



AHRQ's Initiative To Increase Use of Cardiac Rehabilitation



# Building and Implementing a Successful Automatic Cardiac Rehab Referral System

**Module 5**

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Kathy Lee Bishop, PT, DPT



# TAKEheart Training and Technical Assistance Components

Training sessions guided by the Million Hearts®/AACVPR Cardiac Rehabilitation Change Package (CRCP), located in the Resource Center [TAKEheart Website](#)

**Monthly Training Sessions: What to do and Why** -- Fifth of 10 modules

**Implementation Guide (IG): Focus on the How**  
Supplemental documents which outline the content, and provide specific actions, steps and resources designed to assist with integrating the training material

**Partner Hospital Peer Action Groups (PH PAGs): Discussion of the HOW**

Meet with coaches to discuss module content, share ideas and offer support to other hospitals in the group



Promoting Health Care Quality and Patient Safety Through Certification and Education



# American Hospital Association (AHA)/Health Research and Education Trust (HRET): TAKEheart AHRQ's Initiative to Increase Use of Cardiac Rehabilitation Module 5: Building and Implementing a Successful Automatic Cardiac Rehab Referral System August 19, 2021

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Amy Miller, MD, PhD, faculty for this educational event, is on the medical advisory boards for Philips and Wolters Kluwer. This presentation has been reviewed and is found to contain no bias. There are no other relevant financial relationships to disclose regarding the content of this presentation.

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# What Do We Know?

## Building the Foundation

### Module 1 &2

- Created a multidisciplinary team with a strong CR champion to navigate and push the project forward
- Created an aim statement
- Began to develop an action plan

### Module 3

- Developed a deep understanding of current workflow processes for referrals, care coordination and data collection to prepare for redesign

### Module 4

- Explored the value of data to support the implementation of automatic referral and care coordination systems



## Modules 5-10: Leaping

- ❖ **Changing and redesigning CR workflow processes** to overcome your current problems and process failures related to referrals, enrollment, participation and adherence.

# What Constitutes a Completed Referral?

## Good

- Automatic referral (AR) of eligible patient to CR

## Better

Required for hospitals to get referral credit

- AR + ordering clinician conversation with referred patient about CR

## Best

- AR + patient conversation + scheduling the patient for the first CR visit prior to discharge

# Learning Goals



Upon completion of this module, attendees will be able to:

1

**Explain WHY implementing** automatic referral benefits CR patients and why automatic referral makes care coordination critical

