



SENSIBLE
MEDICAL
Seeing through walls

Geisinger

Geisinger Caring Experience
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Cardiologist

Patient Selection

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Patients are mapped and selected in pockets of high concentration in the NE and NC regions

Group	Patients in Crisis	Patient in High Risk	Patient in Low Risk
Clinical indications	<ul style="list-style-type: none"> • Fluid accumulation • Fatigue/dyspnea • NYHA Class III or IV • Exercise tolerance acute change <50 feet • High Utilization 	<ul style="list-style-type: none"> • No fluid accumulation • Fatigue/dyspnea • NYHA Class III or IV • Exercise Tolerance <300 Feet • High Utilization 	<ul style="list-style-type: none"> • No fluid accumulation • No fatigue/dyspnea • NYHA Class II (or I) • No fluid accumulation • No symptoms • Exercise Tolerance >300 feet
Home Visits by CHA	1-2x per Week	1 Per Week	N/A

ReDS™ values and HF Questionnaire used to determine risk profile and clinical response

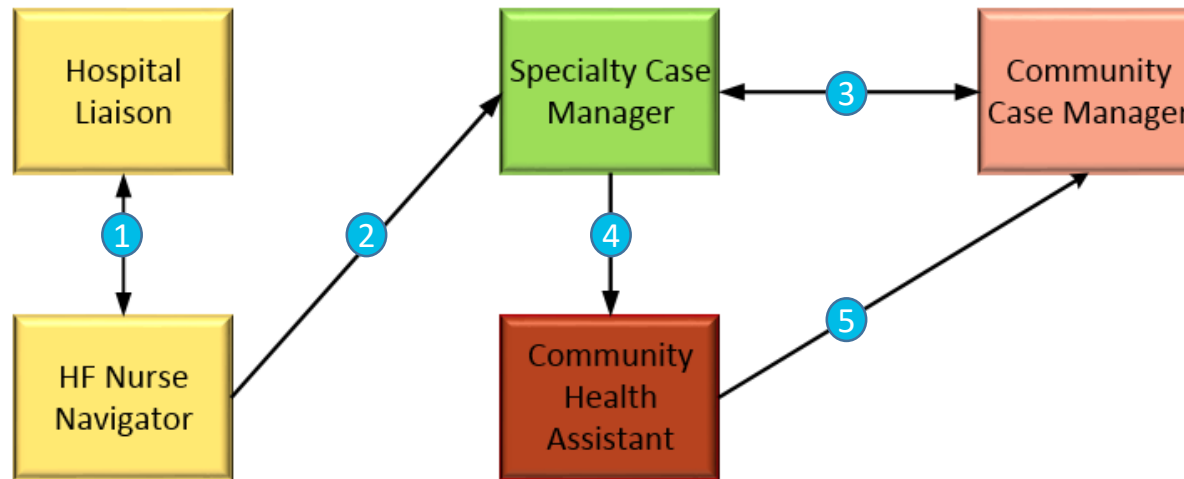
Exclusions

1. Enrolled in SMILE Study
2. Extreme scoliosis
3. Right sided implants
4. Height under 5'1 or over 6'4
5. BMI under 22 or over 38
6. Rib fractures



