

### Implementation Guide - Module 3

<h2 style="text-align: center;">Understanding your Workflow Processes to Prepare for Systems Change</h2>
<h3>Module Purpose</h3>
<p>This module continues the discussion of the steps necessary for systems change to support the implementation of automatic referral with effective care coordination. Topics include the “why’s” and “how’s” of workflow process mapping. Cardiac rehabilitation (CR) quality improvement (QI) teams will map and study their current referral and care coordination workflow processes to understand what is working and what needs to be addressed to implement a successful automatic referral and care coordination system.</p>
<h3>Target Audience</h3>
<p><i>Primary audience:</i> CR QI Team implementing automatic referral with care coordination.  <i>Secondary audience:</i> Non-team cardiac clinicians, discharge planners, care coordinators, hospital leadership</p>
<h3>Learning Objectives</h3>
<p>Upon completion of this module, attendees will be able to:</p> <ul style="list-style-type: none"> <li>• <b><i>Understand the importance of mapping key processes and identifying process failures before implementing automatic referral or enhancing care coordination.</i></b></li> <li>• <b><i>Map current workflow processes for CR referral, enrollment, participation, and completion, including data collection.</i></b></li> <li>• <b><i>Identify implementation gaps and process failures that must be addressed to support automatic referral with effective care coordination.</i></b></li> </ul>
<h3>Key Takeaways from the Module</h3>
<ul style="list-style-type: none"> <li>• Understand the current CR workflow processes, including those related to data collection before making changes.</li> <li>• Seek input from patients, those that completed CR and those that did not.</li> <li>• Involve all significant stakeholders and iterate the workflow map until consensus is reached.</li> <li>• Examine the maps and use them as working documents to identify gaps, opportunities and successful strategies that can be replicated.</li> </ul>
<h3>Steps and Guidance for Getting Started</h3>

**Introduction:** Patients take many paths to reach outpatient CR. Mapping and studying the workflow processes for each path is likely a valuable exercise. However, the focus of TAKEheart is creating an automatic referral with an effective care coordination system from the inpatient/procedural environment to outpatient CR. Therefore, concentrate on mapping the foundational workflow processes for TAKEheart:

- Referral workflow processes from inpatient and/or procedures to outpatient CR
- Care coordination workflow processes from inpatient/procedures to outpatient CR
- Data collection processes from inpatient/procedures to outpatient CR

**STEP 1: Continue building the action plan.**

- Add tasks to the action plan to prepare for mapping workflow processes. Here are some suggestions:
  - Set a time to meet to discuss and map workflows.
  - Identify stakeholders to involve, including patients.
  - Invite stakeholders to mapping meetings.
  - Gather supplies.

**STEP 2: Looking Before you Leap: Map Current CR Workflow Processes**

- Help your team understand the value of mapping to understand and visualize the steps taken to refer and enroll patients in CR and help them complete.
  - Share the slides and/or event recording of module 3 training with members of your team.
  - Use the **Mapping Guide for CR Workflow Processes (Appendix A)** to organize your team.
  - Create a picture of the patient journey from the time of referral to completion by identifying decision points, tasks and activities.
  - Look for gaps and opportunities for implementing automatic referral with effective care coordination.
  - Map data processes to show what data is collected and how and where it is stored, what reports and program information can be generated and who has access.
- Spend some time observing the CR workflow process: Patient eligibility -> completion of CR.
  - Gather all relevant stakeholders, including past patients and those involved in data collection and management, to participate in mapping meetings.
  - Ask each process representative, including patients to state their understanding of the process.
  - Ask past CR patients to map their journeys, include those who completed and those that did not, to obtain different perspectives. Patients can illuminate patient needs and concerns, helping to identify opportunities and needed activities for effective care coordination.
  - Use the **Suggested Workflow Process Questions (Appendix B)** to guide team discussions.
- Create a flow diagram to visualize the process.
  - [Flowchart Template](#) from the American Society for Quality (ASQ)
  - **Sample CR Process Map (Appendix C)**

- Flowchart examples from the Million Hearts/AACVPR Cardiac Rehabilitation Change Package (CRCP)
  - Lake Regional Health System – Cardiopulmonary Rehabilitation Referral Process Map:
   
<https://www.aacvpr.org/Portals/0/Million%20Hearts%20Change%20Package/4.11.2018%20Files/R-12-CRCP-LRHS-Referral%20Process%20Map.pdf?timestamp=1523556769993>
  - Genesis Healthcare System – Group Orientation Process Flowsheet:
   
<https://www.aacvpr.org/Portals/0/Million%20Hearts%20Change%20Package/4.18.2018%20Files/EP-27.25-CRCP-Genesis%20Group%20Orientation%20Process%20Flowsheet.pdf?timestamp=1524152828147>
- Validate the map/flowchart you create by asking for feedback on your process mapping from people and groups involved in the process.

