ScottCare™
cardiovascular solutions

Home-based Cardiac Rehab

Why… What… and How?

FORWARD
THE SCOTTCARE SYMPOSIUM | SEPT. 15 & 17

ABOUT US

Presenters

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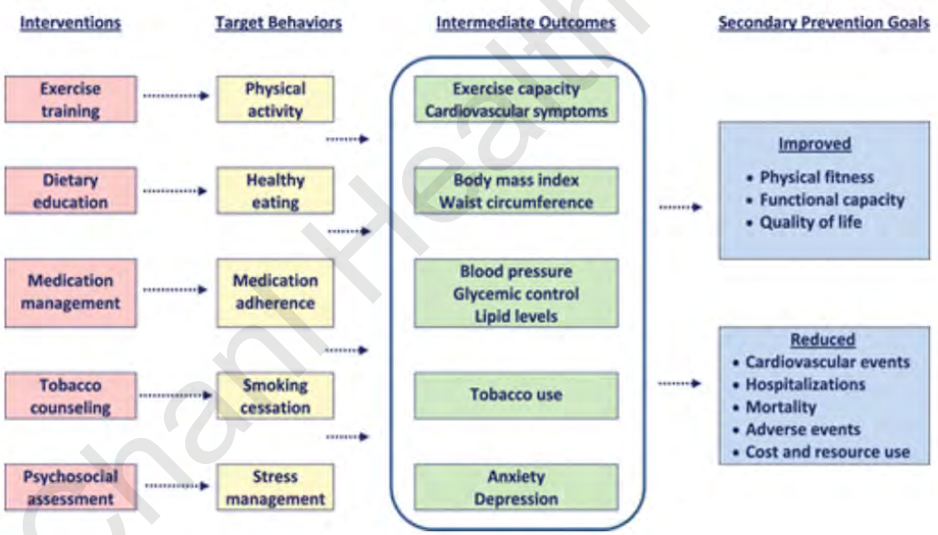
Home-based Cardiac Rehab

Why. What. How.

Today we'll cover:

1. **Why** would we change what we are doing?
2. **What** does home-based rehab look like?
3. **How** can I implement it in a financially viable way?

First…



Circulation. 2019;140:e69–e89. DOI: 10.1161/CIR.

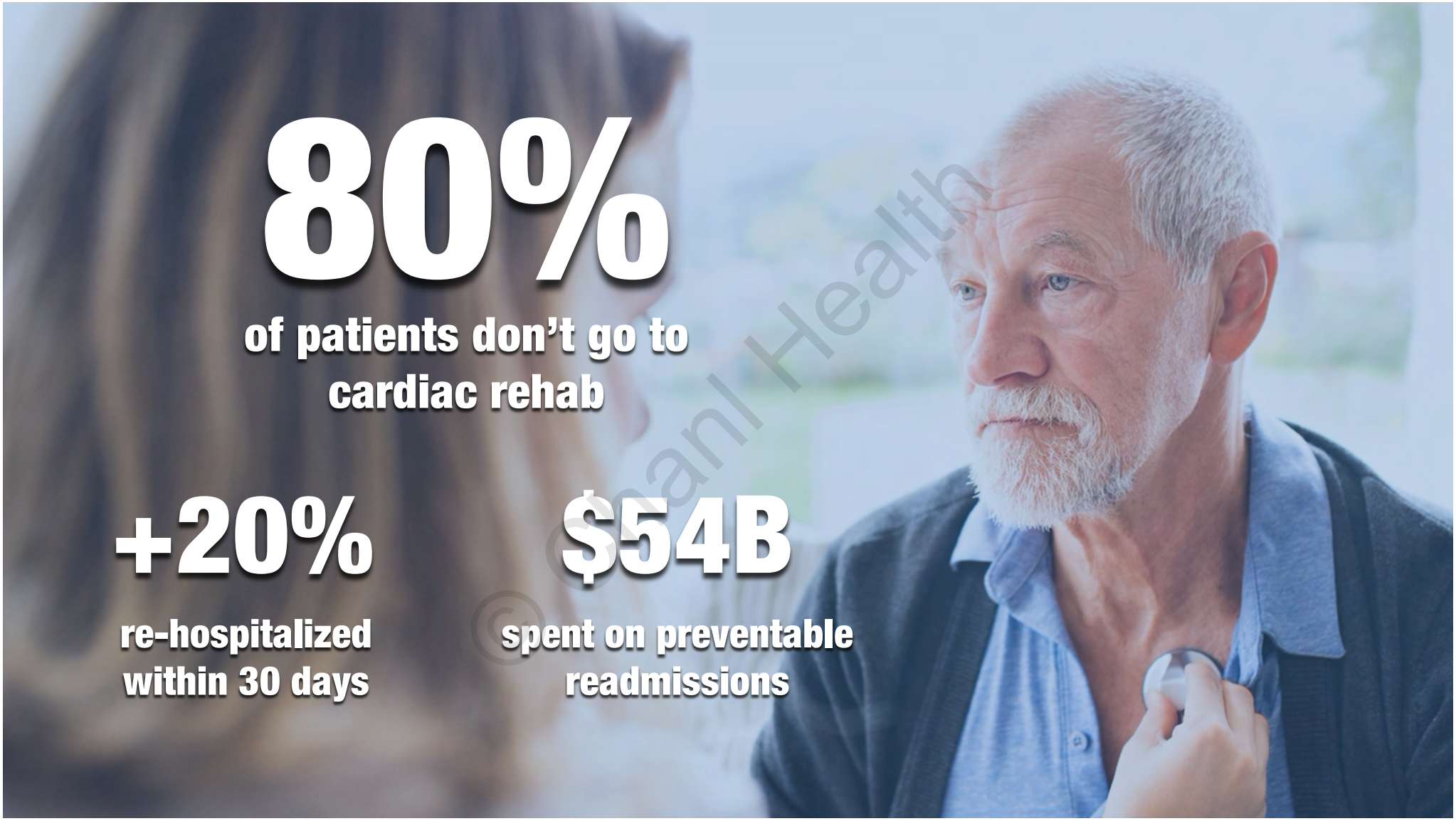
Core components: Cardiac Rehab is Cardiac Rehab
It is more than just exercise.

“Home-based” does not change the core of cardiac rehab,

it just changes the delivery method.

Cardiovascular disease is the now the leading cause of death and the largest healthcare expense in the U.S.


Cardiac Rehab Works!
2x
their chances of surviving 5+ years
30%
reduction in readmissions rate
$10k
average reduced healthcare expenses


80%
of patients don't go to cardiac rehab
+20%
re-hospitalized within 30 days
$54B
spent on preventable readmissions
© Shanl Health

Why Change?

