

# Cook County Health: Semiannual Disparities Report – Change Institute

## Item 24-0403

### Presenters:

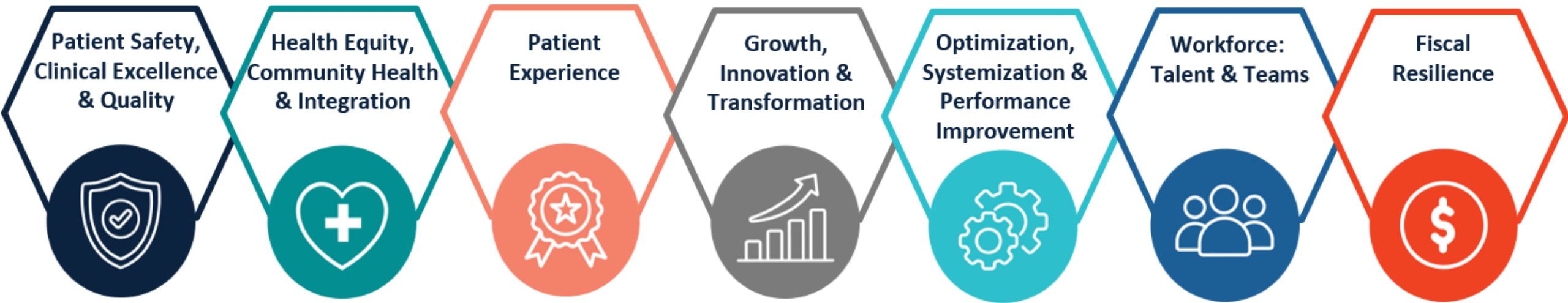
- Dr. Erik Mikaitis, Interim CEO
- Dr. Rami Doukky, Chief Division of Cardiology / Interim Director Heart Institute

February 27, 2024



COOK COUNTY  
HEALTH

# Cook County Health Strategic Pillars





**The Change  
Institute**  
of Cook County Health

# The Change Institute

**Convening health, business, academic and community leaders to deliver improved, equitable health outcomes**

## **Primary Care**

- Improving access to preventive and specialty care across all communities

## **Acute Care**

- Addressing immediate and emergency health needs with universal high-quality care

## **Prevention**

- Promoting health literacy and empowering patients with information and resources to define their own health journey

## **Social Risk Factors & Disruptions**

- Addressing the social and economic infrastructure that directly affect population health



# The Change Institute



**The Change  
Institute**  
of Cook County Health

Our work begins with four of the most prevalent causes of premature death in Cook County. By addressing the stages of care for each disease, we will identify actionable steps that deliver immediate impact and improve health outcomes for generations to come.



Cancer



Stroke



Diabetes



Heart Disease



COOK COUNTY  
**HEALTH**

**Sign up to receive updates at [cicch.org](https://www.cicch.org)**



# Heart Disease: Heart Institute Update

Rami Doukky, MD

Chair of Cardiology

Interim Director, Heart Institute



COOK COUNTY  
HEALTH



**Heart Institute**  
**Neurosciences Service Line**  
**Cancer Center**

**SCOPE**

**Develop a comprehensive, academic, world-class, equitable, cardiac care program spanning from prevention to complex heart disease**

**GOALS**

**Short Term**

- Build a comprehensive cardiac care program
- Introduce cutting edge cardiac service lines
- Address immediate health inequities in heart diseases
- Financial resilience and sustainability

**Long Term**

- Elevate quality, reputation, and academic stature
- Destination for cardiac care in Chicago

# COOK COUNTY HEALTH HEART INSTITUTE



*Cardiovascular  
Professionals Week*

## The Team

- 18 Attending Cardiologists
  - 11 Noninvasive Cardiologists
  - 4 Interventional Cardiologists
  - 2 Electrophysiologists
  - 1 Heart Failure Specialist

