

CARDIAC REHABILITATION





SAVING LIVES PRESTORING HEALTH PREVENTING DISEASE

BENEFITS OF CARDIAC REHABILITATION

Benefits to People

Those who attend 36 sessions have a

47%

lower risk of death and 31%

lower risk of heart attack than those who attend only one 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**



We Know What Works To Improve Referral Rates



Minority status predicts lower referral and participation rates.

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



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



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

Asian Americans are 18 times more likely to have limited English, compared to whites.



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



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



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

Awareness campaigns should be targeted to people and caregivers.





... AND ONLY HALF OF REFERRED PATIENTS ACTUALLY PARTICIPATE

PARTICIPATION AND COMPLETION

Reaching the 36 Session Threshold Is Challenging



We Know from Research How To Eliminate Barriers



Longer wait times following discharge reduce cardiac rehab enrollment.

For every day a person waits to start cardiac rehab, they are 1% less likely to enroll in cardiac rehab.



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



19.6%

white

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

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



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



Ensure access to services, through transportation options and extended hours.

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



7.8%

of eligible black patients

participate

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

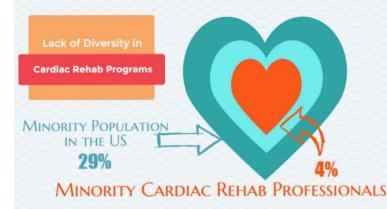


People who make more than \$75,000 per year are 2x more likely to participate than individuals with annual income below \$15,000.



Design culturally and linguistically appropriate programs.

Increase use of translation services by physicians and participants.





Diversify cardiac rehab teams.

Research shows that minority physicians are more likely to care for minority, poor, uninsured, and underserved people, compared with 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 nursemonitored home exercise program.

CARDIAC REHAB PROGRAM VIABILITY AND SUSTAINABILITY

Limited Capacity, Limited Number of Eligible People Served



New Delivery Models and Other Strategies Have Promise



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
- the number of eligible people, and
- the number of referred and participating people

complicate the story of program capacity.



Reward eligible people for completing cardiac rehab programs.



Reward programs with high completion rates.



Share best practices and lessons learned, including innovations.

Sources

Ades PA, Huang D, Weaver SO. Cardiac rehabilitation participation predicts lower rehospitalization costs. Am Heart J. 1992 Apr;123(4 Pt 1):916-21.

Dunlay SM, Pack QR, Thomas RJ, Killian JM, Roger VL. Participation in cardiac rehabilitation, readmissions, and death after acute myocardial infarction. Am J Med. 2014 Jun;127(6):538-46.

Hammill BG, Curtis LH, Schulman KA, et al. Relationship between cardiac rehabilitation and long-term risks of death and myocardial infarction among elderly Medicare beneficiaries. Circulation 2010;121:63-70.

Johnson DA, Sacrinty MT, Gomadam PS, Mehta HJ, Brady MM, Douglas CJ, Paladenech CC, Robinson KC. Effect of early enrollment on outcomes in cardiac rehabilitation. Am J Cardiol. 2014 Dec 15;114(12):1908-11.

Menezes AR, Lavie CJ, DeSchutter A, Milani RV. Gender, race and cardiac rehabilitation in the United States: is there a difference in care? Am J Med Sci. 2014 Aug;348(2):146-52.

Menezes AR, Lavie CJ, Milani RV, Forman DE, King M, Williams MA. Cardiac rehabilitation in the United States. Prog Cardiovasc Dis. 2014 Mar-Apr;56(5):522-

Mozaffarian D, Benjamin EJ, Go AS, Arnett DK, Blaha MJ, Cushman M, de Ferranti S, Després JP, Fullerton HJ, Howard VJ, Huffman MD, Judd SE, Kissela BM, Lackland DT, Lichtman JH, Lisabeth LD, Liu S, Mackey RH, Matchar DB, McGuire DK, Mohler ER 3rd, Moy CS, Muntner P, Mussolino ME, Nasir K, Neumar RW, Nichol G, Palaniappan L, Pandey DK, Reeves MJ, Rodriguez CJ, Sorlie PD, Stein J, Towfighi A, Turan TN, Virani SS, Willey JZ, Woo D, Yeh RW, Turner MB; American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics-2015 update: a report from the American Heart Association. Circulation. 2015 Jan 27;131(4):e29-332.

Valencia HE, Savage PD, Ades PA. Cardiac rehabilitation participation in underserved populations. Minorities, low socioeconomic, and rural residents. J Cardiopulm Rehabil Prev. 2011 Jul-Aug;31(4):203-10.