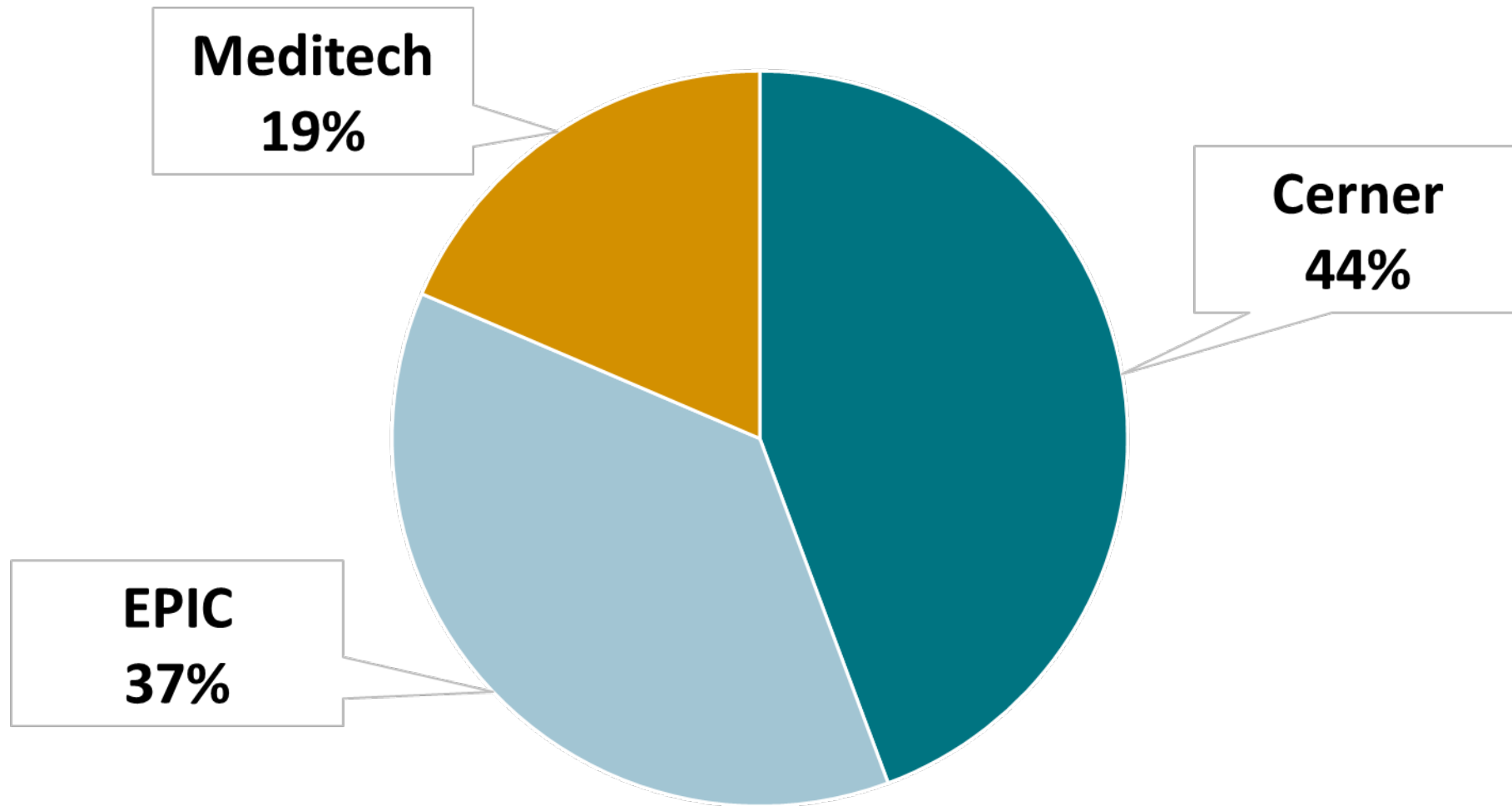
2

**Understand HOW to design** and collaborate with IT to develop EMR specifications for an automatic referral system

3

**Create a testing plan** to begin testing your planned approach to automate referral for cardiac rehabilitation

# EMR Distribution for Participating Hospitals





# Today's Presenters



## **Amy Miller, MD, PhD**

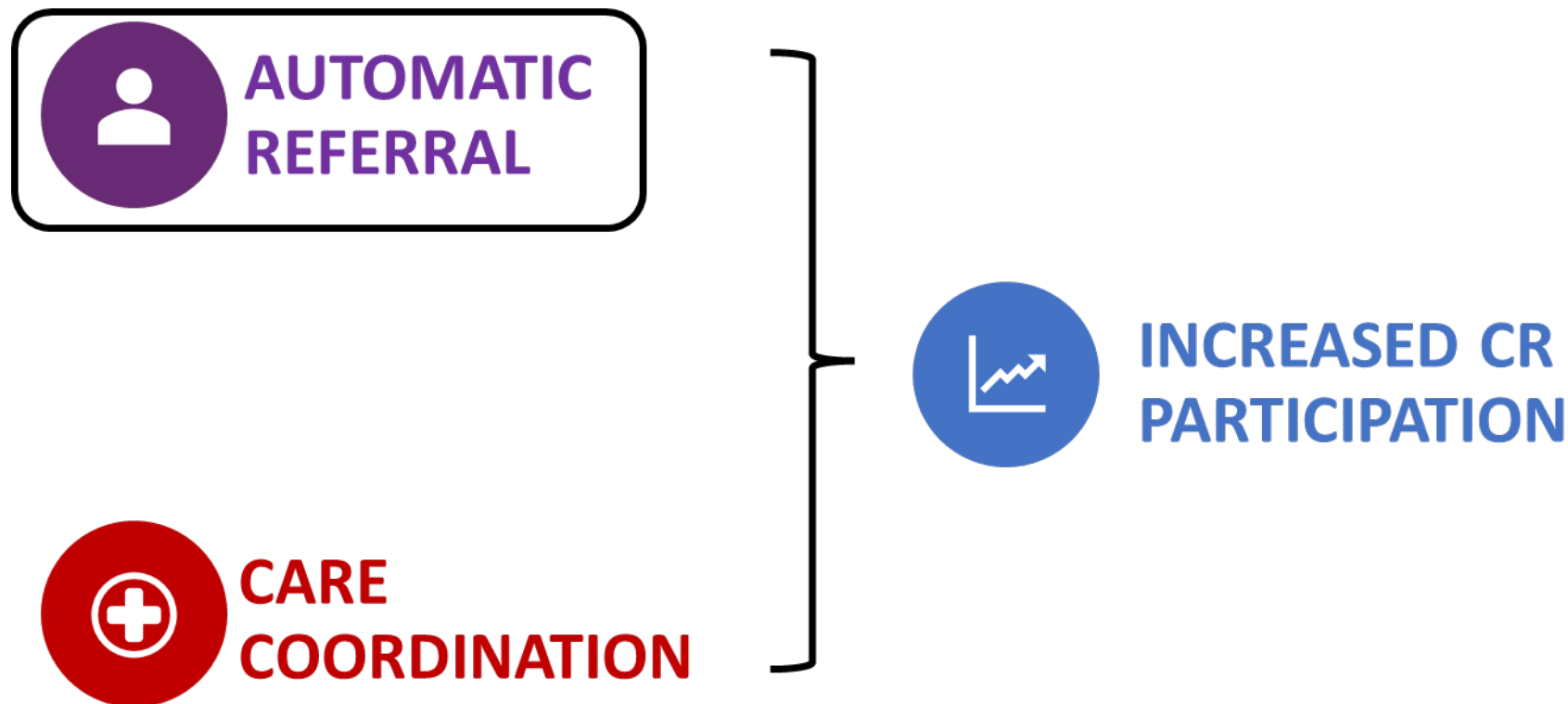
Associate CMIO for Mass General  
Brigham Healthcare  
(EPIC EMR)



## **Kathy Lee Bishop, PT, DPT, CCS, FNAP**

Board-Certified Cardiovascular and  
Pulmonary Clinical Specialist  
Program Manager, Emory Saint Joseph's  
Hospital Cardiac Rehabilitation Program

# TAKEheart: A QI Project For CR



The purpose of TAKEheart is to close the gap between Cardiac Rehabilitation (CR) evidence and practice.

# What Do We Mean By Automatic Referral?



- ❖ Automatic electronic medical record-based CR referral
- ❖ Referral built into an order set
- ❖ Default, “opt-out” model
- ❖ All patients with qualifying diagnosis are referred and relevant provider notified

# Presenter Stories Implementing AR



- ❖ Organizational background
- ❖ Why implementing AR was important
- ❖ How you implemented AR
- ❖ Key advice for peers just starting the process

# Causes of Failures to Refer Eligible Patients

- ❖ Problematic Beliefs
  - ❖ Belief that CR will not be beneficial
  - ❖ Belief the patient will not attend anyway, so why bother
- ❖ Uncertainty about who is responsible for making the referral or if someone has already referred the patient
- ❖ Uncertainty about whether the patient meets inclusion and/or exclusion criteria
- ❖ Uncertainty about when (in the hospital, after procedure, or following hospitalization), the patient can begin CR or how (tell the patient, enter into the discharge order set, notify the CR program, a combination of approaches) the referral should be made

