Please remember to mute your speakers.

VA Mobile Discussion Series

For audio, please dial in using VANTS:

1-800-767-1750 pc: 43950#

Thank you for joining. We will begin shortly.
Mobile Cardiac Rehabilitation:
VA FitHeart & CR Pro

Alexis Beatty, MD, MAS
VA Puget Sound Health Care System

Mary Whooley, MD
San Francisco VA Medical Center

Sara Magnusson
VA Puget Sound Health Care System

VA Mobile Discussion Series
May 24, 2018
Overview of Presentation

• Cardiac Rehab Background
• Why an app?
• VA FitHeart (Veteran-facing)
• CR Pro (provider-facing)
• Field Test
Cardiac Rehabilitation (CR)

• CR is a 12-week program of exercise training and health behavior counseling for patients with heart disease

• CR is proven to improve outcomes
Cardiac Rehab

- Medication adherence
- Smoking cessation
- Healthy eating
- Emotional well-being
- Exercise
Eligible for CR
Referred to CR
Enrolled in CR
Cardiac Rehabilitation Participation VA

National 10%

% Participating in CR

17 - 48
9 - 17
6 - 9
1 - 6

Beatty et al. Circulation 2018
Barriers to CR

• Patients usually required to attend 12-week program at a local CR facility
  – Not all VA facilities have a CR program or facility
  – Difficult for those who live in more rural areas, who have work or caregiving responsibilities, or who have transportation issues
• Can be costly to attend CR sessions

How do we break down these barriers?

• Make it easier for patients to participate in CR
• Improving participation in CR will improve Veteran health

Ongoing VA efforts to improve CR use

• Home CR (Office of Rural Health)
Why an app?

- Makes it easier to share data with providers
- Set reminders
- Visual display of data

### SAMPLE • PATIENT DIARY

<table>
<thead>
<tr>
<th>Date</th>
<th>Blood Pressure</th>
<th>Heart Rate</th>
<th>Weight</th>
<th>Blood Glucose</th>
<th>O2</th>
<th>Took Meds (y/n)</th>
<th>Daily Steps</th>
<th>EXERCISE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-1-17</td>
<td>124/88</td>
<td>67</td>
<td>180</td>
<td>110</td>
<td>98</td>
<td>y</td>
<td>6,980</td>
<td>Walk + Arm Curl, Rows, Elbow Extension, Chest Press</td>
</tr>
<tr>
<td>6-2-17</td>
<td>116/64</td>
<td>72</td>
<td>181</td>
<td>126</td>
<td>96</td>
<td>y</td>
<td>4,820</td>
<td>Bike ride</td>
</tr>
<tr>
<td>6-3-17</td>
<td>134/70</td>
<td>80</td>
<td>179</td>
<td>108</td>
<td>91</td>
<td>y</td>
<td>8,052</td>
<td>Walk + heel raises, leg curls, hip flexion</td>
</tr>
<tr>
<td>6-4-17</td>
<td>130/66</td>
<td>70</td>
<td>180</td>
<td>136</td>
<td>98</td>
<td>y</td>
<td>8,27</td>
<td>Walk + Pedaled - upper body + Front Raise, Side Raise, Arm Curl</td>
</tr>
<tr>
<td>6-5-17</td>
<td>130/72</td>
<td>78</td>
<td>182</td>
<td>150</td>
<td>95</td>
<td>n</td>
<td>4,015</td>
<td>Walk + Knee Extension, Chair Stand, Hip Flexion</td>
</tr>
<tr>
<td>6-6-17</td>
<td>122/70</td>
<td>99</td>
<td>181</td>
<td>120</td>
<td>99</td>
<td>y</td>
<td>9,267</td>
<td>Walk - 20 min</td>
</tr>
<tr>
<td>6-7-17</td>
<td>14/22</td>
<td>62</td>
<td>180</td>
<td>166</td>
<td>91</td>
<td>n</td>
<td>5,146</td>
<td>Bike - 20 min</td>
</tr>
</tbody>
</table>

Notes

<table>
<thead>
<tr>
<th>WEEKLY REVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>This week I had:</td>
</tr>
<tr>
<td>CHEST PAIN: [ ] Yes [ ] No</td>
</tr>
<tr>
<td>• Angina Score (0-10):</td>
</tr>
<tr>
<td>• Number of episodes:</td>
</tr>
<tr>
<td>SHORTNESS OF BREATH: [ ] Yes [ ] No</td>
</tr>
<tr>
<td>• Dyspnea Score (0-10):</td>
</tr>
<tr>
<td>• Number of episodes:</td>
</tr>
</tbody>
</table>
VA FitHeart

Patient-facing mobile application for cardiac rehab
VA FitHeart

Goal Setting

Logs

Education

Reminders
Welcome to VA FitHeart

April 10, 2017

Set Weekly Activity Goals
Status: 04/10/2017 - 04/16/2017

0 steps
70,000 left
Goal: 70,000 steps

Notifications
106 Unread in last 30 days

Use the menu button on the top left to explore the app.
From there you can access the help section.
Select the "Set Weekly Activity Goals" button to set and update activity goals.
VA FitHeart - Fitness

Weekly Activity Goals
Status: 04/10/2017 - 04/16/2017 (7 days remaining)

0 minutes
250 left
Goal: 250 minutes

Date Entered    Activity
04/09/2017 06:21 PM  Running
04/04/2017 10:36 AM  Cycling
04/04/2017 10:35 AM  Running
04/04/2017 10:32 AM  Walking
VA FitHeart – View activity
FitHeart - Usability

- The FitHeart app is designed to help veterans maintain their fitness.

