

Expanding Veteran Access to Cardiac Care

New Pathways through Digital Health

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Disclosures

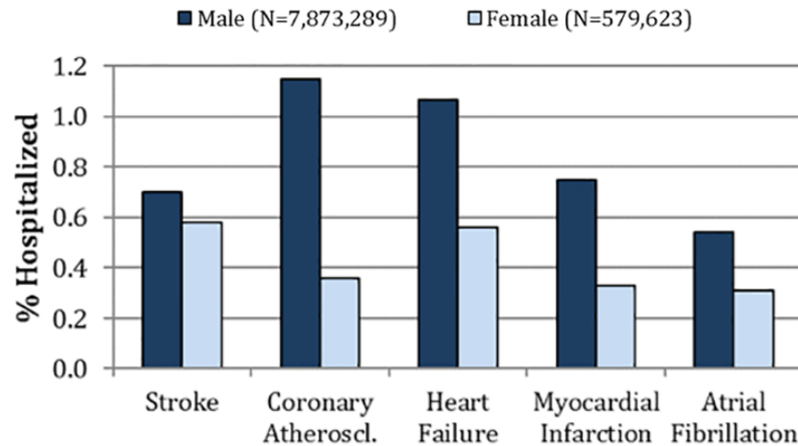
Grant/research support	Veterans Affairs (Rehabilitation R&D Career Development Award-2; 2020-2021 VISN 7 Research Development Award)
Consulting	Centers for Disease Control (Div. of Healthcare Quality Promotion)
Advisory board	Moving Analytics, Inc.
Shareholder/equity	Moving Analytics, Inc.

Learning Objectives

- Recognize the role of digital health in expanding access to cardiac care
- Describe the challenges with deploying patient-facing technologies as part of virtual care pathways

Veteran Heart Disease in the 21st Century

Veteran Hospitalizations* (2010-2014)



Centers for Disease Control (CDC) National Health Interview Survey (2012-2015)

Condition	Odds Ratio	95% CI
Heart Attack	2.52	1.63–3.90
Coronary Heart Disease	1.76	1.16–2.67
Hypertension	1.65	1.39–1.97
Stroke	1.54	0.90–2.62
Heart Problems	0.76	0.54–1.06

*Includes VA healthcare facilities and non-VA facilities reimbursed by VA
Jour Am Board Family Med. January 2019, 32 (1) 50-57
2018. PLOS ONE 13(7): e0200327

Veteran Heart Disease in the 21st Century

- Veterans are at twice the risk of new onset heart disease than non-Veterans
 - Independent of baseline socioeconomic status, comorbid conditions, health behaviors, and Body Mass Index (BMI).
- Veterans more likely to develop ischemic (atherosclerotic) disease than non-Veterans
 - Coronary Artery Disease, Peripheral Arterial Disease, and Stroke
- Veterans more likely to engage in risky health behaviors associated with heart disease
 - Tobacco use, alcohol abuse

Barriers to Accessing VA Specialty Care



PERCENTAGE OF ENROLLEES
LIVING WITHIN A

**40-mile
driving distance**

TO A VA FACILITY

93% 55% 26%

- VA medical center or community-based clinic
- VA medical center
- VA medical center with full specialty care

- Most Veterans live near a VA health care facility (93%) 👍
- Geographic access is limited based on transit time 👎
 - Only **25%** live within 60 minutes
 - Only **43%** live within 40 miles of VA interventional cardiology services

From Prediction to Prevention

The Virtual Cardiology Ecosystem



Mobile Apps and Devices

Patient-reported outcomes

Alerts and reminders

Communication
(video, text, chat)

Patient education



Wearables and Biometrics

Exercise tracking

Physiologic monitoring
(HR, VO_2)