### STEP 3: Examine Maps

- Study the maps created in **Step 2** to:
  - Identify implementation gaps.
  - Identify opportunities to enhance care coordination.
  - Look for ways to develop efficiencies and streamline.
  - Recognize processes that are working well and consider replicating.
  - Determine if new data capture workflow processes are needed.
- Brainstorm as a team to uncover possible causes of identified problems. You can organize these using a Fishbone Diagram (see the **Sample Fishbone Diagram in Appendix D**).
- Strategize methods for process improvements.

### STEP 4: Looking ahead: Redesign Workflow Processes

- Redesign of workflow processes to accommodate changes necessary for the implementation of automatic referral with enhanced care coordination will take place over the course of the next several months.
  - Insights will be gleaned from subsequent modules:
    - **Modules 5 & 7** will address the design and implementation of automatic referral.
    - **Modules 6, 8, and 9** will address laying the groundwork and implementing effective care coordination.
- As a team begin to discuss where to focus the initial changes.
- Begin to draft changes (tasks) to be added to the action plan. Remember to include when, where, by whom and how, with timeframes.
- All changes (tasks) should support the aim statement and the implementation of automatic referral with effective care coordination, including the processes related to data collection.
- Develop protocols which standardize the way work is done.
- Start with easy fixes first then progress to harder ones.
- Iterate the new workflow process until it is right for your hospital.

- Include staff in the redesign process. Staff who are involved feel heard and have a greater chance of buying in and adopting new workflows.
- Create a new flow chart with an updated workflow process to follow.
- Disseminate new flow chart along with any necessary policies.
- Take time to educate and support staff in the adoption of new workflow processes.
- Redesign Referral Workflow Processes
  - Standardization can promote efficiency with care transitions and improve lines of communication from one site of care to another.
  - Automatic referral standardizes the referral process from inpatient to outpatient for all eligible patients.
  - Develop standard processes for all paths taken to CR.
    - Develop and communicate a standardized referral process or policy for patients.
    - Develop a standard process for informing an external CR program of a referred patient.
    - Develop and communicate a standard outpatient CR referral process.
    - Develop a standard process for eligible patients to self-refer to CR.
- Improve Care Coordination Processes
  - Protocols or official procedures are one method used for process improvements.
  - Develop a protocol for scheduling the first session, which includes the outpatient CR program knowing their responsibility.
  - Develop a protocol for clinician -to-clinician hand off to inpatient/rehab CR programs to clarify CR plan of care, improve transitions and reduce readmissions.
  - Develop protocols to identify at risk patients and better meet patients' needs and concerns.
  - Develop and communicate policies/procedures for orienting patients to CR.
- Restructure Data Collection Workflows
  - Plan to collect data about qualifying patients, i.e., race, ethnicity, zip codes.
  - Design processes to collect inpatient referral metrics.
  - Design processes to collect outpatient referral metrics.
  - Design processes for tracking CR enrollment and participation metrics.

**Key Resources:**

**Appendix A: Mapping Guide for CR Workflow Processes**

**Appendix B: Suggested Workflow Process Questions**

**Appendix C: Sample CR process Map**

**Appendix D: Sample Fishbone Diagram**

**Appendix E: Additional Module Resources**

# Appendix A: Guide to Mapping the Cardiac Rehabilitation Process

It is said, “A picture is a thousand words!” Visually representing a process allows you to see gaps, duplications and bottlenecks that might not be apparent by reading a procedure document or imagining it in your head. It also allows you to identify successes, and process steps associated with success that might be applicable to “other steps on the map”. Performing the exercise as a group allows all stakeholders to have input. Those involved in the mapping process should “observe” the process, as much as possible, prior to coming together.

