Million Hearts®
Partner Call

Cardiac Rehab
October 16, 2018
1pm-2pm EDT
Welcome

Robin Rinker, MPH
Health Communications Specialist
Division for Heart Disease and Stroke Prevention
Centers for Disease Control and Prevention
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| Welcome/Overview                           | Janet Wright, MD, FACC  
Executive Director, Million Hearts®, CDC and CMS                                          |
| Cardiac Rehab Change Package               | Hilary Wall, MPH  
Senior Health Scientist/Million Hearts® Science  
Lead, Centers for Disease Control and Prevention                                   |
| Lake Regional Health System: Using Data to Drive Improvement | Jennifer Newman, RN, BSN, cPT  
Director of Cardiac Services, Lake Regional Health System, Cardiopulmonary Rehabilitation |
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<td><em>Tammy Garwick</em></td>
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<td>Manager, Cardiac and Pulmonary Rehabilitation</td>
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<td>Cardiac, Pulmonary &amp; Vascular Rehab Program Manager, The Miriam &amp; Newport Hospitals</td>
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<td><em>April Wallace, MHA</em></td>
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<td>Program Initiatives Manager American Heart® Association</td>
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| Million Hearts® Partners Share                  | - Centers for Disease Control and Prevention  
|                                                | - American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR)          |
| Closing and Adjourn                             |                                                                                        |
Cardiac Rehab Aims and Asks

Janet S. Wright, MD, FACC
Executive Director
Million Hearts®
CDC and CMS
“…increasing CR participation from 20% to 70% would save 25,000 lives and prevent 180,000 hospitalizations annually in the U.S.”
Show 5 Million People the Value of Cardiac Rehabilitation by December 31, 2018

- Share key messages
- Post social media content
- Include an announcement in your newsletter(s)
- Disseminate infographics and factsheets
- Embed syndicated web content into your webpages
- Tell us how many people your messages reach at MillionHeartsCRC@cdc.gov

Access the Cardiac Rehabilitation Communications Toolkit at: https://millionhearts.hhs.gov/partners-progress/partners/cardiac-rehab-toolkit.html
Cardiac Rehab Change Package

Hilary Wall, MPH
Senior Scientist
Million Hearts Science Lead
Centers for Disease Control and Prevention
Intro to the Million Hearts®
Cardiac Rehab Change Package for Partners

Hilary K. Wall, MPH
Senior Scientist/Million Hearts Science Lead
Centers for Disease Control and Prevention

Million Hearts Private Partner Call
October 16, 2018
# Million Hearts® 2022

## Priorities

### Keeping People Healthy
- Reduce Sodium Intake
- Decrease Tobacco Use
- Increase Physical Activity

### Optimizing Care
- Improve ABCS*
- Increase Use of Cardiac Rehab
- Engage Patients in Heart-Healthy Behaviors

### Improving Outcomes for Priority Populations

<table>
<thead>
<tr>
<th>Population</th>
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<tbody>
<tr>
<td>Blacks/African Americans with hypertension</td>
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<tr>
<td>35- to 64-year-olds</td>
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<tr>
<td>People who have had a heart attack or stroke</td>
</tr>
<tr>
<td>People with mental health or substance use disorders who use tobacco</td>
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*Aspirin use when appropriate, Blood pressure control, Cholesterol management, Smoking cessation
What is Cardiac Rehabilitation?

- Comprehensive, team-delivered out-patient program
- Typically administered in 36 sessions over ~12 weeks
  - 25 sessions = healthy ‘dose’
- Strong evidence for individuals who have:
  - Had a heart attack
  - Chronic stable angina
  - Received a coronary angioplasty or stent
  - Chronic heart failure
  - Undergone coronary artery bypass surgery, heart valve replacement or repair, or a heart or heart-lung transplant
- Numerous benefits
Cardiac Rehabilitation Continuum

- Referrals
- Enrollment and Participation
- Adherence
Referrals

- Referral to CR varies by diagnosis
  - ~80% for patients with a heart attack
  - ~60% for patients who undergo angioplasty
  - ~10% for patients with heart failure
- Lower referrals for women, minorities
- Variability by hospital, provider, department

Enrollment and Participation

- Participation rates vary by diagnosis
  - Higher for heart attack (~14%) and bypass surgery (31%)
  - Lower for patients with heart failure (<3%)
- Lower participation rates among
  - People of color
  - Women
  - People with co-morbidities or low SES
- Significant geographic variation

12-24 sessions (23%)
1-11 sessions (19%)
≥25 sessions (57%)

Adherence

• ~450K beneficiaries were eligible in 2013
• 20% of those eligible initiated within 12 months
• 57% of CR users completed ≥ 25 sessions (~51K)

→ Only 12% of ‘eligibles’ rec’d a healthy dose of CR

“It is not necessary to change. Survival is not mandatory.”

