



MICHIGAN  
**CARDIAC REHAB**  
NETWORK

# **CARDIAC REHAB BEST PRACTICES TOOLKIT**

**STRATEGIES TO IMPROVE  
ENROLLMENT AND ATTENDANCE**



# THE MICHIGAN CARDIAC REHAB NETWORK

The Michigan Cardiac Rehab Network (MiCR) is a collaboration between the Blue Cross Blue Shield of Michigan Cardiovascular Consortium (BMC2) and the Michigan Value Collaborative (MVC) with the aim to equitably increase participation in cardiac rehabilitation for all eligible individuals in Michigan. BMC2 is a collaborative consortium of health care providers dedicated to improving the quality of care and outcomes for cardiovascular patients across the state of Michigan. One of the goals of BMC2 is to share best practices to improve cardiac rehabilitation use after cardiovascular procedures.

MVC represents a partnership between 100 Michigan hospitals and 40 physician organizations (POs) that aims to improve the health of Michigan through sustainable, high-value healthcare. Also supported by Blue Cross Blue Shield of Michigan, MVC helps its hospital and PO members better understand their performance using robust multi-payer data, customized analytics, and at-the-elbow support. As part of this, MVC fosters a collaborative learning environment to enable providers to learn from one another in a cooperative, non-competitive space. MVC is extending its services to support the BMC2 CR initiative.

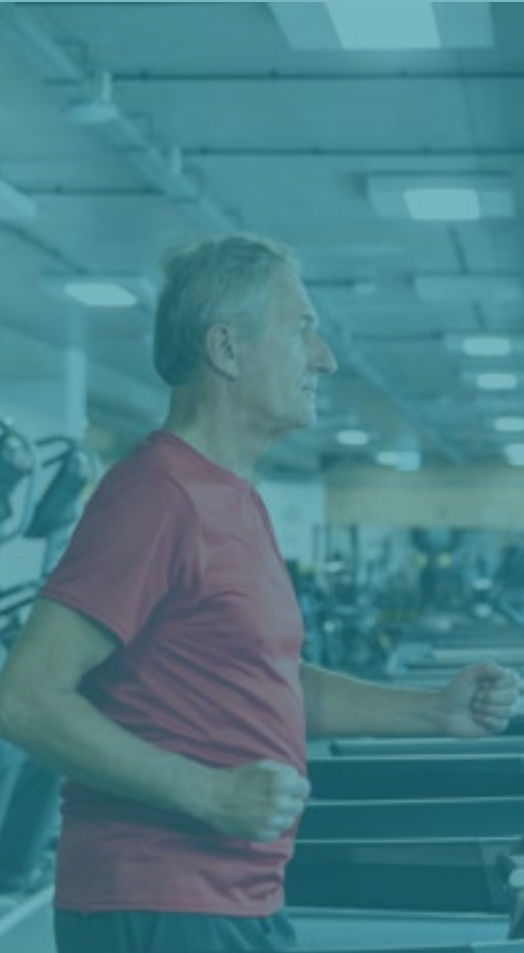
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# INTRODUCTION

Cardiac rehabilitation (CR) is a multifaceted intervention that includes monitored exercise training, education on heart-healthy living, counseling on stress management, and emotional support. Participation in CR is strongly recommended in international guidelines for a spectrum of cardiovascular conditions and procedures including coronary artery disease, percutaneous coronary intervention (PCI), coronary artery bypass graft (CABG) surgery, heart valve repair/replacement such as aortic valve replacement, and heart failure. For many of these conditions, CR is associated with lower mortality and readmissions, and higher quality of life.

Despite its many benefits, overall CR participation remains low. A recent national Medicare Fee-for-Service analysis demonstrated significant variation in participation across eligible patients, with rates ranging between 7.1% for heart attack patients without revascularization to 55.3% of patients who underwent CABG. This quality gap has been highlighted by the Million Hearts initiative, a national program co-led by the Centers for Disease Control and Prevention and the Centers for Medicare and Medicaid Services that was launched in 2012. It was aimed at increasing CR participation from 20% to 70% by 2022 – an increase that was estimated to save 25,000 lives and prevent 180,000 hospitalizations.

