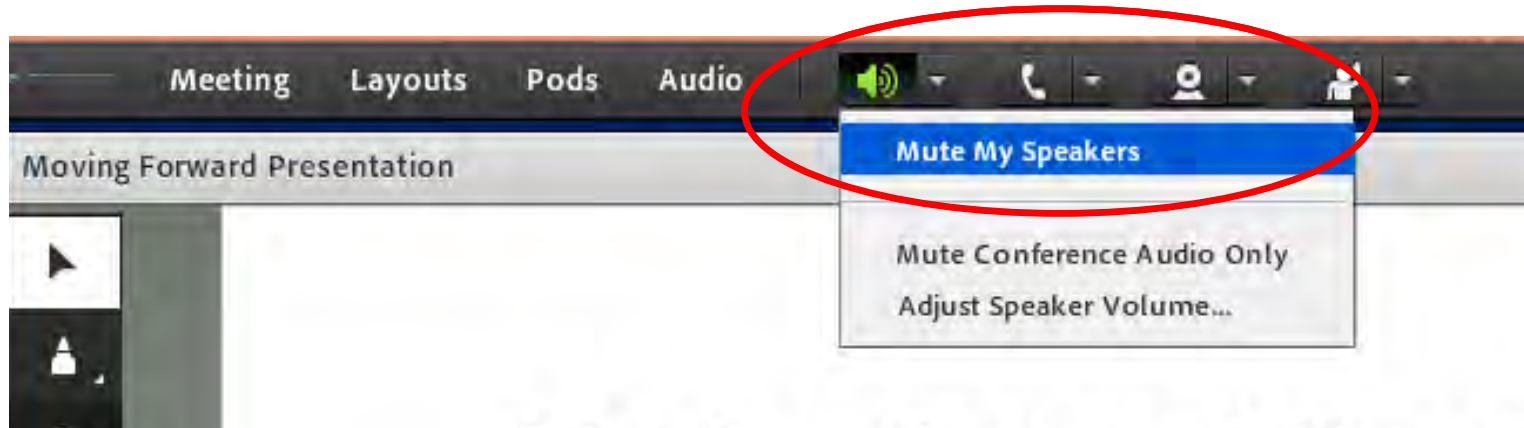


Please remember to mute your speakers.



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.



U.S. Department of Veterans Affairs

Veterans Health Administration
Office of Connected Care



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Mobile Cardiac Rehabilitation: VA FitHeart & CR Pro

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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