Automated feedback



Connected Devices

Blood pressure

Weight

Pulse oximetry

Blood glucose



Personalized Coaching

Guidance

Accountability

Feedback



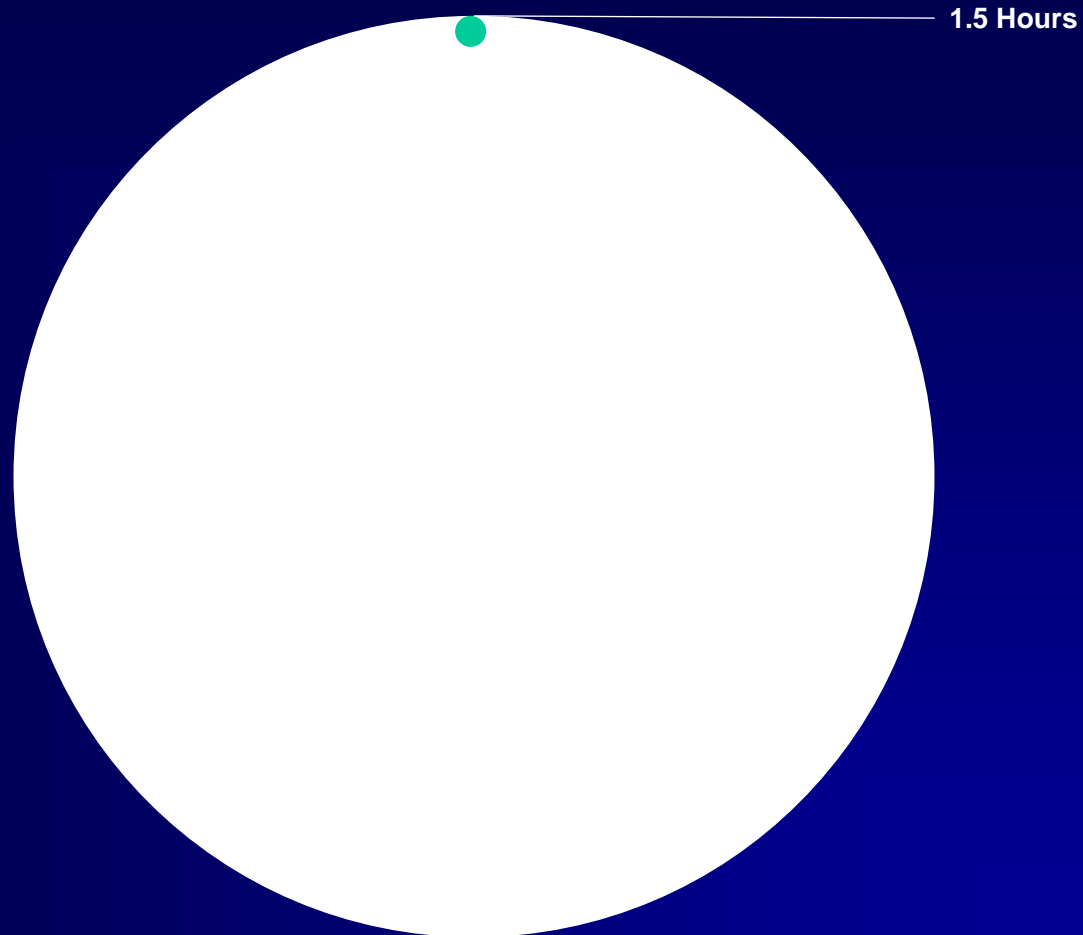
Cloud Computing and Analytics

Care coordination

Population health

Data analysis

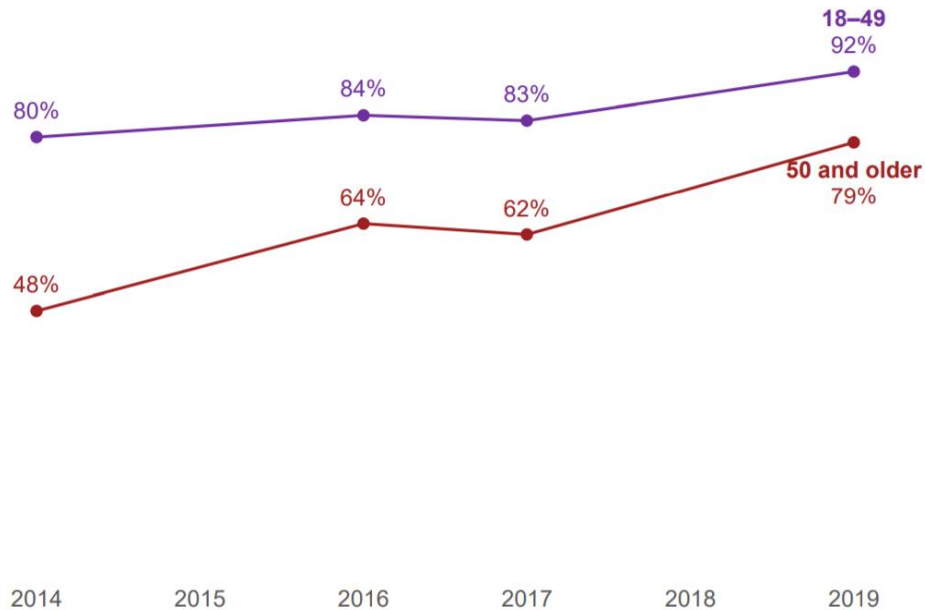
The White Space



5000 Waking Hours

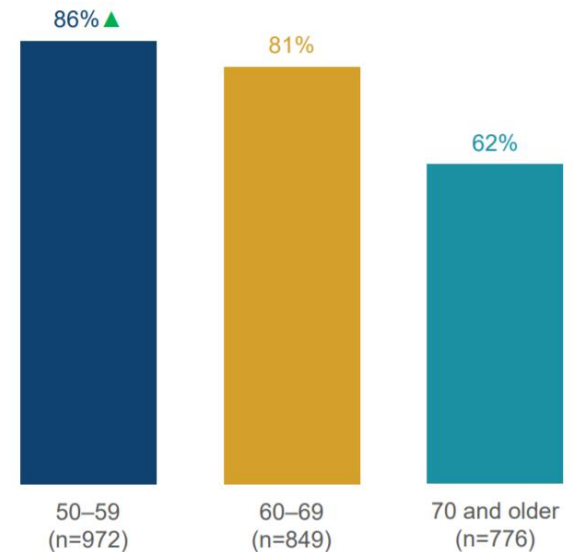
The Narrowing Digital Divide

Smartphone adoption rates among adults **18–49** and **50 and older**
2014 to 2019



Source: Forrester Analytics; Consumer Technographics Online Benchmark Survey of online adults age 18–88 (Part 2)
18–49 sample sizes: 2014 = 21,234; 2016 = 18,529; 2017 = 20,723; 2019 = 29,741
50–88 sample sizes: 2014 = 12,312; 2016 = 11,370; 2017 = 12,747; 2019 = 18,164

Smartphone adoption rates in 2019
Among adults **50–59**, **60–69**, and **70 and older**