– W. Edwards Deming
Cardiac Rehabilitation Change Package

Table 2. Cardiac Rehabilitation Change Package—Referrals

<table>
<thead>
<tr>
<th>Change Concepts</th>
<th>Change Ideas</th>
<th>Tools and Resources</th>
</tr>
</thead>
</table>
| Include referral to CR in order sets for appropriate patients; incorporate into EHR as appropriate | • Henry Ford Health System—EMR Discharge Order Set, “Opt Out” Cardiac Rehabilitation Referral Screenshot  
  • Template AMI Orders, Pages 24B–25B, Montoye CK, et al., 2005.21 |                                                                    |
| Include referral to CR in discharge checklists for appropriate patients; incorporate into EHR as appropriate | • Multidisciplinary Cardiac Discharge Checklist/Instructions. Page 1409, Thomas RJ, et al., 2007.21 |                                                                    |
| Include referral to CR in appropriate patient discharge forms; incorporate into EHR as appropriate | • Heart Attack Discharge Form. Page 29B, Montoye CK, et al., 2005.21           |                                                                    |
| Incorporate Referral to CR into Hospital Standardized Processes of Care for Eligible Patients | • Case Study: Massachusetts General Hospital—Referral of Patient to External Cardiac Rehabilitation Program  
  • How to Find Cardiac Rehabilitation Programs in the United States Using the CDC Interactive Atlas of Heart Disease and Stroke  
  • AACVPR—Program Directory  
  • Massachusetts General Hospital—Fax Cover Sheet for External |                                                                    |
| Develop a standard process for informing an external CR program of a referred patient |                                                                                     |                                                                    |
Change Package Format

- **Change Concept**
  - General notions that are useful in the development of more specific ideas for changes that lead to improvement

- **Change Idea**
  - Actionable, specific ideas for changing a process

- **Tools & Resources**
  - Can be adapted by or adopted in a health care setting
Tools and Resources

1. American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) Strategies
2. Case studies
3. Program-specific tools
4. Organization-specific tools – CDC, AHA, ACC
Cardiac Rehabilitation Change
Package Focus Areas

1. Systems change
2. Referrals
3. Enrollment and participation
4. Adherence
Referrals

Change Concepts:

• Incorporate referral to CR into hospital standardized processes of care for eligible patients
• Standardize the CR referral process
• Use data to drive improvement in referrals to CR
Use Data to Drive Improvement in Referrals to CR

1. Determine inpatient referral metrics to CR

2. Determine outpatient referral metrics to CR

3. Use CR referral performance measures in a quality improvement system

4. Regularly provide a dashboard with CR referral metrics, goals, and performance

5. Implement a CR Registry to identify, track, and manage patients who are referred to a CR program

6. Identify patients who had a cardiac event without a referral to a CR program
Adherence

Change Concepts:
• Identify populations at risk for low engagement
• Improve patient engagement
Adherence

Improve Patient Engagement

1. Incorporate motivational and financial incentives for meeting goals for session attendance
2. Automate reminders and communication
3. Connect enrolled patients with a graduate or phase 3 participant Patient Ambassador or “sponsor”

Change Concept

Change Ideas

Tools & Resources

Million Hearts®
CR Resources

- CR Change Package
- Cardiac Rehab Collaboration – email MillionHeartsCRC@cdc.gov to join
- CR infographic and factsheet
Questions?

Hilary Wall – hwall@cdc.gov

The opinions expressed by authors contributing to this project do not necessarily reflect the opinions of the US Department of Health and Human Services, the Public Health Service, the Centers for Disease Control and Prevention, or the authors’ affiliated institutions. Use of trade names is for identification only and does not imply endorsement by any of the groups named.
Using Data to Drive Improvement

Jennifer Newman, RN, BSN, cPT
Director of Cardiac Services, Lake Regional Health System,
Cardiopulmonary Rehabilitation

Million Hearts®
Cardiac Rehabilitation Change Package

Jennifer Newman, RN, BSN, cPT
Director of Cardiac Services

Lake Regional Health System
Osage Beach, Missouri
Cardiopulmonary Rehabilitation

Lake Ozark

Osage Beach

Eldon

Laurie

Camdenton
• Quality improvement tool
• Target is improved care
• Listing of process improvements that cardiac rehabilitation champions can implement
  • Change concepts
  • Change ideas
  • Tools
  • Resources