## Suggested Steps

### 1. Assemble the team:

- a. Include those who work in cardiac rehabilitation.
- b. Include those involved in the cardiac rehabilitation referral process.
- c. Include those who participate in cardiac rehabilitation (patients).
- d. Include those who supervise and manage cardiac rehabilitation.
- e. Include someone with computer skills who translate the drawings into something more readable.

### 2. Schedule a time:

- a. Find a date and time all of the people who touch the cardiac rehabilitation process can meet for an hour several times over the course of a couple of weeks without being disturbed.

### 3. Gather materials:

- a. Decide what you will use: paper, flip charts, whiteboards, markers, pens, “sticky notes”.

### 4. Set the ground rules:

- a. Let everyone know that this is an interactive meeting that will involve lots of voices. Make sure the room is respectful, allows for open conversation, but stay focused on the task – you’re on a timeline.

### 5. Begin by asking questions:

- a. Use open ended and probing questions.
- b. Ask staff to identify processes and workflows that are working well.
- c. Remember you are documenting what ACTUALLY happens – not what SHOULD happen ideally.
- d. Think questions like: When does the cardiac rehabilitation process start? What is the first step? What happens next? Is that what ACTUALLY happens? What does happen? Who takes care of this? Who is ultimately accountable? Where does this go? What do they do with that referral?  
**(For additional questions, see suggested questions document)**
- e. Identify how many people/teams/departments the referral must pass through to reach the patient. Remember, the greater the number of steps the increases the chance for errors and the time to reach the patient.
- f. Look for duplicative efforts.
- g. Look for bottlenecks—places where the process flow stops or slows, i.e. waiting for insurance verification or physician or insurance approval.
- h. Are there successful processes that can be replicated elsewhere?

### 6. Create it:

a. Shapes-- 4 key shapes to use when mapping.

i.



Represents the start and the end of your process.

ii.



Represents an activity/task in the process.

iii.



Represents your decision point: this is the fork in the process and therefore will always have two arrows (YES/NO)

iv.



The arrows represent direction and connection.

b. Methods:

- i. Draw on whiteboard
- ii. Draw on flip chart
- iii. Draw on paper taped to wall
- iv. Use different colored sticky notes to represent shapes on



wall  
"sticky notes"  
the flow chart.

can take the  
to a readable

## 7. Make it readable:

- a. Someone with computer skills team drawings and convert them flow chart.

## 8. Disseminate the completed flow chart:

- a. Send around for to people in various departments involved in the cardiac rehabilitation process and ask them to review and validate the process the team created.

## 9. Identify changes:

- a. Once the process has been reviewed, schedule another time to meet to discuss what changes are needed for automatic referral with care coordination. Try to find ways to streamline the new process.

## Appendix B: Suggested Workflow Process Questions for Mapping

### Referrals

Who is referred to cardiac rehabilitation and why?

Which patients are currently referred for cardiac rehabilitation, i.e., what diagnoses?

Are some diagnoses missing?

Is the process different for surgical vs. non-surgical patients?

Who decides which patients are referred?

What is the patient referral process?

### Patients

How are appropriate patients for CR identified?

What is the current trigger for a CR referral? E.g., patient diagnosis, physician initiated, etc.?

What happens to patients admitted to general medical floor rather than a cardiology floor?

When and where is referral made?

### Enrollment

What is the CR enrollment process?

Who communicates with the patient?

How is type of health insurance factored in?

How is the CR program selected?

Who follows up with the patient to see if they enrolled?

Do we know how many CR sessions a patient attends or if they complete CR?

If so, who collects that information and when?

### Data

Where does your data reside?