**These are the failures automatic referral is designed to prevent!**

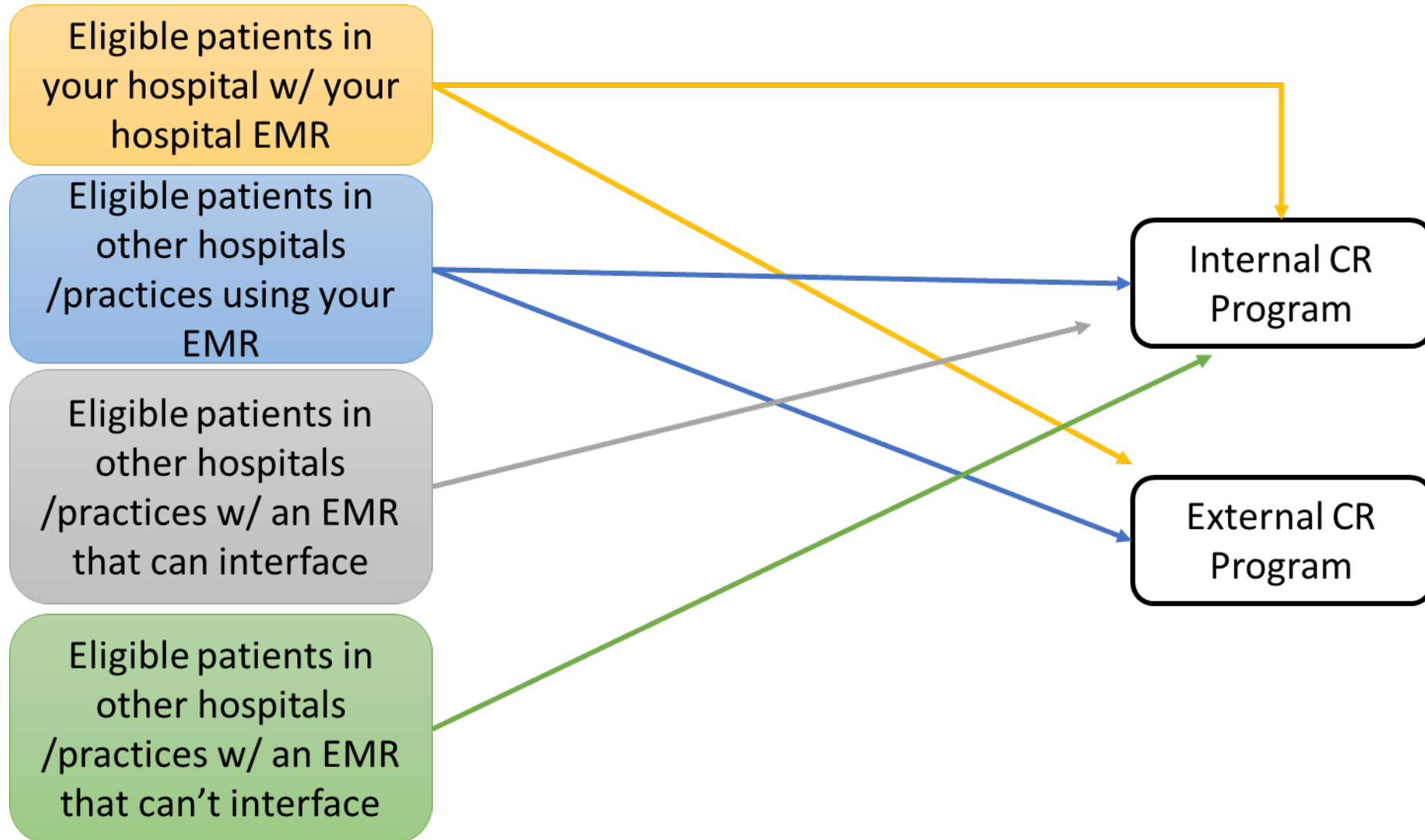
# How Automatic Referral Addresses Problematic Beliefs

<b>Problem Beliefs</b>	<b>Automatic Referral Response</b>
Belief that CR will not be beneficial	Referrals made using consistent, evidence-based criteria
Belief the patient will not attend anyway, so don't bother	Implicit biases excluded from automated referral

# How Automatic Referral Addresses Process Failures

Problem Processes	Automatic Referral Response
Uncertainty about <u>when</u> , the patient can begin CR or <u>how</u> the referral should be made	Referral consistently embedded into discharge order set
Uncertainty about who is responsible for making the referral or if someone has already referred the patient	EMR makes the referral and appropriate physician retains ability to opt-out the patient
Uncertainty about whether the patient meets inclusion and/or exclusion criteria	EMR programmed to consistently identify eligible patients

# Different Referral Patterns





# Different Implementation Strategies

Easiest

Eligible patients in your hospital w/ your hospital EMR

The focus of TAKEheart and the best place to begin. It easily allows for working both ends of automatic referral and care coordination processes

Eligible patients in other hospitals/practices using your EMR

IT changes are likely the same. More work will be required to gain provider buy-in; more people will need to be involved to plan and implement

Eligible patients in other hospitals/practices w/ an EMR that can interface

Requires embedding automatic referral in two separate EMRs and more people need to be involved in care coordination planning

