

A photograph of three women practicing yoga outdoors on a grassy lawn. The woman in the foreground is a Black woman with braided hair, wearing a maroon long-sleeved shirt and grey leggings, sitting on a light blue mat and smiling. In the background, two other women are also practicing yoga on mats; one is a woman with dark hair in a purple top, and the other is a woman with short grey hair in a yellow top. The background is filled with green trees and foliage.

# Michigan Cardiac Rehab Network 1<sup>st</sup> Annual Meeting

October 7<sup>th</sup>, 2022

# Disclosures

- I receive funding from Blue Cross Blue Shield of Michigan for my role as Co-Director of the Michigan Value Collaborative
- I receive grant funding from the Agency for Healthcare Research and Quality (K01HS027830, R01HS028397)



# Agenda

- 1:00pm – Welcome & Introduction
- 1:15pm – Getting Buy-in from Clinicians and Administrators
  - Frank Smith, MD; Jacqueline Harris, BS, CCEP; Rob Snyder, EP, MSA; Steven Keteyian, PhD (Moderator)
- 2:15pm – Break
- 2:30pm – Navigating Insurance Challenges
  - Jackie Evans; Robert Berry, MS; Devraj Sukul, MD, MSc (Moderator)
- 3:15pm – Developing Patient & Provider Resources
  - Greg Merritt; Tom Cascino, MD, MS; Larrea Young; Mike Thompson, PhD (Moderator)
- 3:55pm – Wrap up & Adjourn



# Collaborative Quality Initiatives

- Funded by BCBSM through its Value Partnerships Initiatives
  - 23 CQIs spanning the clinical spectrum
- Coordinating centers support collaborative learning and data sharing
- Pay-for-performance incentives support improvement



“

In Michigan, payers, providers, and patients have benefited from this collaborative approach for over two decades through reduced costs, improved quality, and higher patient satisfaction.”

Harvard  
Business  
Review

COLLABORATIVE  
QUALITY  
INITIATIVES





Michigan Value Collaborative

**CQI**

Collaborative  
Quality  
Initiative (CQI)

**2013**

Established  
in 2013

**19**

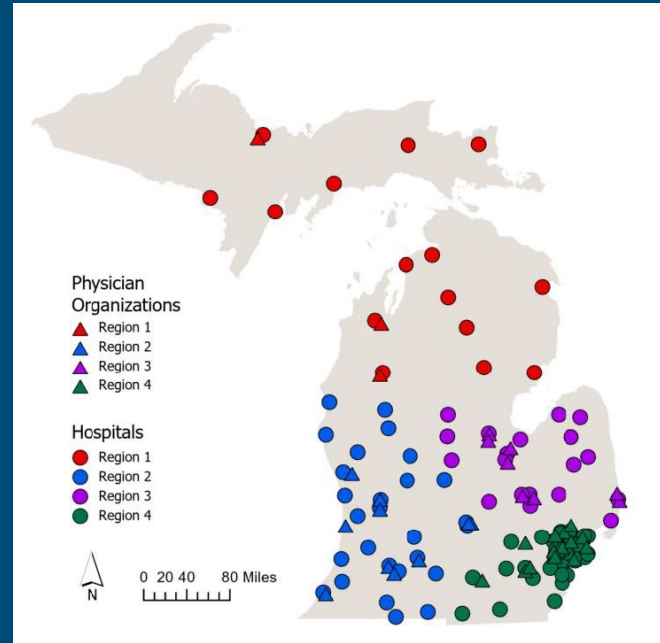
Team  
Members

**100**

Hospitals

**40**

POs





## Purpose

To improve the health of Michigan through sustainable, high-value healthcare



## Vision

People accessing the right care, at the right time, at the right cost

# CELEBRATING 25 YEARS OF IMPROVING SAFETY, QUALITY, AND



## PRESENTATIONS

100+ abstracts presented  
at national and interna-  
tional meetings



## MANUSCRIPTS

100+ published manuscripts



## SITES

PCI - 48  
Vascular  
Surgery - 34  
MISHC - 30

## PCI

350 interventional cardiologists  
650,000 cases



## VASCULAR SURGERY

250 participating physicians  
50,000 cases



## PATIENT OUTCOMES THROUGH COLLABORATION

## MISHC

140 participating physicians  
12,000 cases





MICHIGAN  
**CARDIAC REHAB**  
NETWORK

To equitably increase CR  
participation for all eligible  
individuals in Michigan







