Improving Access to Cardiac Rehabilitation in the Veterans Health Administration

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Background

- Cardiac rehabilitation (CR) programs vastly underutilized
- Efforts underway to increase participation to 70% by 2022
- Some VA facilities offering new home-based CR programs
- Effect on CR participation has not been evaluated
Aims

- Compare participation in CR before vs. after implementation of a home-based CR program at San Francisco VA Medical Center

- Evaluate patient characteristics associated with participation and completion of home-based CR
Study Population

• **Setting**: Patients hospitalized at San Francisco VA

• **Time period**: Oct 1, 2012 to Sept 30, 2016

• **Inclusion criteria**: acute myocardial infarction, percutaneous coronary intervention, cardiac surgery or heart failure

• **Exclusion criteria**: staged PCI, skilled nursing facility
Methods

• Home-based CR program initiated at San Francisco VA Medical Center in Aug 2013

• Patients hospitalized for ischemic heart disease (MI, PCI or CABG) referred via automated referral system

• All hospitalized patients offered bedside (Phase I) CR

• Eligible patients offered referral to facility-based or home-based CR program
Program Profile

The Design and Implementation of a Home-Based Cardiac Rehabilitation Program

Gregory Rohrbach, DNP; David W. Schopfer, MD; Nirupama Krishnamurthi, MBBS, MPH; Mark Pabst, MPH; Michael Bettencourt; Jo Loomis, DNP; Mary A. Whooley, MD

A home-based cardiac rehabilitation program improves access and enrollment by using an evidence-based alternative model of care.

Fed Prac 2017;34:30-35
American Heart Association (AHA), January 2013
“An Active Partnership For the Health of Your Heart”

https://www.kramesstore.com/OA_HTML/ActivePartnership.html
## Healthy Heart Cardiac Rehab Program

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III (optional)</th>
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<td>Bedside visit by CR nurse before discharge</td>
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### At each session:
1. Assess symptoms
2. Reconcile medications
3. Review logs (physical activity, BP, HR, weight, diet, mood)
4. Provide individually-tailored education (exercise, nutrition, CV risk factors)
5. Motivational interviewing → set goal(s) for the next week
Analysis

• Participation rates compared using chi square for trend over time

• Logistic regression to evaluate predictors of participation and completion of home-based CR
Results

Pending further analysis
Limitations

• Limited generalizability (predominantly male)

• Results may differ across facilities or programs

• Unable to evaluate long-term outcomes
Conclusions

• Implementation of home-based program significantly increased participation in CR (from <1% to >40%)

• No differences in participation or completion by sex, race, or ethnicity

• CABG (vs. other indication) strongest predictor of participation and completion
Acknowledgements

- AACVPR

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  - Tara Ahi
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  - David Schopfer MD MAS
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Thank you!

Questions?