

HeartHome: Adapting home-based cardiac rehab to increase access & reach for underserved populations

Presenter: Cheryl B. Jones, PhD, RN, FAAN

Background

- While evidence suggests that cardiac rehabilitation (CR) can empower patients to adopt healthier behaviors and reduce CVD risk, cardiac rehabilitation (CR) is woefully underutilized.
- Home-based CR (HBCR) models have the potential to overcome barriers to CR access.
- However HBCR models often lack social support and face-to-face monitoring/communication.

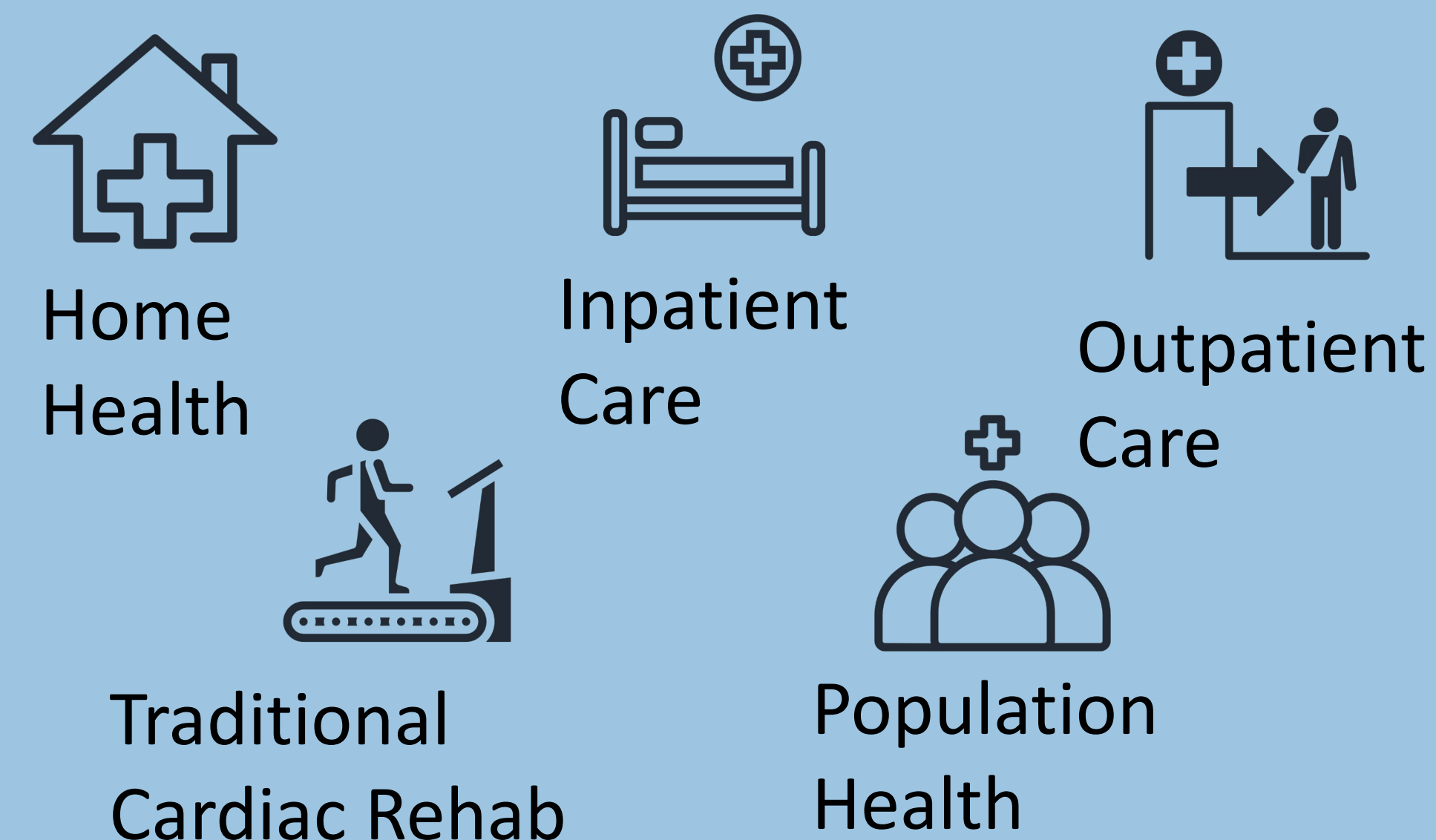
Therefore, we are designing an adapted model of HBCR that blends center-based cardiac rehab with home health care.

Methods

- We reviewed the literature to identify core components of and gaps in HBCR models.
- We brought together expert clinicians, researchers, and stakeholders to design a person-centered intervention for a complex organizational system.
- Core HeartHome intervention components were derived from American Heart Association guidelines.
- Process mapping was used to understand local CR processes and identify barriers and facilitators.
- An implementation team helped design a plan to embed and integrate HeartHome into the system, and engage patients, clinicians, and stakeholders.
- Nurses were trained in CVD care management and prevention, home care, group facilitation, and behavioral modification.