- 1.25 FTE cardiac surgeon

- 8 Advanced Practice Providers

### Academic Program

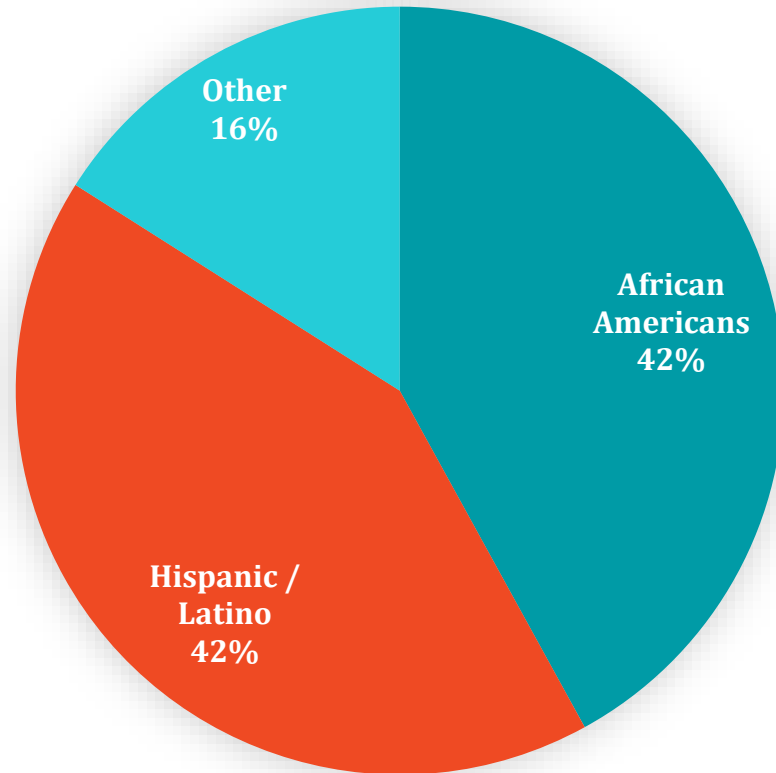
- 2 Professors
- 8 Associate Professors
- 9 Assistant Professors

### Training Program

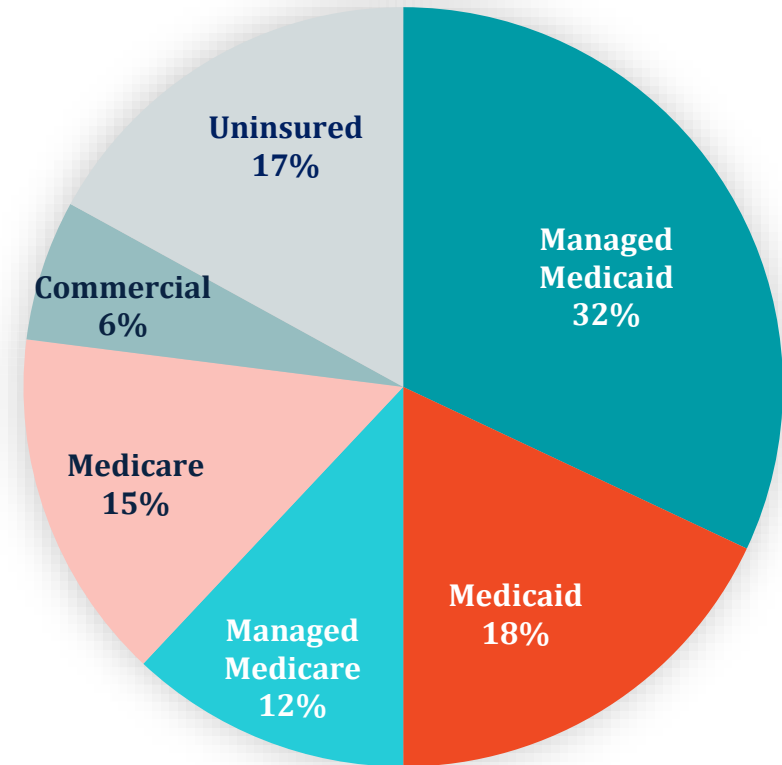
- 11 Cardiology Fellows
- 1 Interventional Cardiology Fellow

