

Heart Failure All Cause Readmission Reduction

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Background

Greater Oaks Healthcare has a culture of continuous improvement. The cardiovascular service line has a CQI approach to Heart Failure readmissions. Over the past year the readmission rate reached 21%. In addition to an excellent pharmacologic and home care program, readmission rates are on the increase.

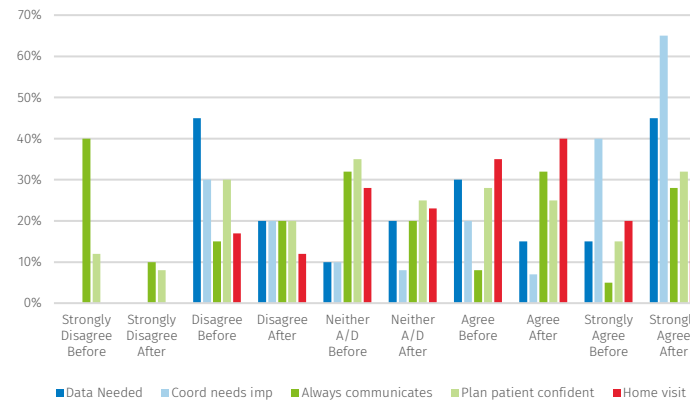
Methods

A team was established to take a deep dive into the current program for HF care. It was determined to focus on a multidisciplinary care team approach that connects the inpatient discharge plan to follow up in the home. This included, having members of the inpatient care team participate in a home visit within seven days of discharge. This includes the discharging Medical Resident, RN, and CLSW.

Results

- Care team surveys revealed an improved sense of collaboration, coordinated care planning and the appreciation of different perspectives that enhanced the care plan.
- Patients reported an increased sense of being heard by their care team and a continuity of information from hospital to home. They appreciated having a follow up visit from their inpatient RN and Medical Resident.

Care Team Survey Results
HF Readmission



Conclusions

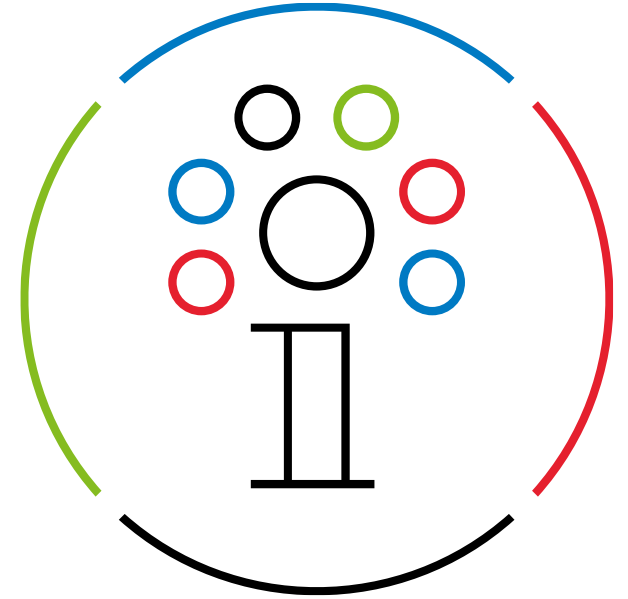
Continuity of care from hospital to home enhanced patient trust and improved outcomes, including reductions in hospital readmissions.

References

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Heart Failure All Cause Readmission Reduction

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- Current State
- Project Background
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- PDSA Cycle
- Sustainability
- Dissemination



Project Team

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Current State

Problem you are solving

The heart failure 30 day readmission rate is 21% across our cardiovascular program. Factors include severity of illness, co-morbidities, age, prior hospital admissions, and social determinants of health. Despite optimal pharmacological interventions and post discharge home program, our readmission rate has increased 1% over the past over the past three years.

Cost of readmission for this population is \$15,879 per patient as of 2020 data.

Supporting documents:

[Heart Failure Readmission Data.xlsx](#)

Current State

Continued

What you are doing now

The cardiovascular services department has been working on heart failure readmission rates for years. Despite optimal pharmacological interventions and post discharge home program the rates are going up. The Medical Resident has not been a part of the patients transition to home or the home program once the patient is stable.

Current State

Continued

Process map and high-level steps

The discharge process starts upon admission. For new HF patients education is a primary focus to assure the patient and family know about their HF diagnosis and care plan. For readmissions the care team does a case review, immediately to determine the root cause for the readmission.

Supporting documents:

High Level Process Map Cardiovascular Services.docx

Current State

Continued

Who is involved	What they do
Charge Nurse and Resident	For readmissions, a review of the case is started upon admission to determine the root cause of the patients readmission.