- The usability of the FitHeart app was tested using two versions:
  - Initial Version (n=5)
  - Revised Versions (n=8)

- The bar chart shows the comparison of task completion success, usability, and likelihood to use the app between the initial and revised versions.

- Task Completion Success:
  - Initial Version: 50%
  - Revised Versions: 70% (p = 0.05)

- Usability:
  - Initial Version: 60%
  - Revised Versions: 80% (p = 0.04)

- Likely to Use App:
  - Initial Version: 40%
  - Revised Versions: 80% (p = 0.04)
• **General Enthusiasm** “I think that the idea of an app that records all of the information that this app is doing will be very valuable. Actually somewhat of a motivation for me to do this thing.”

• **Tracking Health Measures** “I think it’ll be good to track my exercise and to see what I’m doing.”

• **Introductory Training** “Initially, training with a technical person, instead of me relying on myself.”

• **Sharing Data with Providers** “It would also be helpful to share with my doctor, it just being a matter of clicking a button and sharing it with my doctor.”
VA FitHeart

Goal Setting

Logs

Education

Reminders
General Positive Feedback

• “It actually was encouraging me to do what I was supposed to do. To keep track of things and for me, to actually exercise because I had to write it down.”

• “The app is user friendly.”

Lessons Learned

• Initial Training

• **DS Logon is a challenge** - Training time - DS Logon (45 minutes) + VA FitHeart (10-15 minutes)

• **Sharing data with providers** - We need to test along with CR Pro
Mobile Home Cardiac Rehab Program

- VA FitHeart
- VA FitHeart ToolKit
- Home CR
- CR Pro
CR Pro

Provider-facing mobile application for cardiac rehab
To get started viewing patient-entered data, select a patient from the left navigation pane.

- In the search window, enter part or all of the patient’s last name, the last four digits of the social security number, or the first letter of the last name and last four digits of the social security number. (press Q to search).
- When you search, all patient last names that start with the search text or come afterwards alphabetically will be displayed.
- The default list of patients is ‘All Patients.’ You can change to another patient list by pressing the Change button.
- To see all patients within a list, clear the search box and press Q to search.
CR Pro – Dashboard

Latest Goal Start Date: 01/24/2018

Goal Progress

- 160/666 Minutes
- 1600/6666 Steps
- 103.0/50000 Miles

Data from 02/01/2017 through 02/01/2018

Latest Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>MM/DD</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>01/24</td>
<td>250</td>
<td>lbs</td>
</tr>
<tr>
<td>Heart Rate</td>
<td>01/24</td>
<td>50</td>
<td>bpm</td>
</tr>
<tr>
<td>BP</td>
<td>01/24</td>
<td>150/100</td>
<td>mmHg</td>
</tr>
<tr>
<td>Glucose</td>
<td>01/24</td>
<td>500*</td>
<td>mg/dL</td>
</tr>
<tr>
<td>Mood</td>
<td>01/24</td>
<td>1</td>
<td>10=Best</td>
</tr>
</tbody>
</table>
## CR Pro – Exporting to CPRS

![Cardiac Rehabilitation Progress Note](image)

### Patient Data
- **SSN**: 666666078
- **Gender**: M
- **DOB**: 11/10/1900
- **Age**: 117

### Cardiac Rehabilitation Progress Note

<table>
<thead>
<tr>
<th>Date</th>
<th>Goal</th>
<th>Unit</th>
<th>Met?</th>
<th>Date</th>
<th>Entry/Unit</th>
<th>Activity</th>
<th>Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/16/2018</td>
<td>50000</td>
<td>miles</td>
<td>Yes</td>
<td>Total</td>
<td>60000 miles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01/17/2018</td>
<td>666</td>
<td>minutes</td>
<td>No</td>
<td>Total</td>
<td>30 minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01/17/2018</td>
<td>66666</td>
<td>steps</td>
<td>No</td>
<td>Total</td>
<td>3050 steps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Effort Scale:** 0=Not Entered, 1=Very Easy → 6=Very Hard

- **Mood (scale 1=worst → 10=best):**
  - Avg: 5.0, Last: 1 (1/18/2018), High: 9, Low: 1
- **Weight (lbs):**
  - Avg: 461, Last: 999 (1/10/2018), High: 999, Low: 192
VA FitHeart

• Phase One – VA FitHeart @ VA Puget Sound – Sep/Oct 2017
• Phase Two – VA FitHeart Limited National Field Test – November 2017

VA FitHeart & CR Pro

• Phase Three – VA FitHeart and CR Pro Limited National Field Test – May 2018

National Release

• TBD
Field testing resources

- Beta App Store for Veterans to access VA FitHeart
  - [https://mobile.va.gov/app/beta/fitheart](https://mobile.va.gov/app/beta/fitheart)
- Beta App Store for providers to access CR Pro
  - [https://mobile.va.gov/app/beta/crpro](https://mobile.va.gov/app/beta/crpro)
- SharePoint for VA Staff
  - [https://vaww.connectedhealth.va.gov/fitheart/SitePages/Home.aspx](https://vaww.connectedhealth.va.gov/fitheart/SitePages/Home.aspx)
- Training materials
  - Training protocol
  - User guides
  - Training videos
- Implementation aids
  - Quick reference
  - Tools and Tips
  - Peer support suggestions
Q&A Discussion
Questions

Contact:
Alexis Beatty

alexis.beatty2@va.gov
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  - Measurement Science QUERI
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Thank you!

What future topics would you like to discuss?

Let us know by providing feedback at this link:
https://www.surveymonkey.com/r/GCFTSMV