Eligible patients in other hospitals/practices w/ an EMR that can't interface

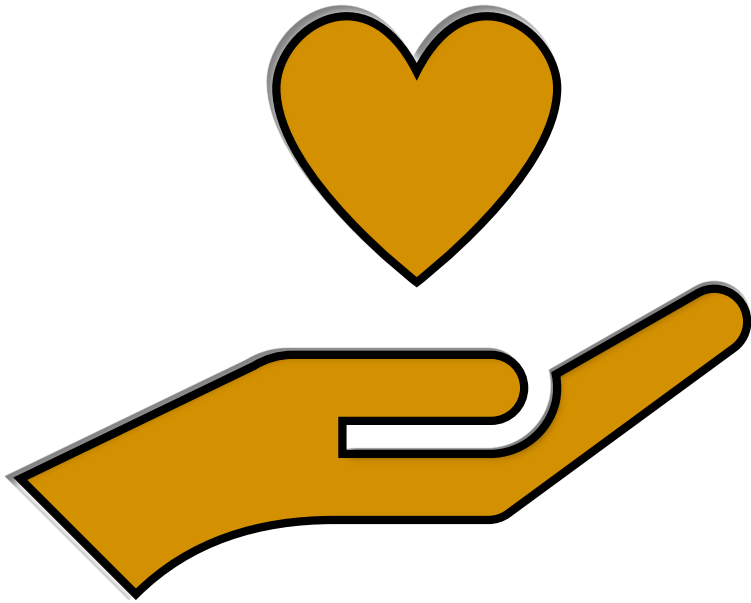
Without two interfacing EMRs, automatic referral can't be implemented; care coordination processes can be developed and strengthened to increase referrals and promote successful completion

Hardest

External Programs

Automatic referrals outside the system may not be seen as a financial priority. Strengthening informal referral processes would be an efficient use of resources

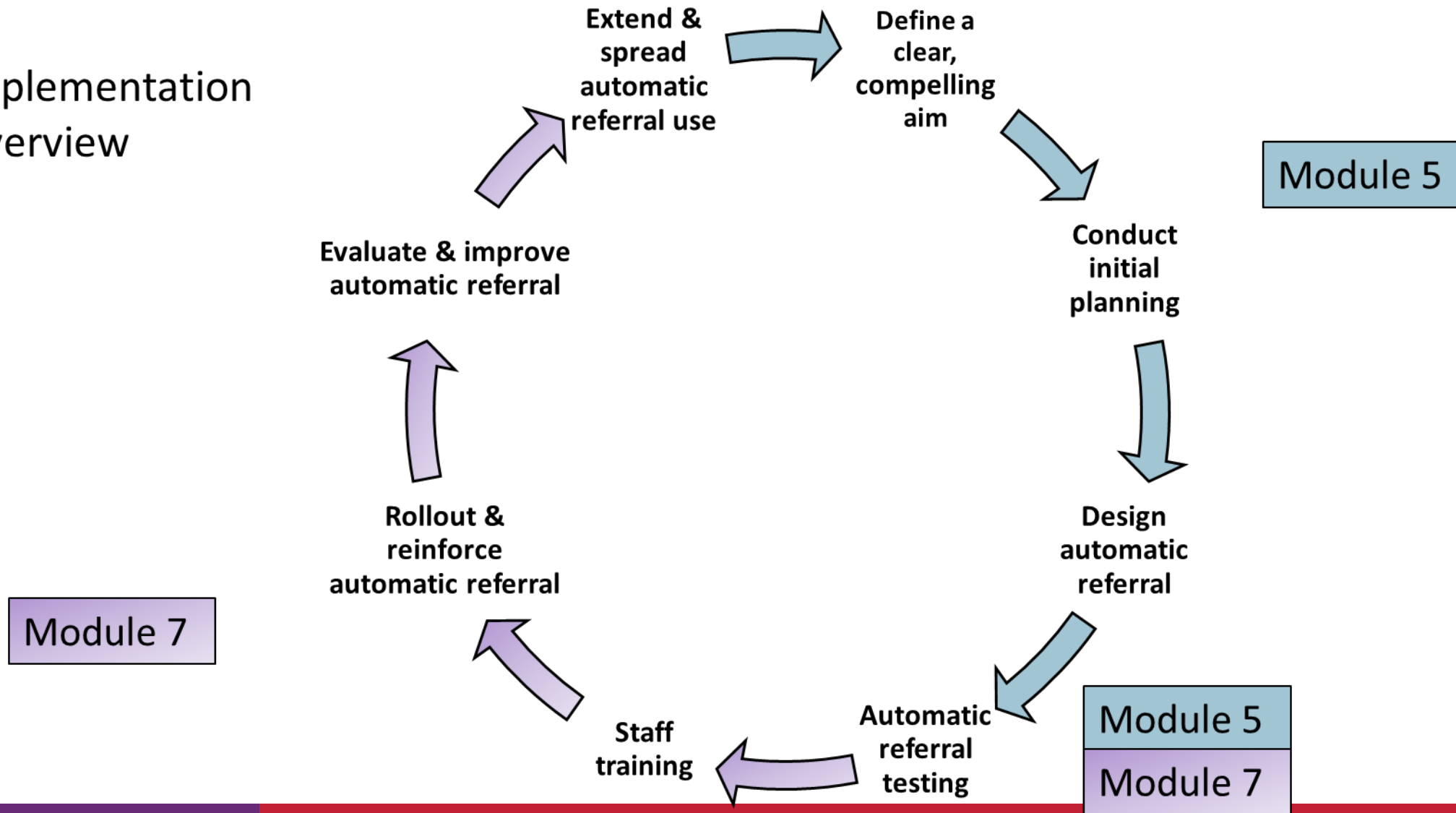
# Automatic Referral Makes Care Coordination MORE Important



- ❖ Automatic referral is not a substitute for the “Human touch”
- ❖ More referrals should lead to more conversations with patients and families about CR
- ❖ Cardiologist recommendations and family support both strongly impact patient participation in CR

# How to Successfully Implement Automatic Referral

## Implementation Overview



# Define a Clear & Compelling Aim

Define an aim statement with a S.M.A.R.T.\* goal for your project  
(see the discussion in Module 1 & 2)

## Example Aim Statement:

We aim to increase the number of patients with MI, PCI and CABG who are referred, enrolled and participate in cardiac rehabilitation by 30%. This is important because we want to improve patient care and outcomes and reduce hospital readmissions. We will accomplish this aim by implementing automatic referral with care coordination by March 31, 2022. We intend to see a 30% increase in current participation rates by December 31, 2022.