# Our Patients

## Race / Ethnicity



## Payor





# Heart Institute

## Collaborations

- Cardiology
- Cardiac Surgery
- Radiology
- Anesthesiology
- Emergency department
- Endocrinology
- Pulmonary Medicine
- Nursing
- Hospital Medicine
- General Internal Medicine
- ACHN



**Outpatient**

**COOK COUNTY  
HEALTH  
HEART INSTITUTE**



**COOK COUNTY  
HEALTH**

# Outpatient Access

## Subspecialties Clinics

- General Cardiology
- Cardiac Surgery
- **Heart Failure**
- **Palliative Cardiology**
- **Structural Heart Disease**
- **Lipids disorders**
- **Electrophysiology**
- **Device clinic**
- **CV Genetics**
- **Cardio-oncology**
- **HIV Cardiology (CORE)**
- **Heart Disease in Women (2024)**

## Locations

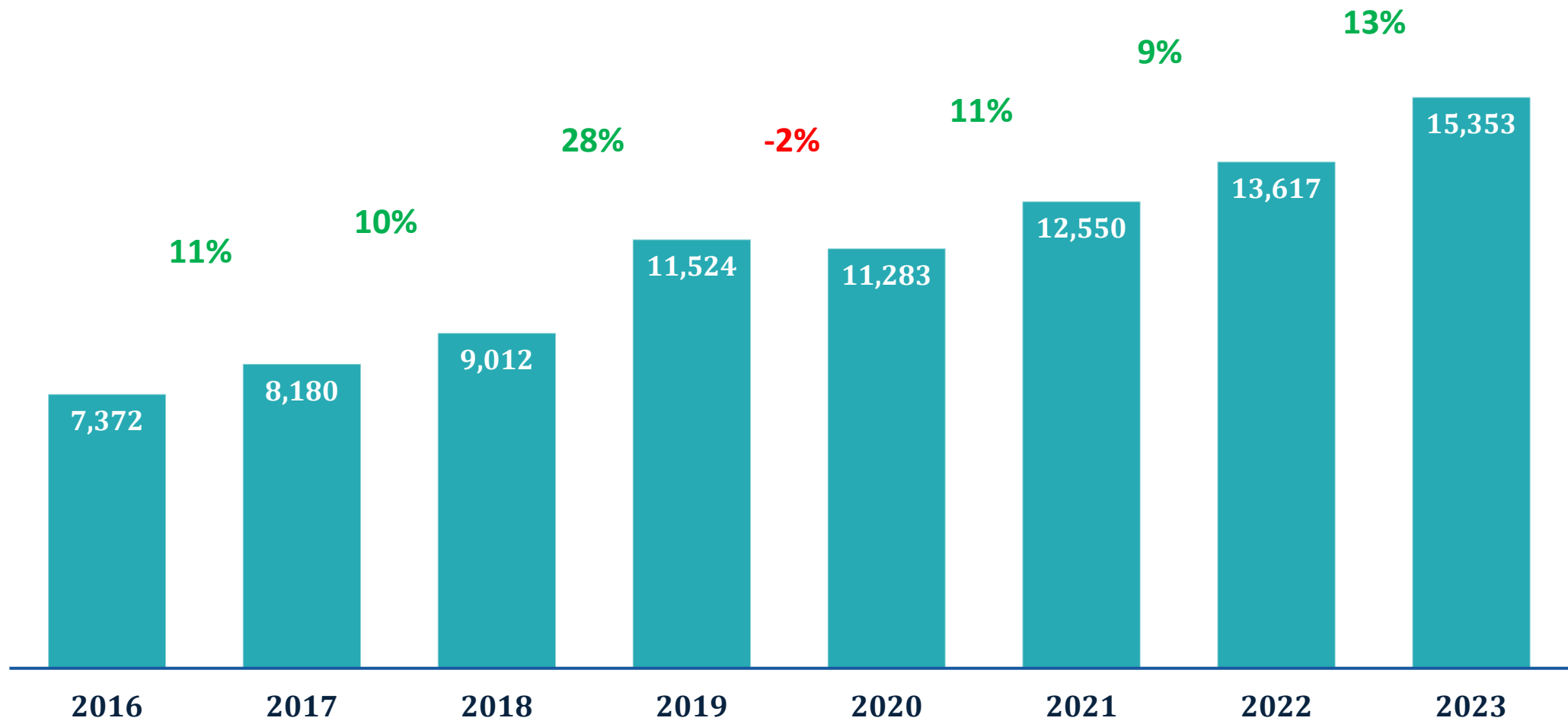
1. Stroger, Specialty Care Center
2. Sengstacke
3. Blue Island
4. Cermak Health Center
5. **CORE Center**