Background

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



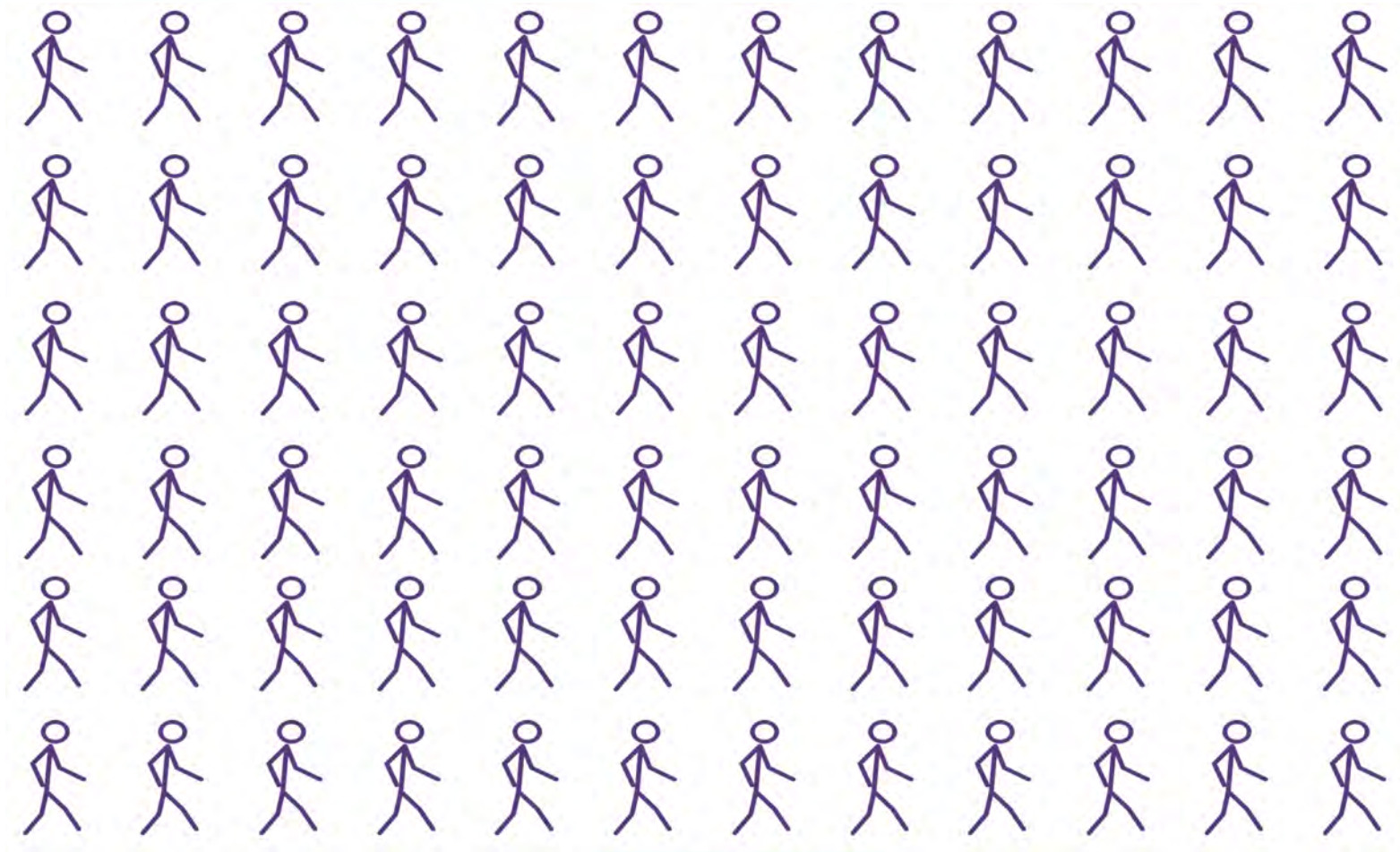


Cardiac Rehab



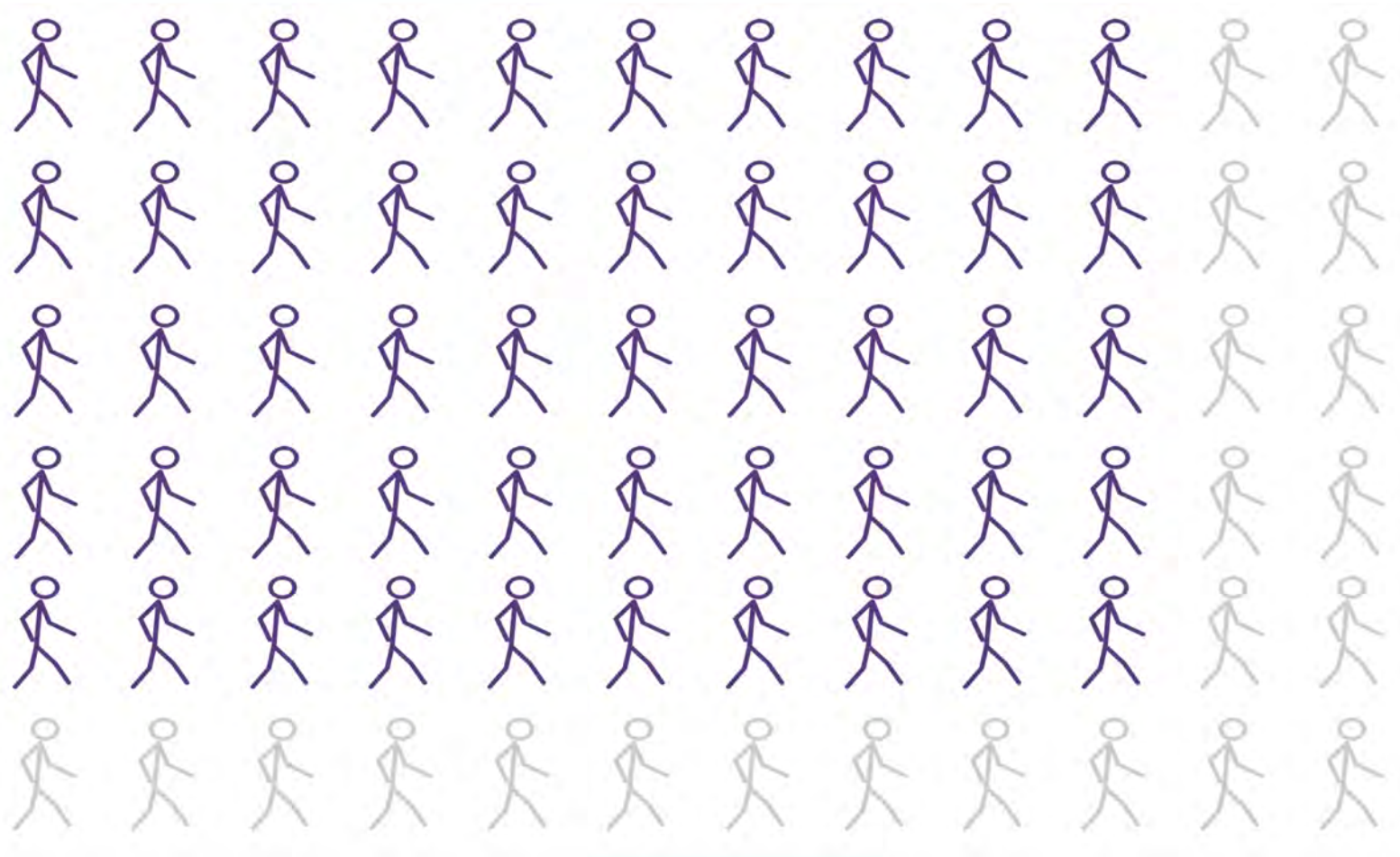


Eligible for CR



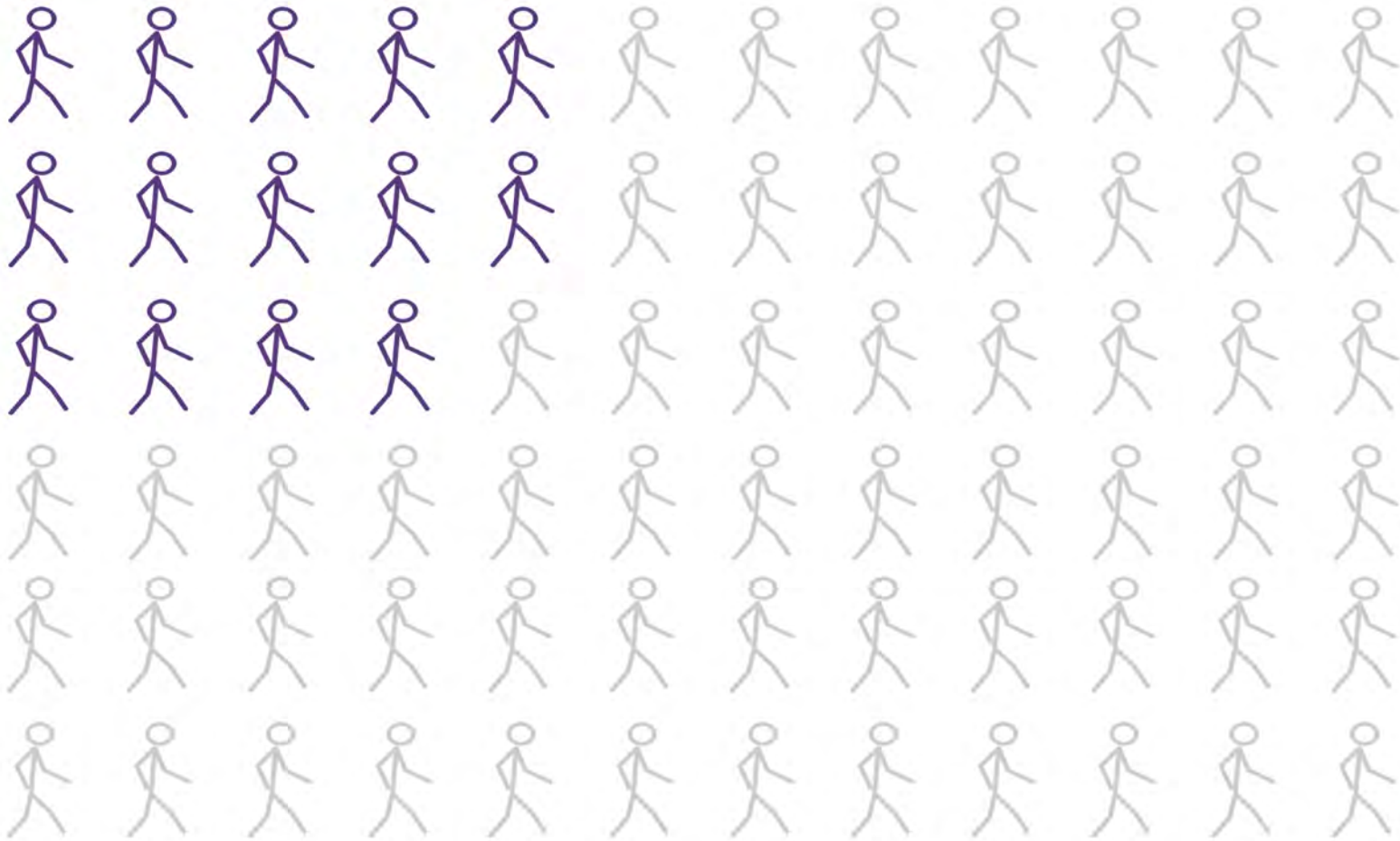


Referred to CR



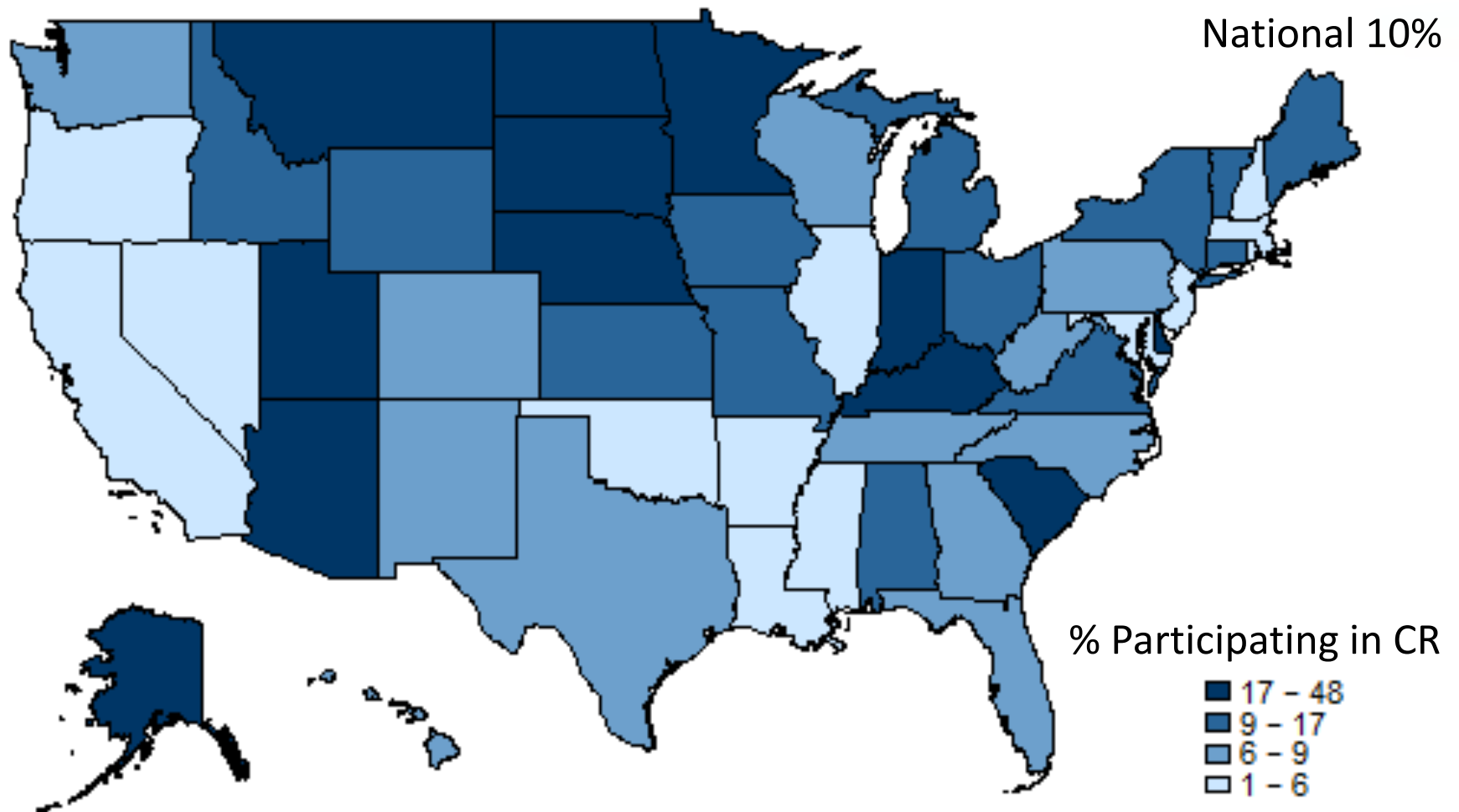


Enrolled in CR





Cardiac Rehabilitation Participation VA



Beatty et al. Circulation 2018



Background

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?

Date	Blood Pressure	Heart Rate	Weight	Blood Glucose	O ₂	Took Meds (y/n)	Daily Steps	EXERCISE
6-1-17	124/68	67	180	110	98	y	6,580	Walk + Arm Curl, Rows, Elbow Extension, Chest Press
6-2-17	116/64	72	181	126	96	y	4,820	Bike Ride
6-3-17	134/70	80	179	108	97	y	8,052	Walk + heel Raises, leg curls, hip Flexion
6-4-17	120/66	70	180	138	98	y	8,271	Walk + Peddled - upper body + Front Raise, Side Raise, Arm Curl
6-5-17	130/72	78	182	150	95	n	4,015	
6-6-17	112/70	99	181	120	99	y	9,287	Walk + Knee Extension, Chair Stand, Hip Flexion
6-7-17	114/72	62	180	106	97	n	5,146	Walk - 20 min Bike - 20 min

Notes

SAMPLE • *PATIENT DIARY*

WEEK IN REVIEW

This week I had:

