as an average cost for all diseases for patients on Medicare.
- Reducing the average length of stay for patients, moving patient to less costly setting of care is optimal with each inpatient day costs an average of \$1,831 to \$2,214.
- 40% of patients fail to adhere to treatment recommendations and instructions with \$100 to \$300 billion in avoidable health care costs have been attributed to nonadherence in the US annually. Adherence rates dramatically drop to 20% for patients that are required to thirteen or more medications per day.
- Caring for patients in home or post-acute setting can now be controlled using the real-time predictive analytics to warn of imminent adverse events, such as keeping 30-day readmission rates to below the 16% average