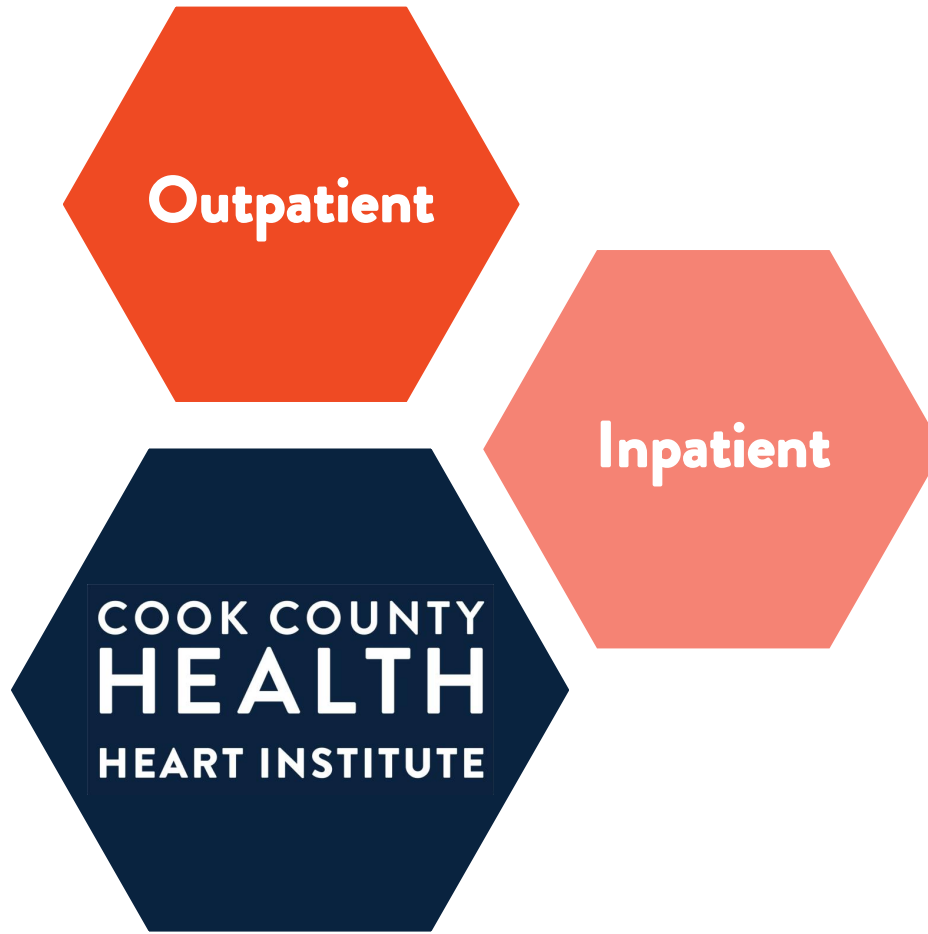
## New Locations (2023)