To improve CR participation in Michigan and beyond, MiCR convened a group of dedicated CR providers and content experts in the state of Michigan to outline best practices for CR facilities, hospitals, and health systems. The Cardiac Rehabilitation Best Practices Toolkit details a menu of strategies intended to improve participation in CR. The authors and contributors encourage local quality improvement (QI) teams to select the specific interventions that will be most valuable to their site. Start by assembling your QI team, likely comprised of CR professionals, physicians, administrators, EMR/IT staff, and other relevant stakeholders to discuss the aspects of CR utilization that are most in need of improvement. The QI team can then select corresponding strategies or interventions that best address those identified issues. We do not recommend that teams attempt to implement all of the interventions at once, nor is it likely that all interventions will be applicable to your clinical setting.

We believe these “living documents” serve as a starting point for providers and administrators across Michigan, helping facilities to learn from one another and implement initiatives that improve the care of patients through increased exposure to the benefits that cardiac rehabilitation. The MiCR team welcomes feedback on these documents and looks forward to adding to this toolkit as we continue to evolve and improve CR care practices.

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# INITIATION STRATEGIES:

Referrals, Cardiac Rehab Inpatient Liaison Programs, Early Scheduling, and Reducing Delays in Enrollment After Discharge



# Cardiac Rehab Referrals

## KEY STAKEHOLDERS

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

## DIRECT CONTACTS FOR QUESTIONS

- Jodi Radtke, RN-C, BSN  
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## 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.



# Inpatient Liaison Programs

## KEY STAKEHOLDERS

- CR staff
- CR program manager
- Referring physicians
- Cath lab
- Surgery contacts
- Rounding nurses
- Floor nurses
- CR medical director
- Health IT
- Hospital administration

## DIRECT CONTACTS FOR QUESTIONS

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## DEVELOPING A LIAISON WITH DEDICATED CR TIME

CR has low overall enrollment rates. Patient readiness to change may vary among eligible patients who prefer to have multiple conversations about CR before enrolling. An established FTE assigned to patient recruitment and enrollment can follow up and encourage patients to enroll, and act as a liaison between the inpatient and outpatient settings.

## METRICS OR RESOURCES NEEDED

- Defined roles and responsibilities of a CR liaison
- Defined recruitment strategies
- Additional FTE funding, if needed

## PROCESS DESCRIPTION

- 1 Examine your current recruitment and enrollment process to establish what is working well, barriers, how this liaison will fit into your program's day-to-day responsibilities, and whether your department has enough FTEs for this additional responsibility.
- 2 Identify all referral sources. Consider in-network vs. out-of-network and whether all cardiac procedures happen on campus. Whether on or off campus, create time for staff to speak with inpatients.
- 3 The CR department should identify the roles and responsibilities of the liaison, and divide responsibilities for inpatient work vs. outpatient work.
- 4 Identify a process for receiving and organizing referrals, such as creating a referral database using EMR, Excel, or Quickbase. This will help streamline work if multiple staff are involved.
- 5 Work with your marketing department to develop and add brochures, handouts, video, and contact information to the hospital website.
- 6 Establish a relationship with your Patient Financial Services department, since obtaining benefit information early can be a deciding factor for the patient.
- 7 Work with Health IT and the inpatient team to ensure that program information and any scheduled appointments are added to the patient's discharge paperwork.
- 8 Obtain a list of Michigan CR locations from MSCVPR and send referrals to competing programs. There are more than enough patients to go around and patients are more likely to enroll with a shorter commute.
- 9 Create an "elevator pitch" for the inpatient/output liaison to briefly summarize CR for patients.
- 10 Request additional FTE time from your hospital administration. Build in productivity measures for the hospital to track, such as a cross-reference of referrals received vs. patients signed up.