CHEST PAIN: ☒ Yes ☐ No

• Angina Score (0-4): 2

• Number of Episodes: 1

SHORTNESS OF BREATH: ☒ Yes ☐ No

• Dyspnea Score (0-10) 4

• Number of Episodes: 2

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

VA



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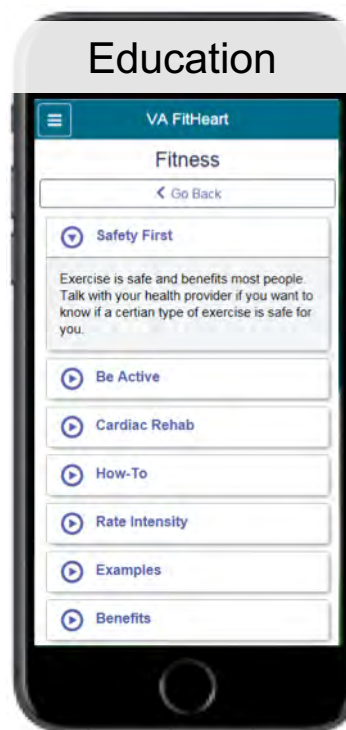
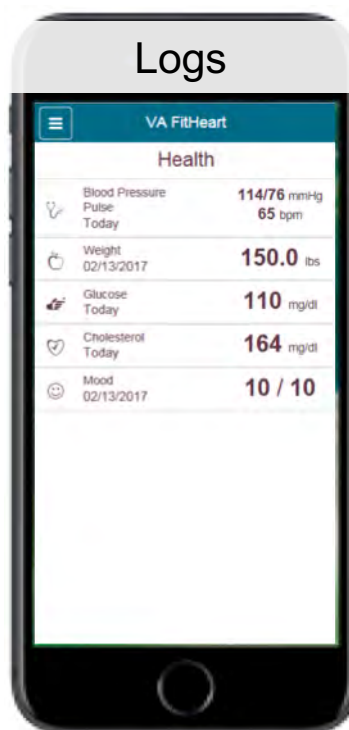
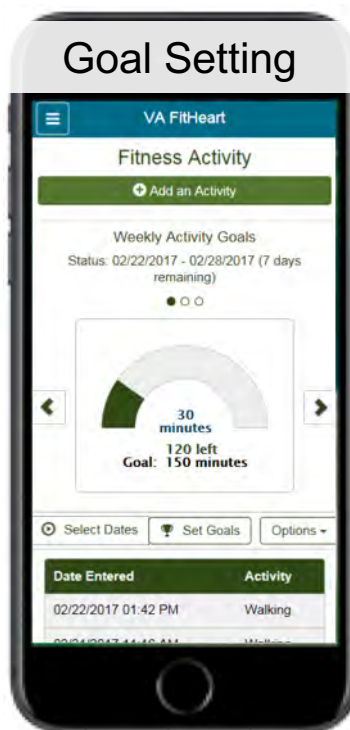
VA FitHeart