6. North Riverside
7. Arlington Heights
8. Belmont Cragin



# Annual Outpatient Volume - Stroger





# Inpatient Cardiology

## Cardiac Care Unit (CCU)

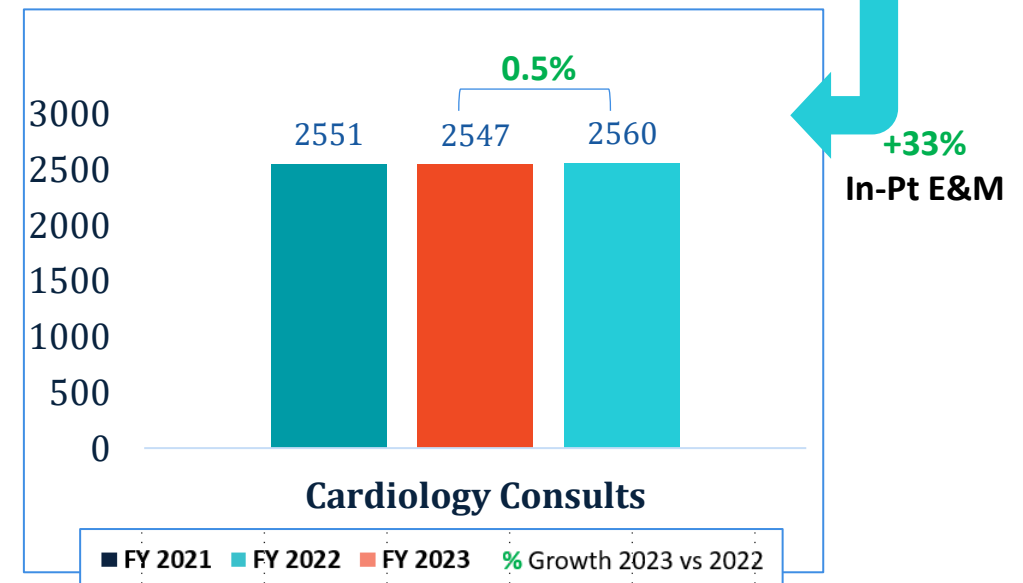
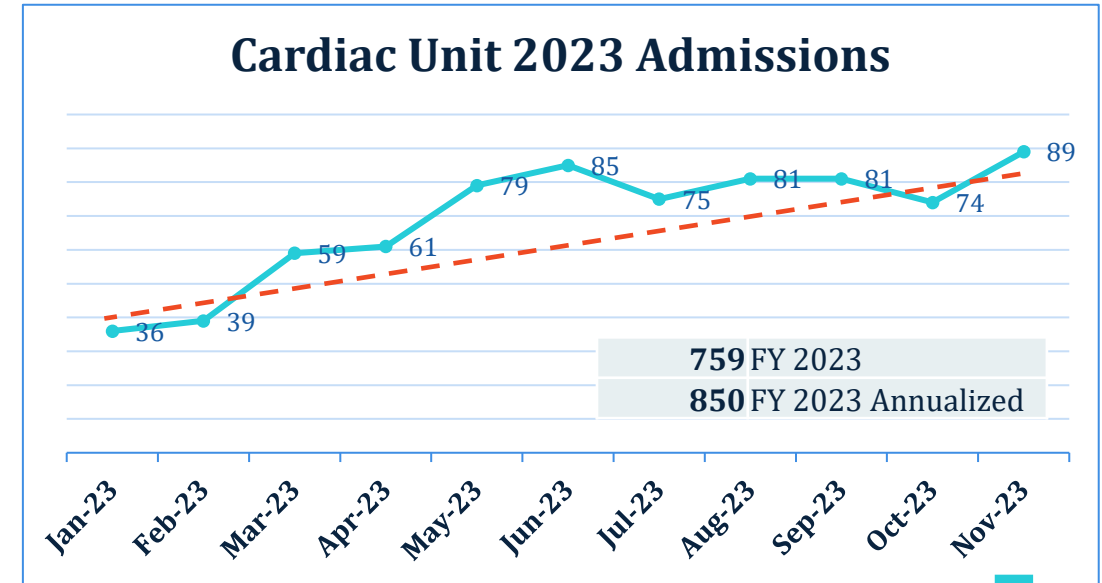
- 12 beds