Help more patients

What this looks like for a health system

CR Data						
SITES	Average billed sessions / month	Avererage sessions / patient	Capture Rate (Pre-Covid)	Enrolled patients/year	Total qualified patients/year	Missed patients (opportunity)
Site 1	633	19	30.00%	400	1333	933
Site 2	200	20	25.00%	120	480	360
				520	**1813**	**1293**

Why 80% don't go

Inconvenience

- Work conflicts
- Travel distance far from the rehab site
- Cannot get transportation to site

High cost

- Co-pays result in $720 to $1,800 of out-of-pocket costs.

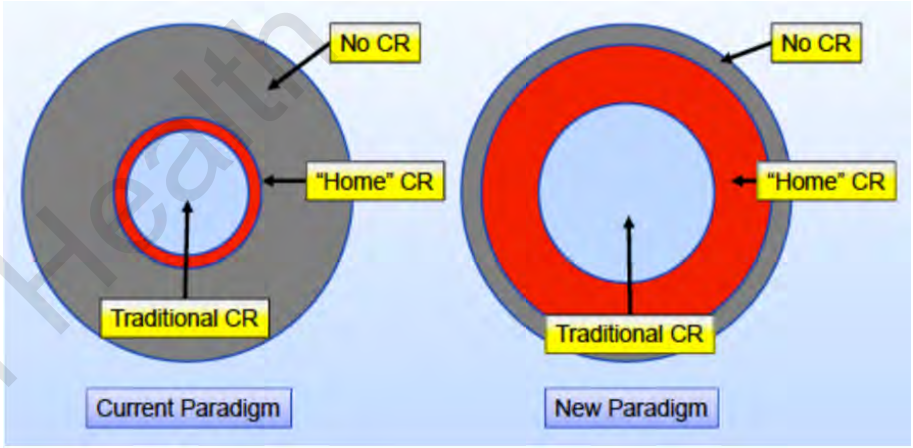
Patient experience

- Limited sites and locations
- Parking and access is troublesome
- Uncomfortable exercising with others
- Perceived lack of importance

Million Hearts®

Cardiac Rehabilitation Collaborative (CRC)

Getting to 70% CR Participation by 2022



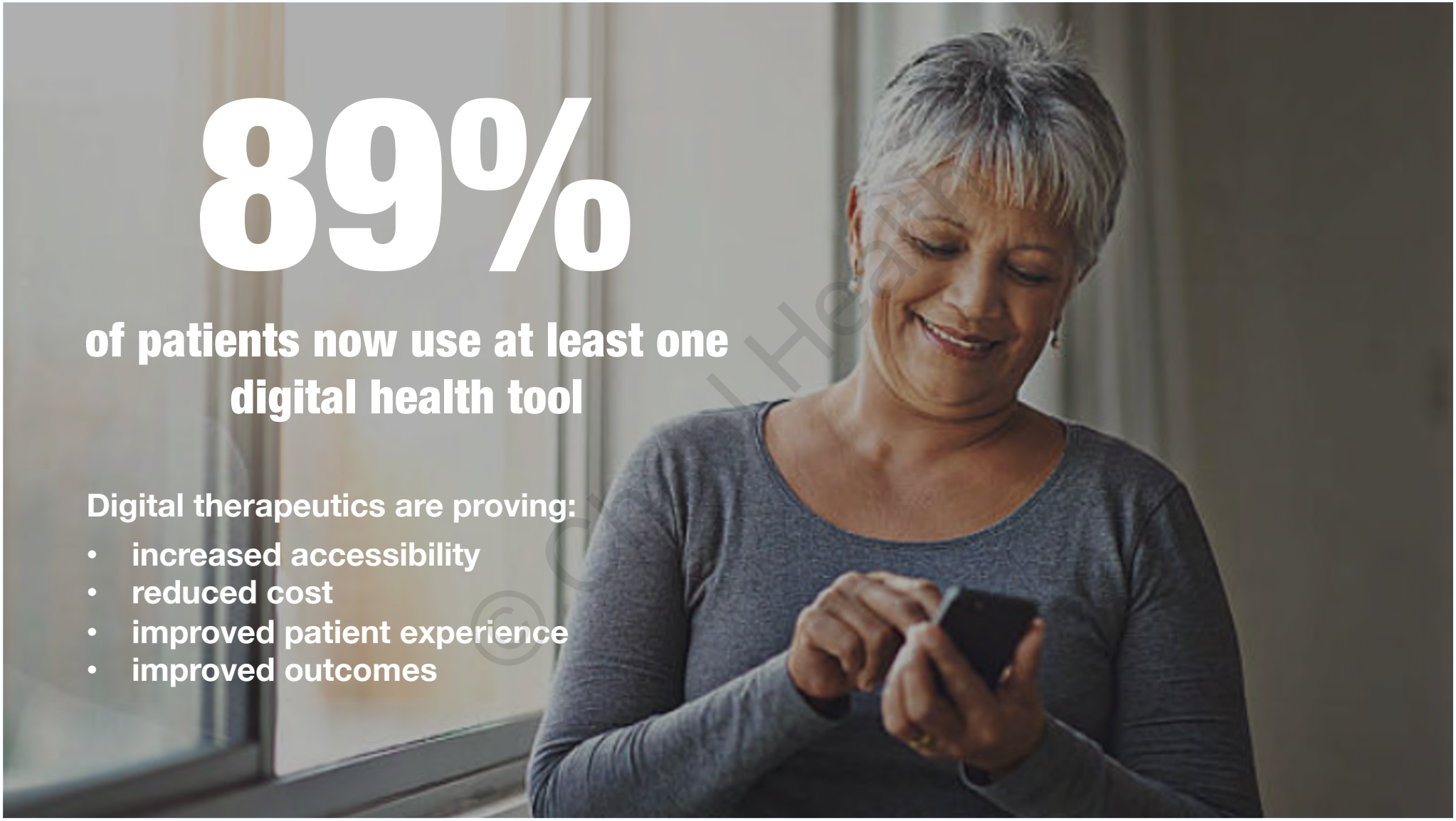
Our leaders need to break-away from the mindset that success is defined as filling their onsite classes to capacity.

"If we filled every cardiac rehabilitation program in the United States to full capacity, plus 10%, we could only serve about 45% of eligible patients. We'd need to have a 1-year waiting list."

