

# How Cardiac Solutions took already low readmission rates and found a new path to further reduce by 50%.

With the help of MD Revolution's care management design and robust analytics, Cardiac Solutions drives significant improvement in reducing readmissions for patients.



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Cardiac Solutions is an innovative team of 22 cardiologists, known for delivering comprehensive cardiac care throughout three West Phoenix locations.

The physician-owned group has a sterling reputation for excellence, serving patients with personalized cardiovascular treatment plans while continually exploring new approaches to provide high quality care at lower costs. The practice recently expanded its concierge-like care for Medicare patients by partnering with MD Revolution to implement RevUp, a Chronic Care Management (CCM) and Remote Patient Monitoring (RPM) program and accompanying patient engagement application.



## Challenge

One in five Medicare patients is readmitted within 30 days of discharge, according to the U.S. Centers of Medicare & Medicaid Services. High readmission rates are due to various factors, including: inadequate follow-up care, lack of patient education, and poor coordination between healthcare providers. Patients who are discharged without adequate education about their condition and treatment plan, in fact, are 70% more likely to return to the hospital. Similarly, patients who do not receive timely follow-up care are also at a higher risk of readmission.

On top of the primary challenge of readmissions, there is also the difficulty of outcomes measurement, largely due to data silos. Cumulatively, this results in suboptimal care, lack of transparency, and added cost to the system.



“Population health management is important to us. We wanted to reach patients with other chronic disease states and provide them with quality care in between their already scheduled in-office visits with cardiologists. Keeping a patient out of the hospital is good for the patient, insurance providers, and hospitals.”

CHRISTINE ONSTOTT, AAS-N, BS,  
DIRECTOR OF OPERATIONS, CARDIAC SOLUTIONS

## Methodology

With already low readmission rates compared to the national average, the innovative team at Cardiac Solutions set out to prove the impact of implementing a remote care management program to further enhance quality. The Cardiac Solutions team also utilizes MD Revolution's proprietary data analytics to monitor, track and report on a statistically significant unique patient population under its care. MD Revolution's remote care management data was paired with data from the point of discharge, enabled by integration with mobile rounding software. This allowed Cardiac Solutions patient data to be tracked across the continuum of care, from the hospital to home and if applicable, readmission.

### Cohort calculation:

**1,037 patients** enrolled in remote care management before their first admission occurred, or enrolled within 30 days of their first admission

**25,654 patients** not enrolled in remote care management at the time of readmission

This case study presents the findings of an analysis of Cardiac Solutions data, specifically looking at patient readmissions comprising 43,329 records including 26,689 unique patients. We conducted a thorough analysis of the data to identify patterns, trends, and insights related to patient readmissions and their association with MD Revolution's RevUp remote care management services.

## Solution

In late 2021, Cardiac Solutions expanded its concierge-like care for its Medicare patient population, partnering with MD Revolution to implement Chronic Care Management (CCM) and Remote Patient Monitoring (RPM) programs integrated with athenaPractice. They ramped up CCM and RPM programs simultaneously with record patient enrollment, vitals collection, and patient adherence, while embracing a record low number of escalations back to providers.

From the onset, remote care programs were curated for Cardiac Solutions' patient population and clinical goals, providing clinical care and digital applications for patient education, improved medication adherence, early intervention, and continuity of care across providers and settings. Behind the scenes, MD Revolution's care management software allowed the practice access to advanced analytics of longitudinal data as well as integrated data captured in the acute care setting, providing transparency across multiple points of care.

Well-designed remote care management programs have the potential to overcome challenges that cause readmissions and significantly improve patient outcomes.

To measure the contribution of Cardiac Solution's remote care programs to already low readmission rates, an analysis of twelve months of 30-day readmissions data was conducted from 26,689 unique Cardiac Solutions patients. The percentage chance of readmission was evaluated amongst the cohort of patients enrolled in care management services vs. those that were not enrolled.



**"The CCM component provides us with the personal clinical touchpoints we want our patients to experience, sort of like a concierge service, and the RPM component allows us to monitor blood pressure, which is a health component that CCM can review with the patient. They go hand-in-hand."**

**CHRISTINE ONSTOTT, AAS-N, BS,**  
DIRECTOR OF OPERATIONS, CARDIAC SOLUTIONS

## Readmission Metrics Spanning 1 Year

Here's a breakdown of the difference in readmissions between patients in the RevUp program and those not enrolled:

	30 Days	60 Days	90 Days	120 Days	180 Days	365 Days
RevUp Patient Readmissions	74	108	126	142	161	201
RevUp Readmissions Percentage	7%	10%	12%	14%	16%	19%
Non-RevUp Patient Readmissions	3840	5286	6025	6427	6976	7757
Non-RevUp Readmissions Percentage	15%	21%	23%	25%	27%	30%

## The Results: Care Management patients were 50% less likely to have a readmission than those not in a program

With Cardiac Solutions’ patient data spanning multiple points of care, the analysis showed that patients who were not enrolled in care management services were twice as likely to be readmitted than patients enrolled.

The statistical significance of the 30-day readmission rates suggests that lower readmission rates can be realized by empowering patients to take an active role in their health — and avoiding complications that may require hospitalization.

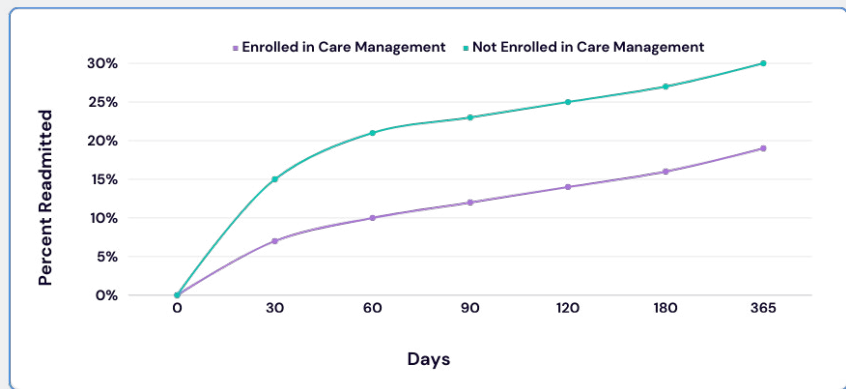


“We are proud of our partnership with Cardiac Solutions, our own MD Revolution remote care management technology platform, and the analytics team that delivered this critical data to demonstrate the efficacy of remote care management.”

KYLE WILLIAMS, CEO, MD REVOLUTION.

### RevUp vs. non-RevUp Readmits by Days

Patients in the RevUp program experienced significantly lower rates of readmission than non-participants:



For Cardiac Solutions, the achieved 50 percent reduction in readmissions offers proof that remote care management programs with the right technologies and clinical services work. But success requires more than simply implementing a remote care management program. Cardiac Solutions was able to achieve the dramatic reduction in readmissions by partnering with MD Revolution to customize the program design and analyze data to measure progress — and plan for outcomes from the beginning, not by adding the capabilities on at the end.

MD Revolution partners with health systems and medical groups to design robust remote patient monitoring and chronic care management programs by setting straight-forward, attainable goals, customized for each practice’s population.

For a picture of sustained program success and a tailored practice pro forma, [Contact us here.](#)