Munson Healthcare Cardiac Rehabilitation Program

Michigan Value Collaborative October 25, 2024

Jodi Perdue, RN-C, BSN

Coordinator of Cardiac Prevention and Rehab

Diane Barton, MSN/MHA, RN, CPHQ, CPPS

Director Organizational Quality



Munson Healthcare

Mission

Munson Healthcare and its partners will work together to provide superior quality care and promote community health

Purpose

We improve lives.

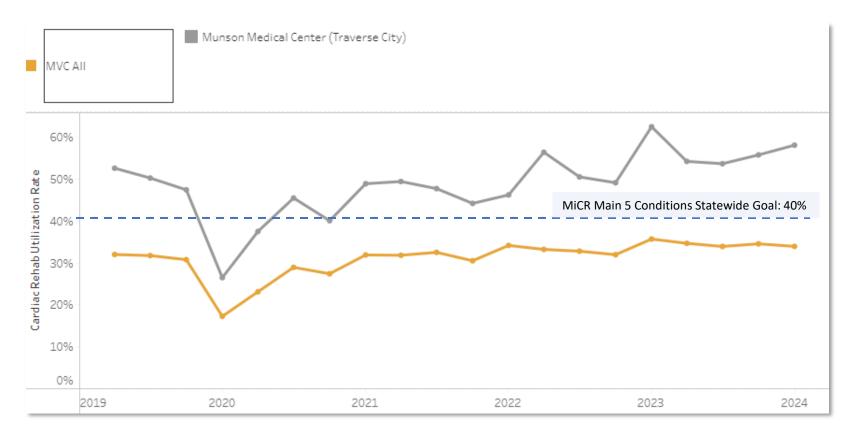
Vision

To be our communities/ trusted source of compassionate, seamless care for another 100 years.





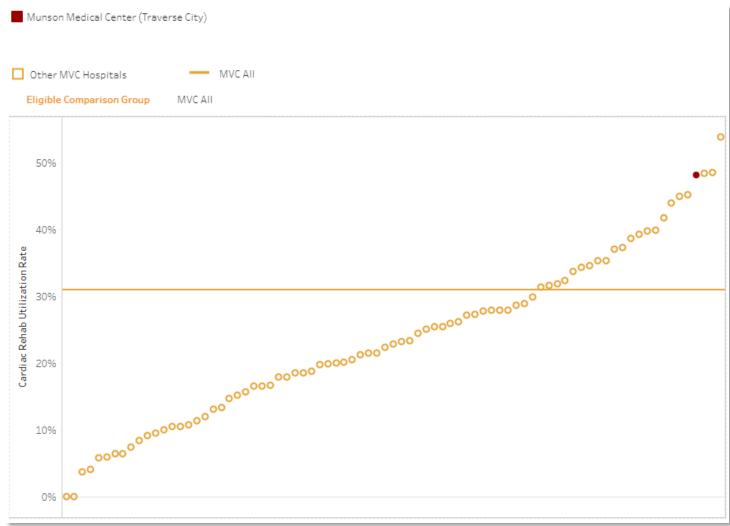
Quarterly Trends in Cardiac Rehab Use Within 90 Days from Cardiac Care Encounter



Data source: Quarterly trends in cardiac rehab use within 90 days from cardiac care encounter. 7/1/19 – 6/30/2024 (BCBSM PPO Commercial, BCN Commercial, BCN MA, BCN MA, Medicaid, and Medicare FFS). Support for MVC is provided by Blue Cross Blue Shield of Michigan and Blue Care Network as part of the BCBSM Value Partnerships program.