## Consultation Service

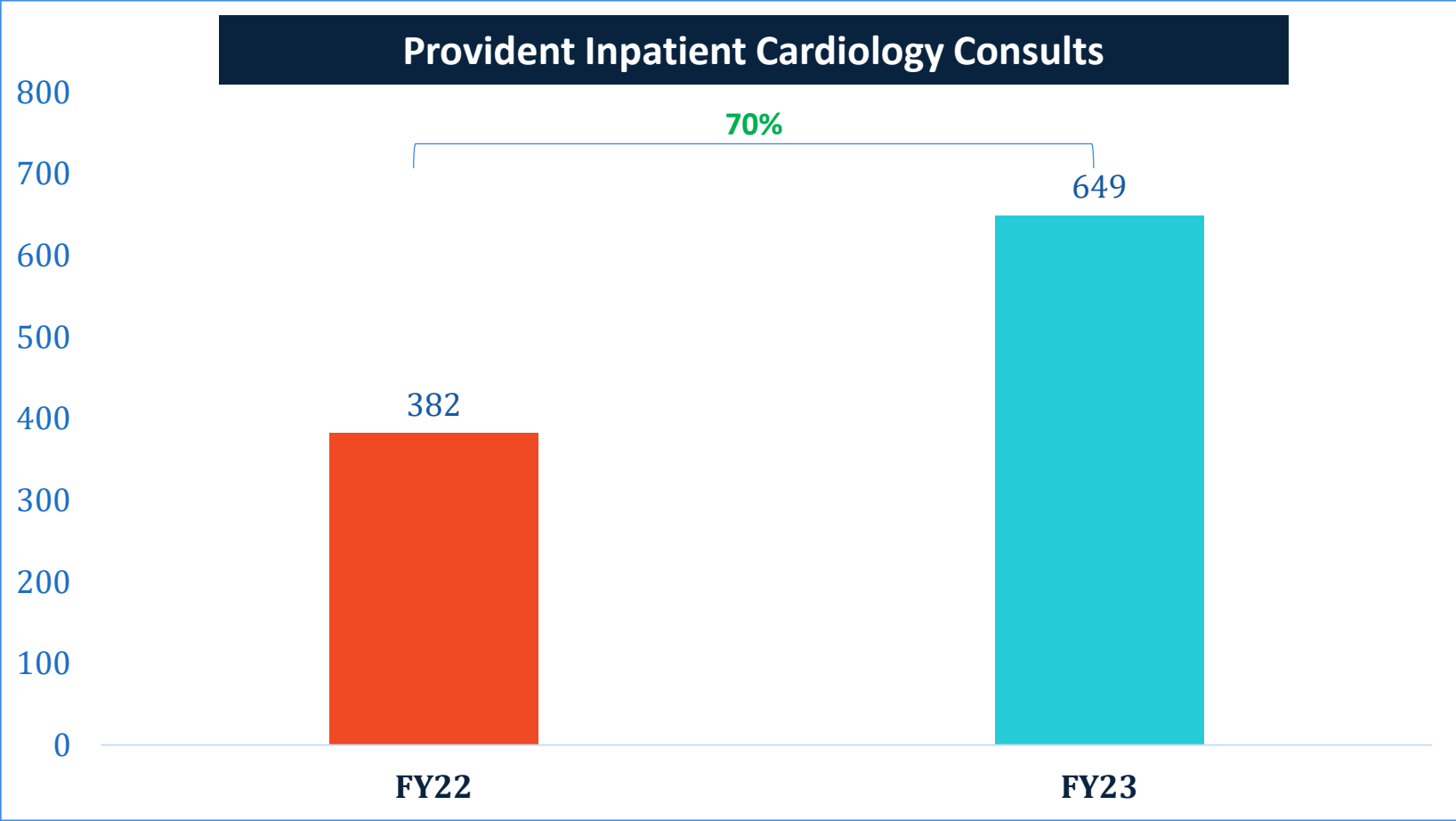
- General cardiology – Stroger
- **Electrophysiology (2022)**
- **Advanced Heart Failure (2022)**
- ↑General Cardiology - Provident