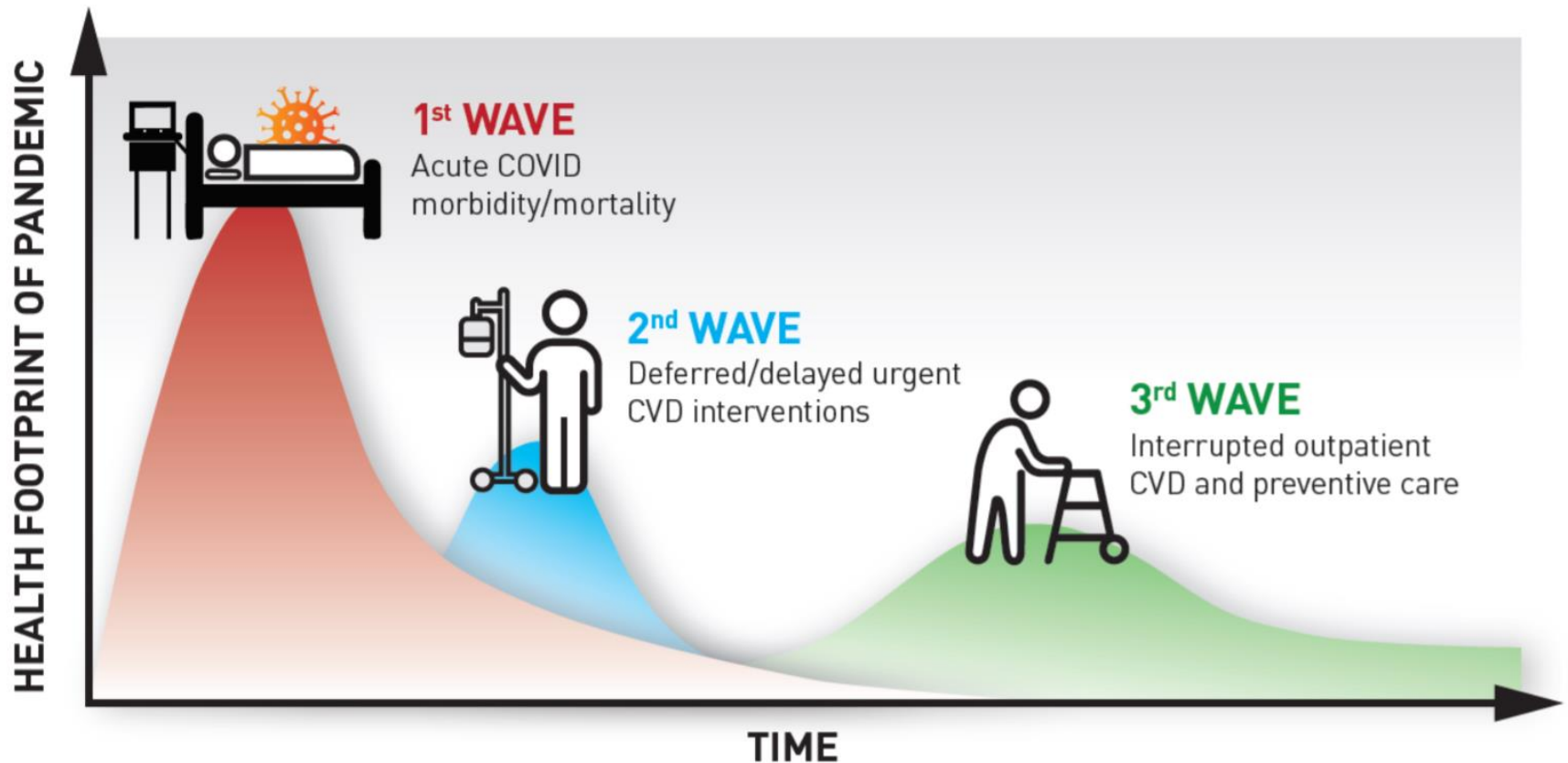


Base: Total Respondents (n=2,597)

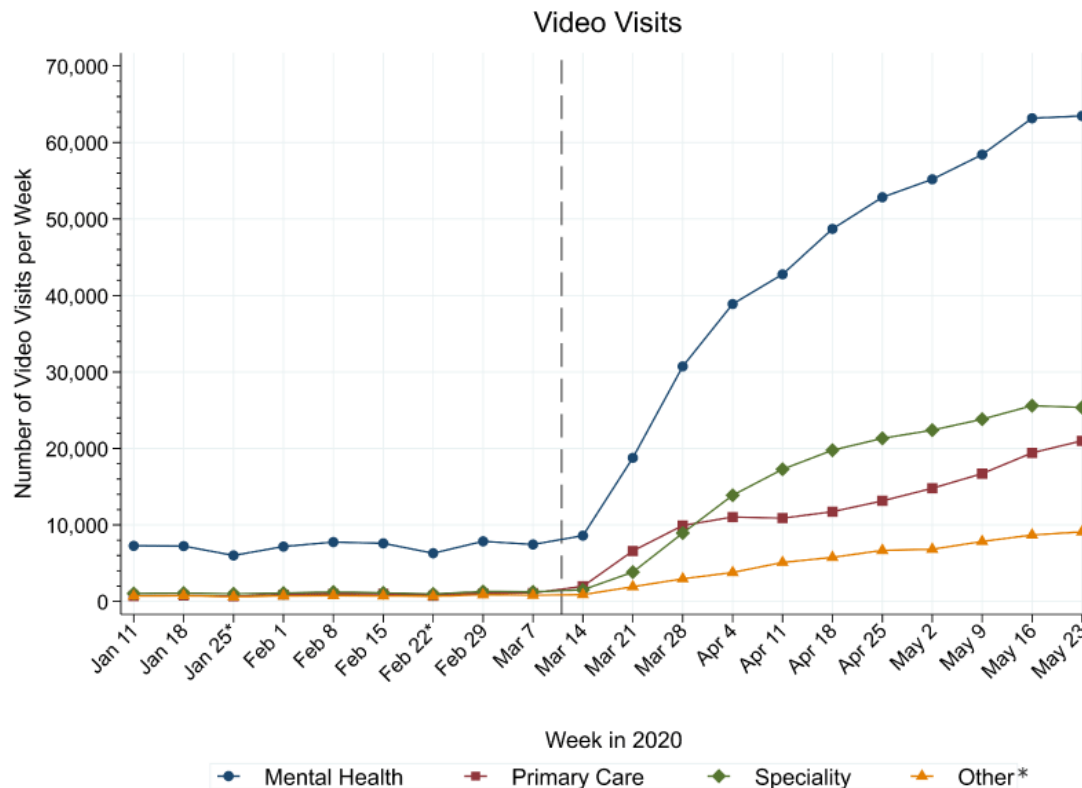
Q.TECH1 Which of the following items do you have?

