

# Telehealth Program Reduces Hospital Readmissions Among High-risk Cardiac Patients

“ Using the successful telehealth program model we already had in place allowed us to leverage an existing platform to create the Heart & Vascular Program in conjunction with our health system and its staff of cardiologists. Through it, we were able to address the CHF patient population that did not qualify for certified home health care, yet stood to benefit from its extra medical oversight.”

- David Taylor,  
Supervisor of Telehealth Services  
and awarded the “Home Care & Hospice Nurse of the Year” for the state of Illinois in 2013, Visiting Nurses Association of Rockford (VNA)



As the largest and most widely-recognized non-profit home care agency in northern Illinois, the Visiting Nurses Association of Rockford (VNA) currently uses Honeywell’s Genesis family of remote patient monitors in conjunction with its LifeStream Management Suite to monitor home health patients and keep hospital readmissions low. But recently the VNA Rockford team expanded access to their remote patient monitoring (RPM) services to previously non-qualified, high-risk CHF patients to bring about sustained readmission reductions – **reported at around 14 percent**, year-to-date.

\*Robert is a chronic heart failure (CHF) patient who was in and out of the Rockford Memorial Hospital on a regular basis. On several occasions following a discharge, he would be placed under care with the Visiting Nurses Association of Rockford (VNA), and they would monitor his vitals using Honeywell’s Genesis DM remote patient monitor and LifeStream Management software for between 45 and 90 days, on average.

Throughout that timeframe, they would be able to keep him out of the hospital by identifying changes in his health as they happened, and work with his physicians to address the issue and adjust his medications accordingly.

But after his 60-90 days of RPM (the certified home health care period), Robert would be discharged from VNA services, the monitor would go back to the VNA, and in short order, he would end up back in the hospital.

## Bringing Their A-Game

That all changed when VNA introduced a new program they called the **Heart & Vascular Program**, which identified high-risk CHF patients like Robert who could benefit from remote patient monitoring in both short- and long-term timeframes.

Even though a subset of cardiac patients treated for CHF weren’t typically eligible for remote patient monitoring (RPM) services because they didn’t qualify under Medicare guidelines, VNA recognized that in most cases, RPM could work to keep those patients from being readmitted to the hospital.

To that end, the staff at VNA worked with Rockford Memorial Hospital cardiologists to create the new program which allowed any patient being treated by a hospital cardiologist to receive a monitoring device – whether they qualified for VNA services under Medicare or not.

The VNA staff and hospital cardiologists created protocols and standards around the RPM services for each patient. Some vital signs or parameters were standard for each patient (such as weight), but others were customized to each patient (such as blood pressure, for example), in order to ensure that each patient received proper monitoring and attention.

If the VNA telehealth nurses observed that a Heart & Vascular Program patient was exhibiting out-of-normal range vital signs, they alerted the patient’s cardiology staff, who then made contact with the patient and worked with them to address any health issues.

**Honeywell**

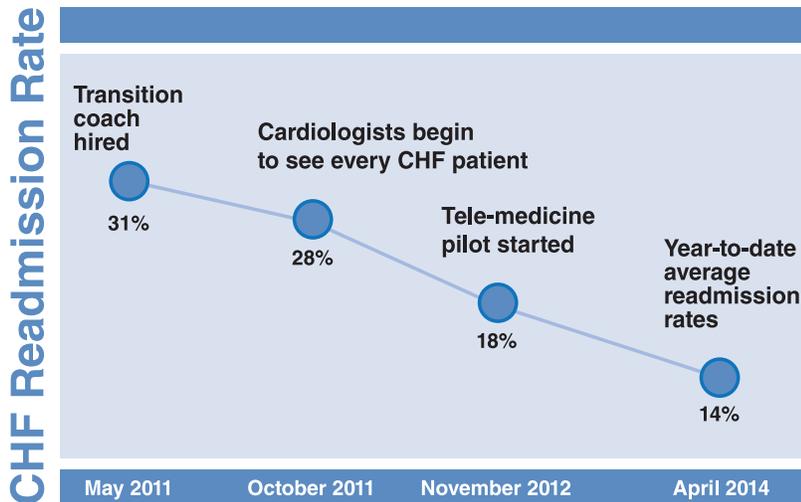


Chart displays readmission rates for the VNA Rockford CHF patients, representing a portion of overall hospital readmissions.

### LifeStream: the Key to Customized Remote Patient Monitoring

The combination of standardized versus customized vitals monitoring might have been incredibly difficult to manage within the framework of VNA's RPM program that has more than 60 patients at any given point in time, but using Honeywell's LifeStream Management software allows the VNA nurses to easily import existing standards as well as set customized ranges in a patient record, making it simple to implement a truly customized patient experience. The software also allows VNA telehealth nurses to easily monitor all those patients and their vital signs at one time – in fact, they would be able to manage more than 150 patients using the LifeStream software

While most cardiac patients in the Heart & Vascular Program have monitoring devices with them for 45-90 days, the VNA staff has the ability to be as flexible with those timeframes as it does with patient vital signs.

For example, with the patient Robert, the VNA staff recognized that longer-term monitoring might be the key to keeping him healthy and out of the hospital. After 6 months of monitoring, Robert's vitals indicated a change in lifestyle had occurred: he had lost weight through diet modifications and exercise. Once he realized that the VNA staff would be there as a resource for as long as he needed, he felt empowered and supported to make significant changes to his lifestyle that contributed to increased good health. He has been "hospital-free" for more than a year at the writing of this piece.

### And the Results are In: Hospital Readmissions Decreased

With CHF patients representing a large portion of hospital readmissions, VNA recognized correctly that addressing the needs of that population could have significant impact on the overall hospital readmission rates. Within a year of Heart & Vascular Program implementation, the readmission rates at Rockford Memorial Hospital had dropped from **25 percent to 17 percent.**

While the Heart & Vascular program played a significant part in reducing CHF readmission rates, VNA notes that they were able to measure highly successful results within the program participants, as they watched the readmission rates for high-risk CHF patients drop to **about 4 percent.**

But for patients like Robert, the program has provided much more than simply a ticket out of the hospital readmission frequent flyer club – he now enjoys the benefits of better health and well-being, which he would say are "priceless."

*\*Name changed to protect privacy.*



The Visiting Nurses Association of Rockford (VNA) is a part of Rockford Health System and the largest non-profit home care agency in northern Illinois, providing compassionate care to Rockford area residents for more than 100 years. Physicians, case managers, discharge planners, and most importantly, patients and families, depend on them for professional patient-centered clinical care and personalized services.

VNA is ranked in the top 25 percent of all Medicare-certified home health agencies for financial stability, quality patient outcomes, and patient satisfaction. They are certified by Medicare and Medicaid, and are accredited by the Joint Commission on Accreditation of Healthcare Organizations.

### VNA consists of four core programs:

- Home health
- Home medical equipment & supplies
- Hospice
- Older adult services