## SAMPLE RESPONSIBILITIES FOR CR LIAISON INPATIENT & OUTPATIENT

- Collect and organize all new patient referrals
- Speak with patients and families prior to discharge
- Describe the CR program and set expectations
- Enroll patients and schedule appointments
- Manage referral database
- Work with financial services to confirm insurance



## KEY STAKEHOLDERS

- CR medical director
- CR manager
- CR coordinator
- CR lead
- CR staff
- Health IT/EMR
- Referring physicians
- Cardiovascular service line director and managers
- Cath lab
- Surgery contacts
- Rounding/Floor nurses
- Hospital administration

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## REFERENCES

- AACVPR
- Million Hearts

# Early Scheduling of Initial Outpatient Appointments

## ENHANCE CR LIAISON VISIT IN ACUTE CARE

The evidence base that a CR Liaison increases enrollment in CR is well documented. Early scheduling further increases patient capture in CR and reinforces CR as the patient's next step. The CR Liaison will initiate this strategy as part of their initial visit within the acute-care setting, where the benefits of CR will be discussed and the patient's outpatient appointment will be provided prior to discharge from the hospital. The patient should receive their appointment information from the CR liaison as part of their discharge instructions.

## METRICS OR RESOURCES NEEDED

- CR Liaison with additional protected time
- System for electronic or paper discharge instructions
- Connection with CR facility appointment calendar
- Patient education materials (website, videos, handouts etc.)

## PROCESS DESCRIPTION

- 1 Identify a champion for an early scheduling initiative, such as a medical director and/or cardiovascular service line director.
- 2 The identified champion and cardiovascular providers should draft an agreement on scheduling criteria for early scheduling participation. Considerations will likely include patient diagnosis or intervention performed, and the patient's status with the absence of adverse signs or symptoms.
- 3 Verify that the CR consult order can be added to the EMR referral work queue or provided to the CR team.
- 4 Establish a workflow for the CR liaison that includes a review of the patient's history, a discussion of the benefits of CR, identification of an appropriate CR location, selecting and scheduling an initial outpatient appointment time, entering the appointment into the EMR, and documenting the visit.
- 5 Establish a methodology for tracking the productivity of the CR liaison visit.
- 6 Develop a strategy and related materials for patient education while the patient is waiting for their initial CR appointment. This may integrate a CR website, YouTube videos, Facebook, EPIC MyChart, the Better Hearts App, or even educational materials delivered via the Postal Service.
- 7 Establish a dashboard with CR referral metrics, goals, and performance related to patient capture and retention.
- 8 Utilize Televox or similar technologies and strategies to remind patients of their upcoming CR visit.





# Reducing Delay Between Discharge & Enrollment

## KEY STAKEHOLDERS

- Scheduling support staff
- Supervisors/program managers
- CR staff
- Referring providers
- Administrative assistants

## DIRECT CONTACTS FOR QUESTIONS

- Steven Keteyian, PhD  
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## REFERENCES

- [Referral, enrollment, and delivery of cardiac rehabilitation programs](#)
- [CR wait times](#)
- [Affordability, accountability, and accessibility in CR](#)
- [Early appointment to outpatient CR at hospital discharge](#)

## ENROLLING PATIENTS WITHIN 21 DAYS

It is recognized that an inverse relationship exists between time to enrollment in outpatient CR and participation. It has been estimated that participation in CR decreases by 1% for every day that enrollment is prolonged beyond discharge. Delays to enrollment should be minimized so patients receive the maximum benefit from participation.

## METRICS OR RESOURCES NEEDED

- Current average time to enrollment appointment
- Identify number of enrollment slots available

## PROCESS DESCRIPTION

- 1 Identify the current interval between discharge or referral and the patient's first CR appointment (both the range and average).
- 2 Determine a goal interval.
- 3 Identify opportunities for improvement by mapping out the current process from referral/discharge to appointment.
- 4 Identify any patient, program, or system barriers, such as transportation issues, staffing or volume concerns, or technical considerations.
- 5 Brainstorm how to address those issues to reach the goal interval.