- Randal Thomas, MD from 7/17 JAMA Perspective, Although Cardiac Rehab Saves Lives, Few Eligible Patients Take Part

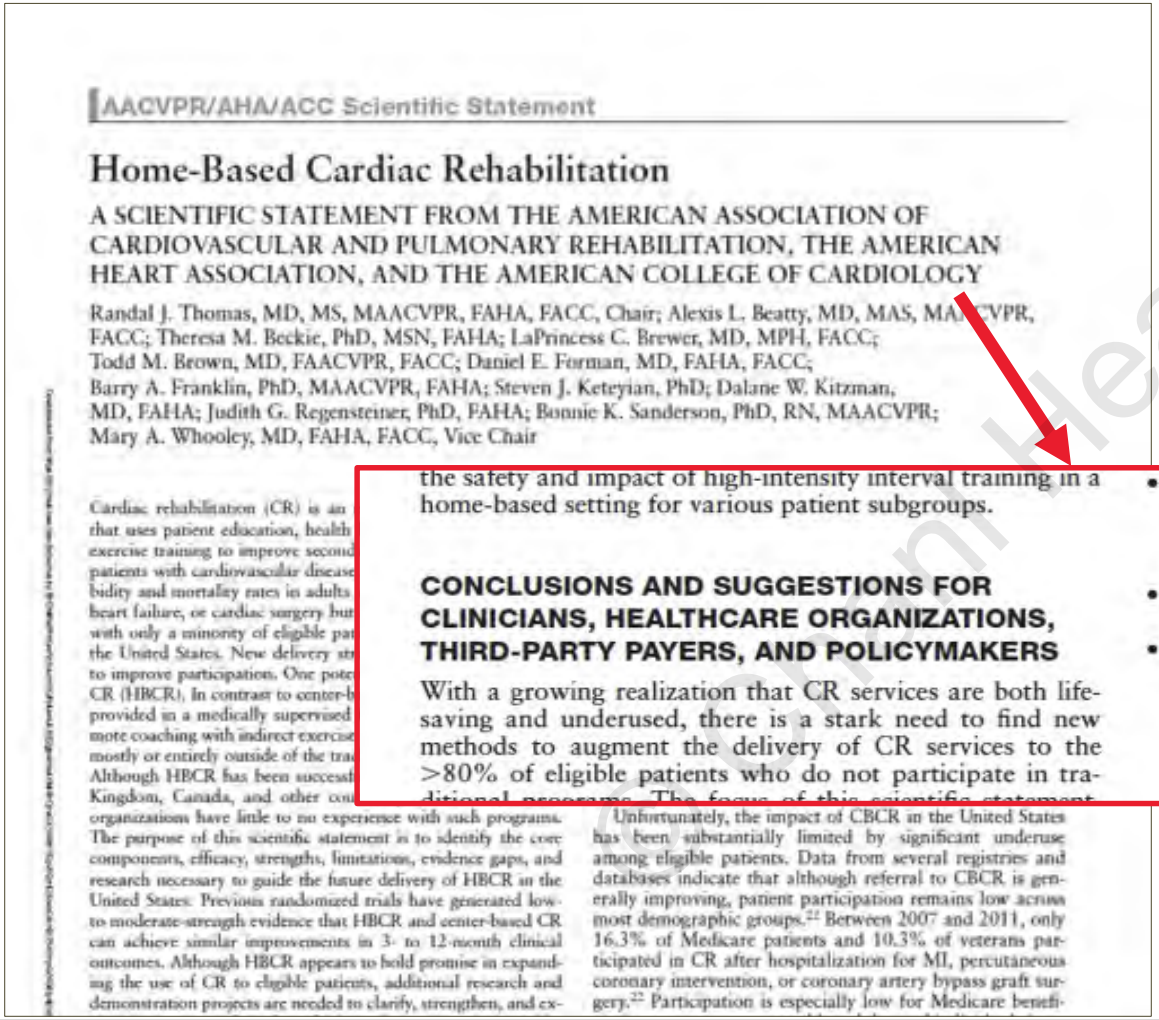
Why Change?

Virtual health is new normal


89%
of patients now use at least one digital health tool
Digital therapeutics are proving:
• increased accessibility
• reduced cost
• improved patient experience
• improved outcomes

Why Change?

Evidence and industry support it



AACVPR/AHA/ACC Scientific Statement

Home-Based Cardiac Rehabilitation

A SCIENTIFIC STATEMENT FROM THE AMERICAN ASSOCIATION OF CARDIOVASCULAR AND PULMONARY REHABILITATION, THE AMERICAN HEART ASSOCIATION, AND THE AMERICAN COLLEGE OF CARDIOLOGY

Randal J. Thomas, MD, MS, MAACVPR, FAHA, FACC, Chair; Alexis L. Beatty, MD, MAS, MA CVPR, FACC; Theresa M. Beckie, PhD, MSN, FAHA; LaPrincess C. Brewer, MD, MPH, FACC; Todd M. Brown, MD, FAACVPR, FACC; Daniel E. Forman, MD, FAHA, FACC; Barry A. Franklin, PhD, MAACVPR, FAHA; Steven J. Keteyian, PhD; Dalane W. Kitzman, MD, FAHA; Judith G. Regensteiner, PhD, FAHA; Bonnie K. Sanderson, PhD, RN, MAACVPR; Mary A. Whooley, MD, FAHA, FACC, Vice Chair

Cardiac rehabilitation (CR) is an
that uses patient education, health
exercise training to improve second
patients with cardiovascular disease
bidity and mortality rates in adults
heart failure, or cardiac surgery but
with only a minority of eligible pat
the United States. New delivery st
to improve participation. One pote
CR (HBCR). In contrast to center-b
provided in a medically supervised
mote coaching with indirect exercise
mostly or entirely outside of the tra
Although HBCR has been successf
Kingdom, Canada, and other cou
organizations have little to no experience with such programs. The purpose of this scientific statement is to identify the core components, efficacy, strengths, limitations, evidence gaps, and research necessary to guide the future delivery of HBCR in the United States. Previous randomized trials have generated low- to moderate-strength evidence that HBCR and center-based CR can achieve similar improvements in 3- to 12-month clinical outcomes. Although HBCR appears to hold promise in expanding the use of CR to eligible patients, additional research and demonstration projects are needed to clarify, strengthen, and ex-

the safety and impact of high-intensity interval training in a home-based setting for various patient subgroups.

CONCLUSIONS AND SUGGESTIONS FOR CLINICIANS, HEALTHCARE ORGANIZATIONS, THIRD-PARTY PAYERS, AND POLICYMAKERS

With a growing realization that CR services are both life-saving and underused, there is a stark need to find new methods to augment the delivery of CR services to the >80% of eligible patients who do not participate in tra-

Unfortunately, the impact of CBCR in the United States has been substantially limited by significant underuse among eligible patients. Data from several registries and databases indicate that although referral to CBCR is generally improving, patient participation remains low across most demographic groups.[22] Between 2007 and 2011, only 16.3% of Medicare patients and 10.3% of veterans participated in CR after hospitalization for MI, percutaneous coronary intervention, or coronary artery bypass graft surgery.[22] Participation is especially low for Medicare benefi-

- To potentially reduce the gap in CR participation that exists today, HBCR may be an alternative option to recommend for selected clinically stable low- to moderate-risk patients who cannot attend CBCR.
- HBCR services should be designed and tested using effective processes of care for CVD secondary prevention.
- Healthcare organizations must develop and support the following:
  - Efforts to maximize CR referral and entry through systematic approaches such as automatic referral systems and patient liaisons.