\* S.M.A.R.T. = Specific, Measurable, Applicable, Realistic, & Timely

# Conduct Initial Planning

## FINALIZE YOUR TEAM

See combined modules 1 & 2 for a refresher on creating a strong implementation team



**CR Champion:** leads the team and advocates for the initiative



**Cardiac care clinicians:** cardiologists, cardiac surgeons, physician assistants, or nurse practitioners provide input on treatment and referral



**Cardiac Rehabilitation clinicians:** nurses, physical therapists, exercise physiologists, physicians provide valuable perspectives on enrollment and participation



**Cardiac care manager:** provides important information about current workflows and potential areas for improvement



**Information Technology (IT) staff:** possess the skills necessary to enact the required changes for automatic referral and data collection. May include IT vendor representatives.



**Quality improvement leaders (QI):** provide insight into best practices for implementing and measuring quality improvement.



**Patients:** provide the end user perspective.

# How Can Collaboration Projects Succeed?

## INCLUDE IN PLAN

- ❖ Strong executive support / sponsorship with a shared understanding of project importance
- ❖ Clear project ownership
- ❖ Clear & effective governance / decision making
- ❖ Strong project management



# Success Factors

## INCLUDE IN PLAN

- ❖ Clear, achievable goals
- ❖ Well defined key tasks along with defined responsibilities and timelines for completing them (**Action Plan – Mod. 2**)
- ❖ Adequate resources; proper skills mix
- ❖ Collaboration with key stakeholders, including end users (front-line staff, patients)
- ❖ Adequate budget



# Avoid Common Causes of Failure

## PITFALLS



- 1 Unclear project requirements
- 2 Poor management
- 3 Lack of communication
- 4 No end-user involvement
- 5 Lack of quality testing