COMMON BARRIERS	POTENTIAL SOLUTIONS
<p><b>What is the cause of no-shows and cancellations?</b></p> <p>Patient barriers to consider:</p> <ul style="list-style-type: none"> <li>• Preauthorization</li> <li>• Insurance</li> <li>• Transportation</li> <li>• Language, culture</li> <li>• Availability</li> <li>• Lack of social support</li> </ul>	<p><b>Potential solutions to patient barriers:</b></p> <ul style="list-style-type: none"> <li>• Reminder phone calls</li> <li>• Identification of social support network</li> <li>• Financial incentives</li> <li>• Transportation reimbursement</li> </ul>
<p><b>Does current volume allow for more patients?</b></p> <p>Program barriers to consider:</p> <ul style="list-style-type: none"> <li>• Hours of operation</li> <li>• Appointment length</li> <li>• Appointment times</li> <li>• Adequate staffing</li> </ul>	<p><b>Potential solutions to program barriers:</b></p> <ul style="list-style-type: none"> <li>• Set appointment while in hospital</li> <li>• Facilitated referral utilizing CR staff</li> <li>• Process patient intake in a timely manner</li> </ul>
<p><b>Is medical information from the referring site provided in a timely manner? (system barrier)</b></p>	<p><b>Work with referring providers to send medical information at time of referral</b></p>



# MAINTENANCE STRATEGIES:

Cardiac Rehab Group Orientations,  
Addressing Transportation Barriers, and  
Improving Attendance



# Cardiac Rehab Group Orientation Strategy

## KEY STAKEHOLDERS

- Patients and their families
- CR orientation staff
- Patient advisors/advocates
- Schedulers/Intake coordinators
- Providers
- CR supervisors

## DIRECT CONTACTS FOR QUESTIONS

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- **Greg Scharf, BS, CEP, CCRP**  
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## REFERENCES

- 33rd Annual AACVPR Annual Meeting Presentation  
"Cultivating Connections Patient Family Centered Care Group Orientation"  
Diane Perry, M.S. ACSM-CEP, CHWC, Carolyn Palka, M.S. ACSM-CEP, CHWC
  - AACVPR Poster Presentation  
"Transformational Change in Group VS. Individual Orientation for Cardiac Rehabilitation"  
Carolyn Palka, M.S. CEP, Diane Perry, M.S. CEP, Joseph Bryant, B.S. CEP, Daniel Montgomery, B.S. and Melvyn Rubenfire, M.D.

## LEVERAGE THE POWER OF PEERS IN ORIENTATION

CR-eligible patients are being discharged earlier from the hospital than in years past, often resulting in heightened anxiety, hostility, and increased social isolation. This puts patients at an emotional disadvantage for effectively optimizing behavior. Making connections with peers during the orientation process helps them to cope with anxiety and social isolation through immediate access to a relevant social support group.

Implementing group orientation also has the advantage of reducing staff redundancies and orientation burnout, minimizing the impact of cancellations and no-shows on staff time, ensuring that consistent messaging and education is provided to patients at orientation, minimizing the time gap between referral and enrollment dates, and enhancing patient-centered care.

## METRICS OR RESOURCES NEEDED

- Data on referral to enrollment times and any backlogs
- Detailed summary of current orientation process including the number of cancellations, no-shows, attributed staff hours, physical space needs, method, and length
- Current staffing capacities and hours

## PROCESS DESCRIPTION

- 1** Identify the current process for initial evaluation and orientation and whether these are currently billable sessions. If the visit includes the patient's initial assessment, it can be billed. If patients receive orientation only, consider offering this at no additional charge.
- 2** Determine your facility's primary rationale for a group orientation, such as increased volume of orientations, staff/program efficiency, orientations being non-billable, shortening the window between referral and start dates, improving enrollment rates, and/or improving patient satisfaction.
- 3** Develop a goal based on your specific rationale and determine program details, such as the length and activities of orientation, the max number of patients per session, whether physician supervision is needed, if the initial treatment plan will be signed prior to or at orientation, etc.
- 4** Identify barriers to instituting this type of group orientation. Patient barriers might include learning needs and ability levels, language and cultural differences, transportation needs, the inclusion of the patient's support person, insurance coverage, and out-of-pocket costs. Program or system barriers might include the need for different AV equipment, space, staffing models, scheduling changes, and considerations for HIPAA compliance.
- 5** Re-think messaging for patients to promote the benefits of peer connection and then modify program materials accordingly to highlight social connections made at orientation.
- 6** Identify and invite peer mentors (patients who already completed CR) to attend orientation sessions.
- 7** Come up with a plan for grouping patients at orientation by similar characteristics (gender, age, etc.) to support peer networking.