Summary of Evidence for HBCR

* Mortality, cardiac events, exercise capacity, risk factors (lipids, BP, smoking status), HRQoL

Anderson et al. Cochrane Database of Systematic Reviews 2017

RE-imagine

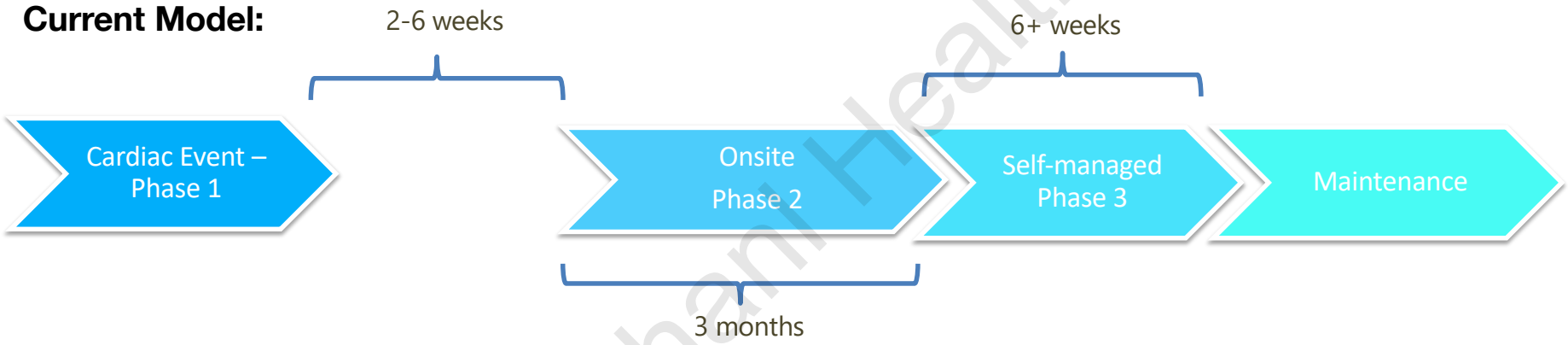
"When we are married to the idea of *"what is"*…we are challenged to see *"what can be"*

Barbra Fagan

What it looks like

Standard Care Delivery Today

Current Model:



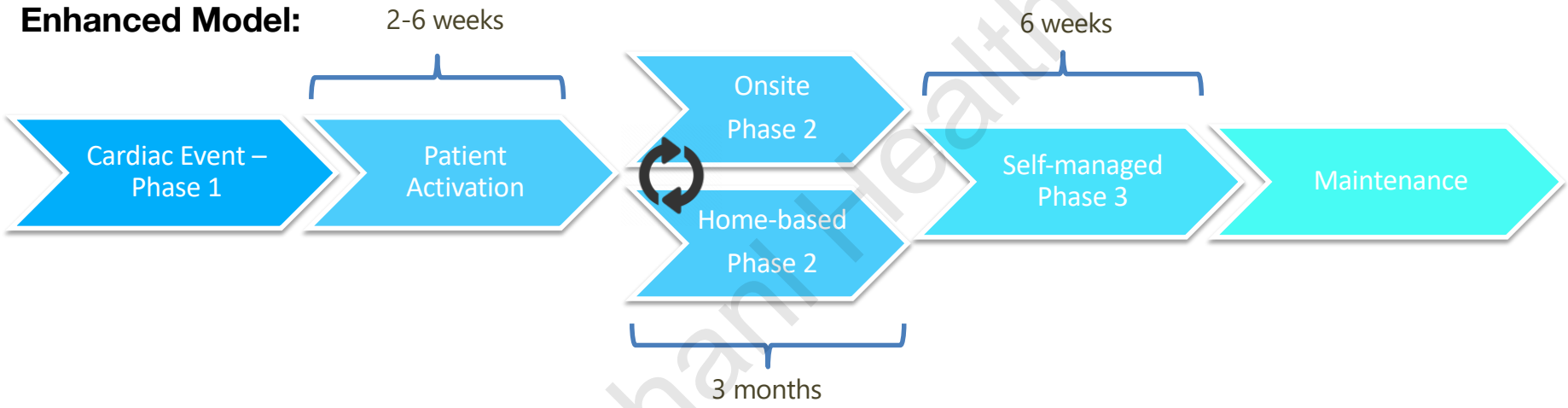
20-30% of patients begin on-site Phase 2.
3% of qualifying heart failure patients attend.
Staff-to-patient ratio of 40-to-1.

Standard Care Delivery Today

- Onsite exercise sessions
  - Average 22 onsite sessions over 8 wks
  - Typically onsite 3 days/wk
- Education
  - Half-hour education classes 1-3 times/wk
  - Staff presentation
- ITP
  - Updated every 30 days

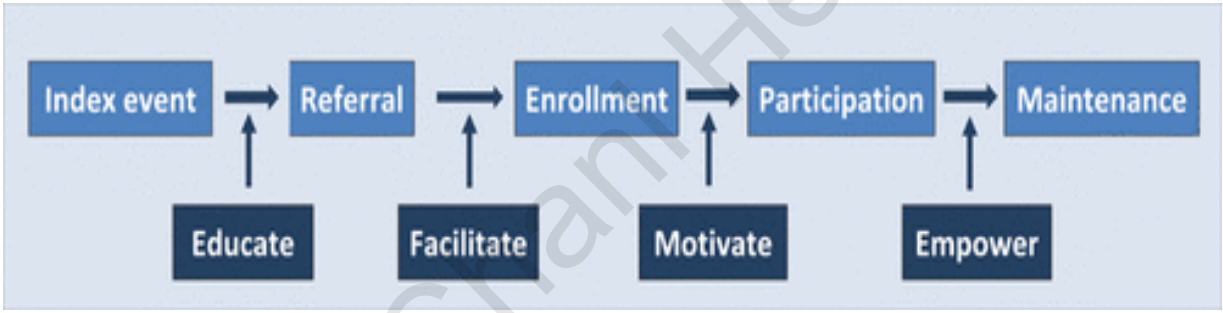
A Paradigm Shift in Cardiac Rehab

Enhanced Model:



Engage patients before full exercise sessions begin
Extend resources and support outside of just Phase 2 exercise sessions
Right mix of onsite and home-based sessions for the patient

Improve efficiencies and remove barriers



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CASE STUDY

Hybrid HBCR Program

Customization Options

- Phase 1 in-person meeting before discharge.
- Patient must have smartphone, tablet, or computer.
- 4 onsite sessions scheduled – intake, 30d, 60d, 90d.
- 12-week education curriculum delivered through app/web.
- Weekly phone or video call for coaching.
- Patient has program access w/o coaching, post Phase 2.