ReDS Heart Failure Monitoring Workflow

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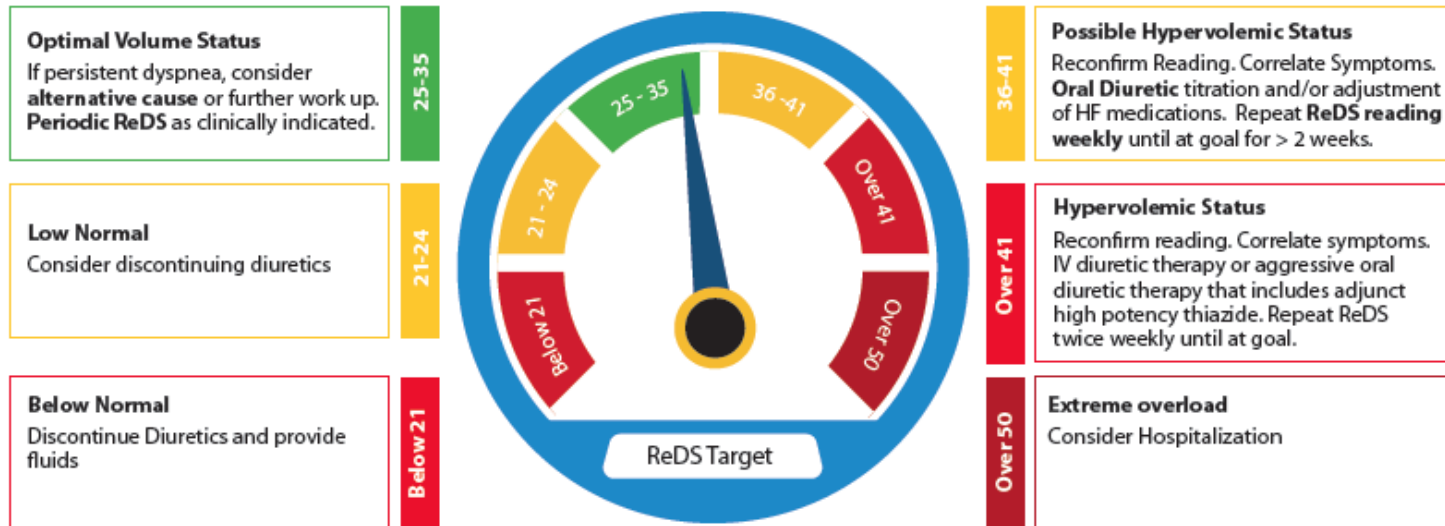
- 1 High risk or crisis level Hospital discharge or clinic referral for vest monitoring
- 2 SCM prioritizes deployment of CHAs and confirms that there are no contraindications to vest monitoring
- 3 CCM refers high risk or crisis level patients to SCM for vest monitoring
- 4 CHA goes to home and performs the HF screen questions and Vest reading
- 5 Results communicated to referring CCM or HF nurse



ReDS Protocol Flow

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Patients are mapped and selected in pockets of high concentration in the NE and NC regions



Reduction of HF hospitalizations

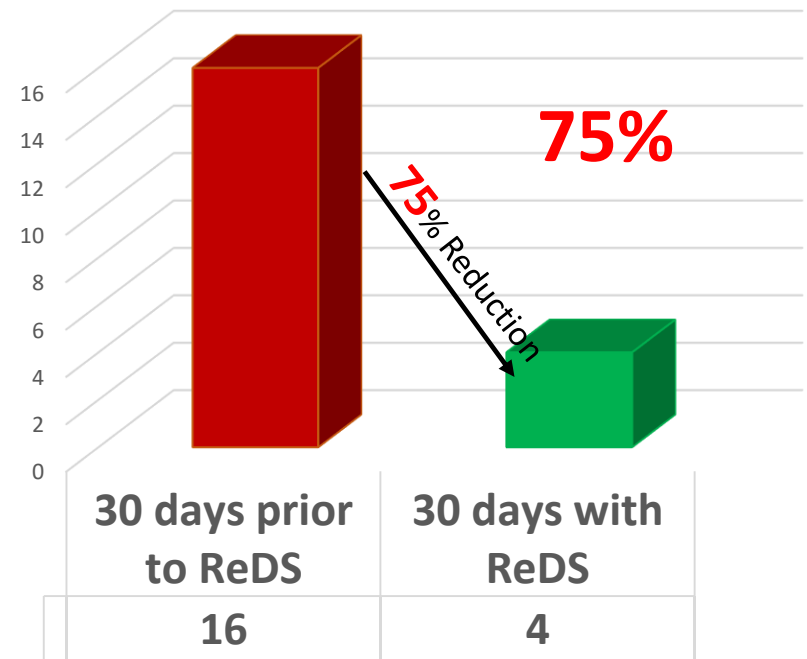
28 high risk/crisis patients in the cohort

The Problem: 46% of patients had been hospitalized 30 days prior to enrollment, some on multiple occasions