- ▲ Statistically higher than both groups at the 95% confidence level
- ▼ Statistically lower than both groups at the 95% confidence level

Disruption of Cardiovascular Care During COVID-19



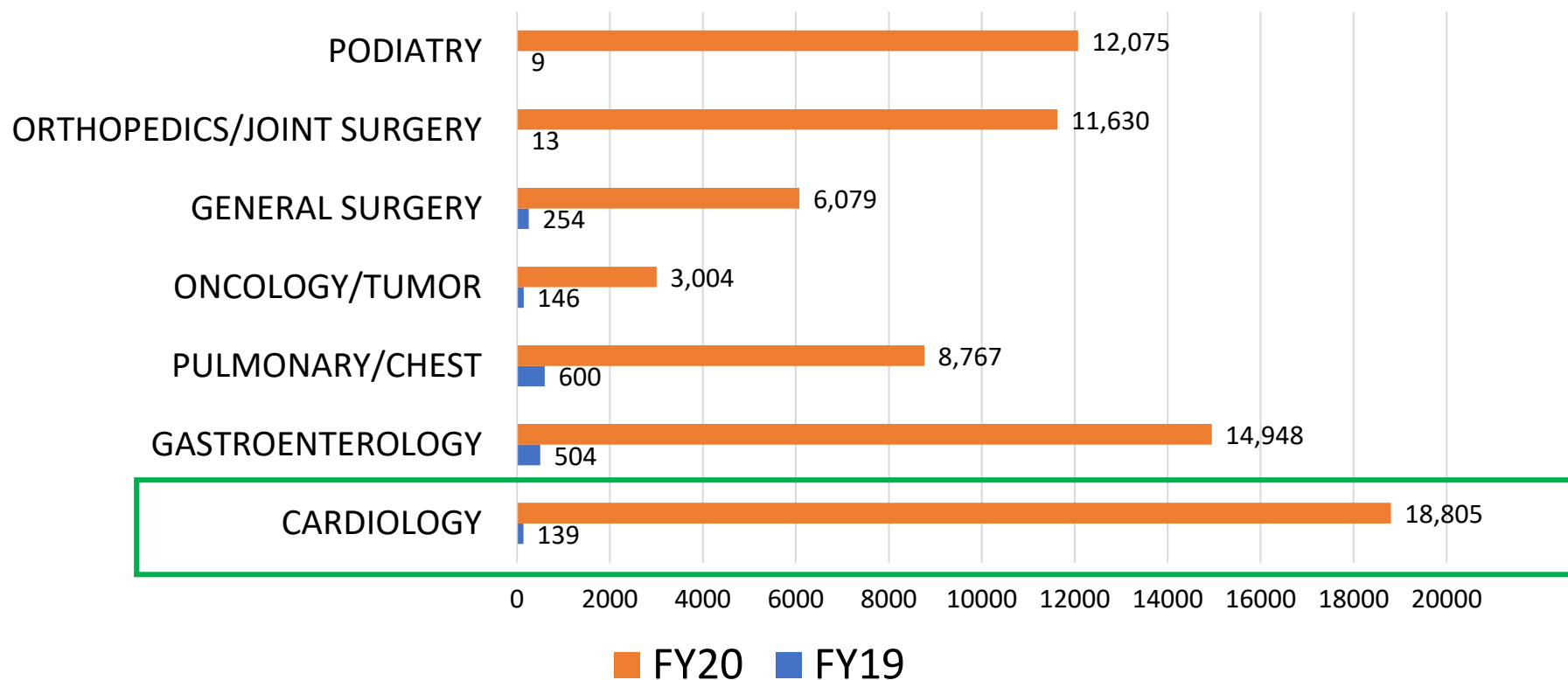
Rapid VA Telehealth Expansion During Covid-19