# Listen To Key People

**Patients**

**Cardiac  
Rehabilitation  
Champion**

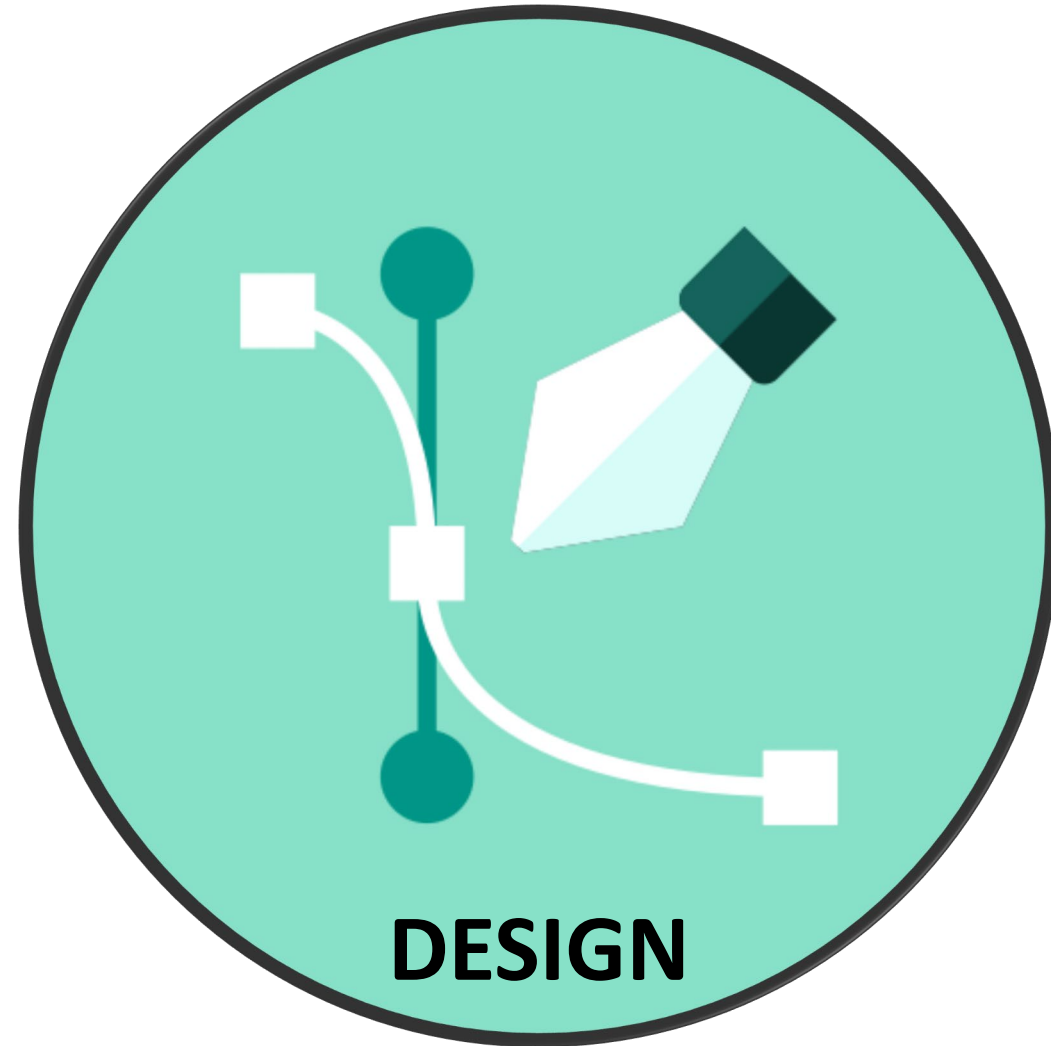
**Quality  
Improvement  
Specialist**

**Reporting and  
IT Analytics  
Coordinator**

**Ordering  
Provider**

**IT Dept.  
Representatives**

# Design Your Automatic Referral Process



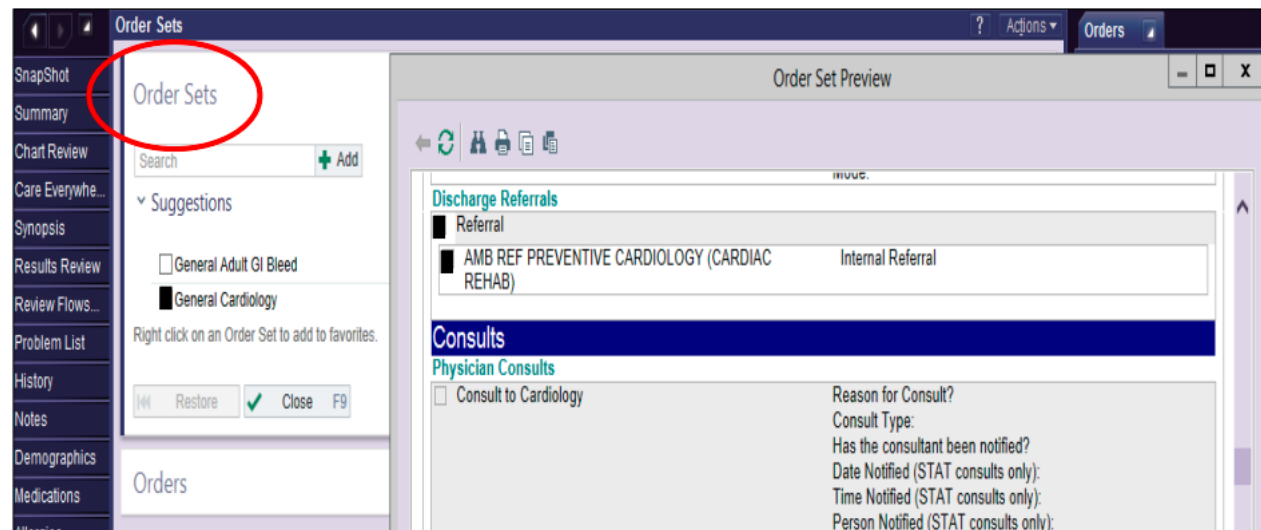
# Accounting for Order Sets

## What are order sets?

- ❖ A group of standard provider directives and or instructions regarding the care of a patient.
- ❖ A clinical decision support tool whose purpose is to prompt physicians to order appropriate treatments based on evidence-based practices.

## Why do order sets matter?

- ❖ Physicians need to use the order sets with AR incorporated to meet the objectives of TAKEheart



# Four Crucial Design Factors



**Who**



**When**



**How**



**Where**



# WHO: Identify Eligible Patients

## PROCEDURE (CPT codes)

- Cath Lab procedures
  - PCI
- Surgical procedures
  - CABG
  - Heart valve replacement/repair
  - Heart or heart/lung transplant

## DIAGNOSIS (ICD-10 codes)

- MI
- Chronic stable angina
- Chronic stable heart failure
  - EF= $\leq$ 35%
  - Outpatient referral
  - Medicare guidelines: 6 weeks post hospital



# WHO: Eliminate Inappropriate Patients

See the **Implementation Guide** for this Module for lists of codes and criteria you can use for inclusion and exclusion criteria

- ❖ Exclude comorbidities/conditions for which CR would be contraindicated
- ❖ Eliminate redundancy, i.e., patients who already have an active referral



# WHEN: A Time to Trigger Referral

## INPATIENT VS OUTPATIENT

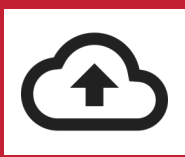
### **Inpatient and Procedures**

- ❖ Discharge order set

### **Outpatient**

- ❖ Care encounter

**NOTE:** These times catch the patient in a receptive state and enable conversations with the patient and family.



## HOW: Use of the “Opt-out” Feature: Inpatient/Procedure Setting:

### **Inpatient / Procedure Setting:**

- ❖ Align your AR process with your existing workflow as much as possible
- ❖ Insert automatic referral into tools already being used, i.e., discharge order set
- ❖ Include a way to track the “opt-out” reason
- ❖ Include a feedback feature to inform refinements