Current State

Continued

What is done well

1. Patients are admitted and stabilized quickly, LOS is less than 3 days (60 hours) for patients who are readmitted with HF.
2. Patients are satisfied with the care.
3. Patients like the home care follow up visit by RN.

Current State

Continued

What could be improved

1. Resident participation in discharge planning and home care follow-up.
2. Smoking Cessation communication.
3. Medication education in home; Medication reconciliation and improve confidence of patient and family once home with new medication instructions.
4. Meals post discharge.

Project Background

Change or Evidence-Based Practice question

Does Medical Resident involvement in HF patient transitions reduce readmissions?

Project Background

Stakeholder	Role	Deliverable
Dr. Carla Schaefer, MD	CMO	Project Champion
Jonas Robertson, RN, PhD	CNO	Project Sponsor
Omar Tobias	VP Cardiovascular Services	Project Sponsor

Continued

Project Background

Campus

- Great Oaks Healthcare

Unit

- Cardiac Step Down 5S

Strategic Alignment

Strategic alignment

- Quality and patient safety
- Patient satisfaction
- Care delivery effectiveness
- Financial health

PDSA Cycle(s) Summary

2 cycles

Cycles	Interventions	Cycle decision
Title Collaborative documentation, smoking cessation, and resident home visit bundle Start date 2023-04-01 End date 2024-04-03	Multidisciplinary Documentation ----- Smoking Cessation ----- Resident Home Visit	Completed Cycle decision: Adopted
Title Medically tailored meals Start date 2024-04-01 End date 2024-07-31	Medically tailored meals	In-progress

PDSA Cycle 1:
Collaborative
documentation,
smoking
cessation, and
resident home
visit bundle

Plan

What are you trying to accomplish

Reduce HF readmissions from 21% to 15% over 2 years.

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Plan

How will you know that a change is an improvement

1. HF readmission daily, weekly, monthly, quarterly, annually
2. Patient survey pre-post intervention
3. Care team survey pre-post intervention (MD, RN, LCSW, Pharmacist)
4. Smoking Cessation rates

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Plan

What change can we make that will result in an improvement

Studies demonstrate resident participation in smoking cessation and comprehensive discharge interventions had a substantial impact in quality metrics. Residents benefit by increasing their ability to mentor others and become aware of resources internally and externally to support the patient, thus reducing readmissions.

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Plan

Intervention title	Description
Multidisciplinary Documentation	Individuals from all disciplines will participate in content identification and design. Document will be tested on paper prior to IT development in EMR. A continuous improvement cycle will be used until team approves
Smoking Cessation	Medical Residents will drive their role in smoking cessation and home visit process design. Medical Residents see patients in clinic and hospital, having this relationship continuity go to a home visit post discharge to reinforce smoking cessation and medication management will be key
Resident Home Visit	Medical Residents see patients in clinic and hospital, having this relationship continuity go to a home visit post discharge to reinforce smoking cessation and medication management will be key.

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Plan

Action plan: How do you know it will get done?

1. Engagement of Medical Director and CNO to gain support and champion
2. Engage Information Technology (IT) to design a specific multidisciplinary team documentation template for Heart Failure
3. Provide Education and training for residents, nurses, social work and doctors
4. Engage clinical data analytics team for data tracking and analysis
5. Design pre-post study to focus on satisfaction of resident, nurse and social worker during discharge planning process and home care follow up visit(s)
6. Patient satisfaction survey

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Do

What	Who	By when
Develop a multidisciplinary HF guideline documentation tool to promote team approach to care coordination	R. Jaslow, RN MS	7/22/20XX
Develop process for smoking cessation program enhancement for Medical Resident	J. Pankow, RN	8/1/20XX
Engage IT for form development in EMR	K. Redlin, RN DNP	8/2/20XX
Develop pre-post surveys for patient and care team	S. Chin, RN MS	9/15/20XX
Design Test of Change Medical Resident visit to home	C. Shaw, RN DNP	10/30/20XX

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Do

Describe change process and procedure to be followed?

The key to this change will be collaboration, inclusion and a small team of respected professionals getting input and feedback with their peers so changes can be made in real time.

1. Multidisciplinary Documentation.
 - Individuals from all disciplines will participate in content identification and design.
 - Designated individuals will seek colleague input and discuss the importance of the project.
 - Document will be tested on paper prior to IT development in EMR. A continuous improvement cycle will be used until team approves.
2. Smoking Cessation
 - Medical Residents will drive their role in smoking cessation and home visit process design.
 - Medical Residents see patients in clinic and hospital, having this relationship continuity go to a home visit post discharge to reinforce smoking cessation and medication management will be key.
3. Resident Home visit
 - Medical Residents see patients in clinic and hospital, having this relationship continuity go to a home visit post discharge to reinforce smoking cessation and medication management will be key.