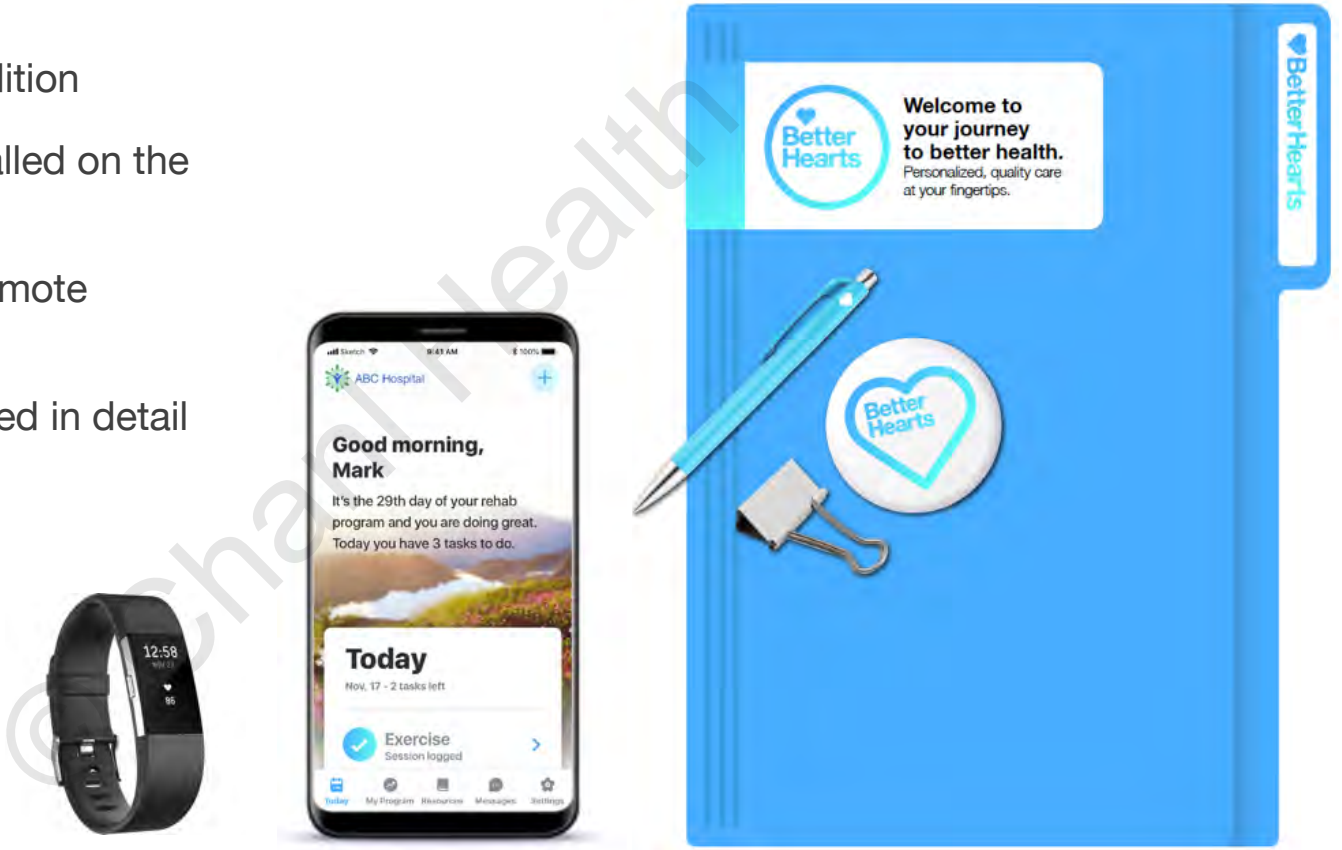
90-day schedule

Program Step	Day range
Identify a low-to-moderate risk (LMR) patient who qualifies	
Phase 1 enrollment meeting with patient before discharge ~or~ Enrollment phone call with external patient candidates	
On-site orientation – Week 1 - 90 minutes - 93798	Day 1
Week 2 – 10-minute coaching phone call	Day 4-8 up to 8-12
Week 3 – 10-minute coaching phone call	Day 11-15 up to 15-19
Week 4 – On-site exercise session – 60 minutes - 93798	Day 18-22 up to 22–26
Week 5 – Nothing	Day 25–29 up to 29-33 (Must be scheduled <30)
Week 6 - 10-minute coaching phone call	Day 32-34 up to 34-38
Week 7 – Nothing	Day 37-41 up to 41-45
Week 8 – Onsite exercise session – 60 minutes - 93798	Day 44-48 up to 48-52
Week 9 – Nothing	Day 51-55 up to 55-59
Week 10 – 10-minute coaching phone call	Day 58-62 up to 62-66
Week 11 – Nothing	Day 65-72 up to 69-73
Week 12 – Onsite exercise session and commencement – 90 minutes - 93798	Day 72-74 up to 76-80
Week 13 – Flex	Day 79-83 up to 83-87

PATIENT INTAKE

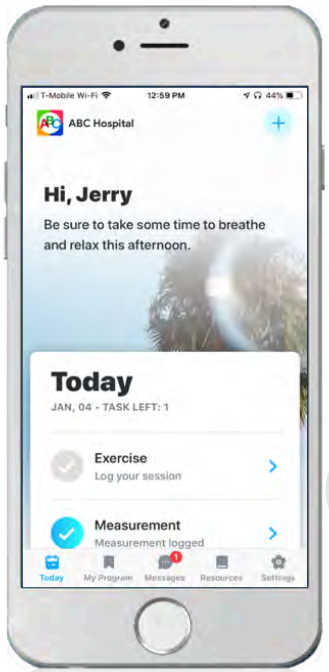
Similar to regular intake, with addition

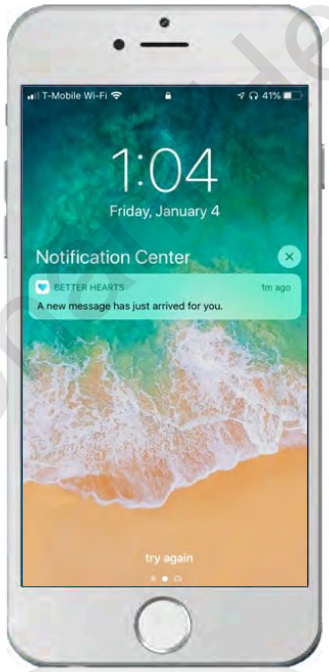
- The Better Hearts app is installed on the patient's device.
- Usage and expectations of remote participation discussed
- Home exercise plan determined in detail

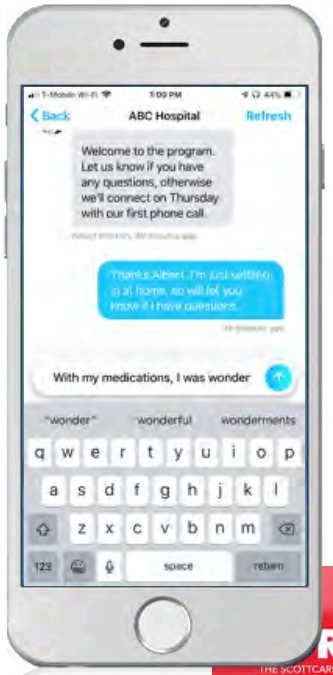


The app helps patients stay adherent

A complex care plan is simplified through a daily task list, reminders, tracking and feedback.