# Eliminating Transportation as a Barrier to Participation

## KEY STAKEHOLDERS

- Program managers
- Class instructors
- Support staff
- Scheduling staff
- Referring physicians
- Hospital administrators
- Social workers

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## REFERENCES

- [American Cancer Society: Road to Recovery Program](#)
- [ACS grant removes barriers for patients in treatment](#)

## IMPROVE ATTENDANCE WITH RIDE ASSISTANCE

Cardiac rehab programs have low enrollment rates. Transportation is often a barrier to obtaining these important services. To increase enrollment and retention rates, programs need to assist patients in obtaining reliable transportation.

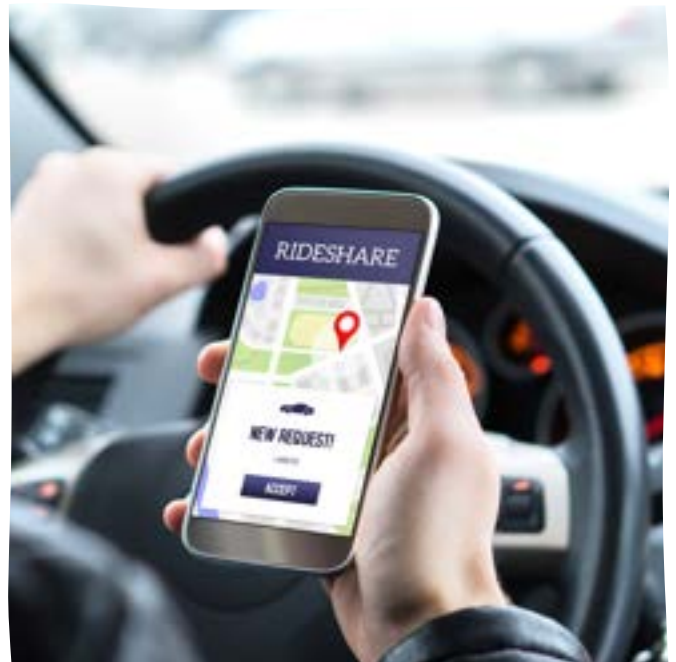
## METRICS OR RESOURCES NEEDED

Professional contacts who specialize in:

- Senior programs
- Community programs
- Veterans organizations
- Philanthropy

## PROCESS DESCRIPTION

- 1 Identify contacts at current transportation programs within local communities and reach out to discuss options for a transportation assistance program.
- 2 Draft agreements with relevant rideshare programs that include any important details or arrangements.
- 3 Draft materials for patients that promote local transportation assistance programs and outline the patient's steps to obtain rides.
- 4 Inform any relevant stakeholders of patients' options for transportation and integrate the use of any newly-created patient educational materials into their workflow where appropriate.
- 5 To accommodate the logistics of drivers, work with scheduling staff and class instructors to incorporate more flexibility when scheduling patient appointments.
- 6 Identify a waiting area for patients who are using a rideshare program, as well as those who have family or friends driving them. Similarly, consider adding pick-up location markers for drivers of rideshare programs to reduce congestion near lobbies and entrances.
- 7 Consider funding a van service to transport patients to appointments. Possible funding sources could include grants, but the cost could also be shared if the service is utilized hospital-wide.





# Improving Attendance

## KEY STAKEHOLDERS

- Program managers
- Scheduling staff
- Class instructors
- Support staff
- Referring providers

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- Bryan Foster, BS, CEP  
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## REFERENCES

- [Improving CR Attendance and Completion Through QI Activities and a Motivational Program](#)

## IMPROVING ATTENDANCE AFTER ENROLLMENT

Most insurance companies will allot 36 covered sessions for traditional cardiac rehab and 72 covered sessions for intensive cardiac rehab. Many patients who enroll in cardiac rehab do not complete all covered sessions. Patients may stop attending the program at different stages of completion with a variety of reasons for early withdrawal. There are a variety of strategies for understanding and reducing early withdrawal.