# MiCR Coordinating Center(s) Team



**Mike Thompson, PhD**  
Co-Director  
Michigan Value Collaborative



**Jessica Yaser, MPH**  
Analyst  
Michigan Value Collaborative



**Devraj Sukul, MD, MSc**  
Associate Director  
Blue Cross Blue Shield of Michigan  
Cardiovascular Consortium

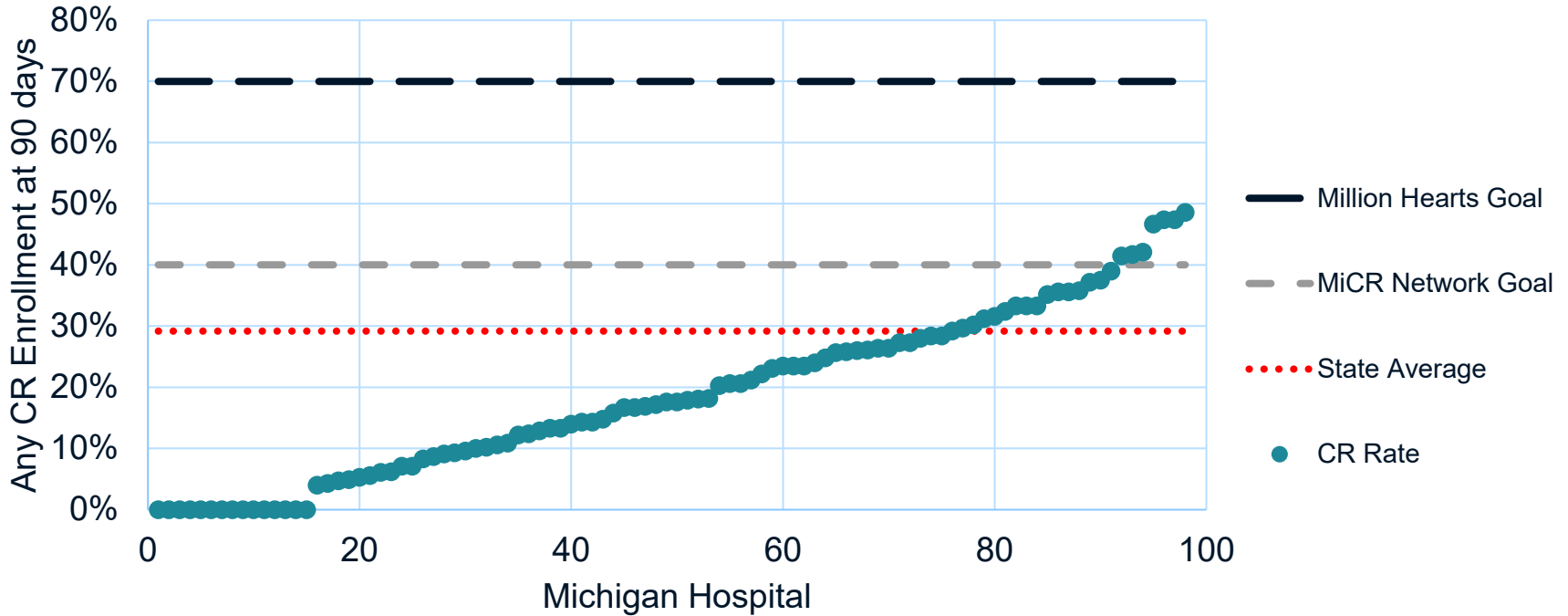


**Annemarie Forrest, MS, MPH**  
Program Manager  
Blue Cross Blue Shield of Michigan  
Cardiovascular Consortium

Name	Title/Position	Affiliation
Steven Keteyian	Director, Preventive Cardiology	Henry Ford Health System
Frank Smith	Regional Director, Cardiac Rehabilitation	St Joseph Mercy Hospital Ann Arbor
Bryan Foster	Director, Cardiac Rehabilitation	St Joseph Mercy Hospital Ann Arbor
Rob Snyder	Cardiac Rehabilitation Lead	McLaren Greater Lansing
Jennifer Eberhard	Cardiovascular Services Quality Manager	UP Health System-Marquette
Gregory Scharf	CardioPulmonary Rehab Manager	MidMichigan Health
Jackie Evans	Cardiac Pulmonary Rehab Supervisor	MidMichigan Health
Diane Perry	Clinical Exercise Physiologist	Michigan Medicine
Al Delucia III	Cardiothoracic Surgeon	Bronson Methodist Healthcare
Patty Theurer	Program Manager	MSTCVS-QC
Diane Hamilton	Cardiac Rehab Coordinator	Beaumont Health Trenton
Taylor Cowles	President	MSCVPR
Jenna Scott	President-Elect	MSCVPR