Cardiac Rehabilitation Change Package
• Make CR a Health System Priority
  • Tool – Presentation to the Board of Trustees
  • Tool – Update to department managers
• Standardization
  • Tool - Process Mapping for CR Referrals
  • Tool - Physician Referral/Order Policy
  • Tool - Admission Guidelines
• Educate patients about the benefits of CR.
  • Tool - Phase I Program Guidelines for inpatient education
• Use Data (analytics) to Drive Improvement
  • Tool - CR Enrollment Data – spreadsheet
  • Tool - Tracking of participants by diagnosis for targeting
• Reduce cost sharing barriers for CR services
  • Tool - Referral Process Map
Questions?
Designing Outpatient Rehab for the Patient

Tammy Garwick
Manager, Cardiac and Pulmonary Rehabilitation
Mount Carmel Health System
Traditional vs. Contemporary Rehabilitation

- Traditional rehab is 3 days per week
  - Monday, Wednesday, and Thursday/Friday
- Contemporary Rehab is 1-7 days per week
- Medicare Guidelines indicate up to 36 sessions in 36 weeks

- Accelerated program:
  - Allows a patient to complete most or all of the program before returning to work or traveling for the season
  - Two billable sessions per day (93798 and/or 93797) lasting > 91 minutes
Hours

- Hours that meet the patient needs and not the staff needs
  - Working professional
  - Older population
Open Gym

- Need is there to treat cardiac rehabilitation like the YMCA or a community recreation center.
  - Allows patients to come and go as they please
  - Allows patients to choose who they exercise with
  - Announce when group education will be provided allow the patient to schedule accordingly
  - Limitation of open gym is staffing and cardiovascular equipment
    - Resistance training is an excellent addition that can be worked into the routine.
    - Telemetry monitors should not be a limitation
ECG monitoring

• Number of patients at any one time should not be limited by the telemetry ECG monitors available.
  • Risk stratification
  • Initial assessment only
  • Use of CPT: 93797

• 93797 Outpatient cardiac rehabilitation without continuous ECG monitoring
• 93798 Outpatient cardiac rehabilitation with continuous ECG monitoring
Home-based vs Facility-based

- Home-based program allows the patient to exercise at home with staff interaction.
  - Patient records their own exercise sessions
  - Patient may use an accelerometer to determine exercise capacity and heart rates. We know them as FitBit, Garmin, Apple Watches, Polar
  - Patient may use a home blood pressure cuff that has been calibrated or checked against staff acquisition of blood pressure
  - Staff checks in with the patient on a regular basis to review the exercise
  - Allows patients to make progress without the commitment or cost of attending cardiac rehabilitation multiple times per week.

Miriam Hospital: Patient Ambassador Program

Loren Stabile, MS
Cardiac, Pulmonary & Vascular Rehab
Program Manager, The Miriam & Newport Hospitals
The Miriam Hospital Cardiac Rehab Patient Ambassador Program

Million Hearts Partner Call
10.16.2018
Loren Stabile, MS
Manager of The Miriam & Newport Hospitals
Cardiac, Pulmonary & Vascular Rehab Programs
Objectives

- Share the explanation & motivation behind the implementation of the Patient Ambassador Program at The Miriam Hospital Cardiac Rehab Program

- Introduce the framework and components that comprise the Patient Ambassador Program

- Explore the impact of the Patient Ambassador Program on early dropout rates and patient experience in the cardiac rehab setting
The Patient Ambassador Program
A Department Quality Improvement Initiative

1. Capture Rate
2. Access to Care
3. Incidence of Falls
4. Absentee Rate
5. Drop out rate
2014: **24%** Drop Out Rate

**Reasons for Drop Out**

<table>
<thead>
<tr>
<th>Reason for drop out</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Transportation</td>
<td>4.9%</td>
</tr>
<tr>
<td>Financial</td>
<td>5.8%</td>
</tr>
<tr>
<td>Personal</td>
<td>7.8%</td>
</tr>
<tr>
<td>Work</td>
<td>8.7%</td>
</tr>
<tr>
<td>No reason provided</td>
<td>10%</td>
</tr>
<tr>
<td>Medical</td>
<td>30.2%</td>
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<tr>
<td><strong>Non-compliance</strong></td>
<td><strong>32.6%</strong></td>
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Drop out due to Non-compliance