The Solution: Utilize ReDS™ technology to assess volume status and correlate symptoms to reduce readmissions

The Result: 86% were successfully treated in the comfort of their home, avoiding readmission

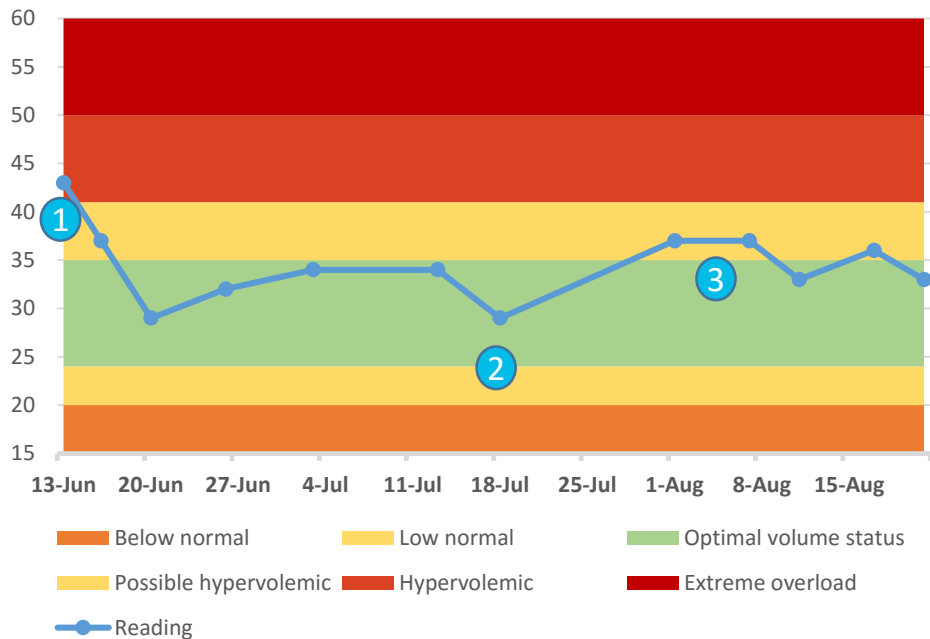
Geisinger HF Readmissions



Patient NC1 – Reds Readings and Treatment

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84-Year-old with chronic systolic heart failure due to cardiomyopathy.



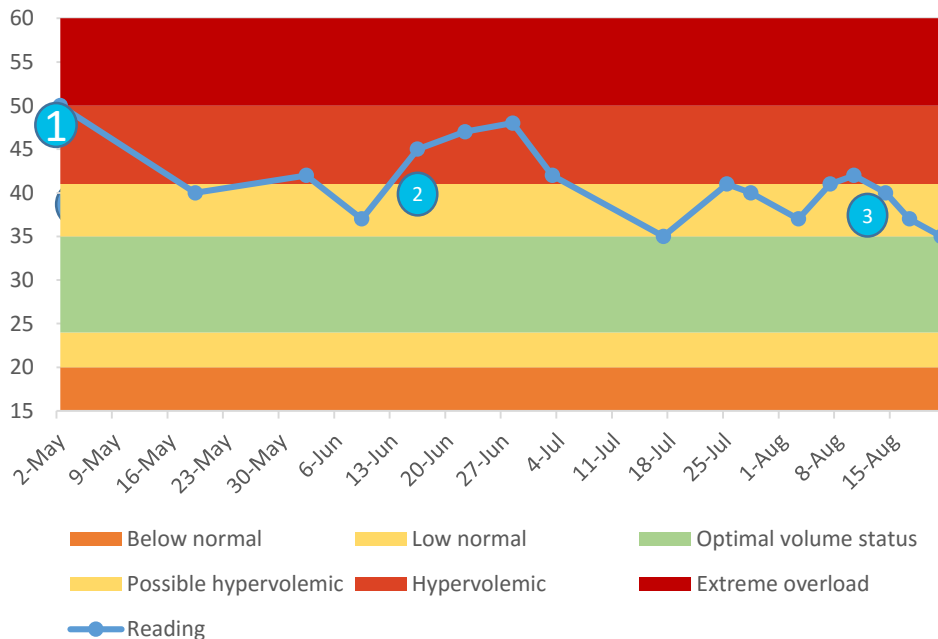
- 1 Initial ReDS reading of 43 in the Cardiology Clinic. IV Lasix given, Metolazone started and beta blocker lowered.
- 2 ReDS measurement of 29 in the home. Torsemide decreased to 3 days per week and stop metolazone, Toprol increased. *Patient asked to stop in home measurements temporarily due to family members illness.*
- 3 ReDS measurement of 37 in the home. IV Lasix 80 mg given and Torsemide increased to daily for few days.