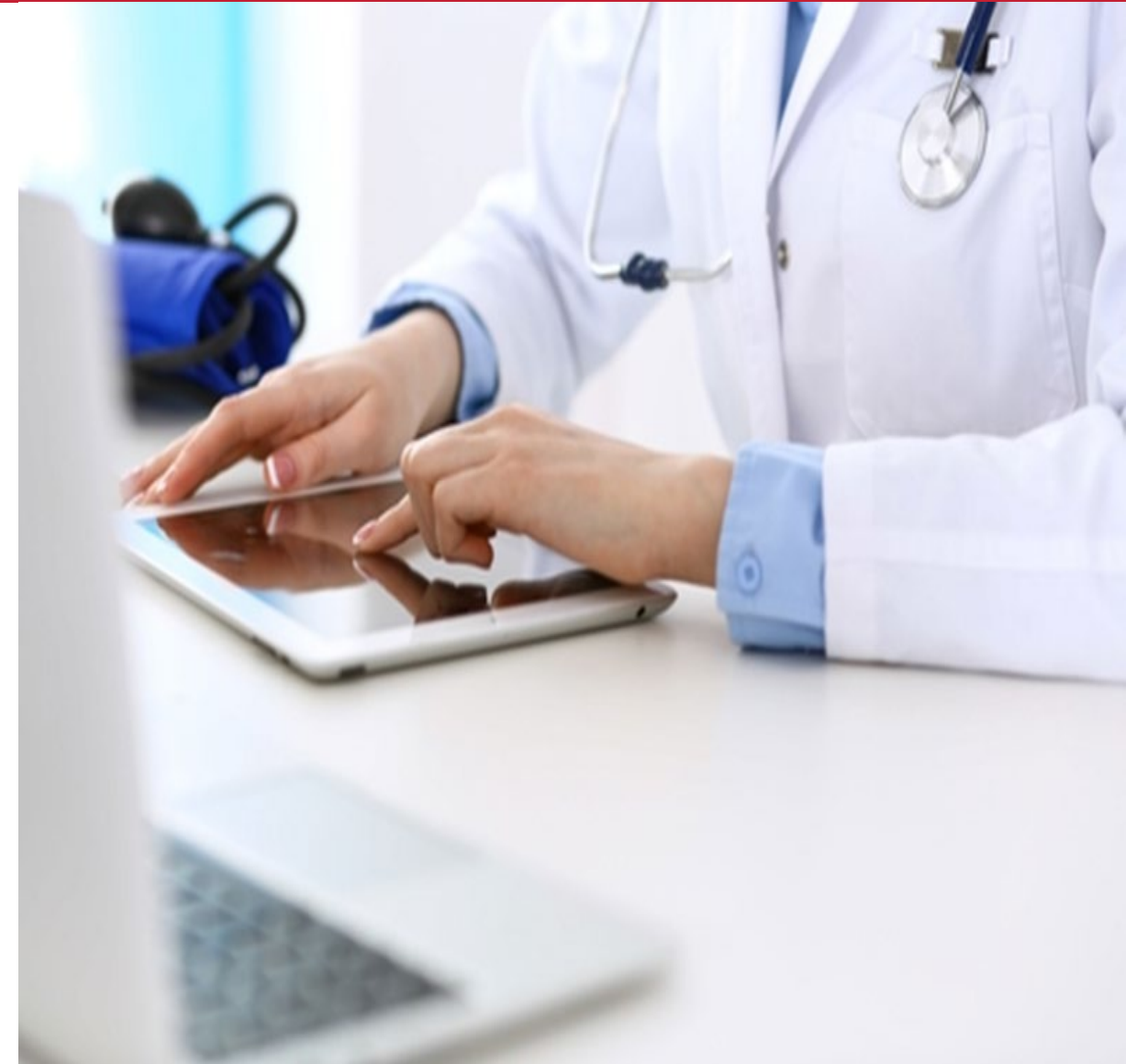




# HOW: Use of the “Opt-out” Feature: Community Provider Referrals

## Community Provider Referrals:

- ❖ Create a “hard-stop” alert
- ❖ Flag appropriate providers, e.g., cardiologists, and internists, during the care encounter
- ❖ Require providers to act for patients with qualifying diagnoses, e.g., heart failure
- ❖ Target appropriate outpatient providers





# WHERE: Which CR Programs Will You Refer To?

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MAY NEED THE ABILITY TO SEND THE REFERRALS TO MULTIPLE PROGRAMS

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BE AWARE OF LOCAL/INTERNAL PROGRAMS AS WELL AS EXTERNAL PROGRAMS IN THE SURROUNDING COMMUNITIES

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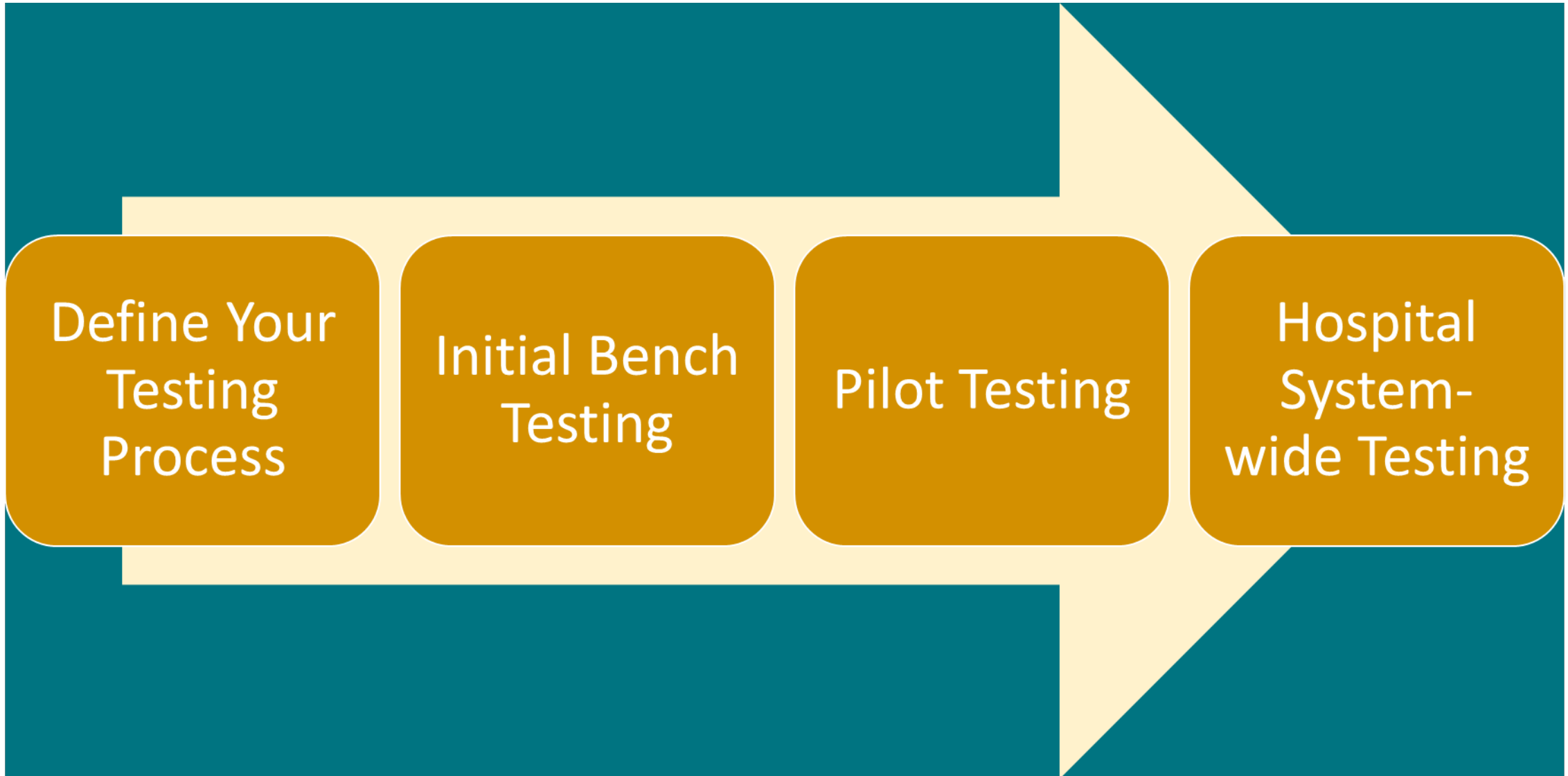
PATIENT CONVENIENCE IS A MAJOR FACTOR IN PARTICIPATION



