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)

<table>
<thead>
<tr>
<th>Race</th>
<th>Participation Rate</th>
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</thead>
<tbody>
<tr>
<td>White</td>
<td>19.6%</td>
</tr>
<tr>
<td>Black</td>
<td>7.8%</td>
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- 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.

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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**Sources**