# Our goal is to get CR participation to 40% by 2024 for all eligible conditions\*



\* Excludes CHF



**2,237**

Additional Michiganders receiving CR per year

**~11,000,000\$**

Annual costs saved

**60**

Deaths avoided



# How will we get there?

## 1 CR Participation Benchmarking

MVC registry data are used to create hospital-specific reports to track and benchmark CR participation

## 2 Dissemination of Best-Practices

Development and dissemination of best-practices designed to aid quality improvement efforts to improve CR participation

## 3 Collaborative Learning

A combination of site engagement and peer-to-peer networking will foster a community of trust and learning

# Hospital-level CR Benchmarking Reports

Biannual reports are provided for PCI, CABG, SAVR, TAVR, AMI, and heart failure to help track hospital CR performance



## Cardiac Rehab Hospital-Level Report

### What is this report?

The Michigan Value Collaborative (MVC) has partnered with the Blue Cross Blue Shield of Michigan Cardiovascular Consortium (BMC2) and the Michigan Society of Thoracic and Cardiovascular Surgeons (MSTCVS) to equitably increase participation in cardiac rehabilitation for all eligible individuals in Michigan. This report provides measures of your patient population's participation in cardiac rehabilitation (CR) based on administrative claims data from MVC. Cardiac rehabilitation is a highly valuable secondary prevention program for patients who have had a heart attack, chronic stable angina, chronic heart failure, or have undergone a percutaneous coronary intervention, heart valve repair or replacement, or coronary artery bypass procedure. Cardiac rehabilitation has been shown to reduce the risk of all-cause and cardiovascular-specific mortality, reduce the risk of hospital readmissions, and improve functional status and quality of life<sup>1-5</sup>. Despite these benefits, this report shows that Michigan currently falls short of the 70% participation goal set by the American College of Cardiology (ACC), American Heart Association (AHA), and Million Hearts<sup>6</sup>. For more information about the benefits of cardiac rehab and resources for improving enrollment, please see the Million Hearts Cardiac Rehabilitation Change Package<sup>7</sup>.

### What is the patient population, and how are cardiac rehab rates calculated?

Patients in MVC's PCI, CABG, TAVR, SAVR, CHF, and AMI episodes from 1/1/2018 to 12/31/2020 are eligible to be in this report. All patients were insured by plans from Medicare FFS, BCBSM PPO Commercial, BCBSM Medicare Advantage, Blue Care Network (BCN) HMO, BCN Medicare Advantage, or Michigan Medicaid. The eligibility threshold was set at 20 cases over the reporting period, and hospitals that did not meet this threshold for a certain procedure will not receive a page of cardiac rehab metrics on that condition. The collaborative to which your hospital is being compared is composed of all other hospitals that met the 20 case count threshold for that particular condition. It is possible to receive a report page that reflects 0% CR utilization, in which case Figures 3 and 4 will not populate. CR variables were derived from administrative claims based on Current Procedural Terminology codes (93797 and 93798), Healthcare Common Procedure Coding System codes (G0422 and G0423), and revenue center code 943. Inpatient deaths and discharges to hospice are excluded from the denominator. The AMI page reflects only medically-managed AMIs; AMIs with PCI are included on the PCI page.

### How do I use this report?

- Discuss with your local cardiac rehab team(s)
- Identify champions for this cause at your institution
- Compare to your own institutional data