## METRICS OR RESOURCES NEEDED

- Collection of strategies for keeping patients engaged throughout the duration of the program
- Policies that hold participants accountable

## PROCESS DESCRIPTION

- 1 Collect feedback from patients to identify their reasons for not completing the entire program. Utilize strategies such as polling, surveys, and a database of reasons for discharge.
- 2 Analyze feedback and identify the top three reasons for early withdrawal. Focus on finding solutions for those areas. Analyze average completed visits and determine if patterns are present and why, such as whether patients tend to leave the program within a certain range of visits.
- 3 Draft an attendance policy that will be reviewed and signed by the patient.
- 4 Develop scripts for staff on program attendance that set expectations for patients upon enrollment and include regular reminders with calls to patients upon consecutive missed sessions.
- 5 Identify coaching opportunities for staff to connect with patients while out on the gym floor on topics such as exercise, nutrition, and stress management.
- 6 Develop activities to keep patients engaged throughout the duration of the program, such as incentive programs, individual competitions, class vs. class competitions, testimonial boards, etc. In addition, consider moving staff from behind the telemetry screen to the floor to interact with patients.
- 7 Work with providers to support full program completion by explaining the benefits to patients.
- 8 For programs that offer education as a separate visit, avoid open-ended questions. For example, avoid saying, "Do you want to go to education today?" Instead, say, "It's a video day today. I have picked out a video on X that I think you'll benefit from. Would you like to watch this or pick another?"
- 9 Incorporate patient recognition during group classes by introducing new patients to the rest of the class and recognizing achievements on graduation day.
- 10 Establish a companion program to help create a support system for the patient. For example, develop a Phase III patient ambassador program to work with Phase II patients.
- 11 Consider establishing ground rules for family members or friends to participate and invite them to join in alongside the patient.
- 12 Invite patients to join committees tasked with problem-solving and solution-building for improving the CR program experience.



# INNOVATION STRATEGIES:

Innovative Cardiac Rehab Models,  
System-Level Changes for Increased  
Participation, and Coalition Building



## KEY STAKEHOLDERS

- Patients
- Referring physicians/providers
- CR clinical staff
- CR Supervisors
- Billing and coding department

## DIRECT CONTACTS FOR QUESTIONS

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## REFERENCES

- [Home-Based CR](#)
- [CMS Telehealth](#)

# Innovative Models for Cardiac Rehab Delivery

## DELIVERING CR SERVICES IN NEW WAYS

Prior to the COVID-19 pandemic, participation in CR was low due to limitations inherent to the on-site model: distance, work schedule constraints, transportation issues, and copays. During the pandemic and beyond, it is imperative that CR programs work to develop alternative ways of delivering their services to increase enrollment and retention rates.

## METRICS OR RESOURCES NEEDED

- Annual number of lost referrals
- List of the main barriers to participation in your area
- Data on the time lag between referral and enrollment

## PROCESS DESCRIPTION

- 1 Review the descriptions below for three different innovation models in cardiac rehab: 1) telehealth (or hybrid) CR, 2) accelerated CR, and 3) open gym.
- 2 Using data on lost referrals, barriers to participation, and lag time between referral and appointment, identify which of the three innovation models will best address the needs of your current program.
- 3 Follow the question prompts provided for that particular innovation model to guide your decision-making and next steps.
- 4 Meet with key stakeholders and personnel to adequately address the considerations below, and then repurpose existing materials and workflows for the alternative model you selected.