Patient-facing mobile application for cardiac rehab





VA FitHeart





VA FitHeart – landing page



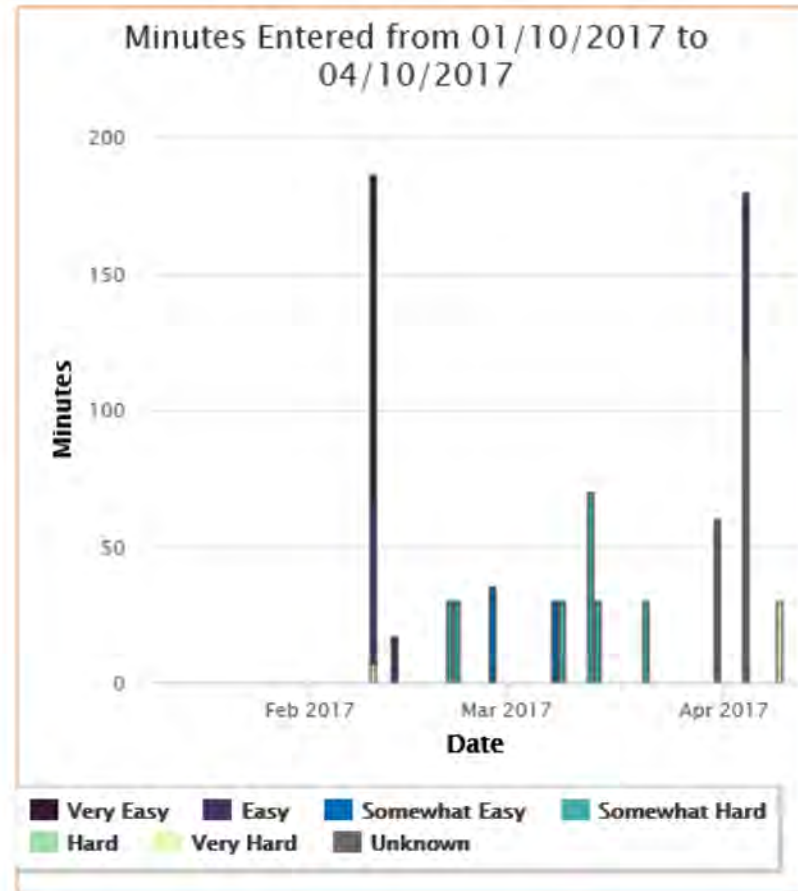


VA FitHeart - Fitness



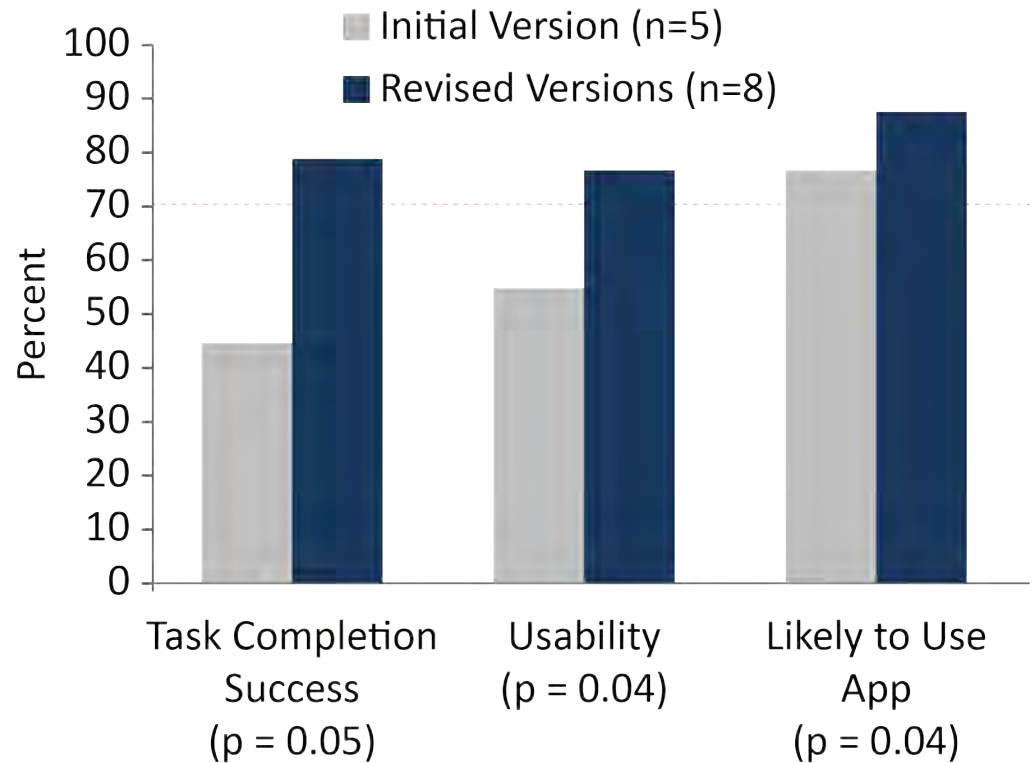


VA FitHeart – View activity





FitHeart - Usability





Usability Testing – Veteran Feedback



Testing

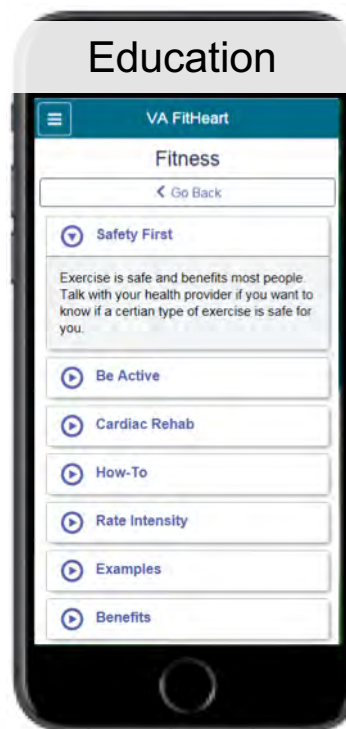
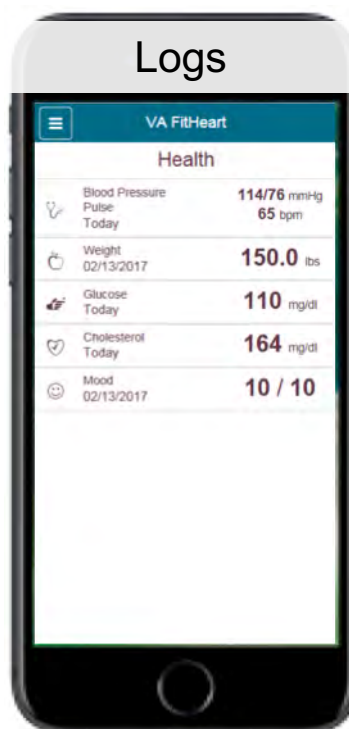
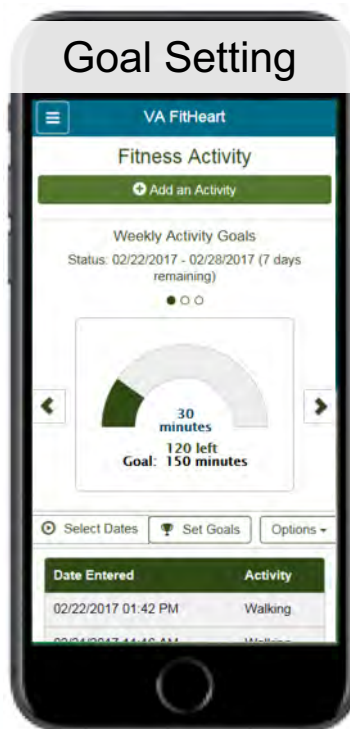
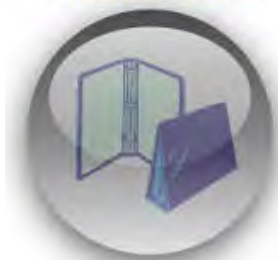
- General Enthusiasm *“I think that the idea of an app that records all of the information that this app is doing will be very valuable. Actually somewhat of a motivation for me to do this thing.”*
- Tracking Health Measures *“I think it’ll be good to track my exercise and to see what I’m doing.”*
- 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