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Do

Implement pilot or test of change

Resident Home Visit

- Medical Resident will participate with the RN in a home visit within the first 7 days of discharge.
- Home is defined as the place the patient will stay for the next week or longer. This could be a transitional care facility, family or friends home or their permanent place of residence.
- Date and time of appointment is made during care team discharge planning with the patient.
- Goal: does the established resident relationship with the patient by reinforcing smoking cessation and medication management reduce rates of smoking and readmissions.

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Do

Data collection plan

1. Pre-post survey care team.
 - Pre survey to be completed by 6/1/20XX
 - Post survey to be completed after 50 patient visits or 3/31/20XX
2. Pre-post survey patient.
 - Prior to discharge or during discharge planning discussion
3. Post survey to be completed in clinic visit after home visit
4. Readmission daily reporting to be captured in daily rounds.
5. Readmission reporting monthly, quarterly, annually via current reporting systems.
6. Smoking cessation rates via patient reported data in EMR.

Supporting documents:

[Care Team Survey HF Readmission Project.docx](#)

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Study

Pre-data comparison to post-data

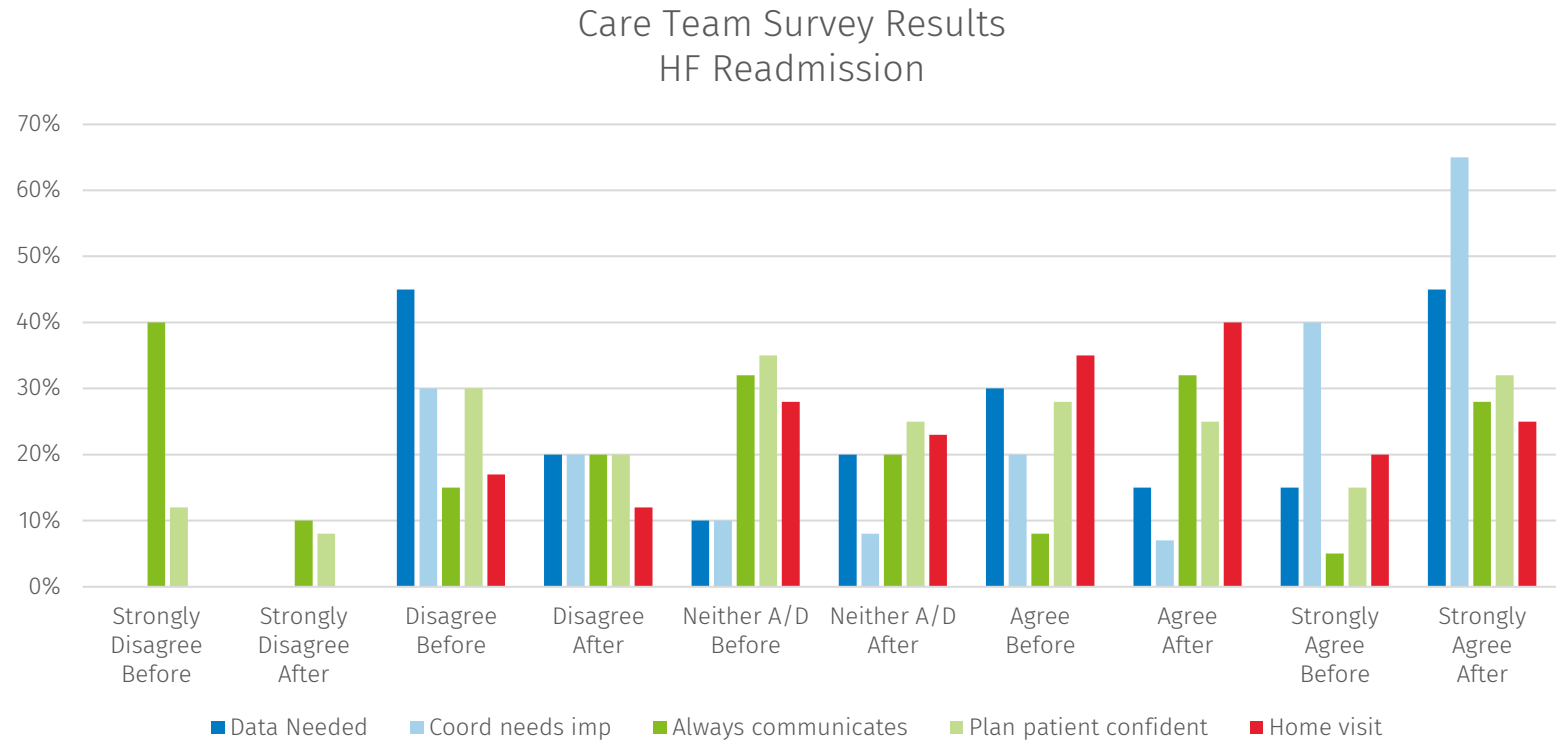
Care team survey demonstrates improved satisfaction in the areas of shared information, coordination in care planning, satisfaction was high with addition of Medical Resident in discharge planning and home visit.