Results


The adaptation process resulted in a nurse-driven CR program that can be completed at home. Program adaptations required detailed planning and collaboration across complex organizational boundaries:



Implications for D&I Research

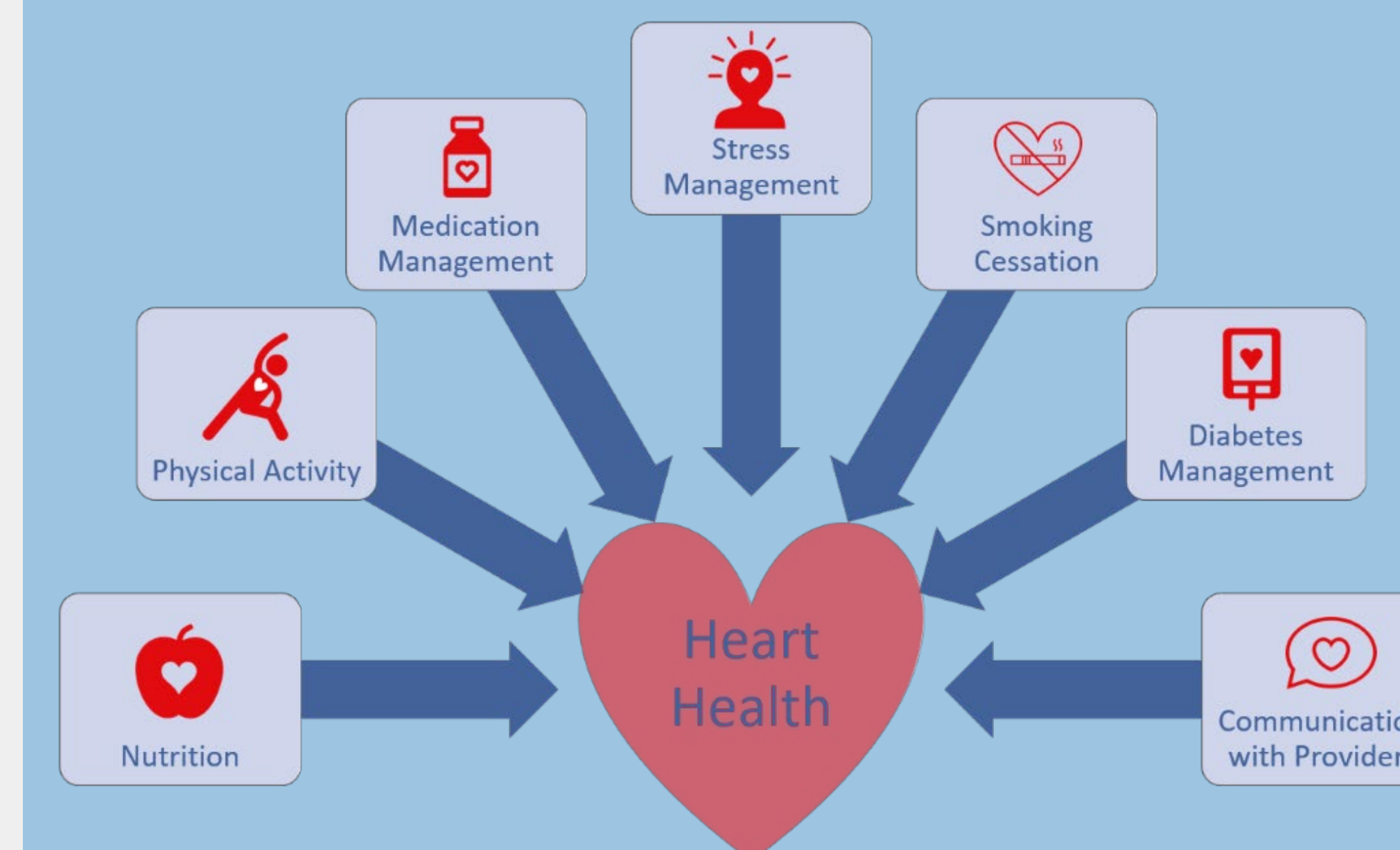
HeartHome has elucidated several strategies for adapting a complex evidence-based intervention spanning multiple organizations and systems. This process helped identify active ingredients and essential components for a successful HBCR program.

Adaptations of complex interventions require **detailed planning** and **collaboration** across multiple organizations to engage **stakeholders.**

 **HeartHome: Partnering to change peoples' lives where they live, work, and thrive!**



HeartHome Program Components



5 Home Visits

- ▶ Orientation
- 🍏 Nutrition
- 🏃 Physical Activity
- 💡 Stress Management
- ⏮ Wrap-Up
- 🎯 Goal Setting
- 📞 Check-In Calls
- 📱 Intentional Text Message Reminders

7 Online Group Classes

- 📖 Medication Management
- 🚭 Smoking Cessation
- 🗣 Communication
- 📖 Diabetes
- 🩺 Cardiovascular Disease
- 🏃 Physical Activity 2
- 📄 Moving Forward

HeartHome Intervention Material



Next Steps

Guided by the RE-AIM framework, we are in the process of pilot testing HeartHome, our newly adapted model of home-based cardiac rehab.

The HeartHome Team: Sidney Smith, Mark Toles, Mary Wangen, Alberta Tran, Meriel McCollum, Jennifer Leeman



ACKNOWLEDGEMENTS
This research is supported by The Duke Endowment. The content is solely the responsibility of the authors and does not necessarily represent the official views of The Duke Endowment. The authors would like to acknowledge the following contributors: Madeline Neal, Tali Horn, Anne Valentine, Agnes Royal, Lisa Yow, Connor Lutz, Terry Thomas, Nancy Houston Miller, Gwen Sherwood, Jamie Crandall, Mary Ann Compton, and Deborah Springer.