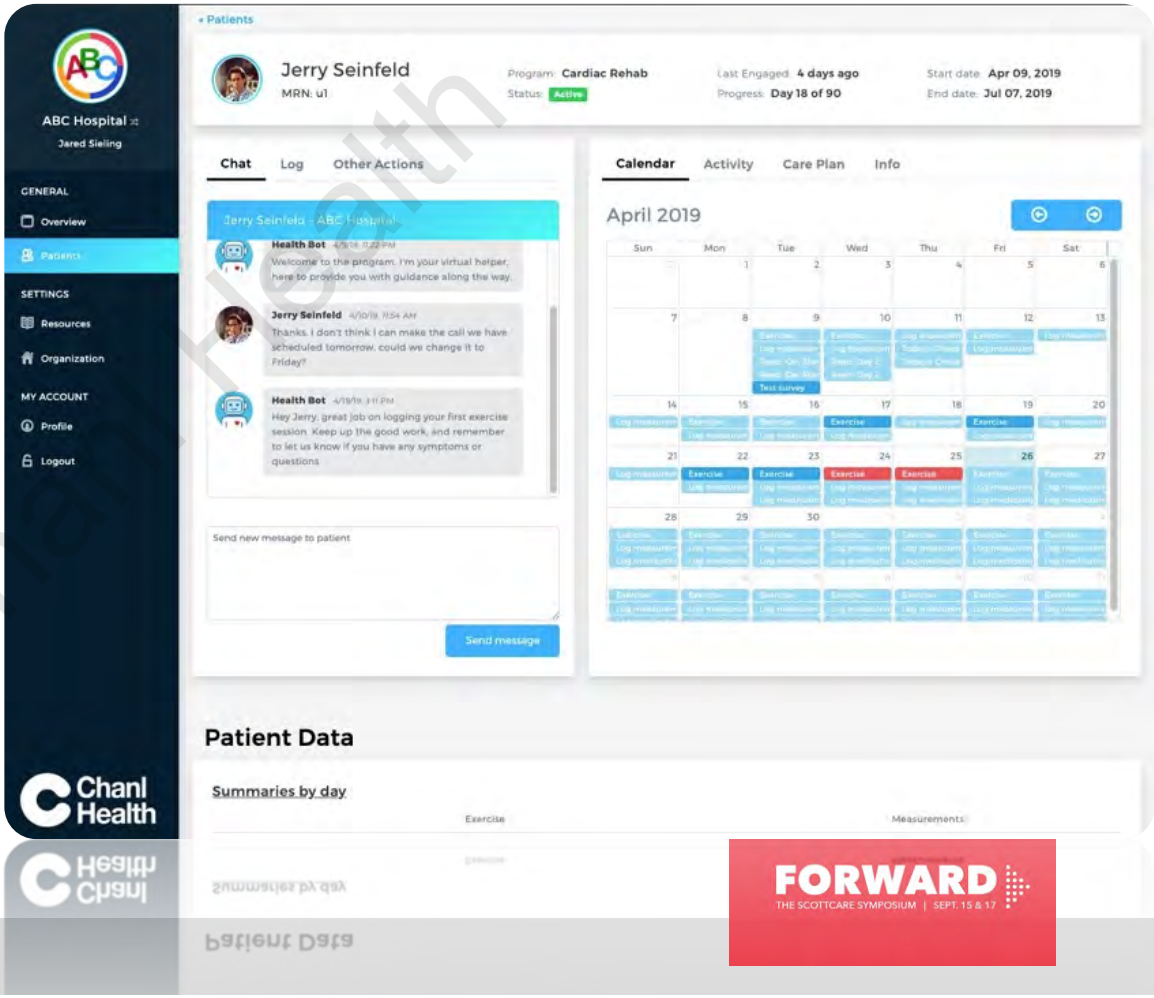




Patients are coached remotely and provided clinical oversight

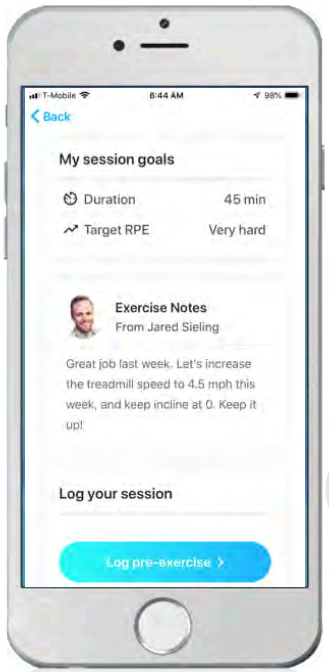
Care team staff can view patient data in real-time through the dashboard, and receive alerts for symptoms or trends.

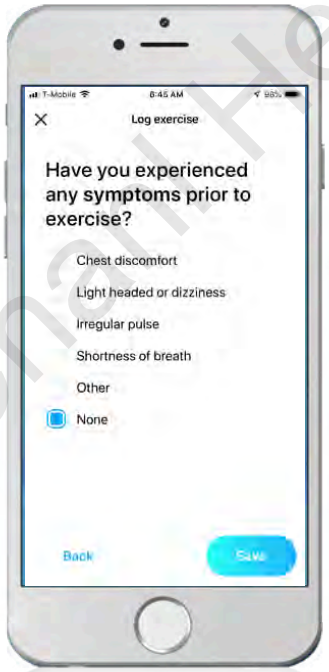
The exercise progression and care plan adjustments are discussed on short scheduled phone calls and through chat messages.

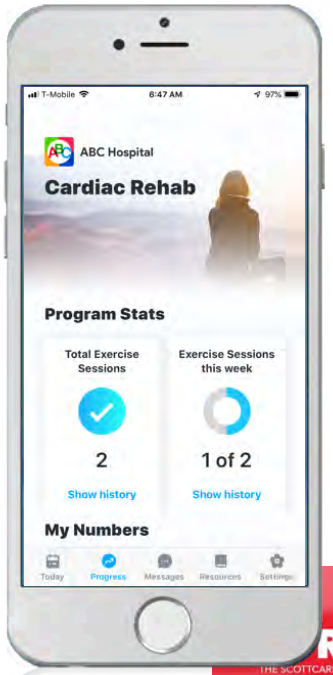


Exercise regimen and progression

Exercise is discussed with the staff and progressed based on the patient. Symptoms and details are tracked quickly and easily, and feedback is provided.