Patient survey indicates noticeable improvement in their medication management confidence, trust in care team and my care team listens to me.

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Study

Pre-data comparison to post-data



[Care Team Survey HF.png](#)

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Study

Did the change go as planned

The changes to date are going as planned. Progress to goal will be seen over the next few months.

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Study

What were the lessons learned

1. The core care team learned that collaboration and the different perspectives each brought to difficult situations was critical to developing a plan for challenging patients.
2. Patients have a very difficult time with many medication changes including dose changes. Having too many old medications in the home can result in confusion and wrong meds or doses being consumed. This will be brought forward as another project.
3. Helping patient identify one person who can check in with them daily was an empowering discussion for the patient. This is another project that will be brought forward. Does a daily conversation regarding "did you weigh yourself today?" and "did you take your medications today?" matter in reducing readmissions.

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Study

Were there unanticipated impacts or results

- Patients responded affirmatively when asked their perception of does my care team listen to me. They liked the continuity of seeing the same RN and MD in their home after discharge.
- The RN and MD also learned from seeing patients in their homes and wrote on surveys that this helped them anticipate patients potential needs better.

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Act

Intervention	Result	Adopted, abandoned, or adapted
Multidisciplinary Documentation	Care Team members found the collaborative document to be of high value and reduced duplication. It enhanced trust in care team by patients and their families as information was consistent and the time with patients could be focused on what their questions and concerns were.	Adopted
Smoking Cessation	Patients found that when the Medical Resident took time to discuss smoking cessation they knew it was important. They also understood better how quitting could improve their health. They also found that when the resident was able to reinforce the message in hospital, clinical and home setting it impacted them in a way it had not prior.	Adopted
Resident Home Visit	Medical Residents were able to impact the care team by participating in discharge planning and the home care visit.	Adopted

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Act

What happened and did you make a difference

Care team members and patients immediately identified the impact of multidisciplinary documentation, discharge planning and a home visit upon discharge. The actual reduction in HF readmission rates are yet to be seen but early indicators are showing an impact.

Cycle decision

Adopted

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Collaborative
documentation,
smoking
cessation, and
resident home
visit bundle

Act

What education and training are needed

Cardiovascular Services Division should enhance orientation to include the discharge planning and home visit programs to new team members and residency program.

PDSA Cycle 1: Collaborative documentation, smoking cessation, and resident home visit bundle

Act

What communication plan is needed

1. Ongoing articles should be placed in the Cardiovascular services line monthly newsletter focusing on HF readmissions and how Evergreen is innovating and reducing rates of readmission.
2. Monthly review of data should be reviewed and discussed in department meetings

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documentation,
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visit bundle

Act

If adopted, what shared governance councils and committees need to be involved?

- Cardiovascular Services Performance Excellence Committee
- Medical Residency QI Council
- Nursing Practice and Research Council

Sustainability

How will this be sustained? When should audit and feedback occur and how often? Ongoing?

1. Daily rounding will include discharge reviews of patients within the last 7 days. Did they get a home visit? What issues were found during visit? What follow up is needed?
2. Monthly and Quarterly review in Cardiovascular Services department QI and Patient Safety Committee. To include readmission rates and review of those readmitted and root cause analysis findings.
3. Bi-annual review in Evergreen Hospital Quality and Patient Safety Committee. To include overall readmission metrics, findings from readmission root cause analysis trends and action plan.

Dissemination

Internal dissemination plan:

- Publish articles in the Cardiovascular Services Newsletter.
- Create a video to be used for orientation purposes for new employee's and resident programs
- Participate in the QI highlights day

Proof of internal dissemination:

Quality Improvement Proof of Dissemination Internal.docx

Dissemination

Continued

Internal dissemination targets

- Unit leadership
- Department newsletter
- Other

Dissemination

Continued

External dissemination plan:

- Submit application for presentation at the University Cardiovascular CQI Conference
- Submit article for publication Journal of Graduate Medical Education

Proof of external dissemination:

Quality Improvement Proof of Dissemination External.docx

Dissemination

Continued

External dissemination targets

- Local/regional conference
- Publication

Supporting Documents

Supporting documents:

[Heart Failure Readmission Data.xlsx](#)

[Project Approval Form \(7\).docx](#)