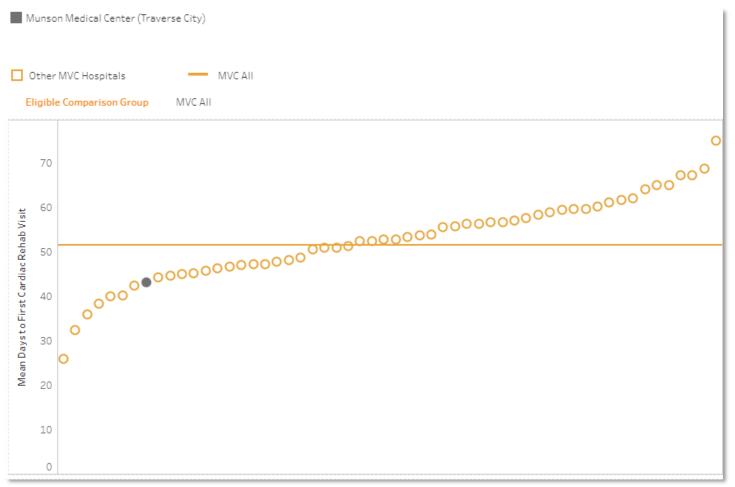
Cardiac Rehab Utilization Within 90 Days after Discharge from Cardiac Care Encounter



Data source: Cardiac rehab utilization within 90 days after discharge from cardiac care encounter. 7/1/19 – 6/30/2024 (BCBSM PPO Commercial, BCN Commercial, BCBSM MA, BCN MA, Medicaid, and Medicare FFS). Support for MVC is provided by Blue Cross Blue Shield of Michigan and Blue Care Network as part of the BCBSM Value Partnerships program.



Mean Days to First Cardiac Rehab Visit after Discharge from Cardiac Care Encounter





Data source: Mean days to first cardiac rehab visit after discharge from cardiac care encounter. 7/1/19 – 6/30/2024 (BCBSM PPO Commercial, BCN Commercial, BCBSM MA, BCN MA, Medicaid, and Medicare FFS). Support for MVC is provided by Blue Cross Blue Shield of Michigan and Blue Care Network as part of the BCBSM Value Partnerships program.

Inpatient – Phase 1

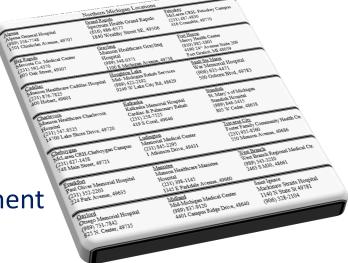
- Auto-referrals for all PCIs, CABG, Valves,
 & TAVRs
- Inpatient Cardiac Rehab RNs propose new order detail to ordering provider to ensure the necessary elements are included
- RNs see patients via bedside consult
- For outpatient PCIs which will discharge after hours, RNs collaborate with the cath lab staff to ensure the correct information is on the patient discharge instructions
- Different process for CHF patients



Inpatient – Phase 1

The Bedside Consult

- Stress importance and benefit of attending
- Educate to process from discharge to cardiac rehab enrollment
- RN places an order to the appropriate site at discharge
- The order and patient demographics are faxed to the patient's closest cardiac rehab, so they can follow up with patient if the patient does not call to schedule first appointment
- Provide a list of Northern Michigan & Upper Peninsula Cardiac Prevention and Rehabilitation programs
 - If patient is from outside region or out of state, they search the AACVBR website to locate sites near the
 patient and provide the address and phone number to the patient
- Engages family or support person in discussion whenever possible



Cardiac Rehab – Phase 2



Goal to start:

PCIs

7-10 days

CABG/Valves

5 weeks

TAVRs

5 weeks

CHF

6 weeks

Cardiac Rehab – Phase 2

- EKG-monitored program with education
- Comprehensive program includes:
 - Exercise Physiologists & RNs
 - Pharmacist & Dietician
 - Risk factor modification & goals
 - Support Group
- Physicians assess at follow-up appointment whether patient attends Cardiac Rehab and investigate barriers
- Patients are asked to commit to 12 sessions











Cardiac Rehab – Phase 3

- Independent with no EKG monitor
- In same space as Phase 2
- Most patients have completed Phase 2
- Self-funded by patient

Successes & Barriers

- Only 1 Cardiology Group
- Only 1 CTS Group
- All are aligned in philosophy around Cardiac Rehab
- Recruitment of younger providers

- Co-pays
- Transportation
- Work Hours
- Snowbirds



AACVPR Registry Program Outcomes Summary

(Munson Medical Center 2022 – 2023 Comparison)