## CONSIDERATIONS FOR ALTERNATIVE CR MODELS

TELEHEALTH	ACCELERATED CR	OPEN GYM
<p>Telehealth leverages an established digital health platform to offer virtual CR. It can address patient barriers such as accessibility, transportation, and program copayments.</p> <ul style="list-style-type: none"> <li>• Do we have access to appropriate staffing and technological resources to provide synchronous and/or asynchronous CR?</li> <li>• Do we have the funds to provide patients with the necessary equipment to use at home?</li> <li>• Are we able to provide concurrent behavioral health interventions?</li> <li>• Can we address regulatory and billing logistics for virtual care?</li> </ul>	<p>Patients in accelerated CR complete all their CR visits in an accelerated period of time, which helps patients with high co-payments, dependent care duties, or an imminent return to work.</p> <ul style="list-style-type: none"> <li>• Can we identify patients eligible for shorter prescribed sessions?</li> <li>• Can we tailor learning needs and assessments for an accelerated program?</li> <li>• Can we address regulatory needs for accelerated programs?</li> <li>• Can we establish an appropriate scheduling/staffing workflow including adequate medical supervision?</li> <li>• Can we implement follow-up programs to assess progress?</li> </ul>	<p>Open gym is a group enrollment format with open gym time slots in place of specific class times, which reduces wait times as well as competition for appointments.</p> <ul style="list-style-type: none"> <li>• Can we accommodate hours of operation, equipment availability, staffing models, and medical supervision for open gym?</li> <li>• Can we offer concurrent education/behavioral coaching for open gym attendees?</li> <li>• Can we identify and accommodate monitored and non-monitored patients?</li> <li>• How will we document progress for open gym attendees?</li> <li>• What reimbursement criteria needs to be considered?</li> </ul>



## KEY STAKEHOLDERS

- CR program director
- Quality officer/department
- Medical director
- relevant referring providers
- Health IT

## DIRECT CONTACTS FOR QUESTIONS

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- **Steven Keteyian, PhD**  
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## REFERENCES

- [Million Hearts CR Change Package: Systems Change](#)

# System-Wide Changes to Increase Participation

## CHANGE STRATEGIES FOR HEALTH SYSTEMS

Health systems are complex environments with a diverse set of clinical and financial demands. Competing health system priorities may de-emphasize the importance of CR and subsequent resources, despite its proven clinical and financial benefits. Enacting changes at the system level will both improve quality and reduce costs, and short-term investments into CR will ensure long-term clinical and financial benefits. System-level changes to increase CR participation range from establishing a CR champion and engaging care teams to identifying benchmarks and tracking key performance indicators.

## METRICS OR RESOURCES NEEDED

- Supporting materials demonstrating the benefit of CR
- Data reports on CR referral, enrollment, adherence

## PROCESS DESCRIPTION

- 1** Identify a CR champion within the CR facility as well as in individual departments (e.g., cardiology, cardiac surgery) to establish a network of champions.
- 2** Provide CR champions with materials and data to facilitate their leadership in CR.
- 3** Engage care teams in CR to ensure buy-in. For staff, identify and train staff liaisons, inform all staff about the benefit of CR, and establish clear protocols.  
  
For physicians, highlight the clinical benefit of CR, both in attendance and adherence, as well as the importance of a physician endorsement.  
  
For administrators, demonstrate the potential cost savings with long-term investment in CR. Examples include fewer readmissions, decreased ED utilization, and improved patient satisfaction scores.
- 4** Develop a method to track key metrics such as CR referral, enrollment, and adherence to use as quality indicators and benchmarks.
- 5** Work with Health IT to build unique measures in the EHR system that track referral, enrollment, and adherence. There are a number of condition- or procedure-specific clinical data registries that can be used to collect and report these data to your care teams.





# Coalition Building

## KEY STAKEHOLDERS

- Cardiac rehab leaders and staff
- Patient Advisors/advocates
- Insurers
- National Organizations (AACVPR) and statewide affiliates

## DIRECT CONTACTS FOR QUESTIONS

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- Diane Perry, MS ACSM-CEP [diaperry@med.umich.edu](mailto:diaperry@med.umich.edu)

## REFERENCES

- [BMC2](#)
- [Consortium Alignment Framework for Excellence \(CAFE\)](#)

## BUILDING AN EFFECTIVE MULTI-CENTER COALITION FOCUSED ON CARDIAC REHAB

Coalitions/consortiums allow organizations to share expertise, develop and disseminate best practices, and collaborate to increase the efficiency and efficacy of quality improvement initiatives around cardiac rehab utilization. A coalition also allows for networking with like-minded peers, learning from others' successes and challenges, ensuring consistent adoption of best practices across sites, and a visible position from which to advocate the value of CR with legislators.

