

Cardiac Rehabilitation: The Role of Problem-Solving Competency in Adherence & Health Outcomes



Jillian Price, Ph.D.

Outcomes Research Program

Functional Assessment Lab

Betty & Guy Beatty Center for Integrated Research

Inova Health System

Per meta-analysis, early outpatient cardiac rehabilitation (CR) post cardiac procedure with completion of at least 25 or more sessions has shown ‘strong evidence of benefits’ on 8 major indices of health outcomes, including morbidity and mortality and every modifiable risk factor for cardiovascular disease. Despite great advances in knowledge and technique, even the most effective exercise-based rehabilitation interventions can become hobbled by lack of consistent participation, diminishing the benefits achieved by the participant. Current participation trends in cardiac rehabilitation are a clear illustration of this problem: presently, only 20%-34.7% (range 20.7% to 58.6% across 20 states) of those referred to cardiac rehabilitation actually attend sessions, and those attending often do not complete their full course of sessions, or attend inconsistently. No subgroup had utilization rates exceeding 50% and no state had utilization rates above 61%. This inconsistency of participation frequency, reduction in rehabilitation participation duration, and a decrease in overall number of session ‘doses’ of exercise accomplished have been linked with significantly poorer health outcomes.

Recently, the Department of Health and Human Service’s Million Hearts Initiative- a group of over 30 organizations and agencies- aimed to increase CR participation in heart attack survivors through a) increased referral to CR using electronic medical record-based referral, b) enrollment in rehab prior to hospital discharge, and c) improving adherence by minimizing patient co-payments. Per this initiative, ‘increasing use of cardiac rehab among patients with a qualifying condition’ to 70% or greater in 5 years would save an estimated 25,000 lives and prevent 180,000 hospitalizations annually in the United States, but success of this and other interventions targeting participation barriers to cardiac rehabilitation have been limited.

The pilot study discussed in this lecture aimed to examine a behavior-influencing factors, problem-solving competency, and their relationships with participation frequency and duration in cardiac rehabilitation, as well as their potential impact on health outcomes obtained from cardiac rehabilitation participation. measurements, reducing computational complexity and power requirements.

Friday, November 1st @ 1:00 p.m.
Krasnow Institute, Room 229