### References

1. Heran BS, Chen JM, Ebrahim S, Mosham T, Oldridge N, Rees K, Thompson DR, Taylor RS. Exercise-based cardiac rehabilitation for coronary heart disease. *Cochrane Database Syst Rev*. 2011 Jul 6(7):CD001800. PMID: 21642399
2. Taylor RS, Brown A, Ebrahim S, Jolliffe I, Noorani H, Rees K, Sicromore B, Stone JA, Thompson DR, Oldridge N. Exercise-based rehabilitation for patients with coronary heart disease: systematic review and meta-analysis of randomized controlled trials. *Am J Med*. 2004 May 15;116(10):682-692. PMID: 15121495
3. Taylor RS, Long L, Moridi R, Madsen MT, Davies EJ, Dalal H, Rees K, Singh SJ, Gloud C, Zwisler A-D. Exercise-Based Rehabilitation for Heart Failure: Cochrane Systematic Review, Meta-Analysis, and Trial Sequential Analysis. *JACC Heart Fail*. 2019 Aug;7(8):691-705. PMID: 31302050
4. Anderson L, Thompson DR, Oldridge N, Zwisler A, Rees K, Martin N, Taylor RS. Exercise-based cardiac rehabilitation for coronary heart disease. *Cochrane Database Syst Rev* [Internet]. John Wiley & Sons, Ltd; 2016 [cited 2021 Jan 25];11. Available from: <https://www.cochrane.org/doi/10.1002/14651858.CD001800.pub3/abstract>
5. Rajeski WJ, Foy CG, Bravley LR, Brubaker PH, Focht BC, Norris J, 3rd, Smith ML. Older adults in cardiac rehabilitation: a new strategy for enhancing physical function. *Med Sci Sports Exerc*. 2002 Nov;34(11):1705-1713. PMID: 12439072
6. Thomas RJ, Balady G, Banks G, Beckie TM, Chiu J, Gouk S, Ho PM, Katelyan SJ, King M, Lui K, Pack Q, Sanderson BK, Wang TY. 2018 ACC/AHA clinical performance and quality measures for cardiac rehabilitation: report of the American College of Cardiology/American Heart Association Task Force on Performance Measures. *Circ Cardiovasc Qual Outcomes*. 2018;11:e000037. doi: 10.1161/HCO.0000000000000037
7. Centers for Disease Control and Prevention. *Cardiac Rehabilitation Change Package*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2018.

## Cardiac Rehab After CABG - Hospital A

Figure 1: Collaborative-Wide CR Use Within 90 Days

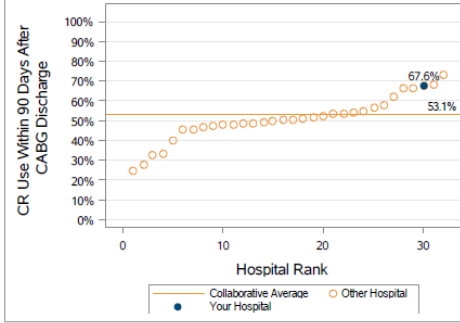


Figure 2: Quarterly Trends in CR Use Within 90 Days

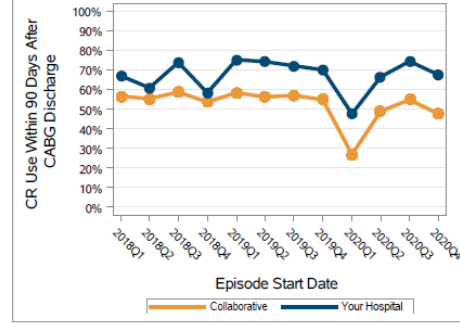


Figure 3: Mean Days to First CR Visit (Among CR Utilizers)

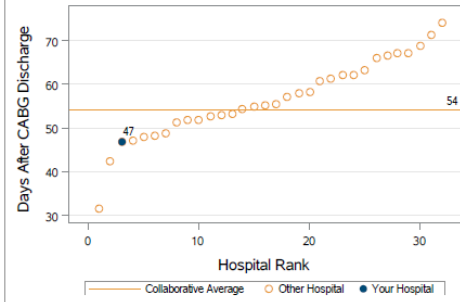
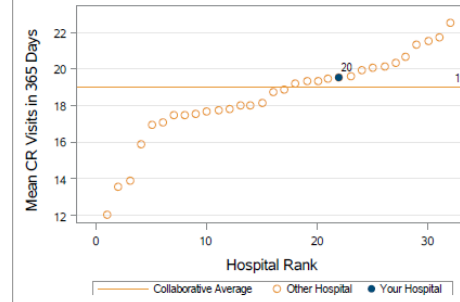


Figure 4: Mean Number of CR Visits Within 365 Days (Among CR Utilizers)





# Cardiac Rehab Best-Practices Toolkit

MiCR members worked to develop a CR best practices documents improve enrollment and adherence





# CONTENTS

## INITIATION STRATEGIES

- 6 Cardiac Rehab Referrals
- 7 Developing a Cardiac Rehab Inpatient Liaison Program
- 8 Early Scheduling of Initial Outpatient Appointments
- 9 Reducing Delay Between Discharge and Enrollment

## MAINTENANCE STRATEGIES

- 11 Cardiac Rehab Group Orientation
- 12 Eliminating Transportation as a Barrier to Participation
- 13 Improving Patient Attendance

## INNOVATION STRATEGIES

- 15 Innovative Cardiac Rehab Models
- 16 System Changes to Increase Cardiac Rehab Participation
- 17 Coalition Building

## METRICS

## RESOURCES

## WORKGROUP MEMBERS



## Cardiac Rehab Referrals

### KEY STAKEHOLDERS

- Cardiologists
- Cardiothoracic surgeons
- APPs
- CR staff
- Cardiovascular service line staff: cash lab, floor nurses
- Health IT/EMR Staff
- Medical director
- Administrators