Training Materials





FitHeart Field Testing

General Positive Feedback

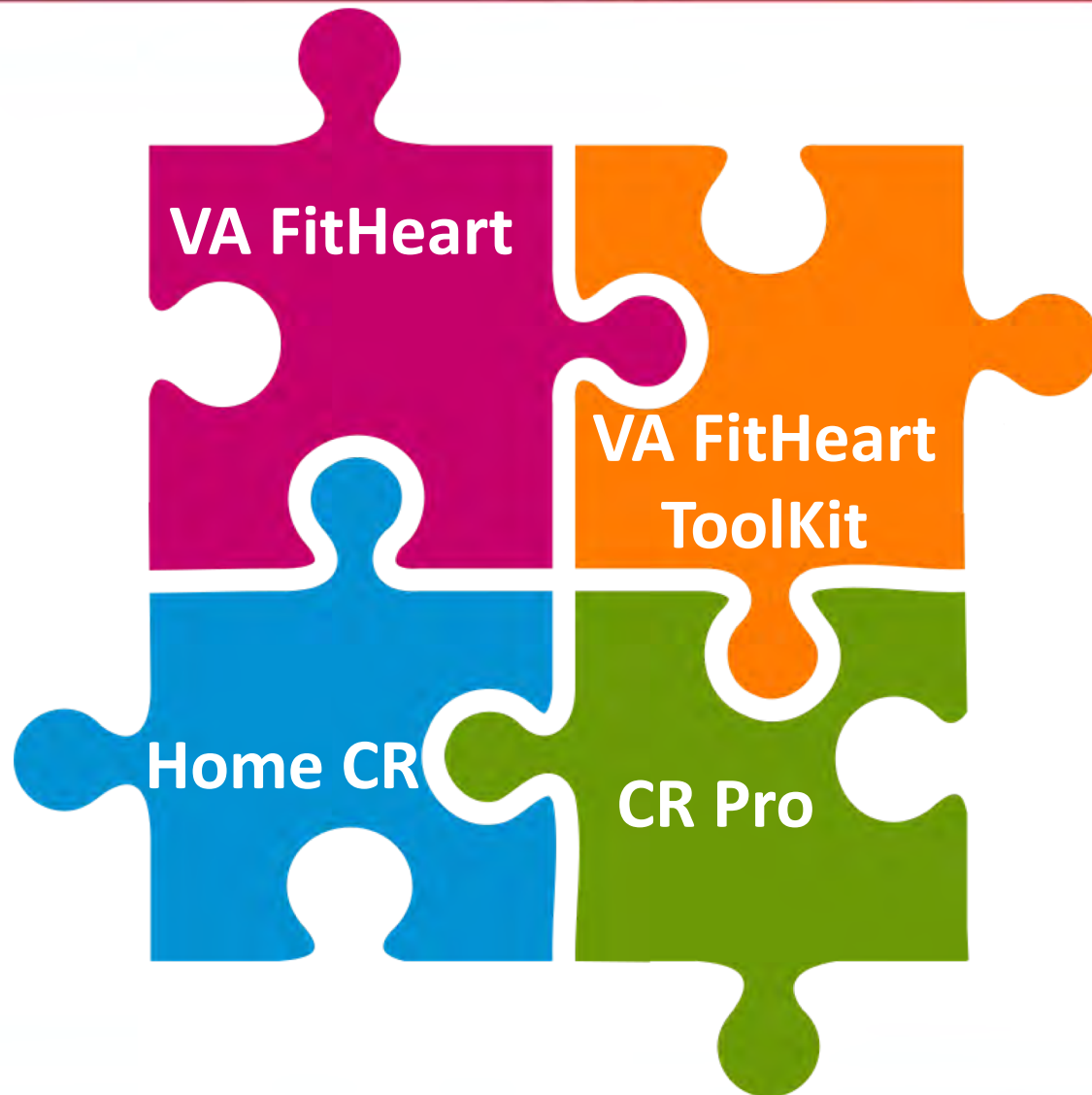
- “It actually was encouraging me to do what I was supposed to do. To keep track of things and for me, to actually exercise because I had to write it down.”
- “The app is user friendly.”

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



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CR Pro

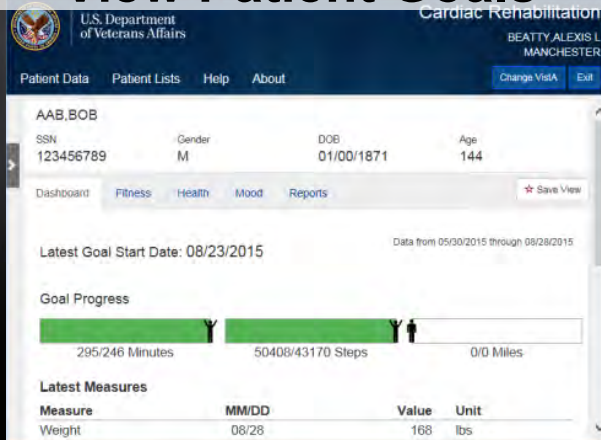
Provider-facing mobile application for cardiac rehab