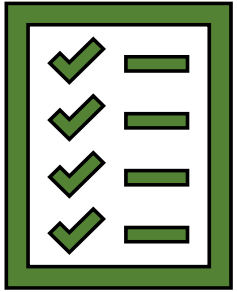
# Automatic Referral Testing



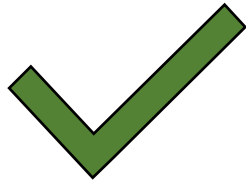
# Testing Phases



# Develop Your Testing Plan



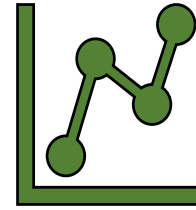
What testing phases do you need?



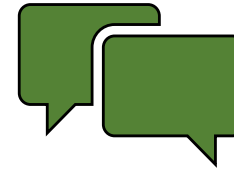
What should each accomplish?



Who should be involved?



What should you be tracking and monitoring?



How will you get feedback from frontline staff?



How will you know when you're ready for the next phase?

# Bench Testing

**Primary Purpose:** Verify that programming to identify eligible patients for referral to CR is working correctly in a secure environment that doesn't risk patient care

## Process

Use test cases to confirm that:

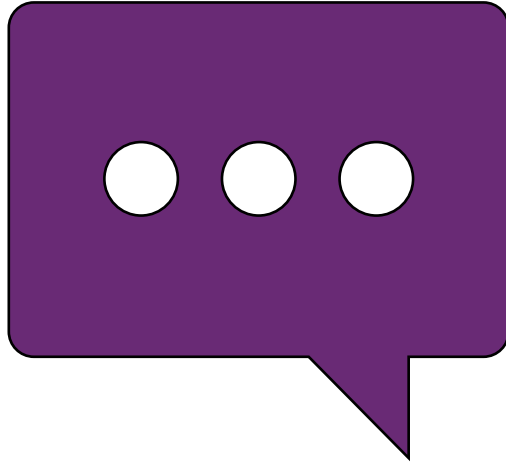
- All patients that should be referred to CR are identified
- All patients with exclusion criteria are not being referred
- Referrals are going to the correct provider
- Other requirements are being met

## Duration

Clear, comprehensive guidance to programmers can avoid rework and shorten the process.

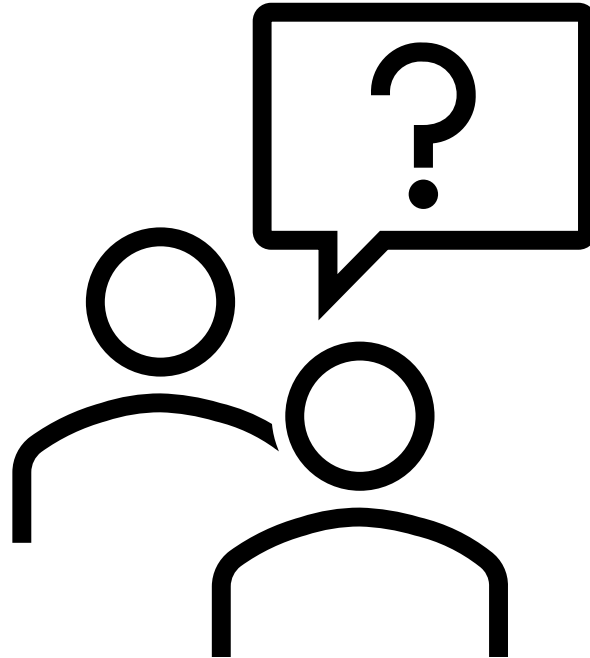
Proceeding without rigorous bench testing is a common cause of implementation failure.

# Audience Question



**Question:** In the chat box, tell us one useful insight you will take away from today's training session.

# Q&A





# EMR Q&A Sessions

## Each session:

- ❖ co-led by a clinician and IT professional with direct experience implementing automatic referral using the EMR
- ❖ experts will respond to questions submitted in advance by persons registering for the event and to questions submitted by the Q&A session participants

## Epic Session:

September 22, 2021

3:00-4:00 pm ET

[Epic Q & A Registration Link](#)

## Meditech Session:

September 14, 2021

1:00-2:00 pm ET

[Meditech Q & A Registration Link](#)

# Action Steps



Feel free to contact coaches with questions

## Continue

Refining your action plan for implementing automatic referral, making sure to assign responsibilities and set targets.

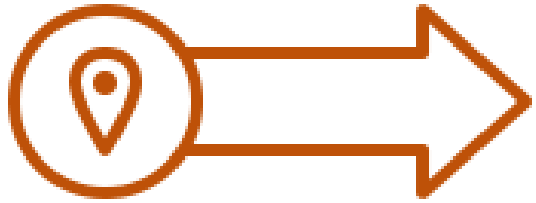
## Explore

Steps, actions and resources available in the Module 5 Implementation Guide

## Discuss

Progress, challenges and solutions in your PH-PAG

# Module 6



## ***Laying the Groundwork for Effective Care Coordination***

September 30, 2021, 3- 4pm ET



[Click here to register](#)

Today's presentation focused on the referral which is just half of the improvement project. Next month will begin the discussion of care coordination which makes up the other half of the project and works to complete the referral.

Help us help you!

Please answer the survey questions as you leave the event today