### DIRECT CONTACTS FOR QUESTIONS

- Jodi Radtke, RN-C, BSN  
jrادتke@msc.org
- Frank Smith, MD  
fsmith@msc.org

### REFERENCES

- Guidelines for Cardiac Rehabilitation and Secondary Prevention Programs, 5th Edition
- Million Hearts

### IMPROVING INPATIENT/OUTPATIENT REFERRALS

**CR is a Class I recommended therapy.** When the provider encourages the patient to attend cardiac rehabilitation, the likelihood of enrollment significantly increases. All patients who are hospitalized with a primary diagnosis of acute myocardial infarction or have undergone coronary artery bypass graft surgery, a percutaneous intervention (PCI), cardiac valve surgery, or cardiac transplantation are to be referred to an early outpatient cardiac rehab program. Patients with chronic stable angina or heart failure that meet Medicare guidelines should also be referred.

### METRICS OR RESOURCES NEEDED

- Automatic inpatient referrals
- Inpatient liaison
- Standards for when a patient should be scheduled to start CR

### PROCESS DESCRIPTION

- 1 Educate providers at in-services, department meetings, and office presentations. Target cardiologists, advanced practice providers, cardiothoracic surgeons, and new residents with evidence of CR benefits.
- 2 For inpatient referrals, include the referral in the order sets following open-heart surgery and PCI. Outpatient referrals can be provided through EPIC, Cerner, or paper discharge instructions.
- 3 Develop patient education materials on the "need to know" information for discharge.
- 4 Determine a plan for engaging patients who decline to set an initial appointment or are going to a skilled nursing facility, such as providing the location and phone number of the nearest CR facility.
- 5 Determine a plan for eligible patients who are identified without a referral, such as contacting the attending physician (or APP) to write a referral.
- 6 Meet with relevant stakeholders to discuss the steps to complete insurance verification for referred patients.
- 7 Identify a dedicated liaison to meet with the patient to set an initial CR appointment at the nearest facility.
- 8 Work with Health IT and the CR liaison to include the appointment details on the patient's discharge instructions. The liaison should notify the receiving CR facility about the appointment.
- 9 Develop a process to notify the liaison of the referral. For same-day discharges, the liaison will be paged; otherwise, they will be notified via EMR or printed referral.
- 10 Early education and improved messaging for patients are critical. Consider developing a brief video featuring a patient testimonial that describes what CR entails: not just supervised exercise, a confidence-builder, a community of people going through the same thing, and holistic support.



# Engagement Activities

- Virtual sessions
  - 2-3x per year
  - Combination of content experts and quality improvement sharing
- Peer-to-peer networking
- Annual in-person meeting
  - Today!



**Any questions?**



# Getting Buy-in from Clinicians and Administrators

Frank Smith, MD  
Trinity St Joseph Mercy Ann Arbor

Jacqueline Harris, BS, CCEP  
McLaren Northern Michigan

Rob Snyder, EP, MSA  
McLaren Greater Lansing

Steven Keteyian , PhD (Moderator)  
Henry Ford Health System

Insert session slides here



# Group Activity Prompts

- What challenges do you experience in engaging with providers or administrators
- How have you achieved success in getting buy-in?
- Are there resources or information that have helped improve buy-in?
- What are ways we can support each other to improve buy-in across Michigan?



# Break

**Reconvene at 2:30pm**



# Navigating Insurance Challenges

Jackie Evans  
Covenant HealthCare

Robert Berry, MS  
Henry Ford Health System

Devraj Sukul, MD, MSc  
Michigan Medicine, BMC2  
(Moderator)



Insert session slides here



# Patient and Provider Resources

Greg Merritt  
Patient is Partner

Tom Cascino, MD, MSc  
Michigan Medicine, HBOM

Larrea Young  
HBOM

Mike Thompson, PhD  
Michigan Medicine, MVC  
(Moderator)

Insert session slides here



**What resources could we develop that would help engage patients/providers?**

# Closing

- Follow up items
- Claiming CME Credit
  - Please fill out the survey!
- Next virtual meeting – TBD,  
info coming soon

# Required: Confirm attendance by claiming CME/CEU

- 1) Go to: [www.eeds.com](http://www.eeds.com)
- 2) Click the “Sign In”  
button
- 3) Enter the Activity Code

**OR**

**91SUMS**

Scan this QR Code



The activity code for this meeting expires 10/14/22 at 12:00 pm



**Thank you!**