



Department of  
Epidemiology &  
Biostatistics

# Cardiac Rehabilitation for Breast Cancer Survivors

Alexis Beatty, MD, MAS

Associate Professor, Department of Epidemiology and Biostatistics, Medicine (Cardiology)

10/20/2022

# Alexis Beatty, MD, MAS

Associate Professor, UCSF

- Born and raised in CA
- Duke for Biomedical Engineering and MD
- Residency at MGH (Boston), Cardiology Fellowship at UCSF
- See general cardiology patients
- Study new delivery models for cardiac rehab, digital health



# Research suggests that exercise and lifestyle programs can help breast cancer patients

- Improved exercise capacity
- Improved patient-reported outcomes
- Possibly:
  - Lower risk of cardiovascular events
  - Improved cardiovascular risk factors

# Cardiac Rehab (CR) is a multi-component program



Physical activity



Healthy eating



Tobacco cessation

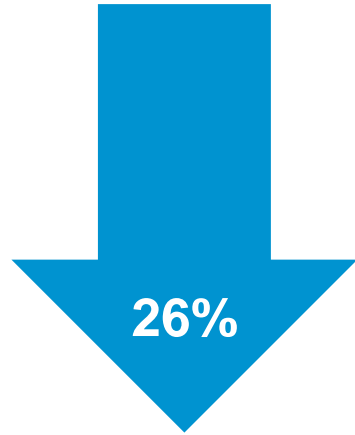


Medication  
adherence

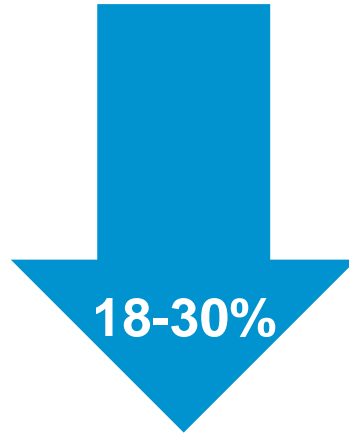


Psychosocial  
wellness

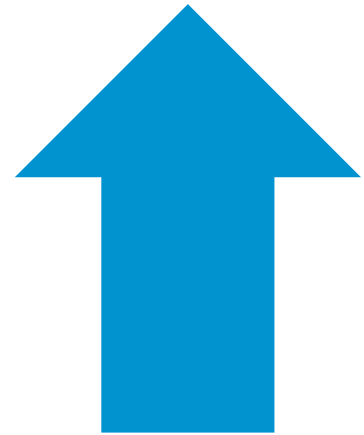
# Cardiac rehab is beneficial



Cardiovascular  
mortality  
*(coronary heart disease)*



Hospitalizations



Quality of life

Can we translate cardiac rehab to breast cancer survivors?

# HEART-ACT

HEART Health After Cancer Treatment

Breast Cancer Survivors at San Francisco General Hospital



- Phase 1 (current)
  - Interviews with 30 people
  - Human-centered design sessions
  - English, Spanish, Cantonese
- Phase 2 (2023)
  - Pilot 12-week intervention
  - 50 people



# Principles

- Individualized
- Address health behaviors that patients can manage
- Meet patients where they are





After I become aware of the benefits of exercise, I feel that it's quite beneficial to physical and mental health, and my body health has also improved. ... Previously I didn't do exercise. After doing exercise, it helps me a lot.



Not everyone can withstand such exercises. It varies from person to person. I have worry too. Some people aren't suitable for such exercises, if they do exercise with difficulty, then something wrong will happen to their body.



I do my best to eat right. And I know I had a pretty good idea of what is bad for us and what isn't. And I've seen the list of cancer causing foods, donuts, French fries, bacon, cookies. And I enjoy cooking. So it just exploring recipes, techniques of healthy food that would be enjoyable. And learning how to feed myself properly. That's essential to healing.

# Summary: consensus so far...

- **Multi-disciplinary program needed and wanted**
  - **Structure/delivery of program**
    - In-person and group preferred by some but Zoom/virtual has convenience
    - Professional speakers
    - Language concordant
    - Support for overcoming barriers (e.g., taxi vouchers)
  - **Content**
    - Topics: Physical activity, Nutrition, Mental wellbeing, Cardiovascular risk factors, Survivorship, Other
    - Physical activity/exercise
      - Part of daily life/routine
      - Address limitations, safety and fear of doing too much/too strenuous
- 
- Nutrition: practical – recipes, shopping lists

# Overall Patient Journey Map



12 weeks

- Referral**
- Intake (in-person)**
- G = Group Education (in-person)**
- I = Individual Counseling (in-person or virtual)**
- E = Exercise (on own or at gym)**
- Graduation (in-person)**

# Program Components



**Each item will have an individualized assessment, goal, and plan.**

# Next steps

- Complete Human-Centered Design Sessions (2022)
- Begin Phase 2 – Pilot Study in 50 patients (early 2023) at ZSFG

Questions?  
alexis.beatty@ucsf.edu

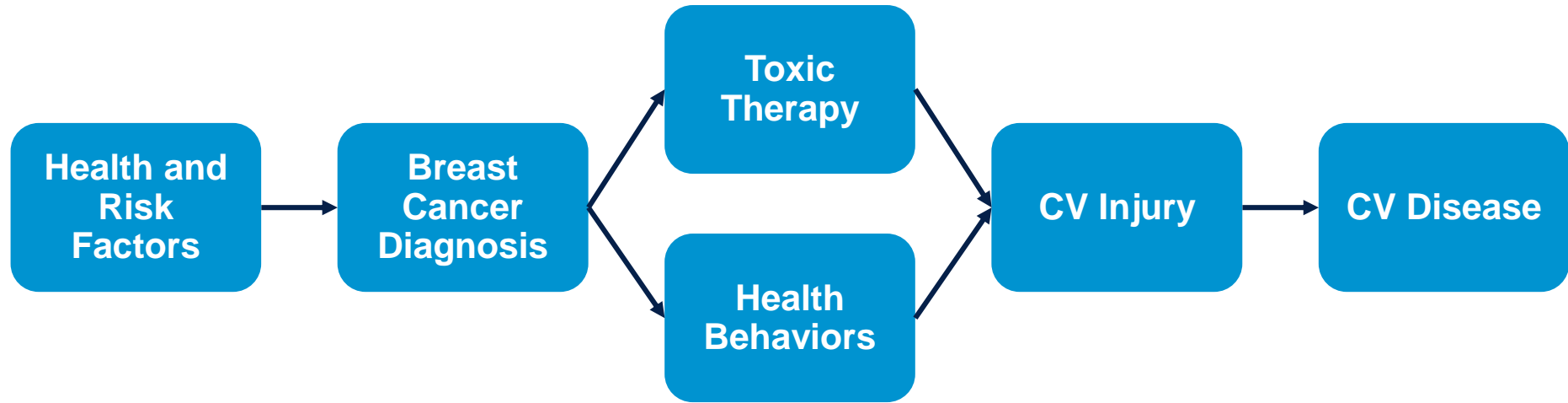






# Extra Slides

# Breast Cancer & Cardiovascular (CV) Risk



# Breast Cancer & Cardiovascular (CV) Risk