- 2012: 14.5%
- 2013: 25.6%
- 2014: 32.6%
Reason for drop out in sessions 1-9

<table>
<thead>
<tr>
<th>Reason</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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</thead>
<tbody>
<tr>
<td>Noncompliance</td>
<td>39.6%</td>
<td>44.2%</td>
<td>46.0%</td>
</tr>
<tr>
<td>Medical</td>
<td>28.3%</td>
<td>19.2%</td>
<td>42.0%</td>
</tr>
<tr>
<td>Financial</td>
<td>7.5%</td>
<td>3.8%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Work</td>
<td></td>
<td></td>
<td>32.7%</td>
</tr>
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(Colors represent data from different years: blue for 2012, green for 2013, and yellow for 2014.)
Conclusion

From 2012-2104, 43% of all dropouts due to non-compliance occurred within the first 9 sessions of Cardiac Rehab.
Opportunity for Improvement

Medical – No control over

Work Conflict - Implemented an early morning 6:45 am CR class

Copay - Offered an abbreviated program or Community Free Service

Transportation - coordinated local transportation through state dept.

Non-compliant or Not Interested - ????
What was the solution

A Patient Ambassador Program
1. Establish Purpose & Mission

Mission & goals were established for Patient ambassadors:

- Ease transition of incoming cardiac rehab patients
- Provide peer support through sharing of experiences
- Provide encouragement regarding the utilization of support services
- Encourage long term health goals at discharge from cardiac rehab
2. Recruit Patient Ambassadors

You’re Invited

To participate in our

Patient Ambassador Program

This is an opportunity to volunteer and share your positive experience in Cardiac Rehab with other newly enrolled patients. We understand that the first few weeks in cardiac rehab can be overwhelming; we are hoping that your experience can assist the new patients on setting a positive trajectory for their cardiac rehab program.

Each Patient Ambassador will be asked to volunteer 1 hour a week of their time to speak with new cardiac rehab patients.

We will be having an informational meeting on ____ to discuss the expectations and guidelines for the Patient Ambassador program. Please contact ______ at _____ if you are interested and will be able to attend.

We look forward to having you join our patient ambassador team.
3. Establish Mission, Guidelines & Expectations

Lifespan Cardiovascular Institute
Rhode Island Hospital - The Miriam Hospital
Newport Hospital

Delivering health with care?

The Center for Cardiac Fitness Cardiac Rehab
Patient Ambassador Program

As The Center for Cardiac Fitness continues to strive for excellence in quality and customer service, the Patient Ambassador Program allows us to provide a more personalized approach to care.

Mission
The mission of the Patient Ambassador Program is to address the following components for the active cardiac rehab participants:

- Ease the transition of incoming cardiac rehab patients
- Provide encouragement regarding utilization of support services
- Provide peer support through sharing of experiences
- Encourage long-term health goals for patients being discharged

Guidelines & General Information

- The Patient Ambassador Team is comprised of 6 to 12 past cardiac rehab participants who successfully completed the 12-week Cardiac Rehab program. Past rehab participants are invited by staff to serve on the committee and volunteer one hour a week to the ambassador program.

- Patient Ambassadors are respectful, courteous and professional at all times when interacting with patients and act as a liaison between the patient and the clinical staff.

- Clinical questions or concerns from the patients are directed to the clinical staff through the patient ambassadors. Medical advice or clinical recommendations from ambassador team members is strictly prohibited.

- A one year commitment for each individual is suggested and will be revisited on the one year anniversary.

- Patient Ambassadors meet quarterly to review procedures, concerns, evaluate suggestions and recommendations.

- An appointed staff person, in collaboration with the program manager and the medical director, is responsible for the coordination of the Patient Ambassador Program.

- Patients are notified of the Ambassador Program through the initial welcome mailing, consisting of an introduction to the program and a list of team members. Patients are reminded of the Ambassador Team members during the intake process and again during rehab classes.

- Patient Ambassadors can be easily identified by patients; they are always well-groomed and dressed in bright orange team shirts with name tags.

- Staff is responsible for identifying and introducing incoming and graduating rehab patients to the Patient Ambassadors.

- Outcomes are assessed through patient satisfaction surveys, turnover rate during the initial 10 rehab sessions as well as periodic surveys during rehab class.
4. Create a Patient Ambassador Uniform

- T-shirt design
- Logo design
- Name tag
5. Communication to CR patients

Ambassador Profile Form

Name: 
(Optional) Age: 
(Optional) Cardiac Event: 
Rehab Graduation date/year: Cardiac Maint member since: 
Hobbies: 
Occupation/Career: 
Your “Aha” Moment at the Center for Cardiac Fitness: 
Biggest Lifestyle change: 
Favorite things about Cardiac rehab: 
A piece of advice: 

Introduction to PAP in Cardiac Rehab Welcome Packet

When starting a Cardiac Rehabilitation program you may have many of the following questions:
- How can I fit Cardiac Rehab into my work schedule?
- Where do I start with making lifestyle changes?
- Am I the only person who has experienced these health challenges?