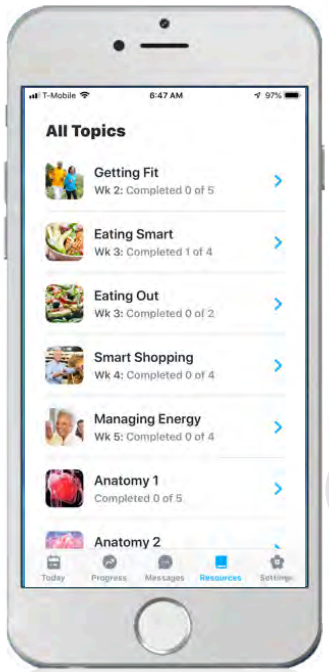


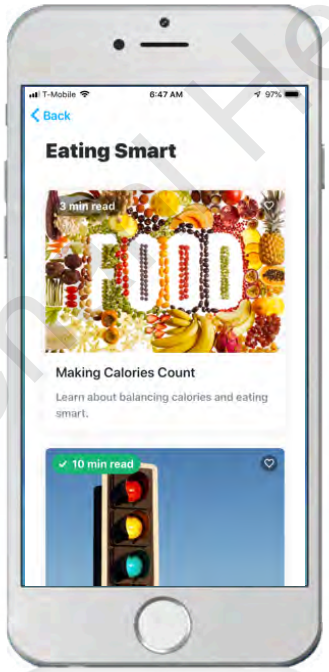


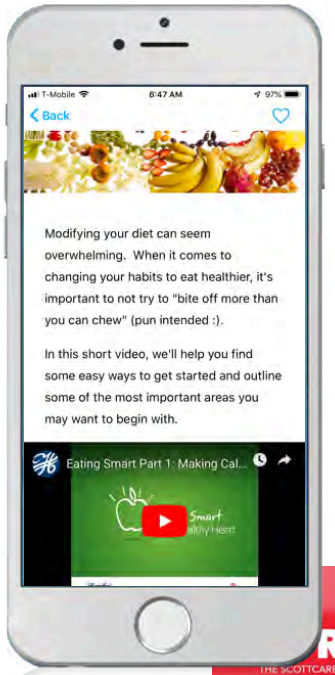


Education and resources

Education content and care plan modifications are tailored to the individual, to keep them engaged and improving.







IMPORTANT

No one-size-fits-all program

Customization Considerations

- What is structure of pre-enrollment, enrollment and onsite visits?
- Use a care management software platform?
- Which staff are responsible for what?
- Are other services integrated? Nutrition? Psychosocial?
- Which remote monitoring devices are used? Provided?
- Where is information tracked and ITP updates made?

HOME-BASED SESSIONS

Delivery Models

Requirement: 31-minute session, with SOME exercise.

1

Class-based or open-gym audio/video sessions

- Most similar to center-based programs

2

One-on-one audio/video sessions

- Allows for better counseling, but not as efficient with staff time

3

Non-audio/video session, with physician on call

- Gives patient more flexible schedule, and instructions for immediate contact

4

Non-audio-video session, no physician on call

- Most flexibility, but does not meet "immediately available" requirement

Case Study

OLYMPIC MEDICAL CENTER

SWEDISH Health Network Affiliate

Lindi Matthews
Heart Center Rehabilitation Coordinator

E: lmatthews@olympicmedical.org

Advantages

- Flexible and convenient scheduling
- Can rehab while returning to work
- Reduced waiting time to begin
- Can ease capacity issues within center
- More integrated into home routine
- May more easily integrate behavior change into daily lifestyle – radical behavioral change
- No transportation issues
- May create less fear of being active alone
- Less out of pocket costs to patient with few co-pay sessions
- Lower cost to deliver care
- Effects and outcomes may be more sustainable

Potential Disadvantages

- Less intense exercise progression
  - Perhaps in the short term
- Less social interaction
  - Engage family, friends and social media groups
- Less patient accountability
  - Overcome with technology
- Lack of published standards
  - Data being gathered
- Less monitoring and communication
  - Calls, chats, and wearables increase touch points
- Safety concerns
  - Not supports by data
- Lack of payment
  - Can be delivered profitably!! (next section)

How to support

1. Public Health Emergency reimbursement
2. CMS permanent reimbursement update
3. Profitable WITHOUT reimbursement
4. How to get started

Public Health Emergency (PHE)

Home-based CR/PR session reimbursable during PHE

- CMS made telehealth expansions on March 31 and April 30 for the PHE
- Under those, some programs are able to bill for home-based CR/PR sessions under 93797 and G0424.
  - Requires synchronous, 31-minute audio/video call with patient in their home, and include SOME exercise.

- These expansions are not black-and-white, so we encourage **all CR/PR programs to reach out to their own compliance department for approval.**

PUBLIC HEALTH EMERGENCY (PHE)

Important Dates

The timelines are a bit confusing, because they are changing and updates are applied retroactively.

	Dates
1. Current PHE without extension	3/1/20 – 10/23/20
2. PHE if extended another 90 days	3/1/20 - 1/21/21
3. Proposed rule for 2021 OPPS	8/3/20
4. Start of 2021 OPPS final rule	1/1/21

CMS

Reimbursement After PHE

2021 Home-based CR/PR session reimbursement
The OPPS Proposed Rule is in open commend period, and will be **finalized in November.**

- It addressed CR/PR directly, but left questions unanswered.
- It made permanent the allowance of ”direct physician supervision” to be virtual for CR/PR.

RPM codes (remote physiological monitoring)

RPM codes are not eligible for home-based cardiac rehab

- This does not mean your health system cannot use them, but they are not designed for HBCR programs.

IMPLEMENTATION

HBR without reimbursement

> *Hybrid rehab is financially sustainable*
>
> *WITHOUT reimbursement, and*
>
> *SERVES MORE PATIENTS!*

- Additional revenue to onsite sessions, from previously missed patients.
- Keeps patients safe within their comfort level, as COVID-19 continues.

HBCR

Revenue without reimbursement

CR Data			
SITES	Average billed sessions / month	Avererage sessions / patient	Capture Rate (Pre-Covid)
Site 1	633	19	30.00%
Site 2	200	20	25.00%
		OVERALL	27.50%

	Enrolled patients/year	Total qualified patients/year	Missed patients (opportunity)	Estimated monthly revenue (@$110/session)	Estimated sessions billed / year	Estimated annual revenue (@$110/session)
Site 1	400	1333	933	$ 69,666.67	7600	$ 836,000.00
Site 2	120	480	360	$ 22,000.00	2400	$ 264,000.00
	520	**1813**	**1293**	**$ 91,666.67**	**10000**	**$ 1,100,000.00**

Percent of missed patients captured into HBCR	20%
Total capture rate	42.9%
Number of new patients from this	259
Avg billed sessions per new patient	4
Ave. revenue per session	$ 110.00
Additional annual revenue (@$110/session)	**$ 113,813.33**

Increased patient capture

This scenario shows the added enrollment and revenue from capturing more patients that were previously missed, and adding a minimal number of billed sessions for each (minimum of 4 billed sessions).

- Example: without any reimbursement, you can increase revenue by 10%, serving 20% of the patients you previously missed, and billing for 4 onsite sessions.

Financial sustainability

A variety of models show profitability when staff and technology costs are included.