## METRICS OR RESOURCES NEEDED

- An identified leader for the project
- A list of who should join and what would constitute membership
- Personnel time to lead consortium meetings and activities
- Personnel time for participants to participate in activities
- Costs for in-person meetings (e.g., meeting expenses, travel)

## PROCESS DESCRIPTION

- 1 Draft a mission, vision, and principles for the consortium.
- 2 Determine an operating structure and governance model.
- 3 Identify interested participants and invite them to attend a kickoff meeting.
- 4 Confirm the coalition's mission, vision, and principles with the other participating members.
- 5 Collaborate with members to confirm roles and responsibilities.
- 6 As a coalition, set initial goals and identify related activities. Goals should be SMART.
- 7 The coalition should maintain regular, clear, purposeful, value-driven communication, and have an agreed-upon schedule for standing meetings. At recurring meetings, the group should regularly assess progress toward goals and the functioning of the coalition.

*need metrics?*

# MEASURES FOR SUCCESS

## METRICS FOR GROUP ORIENTATIONS

- Referral date to orientation date
- Referral to first billable session
- Lack of open orientation appointments
- Lack of open class times
- Number of orientations offered/week
- Number of FTEs needed for orientation

## METRICS FOR OVERALL CR VALUE

- Compare the patient population who attends CR with those patients who do not attend CR
- Measure and compare readmission rates to the health system

## METRICS FOR CR LIAISON & EARLY SCHEDULING

- Number of patients referred
- Number of patients who have a CR liaison visit
- Number of patients who have a CR liaison visit plus early scheduling before discharge
- Adherence/retention rate of each group: no CR liaison visit, CR liaison visit, CR liaison visit with early scheduling)
- Number of days from patient intervention until initial outpatient CR appointment of each group

## **MSCVPR**

The Michigan Society for Cardiovascular and Pulmonary Rehabilitation (MSCVPR) is a statewide network of professionals dedicated to providing educational opportunities, promoting an exchange of ideas, enhancing standards of care, and improving communication among multidisciplinary health professionals who promote cardiovascular and pulmonary health. [mscvpr.org](http://mscvpr.org).

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## **MILLION HEARTS® 2022**

Million Hearts® 2022 is a national initiative co-led by the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare & Medicaid Services (CMS) to prevent 1 million heart attacks and strokes within 5 years. It focuses on a small set of priorities selected for their ability to reduce heart disease, stroke, and related conditions. [millionhearts.hhs.gov](http://millionhearts.hhs.gov)

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## **BMC2**

BMC2 is a collaborative consortium of health care providers dedicated to improving quality of care and outcomes for cardiovascular patients across the State of Michigan. [bmc2.org](http://bmc2.org)

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## **MSTCVS**

The Michigan Society of Thoracic and Cardiovascular Surgeons Quality Collaborative (MSTCVS) is a multidisciplinary group of medical professionals dedicated to improving the care of adult cardiac and general thoracic surgery patients in Michigan. [mstcvs.org](http://mstcvs.org)

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## **MISHC**

The Michigan Structural Heart Consortium (MISHC) is a quality improvement registry designed to improve quality of care and outcomes in patients across the State of Michigan who undergo structural heart procedures, including transcatheter aortic valve replacement, mitral valve replacement, and mitral valve repair procedures. [mishc.org](http://mishc.org)

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## **MVC**

The Michigan Value Collaborative (MVC) aims to understand variation in healthcare use, identify best practices, and lead interventions for improving care before, during, and after hospitalization. The program improves healthcare quality across Michigan through rigorous performance feedback, empirical identification of best practices, and collaborative learning. [michiganvalue.org](http://michiganvalue.org)

# CARDIAC REHAB BEST PRACTICES TOOLKIT WORKGROUP MEMBERS

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