Patient NC2 – Reds Readings and Treatment

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62-year-old with acute on chronic systolic HF secondary to ischemic cardiomyopathy, BiV ICD placed in 2016



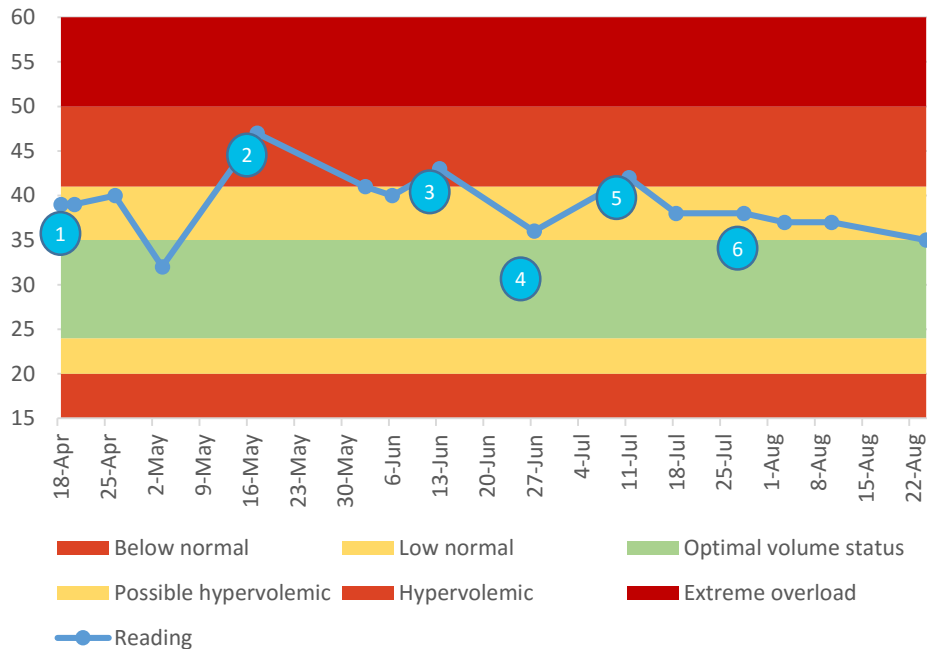
- 1 Initial ReDS reading of 50 in the Cardiology Clinic. Increased Bumex and starting Spironolactone.
- 2 ReDS measurement of 45 in the home. Medication adjustments made via phone. *Patient admits to skipping oral diuretic and not following diet.*
- 3 Patient can see that compliance is a very important factor to managing their HF.



Patient NC3 – Reds Readings and Treatment

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80- year old male with systolic heart failure.



- 1 Initial ReDS reading of 39 in the cardiology clinic. Torsemide and Metolazone was adjusted.
- 2 ReDs reading of 47 in the cardiology clinic. Medications adjusted. Pt referred for home ReDS readings with compliance issues.
- 3 ReDS reading of 43 in home. Pt scheduled for toe amputation. Advised surgical team of hypervolemic status to manage fluids accordingly.
- 4 ReDS reading of 36 in rehab center.
- 5 ReDS reading of 42 during follow up visit in the cardiology clinic. Medications adjusted.
- 6 ReDS readings of 38 in the home. Patient continues to improve. Patient and family very appreciative of the vest and understand the importance of remaining compliant.