1) Patients pay out-of-pocket (less than co-pays would be), and 4 onsite sessions are billed.

2) Patients do not pay out-of-pocket, and 4 onsite sessions are billed.

3) Patient pay out-of-pocket, and zero onsite sessions are billed.

ABC Hospital

METRIC	Self-pay with CBCR	No pay with CBCR	Self-pay no CBCR
REVENUE			
Number of HBCR Patients	200	200	200
Self-pay revenue per patient	**$400.00**	**$0.00**	**$400.00**
Total HBCR revenue	**$80,000.00**	**$0.00**	**$80,000.00**
Billiable sessions	4	4	0
Additional session revenue per patient	**$440.00**	**$440.00**	**$0.00**
Total additional session revenue	**$88,000.00**	**$88,000.00**	**$0.00**
Total Revenue HBCR – Billiable Sessions	**$168,000.00**	**$88,000.00**	**$80,000.00**
EXPENSES			
Staffing salary	$28.00	$28.00	$28.00
Staffing overhead (30%)	$8.40	$8.40	$8.40
Total hourly salary	$36.40	$36.40	$36.40
Minutes per patient for HBCR	240	240	240
Total staff cost per patient for HBCR	$145.60	$145.60	$145.60
Software cost per patient	$200.00	$200.00	$200.00
Total HBCR program cost per patient	**$345.60**	**$345.60**	**$345.60**
Total Expenses	**$69,120.00**	**$69,120.00**	**$69,120.00**
Revenue minus expenses (profit)	**$98,880.00**	**$18,880.00**	**$10,880.00**

How to get started

If you are leading the effort, you'll need a strong proposal for the decision makers.

1. Complete a high-level, initial analysis
    - Identify potential savings, patient outcome improvements, and costs
2. Proposal to decision makers
3. Get final approval (contract, IT review, etc)
4. Customize program and train staff
5. Launch with patients
6. Ongoing adjustments and improvements

INPUT

Initial Impact Analysis

To understand how HBCR may impact your program, it helps to start with this information.

- Your current referral rate
- Your capture rate
- Your discharge to start of rehab <21 days?
- Your waitlist
- Is your organization involved in the bundles?
- Know and understand your completion rate
- How are you delivering education
- Your current outcomes

Chanl Health

We partner with healthcare organizations to help them implement virtual cardiopulmonary rehab:

Our partners include:

Advocate Aurora Health
HealthPartners
DEPARTMENT OF HEALTH
MultiCare
SCL Health
MONTANA DPHHS
Healthy People. Healthy Communities.
UCSF Health
OLYMPIC MEDICAL CENTER
Stony Brook Medicine
EISENHOWER HEALTH

Testimonials

"I must admit I was skeptical at first, but now it's clear that this is the future."
– Julie, Cardiac Rehab Staff

"I'm uncomfortable in crowds, so wouldn't have gone onsite. At home, having the accountability and support from the staff helped me get in a routine."
- Bruce, Patient

"The home-based program gives us the chance to capture more patients and reduce time from discharge to rehab.
– Cindy, VP of Heart Institute

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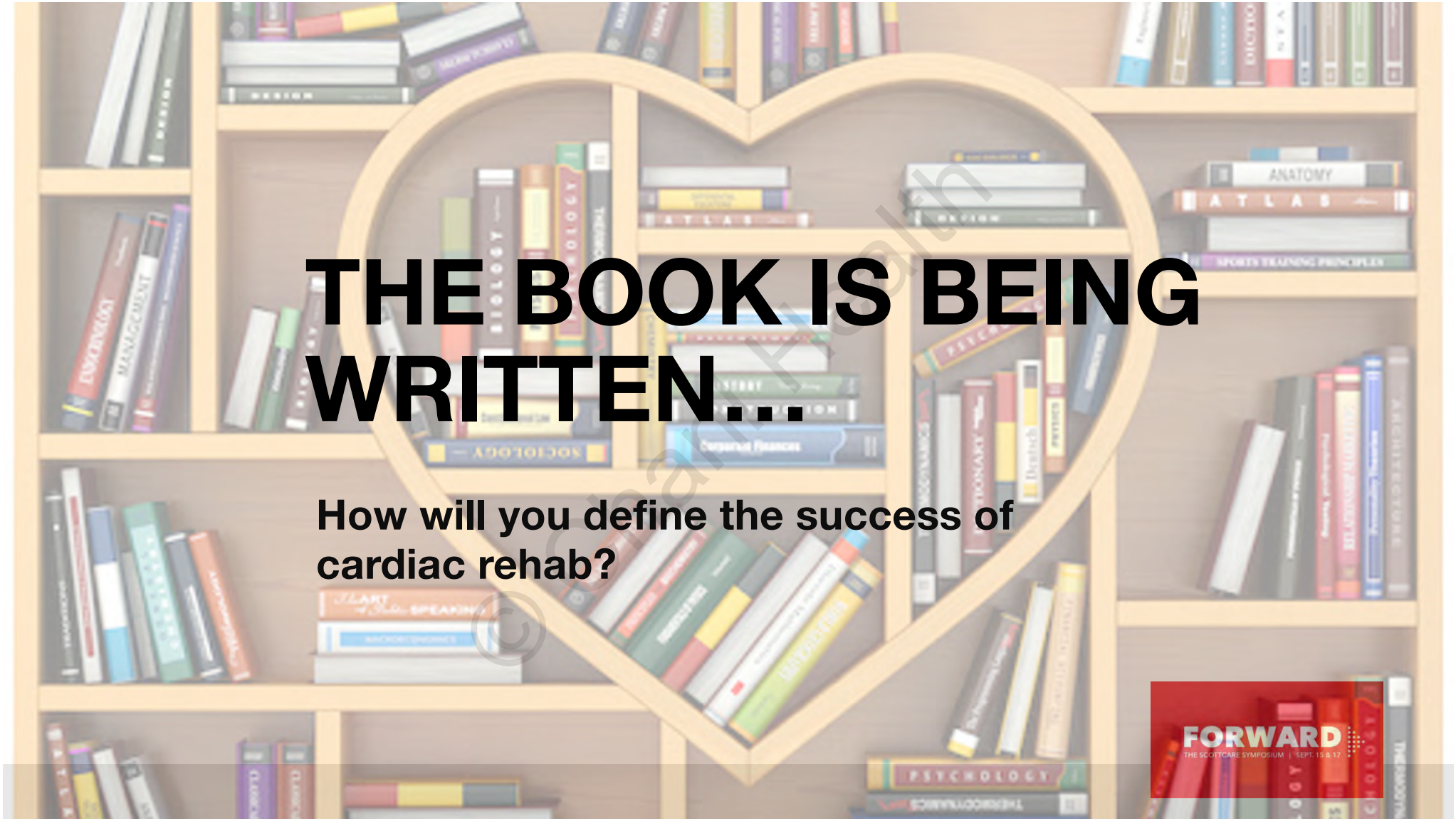

Questions