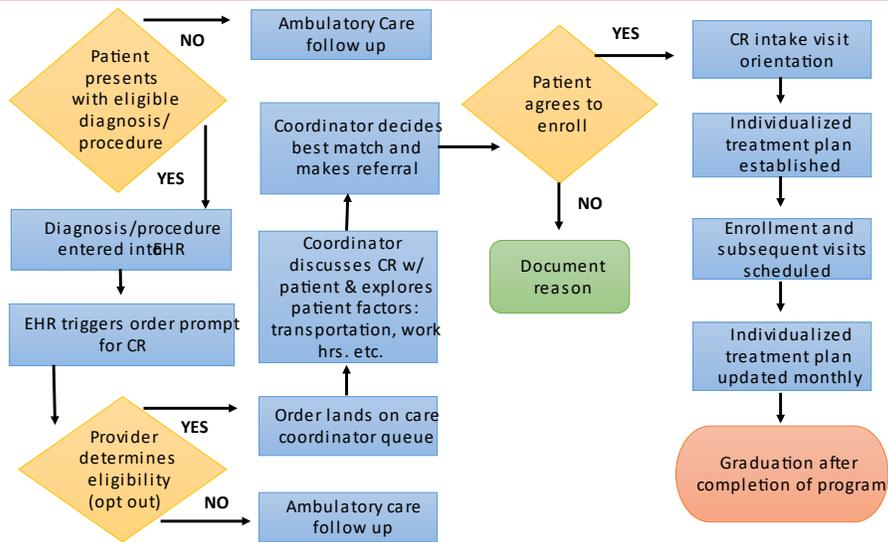
What does it take to capture the data you need?

Are new data capture processes needed?

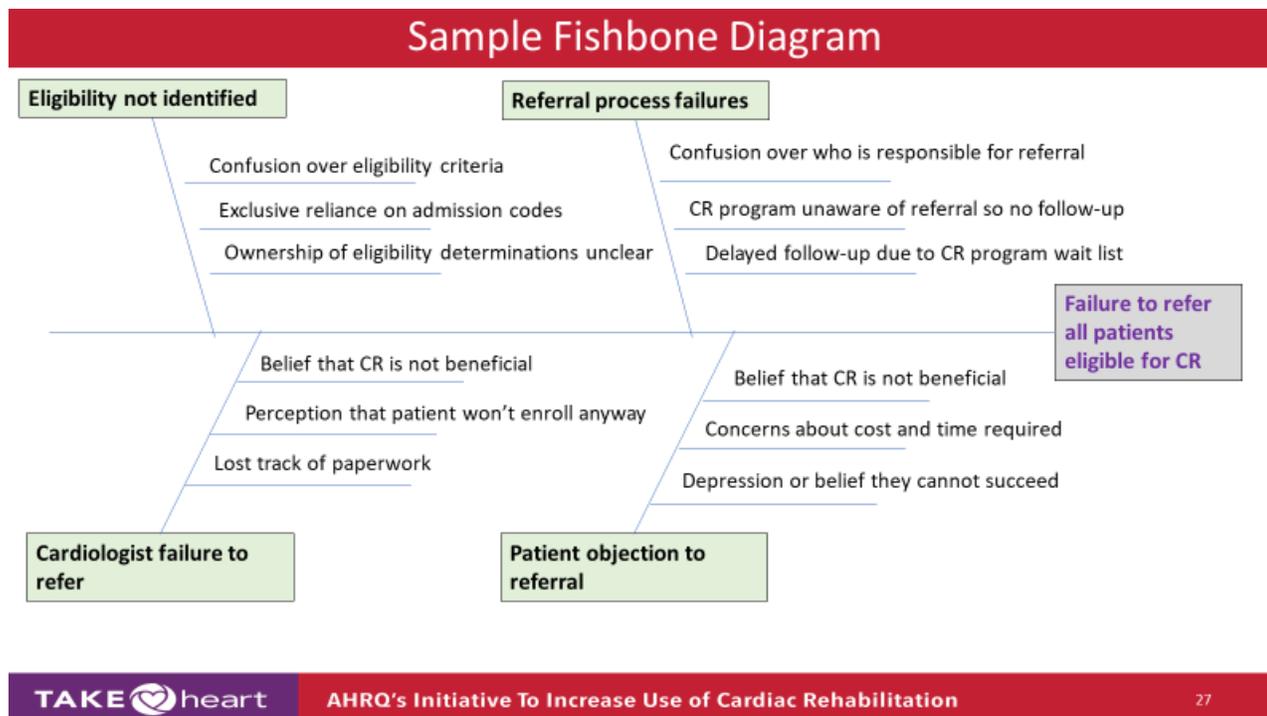
Who oversees different aspects of data collection?

