



# Cardiac Rehabilitation

Saving Lives ♥ Restoring Health ♥ Preventing Disease

## Benefits

### Benefits to People

Individuals who attend 36 sessions have a **47%** lower risk of death and a **31%** lower risk of heart attack than those who attend only **1** session.



### Benefits to Health Systems

Costs per year of life saved range from **\$4,950 to \$9,200** per person.

Cardiac rehab participation also reduces hospital readmissions.

## Referral

### Many People Who Can Benefit Are Not Being Referred



Minority status predicts lower referral and participation rates.

Women, minorities, older people, and those with other medical conditions are under-referred to cardiac rehab.



One of the best predictors of cardiac rehab referral is whether the eligible person speaks English.

Asian Americans are 18 times more likely to speak limited English, compared to white people.



Black women are 60% less likely to be referred and enroll in cardiac rehab programs, compared to white women.

### We Know What Works to Improve Referral Rates



Automatic, systematic referral to cardiac rehab at discharge can help connect eligible people with these programs.



Strong coordination among inpatient, home health, and outpatient cardiac rehab programs boosts referral rates as well as participation rates and outcomes.



Patients' medical teams and families can support and encourage participation in cardiac rehab programs.

Awareness campaigns should be aimed at people and caregivers.



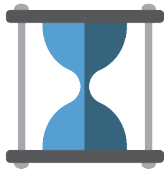
Only **10%** of eligible patients with heart failure are referred.



Less than **3%** of eligible patients with heart failure attend at least 1 session.

# Participation and Completion

## Reaching the Threshold of 36 Sessions Is Challenging



Longer wait times following discharge reduce cardiac rehab enrollment.

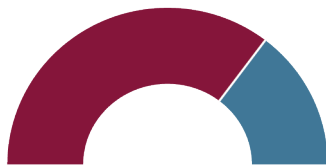
For every day a person waits to start cardiac rehab, that person is 1% less likely to enroll.



People who live outside of metropolitan areas are 30% less likely to participate in cardiac rehab programs.

## Cardiac Rehab Participation Rates by Race (601,000 Medicare Patients)

**19.6%** of eligible white patients participate



**7.8%** of eligible black patients participate



People who make more than \$75,000 per year are twice as likely to participate than individuals with annual incomes below \$15,000.

## Lack of Diversity in Cardiac Rehab Programs

Minority populations in the U.S. **29%**



Minority cardiac rehab professionals **4%**

## We Know from Research How to Eliminate Barriers



The greatest predictor of participation is the strength of the physician's recommendation.



Reduce the interval between hospital discharge and cardiac rehab program orientation by formalizing enrollment practices.



Support participation in cardiac rehab through community health workers, home health aides, and visiting nurses.



Design culturally and linguistically appropriate programs.

Increase use of translation services by physicians and participants.



Ensure access to services through transportation options and extended hours.

Where possible, reduce or eliminate financial burden on cardiac rehab participants.



Diversify cardiac rehab teams.

Research shows that minority physicians are more likely to care for minority, poor, uninsured, and underserved people, compared to white physicians.



**Other strategies are being considered to improve participation and completion:**



Create web-based or home-based programs in rural areas.



Develop telemedicine-monitored cardiac rehab programs for people unable to access traditional programs.



For people unable to attend all 36 sessions in a cardiac rehab facility, conduct baseline assessment in a cardiac rehab clinic followed by a nurse-monitored home exercise program.

# Viability and Sustainability

## Limited Capacity, Limited Number of Eligible People Served



Although cardiac rehab programs are underutilized, some fear that the existing number of programs would be insufficient to serve all eligible people.



Geographic variations in the number of

- cardiac rehab programs,
  - eligible people, and
  - referred and participating people
- complicate the story of program capacity.

## New Delivery Models and Other Strategies Have Promise



Reward eligible people for completing cardiac rehab programs.



Reward programs with high completion rates.



Share best practices and lessons learned, including innovations.

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