CR Pro

View Patient Goals



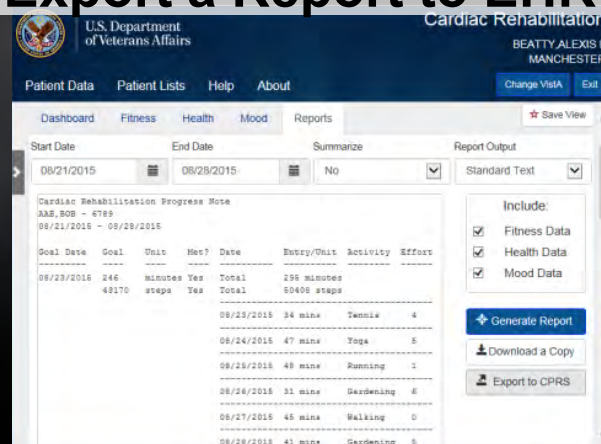
View Patient-Generated Fitness Data



View Patient-Generated Health Data



Export a Report to EHR





CR Pro – Selecting List/Patient



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Cardiac Rehabilitation

MobileAppsProvider, One
CHYSHR TEST LAB

Context: OFF

Change Vista

Exit

Patient Data

Patient Lists

Help

About

Current Patient List

Change

Cardiac Rehab Active -
Russell

Enter Search Text



MobileAppsVeteran, One
666666078
11/10/1900, 117yrs M

MobileAppsVeteran, Two
666666855
8/26/1900, 117yrs M

MobileAppsVeteran, Three
666666080
11/08/1900, 117yrs F

MobileAppsVeteran, Four
666666079
11/9/1900, 117yrs M

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



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Cardiac Rehabilitation

MobileAppProvider, One

CHYSHR TEST LAB

Context: OFF

Change VistA

Exit

Patient Data

Patient Lists

Help

About

Dashboard

Fitness

Health

Mood

Reports

★ Save View

Latest Goal Start Date: 01/24/2018

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

Goal Progress



160/666 Minutes



1600/6666 Steps




103.0/50000 Miles

Latest Measures

Measure	MM/DD	Value	Unit
Weight	01/24	250	lbs
Heart Rate	01/24	50	bpm
BP	01/24	150/100	mmHg
Glucose	01/24	500*	mg/dL
Mood	01/24	1	10=Best



CR Pro – Exporting to CPRS



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Cardiac Rehabilitation

MobileAppsProvider, One
CHYSHR TEST LAB

Patient Data Patient Lists Help About

Context: OFF Change VistA Exit

MobileAppsVeteran, One

SSN Gender DOB Age

666666078 M 11/10/1900 117

Dashboard Fitness Health Mood Reports ★ Save View

Start Date End Date Summarize

01/16/2018 01/23/2018 No

Cardiac Rehabilitation Progress Note

MOBILEAPPSVETERAN, ONE

01/16/2018 - 01/23/2018

Goal Date	Goal	Unit	Met?	Date	Entry/Unit	Activity	Effort
01/17/2018	50000	miles	Yes	Total	50000 miles		
	666	minutes	No	Total	30 minutes		
	6666	steps	No	Total	3050 steps		
				01/17/2018	30 mins	walking	6
					3050 steps		
					50000 miles		

Effort Scale: 0=Not Entered, 1=Very Easy -> 6=Very Hard

Mood (scale 1=worst -> 10=best):
Avg: 5.00, Last: 1 (1/18/2018), High: 9, Low: 1

Weight (lbs):
Avg: 461, Last: 999 (1/18/2018), High: 999, Low: 192

Include:

☒ Fitness Data

☒ Health Data

☒ Mood Data

Output Format:

Text

Generate Report

Download a Copy

Export to CPRS



Field Testing

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

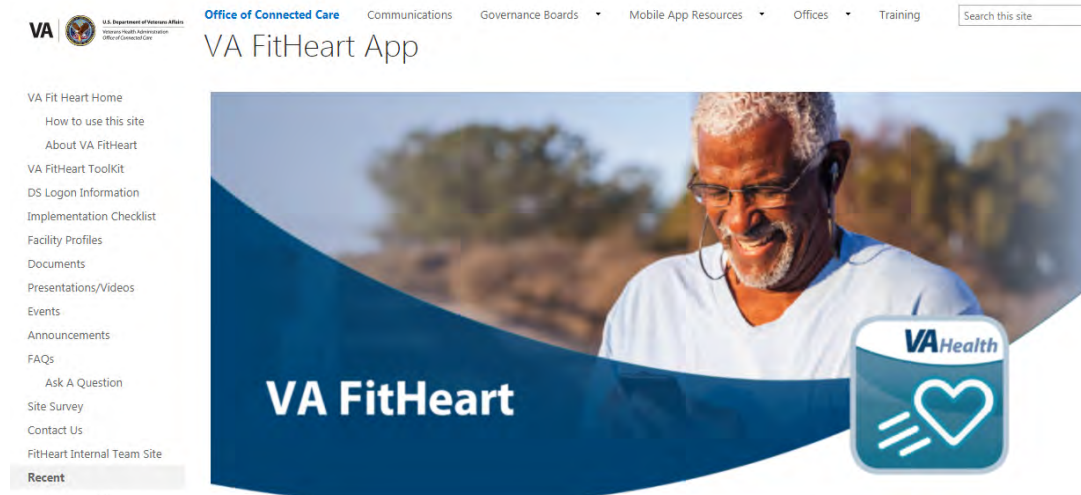
National Release

- TBD



Field testing resources

- Beta App Store for Veterans to access VA FitHeart
 - <https://mobile.va.gov/app/beta/fitheart>
- Beta App Store for providers to access CR Pro
 - <https://mobile.va.gov/app/beta/crpro>
- SharePoint for VA Staff
 - <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



VA



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Q&A Discussion



Questions

Contact:

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Acknowledgements

- Veterans
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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

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