Cardiac Rehabilitation

KEY POINTS

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 transcatheter aortic and mitral valve interventions, and heart failure.

Cardiac Rehabilitation (CR) is associated with lower mortality and readmissions, and higher quality of life.

When the provider encourages the patient to attend cardiac rehabilitation, the likelihood of enrollment significantly increases.

Educate the patient at pre-procedure visits that moving forward with structural heart intervention includes cardiac rehab participation and follow up at 30 days and one year.

Include Cardiac Rehabilitation expectations in pre-procedure teaching. Assess barriers and include care givers in the discussion of expectations.

- Attend two-three times a week for a minimum of eight weeks, preferably the full 12 weeks
- Sessions include:
    - Endurance and strength exercises, depending on ability
    - Nutrition information
    - Psychological support
    - Education

An inverse relationship exists between time to enrollment in outpatient CR and participation. The patient should receive their appointment information from the CR liaison, or structural heart team, as part of their discharge instructions.

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 or heart valve surgery, a percutaneous intervention (PCI), transcatheter aortic, mitral or tricuspid valve interventions, 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
- Defined roles and responsibilities of a CR liaison

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 structural heart valve interventions.

3. Develop patient education materials and 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. Identify steps to complete insurance verification for referred patients. Educate necessary staff on process.

6. Identify a dedicated liaison to meet with the patient to set an initial CR appointment at the nearest facility, as available.

7. Work with Health IT and the CR liaison to include the appointment details on the patient's discharge instructions. The liaison, or designated staff, should notify the receiving CR facility about the appointment.

8. Develop a process to notify the liaison, as available, of the referral. For same-day discharges, the liaison will be paged; otherwise, they will be notified via EMR or printed referral.

9. Early education and improved messaging for patients are critical. Consider developing or finding 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.

ENHANCE CR LIAISON VISIT IN ACUTE CARE

A CR liaison was defined as a health care professional (e.g., advanced provider practitioner, CR staff member) who ensured a CR referral was placed and provided information related to CR face-to-face with the patient before discharge. This role does not require the title of “liaison” and does not require a dedicated FTE. CR Liaison responsibilities can be shared among care teams based on existing team workflows and responsibilities. Evidence that utilizing 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, or designated staff, as part of their discharge instructions.

1. 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.

2. Create an “elevator pitch” for the inpatient/ output liaison to briefly summarize CR for patients.

3. If available, a CR Liaison can facilitate identifying ideal CR facility, helping to confirm patient insurance coverage for CR, and getting the first appointment scheduled

ENROLLING PATIENTS WITHIN 21 DAYS OF DISCHARGE

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.

PROCESS DESCRIPTION

1. 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.

2. 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.

3. 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.

4. Obtain a list of Michigan CR locations from MSCVPR and send referrals to competing programs. Patients are more likely to enroll with a shorter commute.

5. 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.

6. Identify any patient, program, or system barriers, such as transportation issues, staffing or volume concerns, or technical considerations.

7. Identify contacts at current transportation programs within local communities and reach out to discuss options for a transportation assistance program.

8. Draft materials for patients that promote local transportation assistance programs and outline the patients' steps to obtain rides.

Most insurance companies will cover 36 sessions for traditional cardiac rehab and 72 sessions for intensive cardiac rehab. Many patients who enroll in cardiac rehab do not complete all the sessions covered. 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.

PROCESS DESCRIPTION

1. Draft an attendance policy that will be reviewed and signed by the patient.

2. Develop scripts for staff on program attendance that set expectations for patients upon enrollment.

3. Providers will support full program completion by explaining the benefits to patients.

MISHC partners with the Michigan Cardiac Rehab Network (MiCR) to achieve improved cardiac rehab utilization for eligible patients across the state of Michigan. Please visit MiCR's website to access a variety of provider resources:

- Cardiac Rehab Best Practices Toolkit
- Sample CR Hospital-Level Report
- CR Patient Handout
- CR Liaison postcard
- Cardiac rehab locator tool
- Resource Library

ACKNOWLEDGEMENTS

Mike Thompson, PhD, MPH

DISCLAIMER

MISHC Best Practice Protocols are based on consortium-wide consensus at the time of publication. Protocols will be updated regularly, and should not be considered formal guidance, and do not replace the professional opinion of the treating physician.

REFERENCES

1. The Michigan Cardiac Rehab Network (MiCR) Cardiac Rehab Best Practices Tool Kit