# Appendix C: Sample CR Process Map

## Current Workflow Mapping: Example



## Appendix D: Sample Fishbone Diagram



Fishbone diagrams are a useful way to identify major causes of process failures as well as specific failures that fall into these general categories. The example fishbone diagram captures common causes eligible patients fail to be referred into CR. Several specific failures prevent patients from being identified as eligible for CR. If your program does not know a patient is eligible then they will not be referred. Other failures relate to activities or beliefs of cardiologists as well as patients that are eligible for CR but may not understand its importance. The Fishbone diagram makes clear that solving the problem of failing to refer eligible patients will require engaging with both cardiologists and patients—as well as the specific topics you will need to address with both these groups to improve your referrals. The last category in this Fishbone diagram captures other process failures that may cause eligible patients to not be referred. While automatic referral will address many of these challenges, you will need to make sure that all of them are addressed to maximize your referrals.

Once you have done some process mapping, creating Fishbone diagrams that capture the underlying reasons specific problems are occurring is a useful next step. Be sure to include your team and patients in this process to ensure that you fully understand underlying causes of process failures and can address them as you redesign your processes.

## Appendix E: Additional Module Resources

### Materials cited in this Implementation Guide and in the Module 3 webinar slide deck include:

1. Institute for Healthcare Improvement (IHI). “Quality Improvement Essentials Toolkit.” 2020. Available at: <http://www.ihl.org/resources/Pages/Tools/Quality-Improvement-Essentials-Toolkit.aspx>  
*IHI’s QI Essentials Toolkit includes the tools and templates to launch a successful quality improvement project and manage performance improvement. These tools include a short description, instructions, an example, and a blank template.*
2. McNeil, Patrick. “Clinical Champions.” *LiverPool Hospital*. Available at: <https://www.health.nsw.gov.au/wohp/Documents/mc3-clinical-champions-mcneil.pdf>  
*This PowerPoint, created by Liverpool Hospital, suggests the roles, responsibilities, and recruitment of clinical champions.*
3. Centers for Disease Control and Prevention. “Million Hearts: Getting to 70% Cardiac Rehabilitation Participation: Action Steps for Hospitals.” Available at: <https://www.aacvpr.org/Portals/0/Million%20Hearts%20Change%20Package/4.24.2018%20Files/SC-3-CRCP-MH-Actions%20for%20Hospitals.pptx>  
*This PowerPoint, created by CDC’s Million Hearts, outlines both clinical and community-based steps for hospitals to optimize their cardiac rehabilitation programs.*
4. Centers for Disease Control and Prevention: Million Hearts. Cardiac Rehabilitation: Saving Lives, Restoring Health, Preventing Disease.” 2018. Available at: [https://millionhearts.hhs.gov/files/Cardiac\\_Rehab\\_Infographic-508.pdf](https://millionhearts.hhs.gov/files/Cardiac_Rehab_Infographic-508.pdf)  
*The CDC’s Million Hearts “Saving Lives, Restoring Health, Preventing Disease” infographic provides an overview of the individual and systemic benefits of cardiac rehabilitation, the common barriers to referral and enrollment, and some potential interventions for reducing this gap.*
5. Health Information Technology, Evaluation, and Quality Center. “Guide to Improving Care Processes and Outcomes in Health Centers: An Approach to Quality Improvement.” 2016. Available at: <https://hiteqcenter.org/Resources/HITEQ-Resources/guide-to-improving-care-processes-and-outcomes-in-health-centers>  
*This quality improvement approach can be used to augment current QI approaches used in your health center or can serve as a placeholder QI methodology when there isn’t already a robust QI process in place.*
6. TMIT Consulting, LLC. “Clinical Decision Support Quality Improvement Worksheet.” 2016. Available at: [http://hiteqcenter.org/Portals/0/pdf/HITEQ%20HIT%20QI%20Guide%20CDS%20QI%20Worksheet\\_Essential.docx](http://hiteqcenter.org/Portals/0/pdf/HITEQ%20HIT%20QI%20Guide%20CDS%20QI%20Worksheet_Essential.docx)  
*This tool can help users document and analyze current approaches to specific quality improvement targets and plan enhancements.*
7. Centers for Disease Control and Prevention. “Million Hearts: Tools and Protocols.” Available at: <https://millionhearts.hhs.gov/tools-protocols/index.html>  
*This webpage, developed by the CDC’s Million Hearts, provides tools, protocols, and action guides to improve patients’ cardiovascular health.*
8. American Society for Quality. “Quality Tools.” Available at: <https://asq.org/quality-resources/quality-tools>  
*This webpage contains various tools, including flowcharts and “fishbone” diagrams, to support quality management and improvement.*