Munson Medical Center

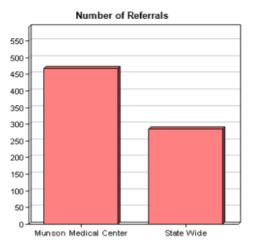
Program Utilization

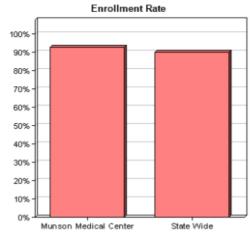
Date Range:

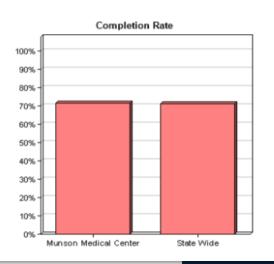
01/01/2023 - 03/31/2024

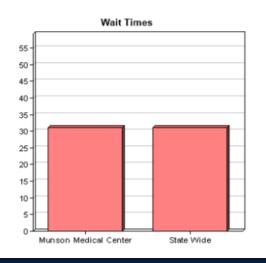
Comparing to:

State Wide









AACVPR Registry Program Outcomes Summary

(Munson Medical Center 1/1/2023 – 3/31/2024)



Munson Medical Center

Program Outcomes Summary

Date Range : 01/01/2023 - 03/31/2024

Patient Count: 334

The following information is derived from patients who have completed the program and whose discharge date is within the above selected date range.

% Gender		Mean Age	Range
Male	69.8	71	23 - 92
Female	30.2	72	46 - 96
Unspecified	0		

% Race	
American Indian or Alaskan Native	1.2
Asian	0.6
Ethnic category not listed	0.3
Ethnic category unknown or not given	15.9
White	82

% Diagnostic categories	
Angina	2.7
CABS	26.9
Cardiac arrest	1.2
Cardiac transplant	0.3
Heart failure	6.6
NSTEMI	26.6
PCI	41
Peripheral Arterial Disease	1.8
STEMI	10.5
Stress-induced cardiomyopathy	0.3
Transcatheter Aortic Valve Implantation	12.9
Valve repair/replacement surgery	14.7
Ventricular Assist Device/Artificial Heart	0.3
Other	2.1

Quality Metrics	
Mean completed sessions	23
Mean program duration (days)	92
Mean wait time (days)	32
Attendance rate (%)	69

% Comorbidities	
Cerebrovascular Disease	10.5
Connective Tissue Disease	2.7
Dementia	1.8
Liver Disease	0.9
Malignancy	16.8
Metastatic Cancer	18.6
Pulmonary Disease	15.6
Renal Disease	19.8
Ulcer Disease	24.3
Peripheral Arterial Disease	15
Previous Myocardial Infarction	7.8

% Tobacco Status (Intake)	
Never smoker	19.8
Current (<= 30 days)	6.3
Former (>6 Months)	18
Recent (31 days â€* 6 months)	1.8

% Risk Levels	
Low	16.8
Intermediate	54.8
High	26.9

% Risk Factors	
Hypertension	80.8
Hyperlipidemia	90.1
Diabetes Type 1	1.5
Diabetes Type 2	31.1
IGT/IFG	2.1
Metabolic Syndrome	4.8



AACVPR Registry Program Outcomes Summary (Munson Medical Center 1/1/2023 – 3/31/2024)

Outcome Measure	Initial	DC	I-DC % Chg
SBP (mm Hg)	116	117	1
DBP	66	65	₹ 2
Lipids (mg/dl)			
Total Cholesterol	163	140	₹ 14
Triglycerides	133	129	₹ 3
HDL-Cholesterol	48	47	₩ 2
LDL-Cholesterol	87	70	₹ 20
Non-HDL Cholesterol	115	92	₹ 20
FBG (mg/dl)	95	93	₹ 2
A1C (%)	6.9	7.0	1 1
Max METs	2.9	5.0	₹ 72
Exercise Mins/Day	29	40	₹38
Exercise Days/Week	4	5	₹ 25
6-minute walk distance (ft)	1265.9	1526.7	₹ 21
Peak METs during CR	2.9	5.2	₹ 79
DASI METs	5.8	7.2	₹ 24
Rate Your Plate-Heart	53	56	₹ 6
DASI	24.7	36.3	₹ 47
Psychosocial			
PHQ-9	4.5	2.8	₹38
Dartmouth COOP	22.1	17.1	₹ 23





Questions?