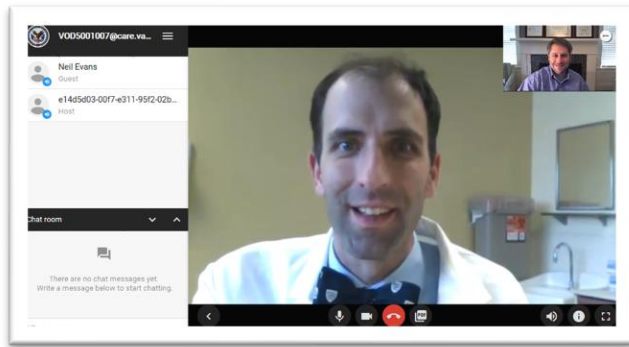
Between March and April 2020, weekly video encounters increased dramatically

- From 1,238 to 21,215 weekly visits for specialties and rehabilitation care (green)

Total VA Video Connect (VVC) Encounters by Specialty (FY19 vs. FY20)



Existing VA Tools for Virtual Cardiology



VVC & VVC NOW



Annie App



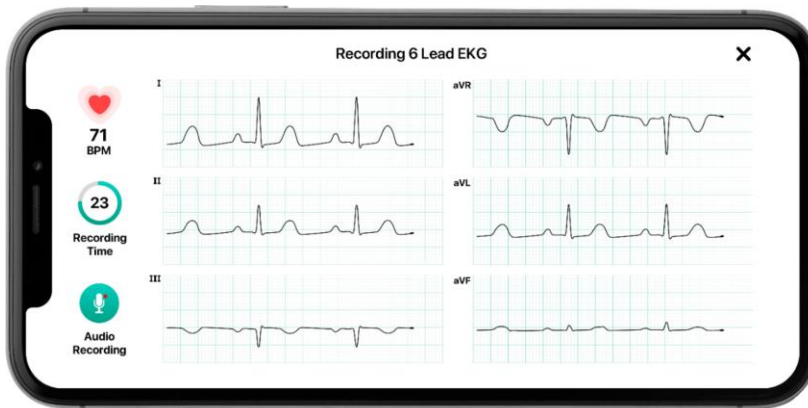
Stay Quit Coach



Integration of Novel Digital Health Technologies

AliveCor®

KardiaMobile 6L

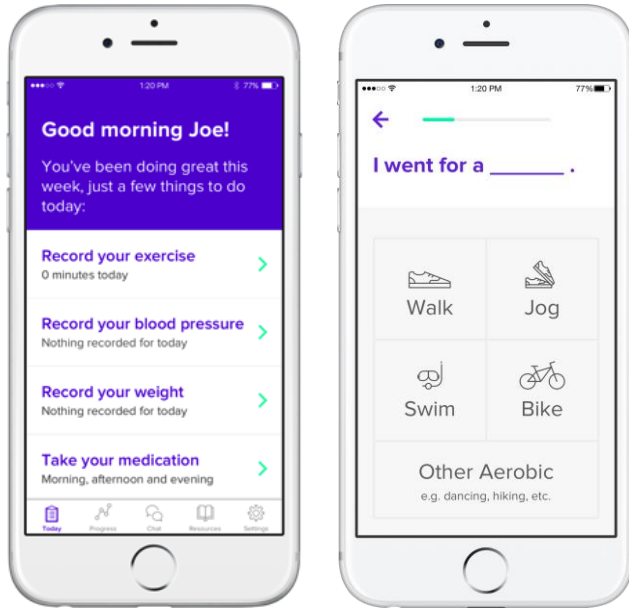


Apple WATCH



Smart HEART

Virtual Cardiac Rehab



Patient Generated Data

- 12-week, remote program
 - Movn smartphone app
 - Fitbit or Garmin for activity tracking (provided)
 - Dedicated coach (APP, exercise physiologist)
 - Weekly video/phone coaching sessions
- Remote monitoring through **connected, cloud-based dashboard**
- In-person visits for enrollment and exit (2 total)

Project RESILIENCE

VA and Fitbit help support Veterans' health and wellness during COVID-19 pandemic

News Sections: #VetResources, Health, Top Stories, VA Innovations, VSO / Partners

Published On: January 11th, 2021 | 371 words | 1.2 min read

The Veterans Health Administration Innovation Ecosystem (VHA IE) has launched a new initiative with Fitbit to help Veterans, caregivers and VA staff manage their health and wellness during the COVID-19 pandemic. This initiative, launched at <https://healthsolutions.fitbit.com/veterans>, is focused on eligible Veterans, caregivers and VA staff who currently use Fitbit devices, and will provide them with free access to Fitbit's paid programs and services to help them manage stress, improve sleep and increase physical activity.