Our Patient Ambassadors are here to help!
- The Patient Ambassador team members experience heart disease just like you. They have successfully completed the 12-week Cardiac Rehabilitation program and now volunteer their time to help ease your enrollment and assist you in answering any questions you may have. By sharing their experiences, our Patient Ambassadors can help you better understand the long-term benefits of the journey to improved health. They are here to support you through your Cardiac Rehabilitation program.

Below is some information about our Patient Ambassadors:

Rob S
Cardiac Event: Heart Attack & Stents, cardiac rehab in 2008
“Aha” moment: “During the first week of rehab, accepting the fact that I had a cardiac event, realizing it was within my power to get healthy and continue my life.”
Biggest lifestyle change: “Examining old habits, implementing sustained changes and making ‘moderation’ a new life theme.”
Piece of advice: “From someone who was initially very reluctant to participate in rehab, my advice is, take good care of yourself and stick with it. As demanding as work can be, keep it in perspective. Your health comes first!”

Rocco C, 64
Cardiac Event: Coronary Artery Bypass Surgery, cardiac rehab 2015
Career: Self Employed/Marketing
“Aha” moment: “After being in rehab for 5 weeks & having much trepidation, I had to receive another Stent. Then had to start all over again and only then did I realize just how much I...”
5. Communication to CR patients

MEET OUR AMBASSADORS

Initial Assessment
6. Measuring the Impact of the Intervention

Using the Program or Patient Satisfaction Survey

Did you speak with the Patient Ambassador during your rehab classes?  Yes  No

How helpful did you find them?  Not very helpful  Somewhat helpful  Helpful  Very Helpful

Circle the component(s) in which the patient ambassador was most helpful:

- Eased your transition into Cardiac Rehab
- Provided peer support and sharing of experiences
- Provided encouragement regarding the utilization of support services (psychologist/dietician/events)
- Encouraged long term health goals at discharge from cardiac rehab

Additional comments or suggestions:
Results

Patient survey data

2016  97% patient satisfaction
2017  96% patient satisfaction

found the patient ambassador to be somewhat helpful, helpful or very helpful

• Rating the components in order of helpfulness:
  • #1  Eased your transition into Cardiac Rehab
  • #2  Provided peer support and sharing of experiences
  • #3  Provided encouragement regarding the utilization of support services
  • #4  Encouraged long term health goals at discharge from cardiac rehab
Drop Out due to Non-compliance

20.6% reduction
Dear Patient Ambassador,

The staff at The Center for Cardiac Fitness would like to thank you all for the enormous amount of time you have spent over the last twelve to eighteen months as a Cardiac Rehab Patient Ambassador.

The Patient Ambassador Program has a critical role in improving patient satisfaction and patient experience. As the Center for Cardiac Fitness continues to strive for excellence in quality and customer service, our patient ambassador team provides a more personalized approach to patient care.

Over the past 18 months, we continued to see a decrease in our patient dropout rates and continued to receive positive feedback by patients regarding their interactions with the Patient Ambassadors.

Thank you for your interest and commitment to this very important departmental quality improvement initiative. The program could not provide this valuable service without your contributions.

The staff is extremely grateful and appreciative for your participation and genuine desire to provide support for incoming patients.

Sincerely,

______________________________
Ambassador Coordinator

______________________________
Program Manager

______________________________
Medical Director
Contact
Loren Stabile, MS
Program Manager
Istabile@lifespan.org
(401)793-5811 or (401)845-1460
Do you have a question for one of the panelist?

Please submit your questions in writing using the Q&A Panel located at the bottom right of your screen.
This is an opportunity for Million Hearts® Partners to provide an update on your organization’s Million Hearts® actions.

Please submit your update in writing using the Q&A Panel located at the bottom right of your screen.
Million Hearts® Partners Share

Division for Heart Disease and Stroke Prevention, CDC: Robin Rinker, MPH, Health Communications Specialist

AACVPR: Amy Knight, PhD ABPP, Associate Professor, Director of Psychology Services, Spain Rehabilitation Center, Department of Physical Medicine & Rehabilitation, The University of Alabama at Birmingham School of Medicine,
Thank You!

Please submit any comments or feedback to millionhearts@cdc.gov