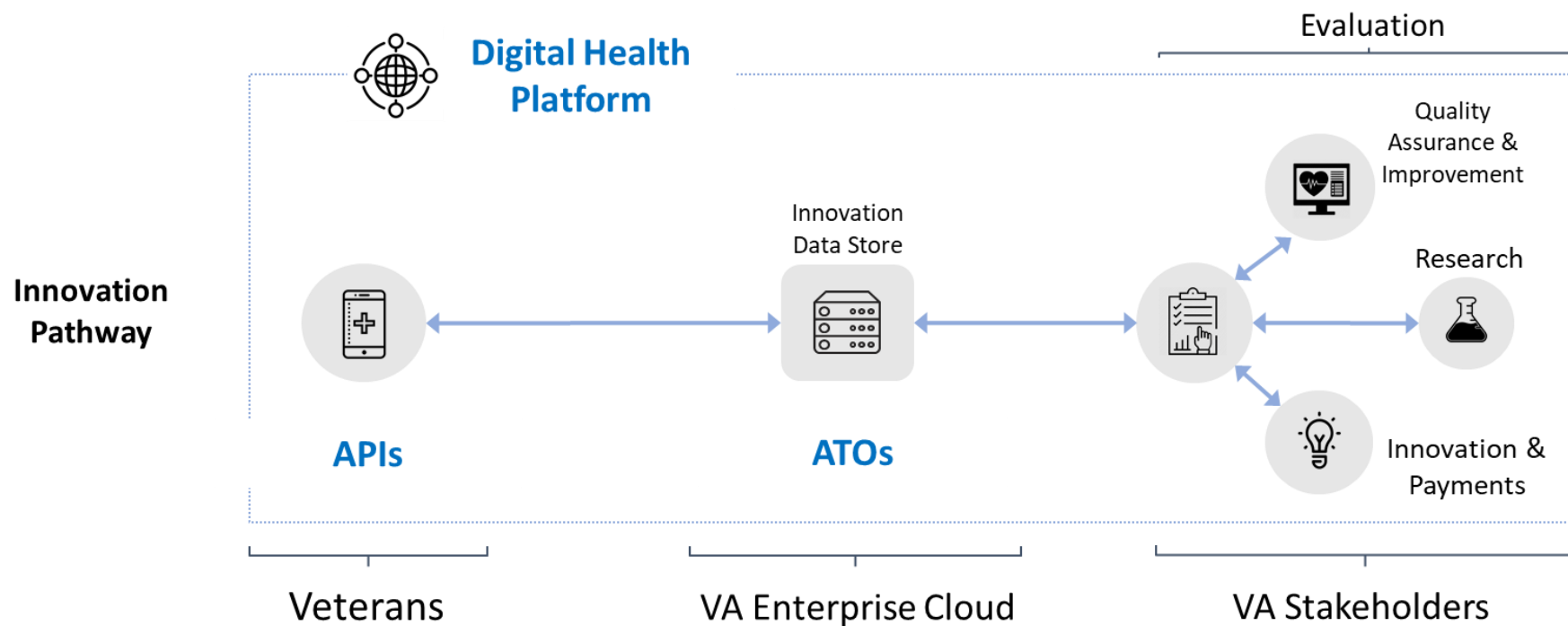
VA has contracted with Fitbit to initially provide 10,000 eligible Veterans, caregivers and VA staff a 1-year free membership to Fitbit Premium. This includes access to guided programs, hundreds of workouts, mindfulness content, a wellness report and a health metrics dashboard. Participants will also have access to Fitbit Health Coaching, one-on-one coaching and guidance from a certified health coach or licensed health professional. VA encourages Veterans, caregivers and VA staff using Fitbit wearables to express their interest in

From 2 Weeks
(Jan 11 – 25, 2021)

Fitbit User	Total
Caregiver	1,210
VA Staff	2,767
Veterans	25,047
	29,024

Non-Fitbit User	Total
Caregiver	691
VA Staff	1039
Veterans	21,348

Digital Health Platform



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