## Cardiac Unit

- Cardiology run
- January 2023
- 13 beds
- ↑intermediate care unit (June 2024)



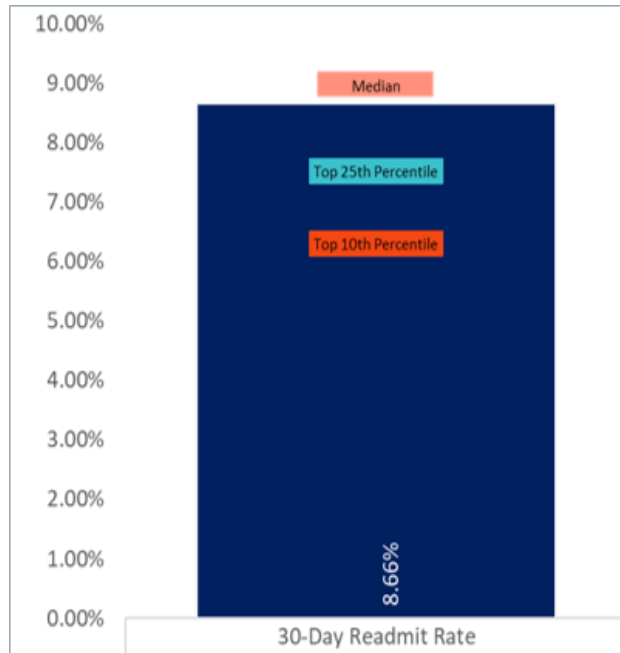
# Inpatient Consultation at Provident





# Heart Attack

## 30-Day Readmission Rate



2023

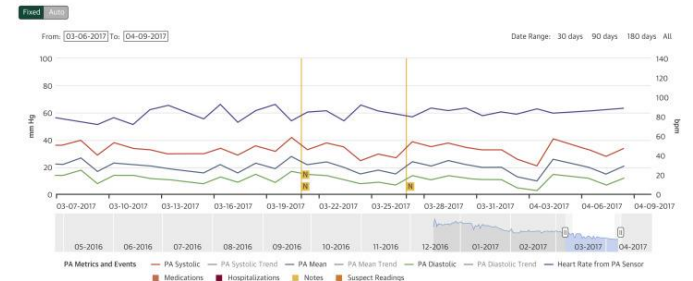
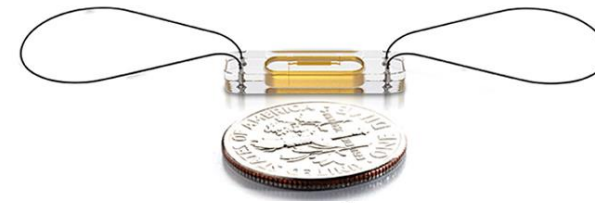
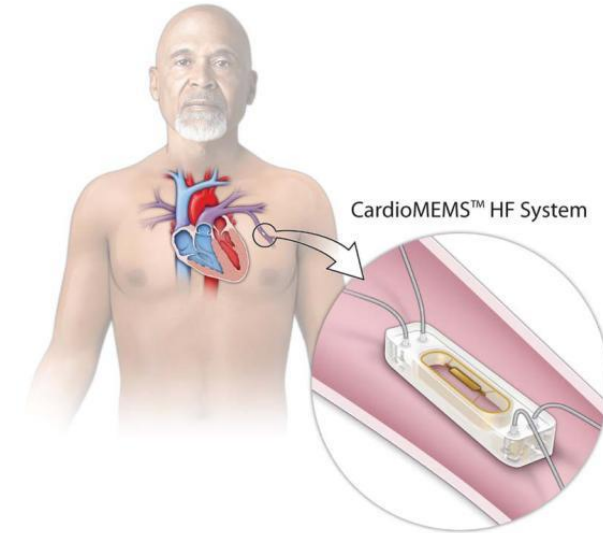


Data Source: Vizient Clinical Data Base  
Dates: Oct 2019– Nov 2023

# Heart Failure Service Line

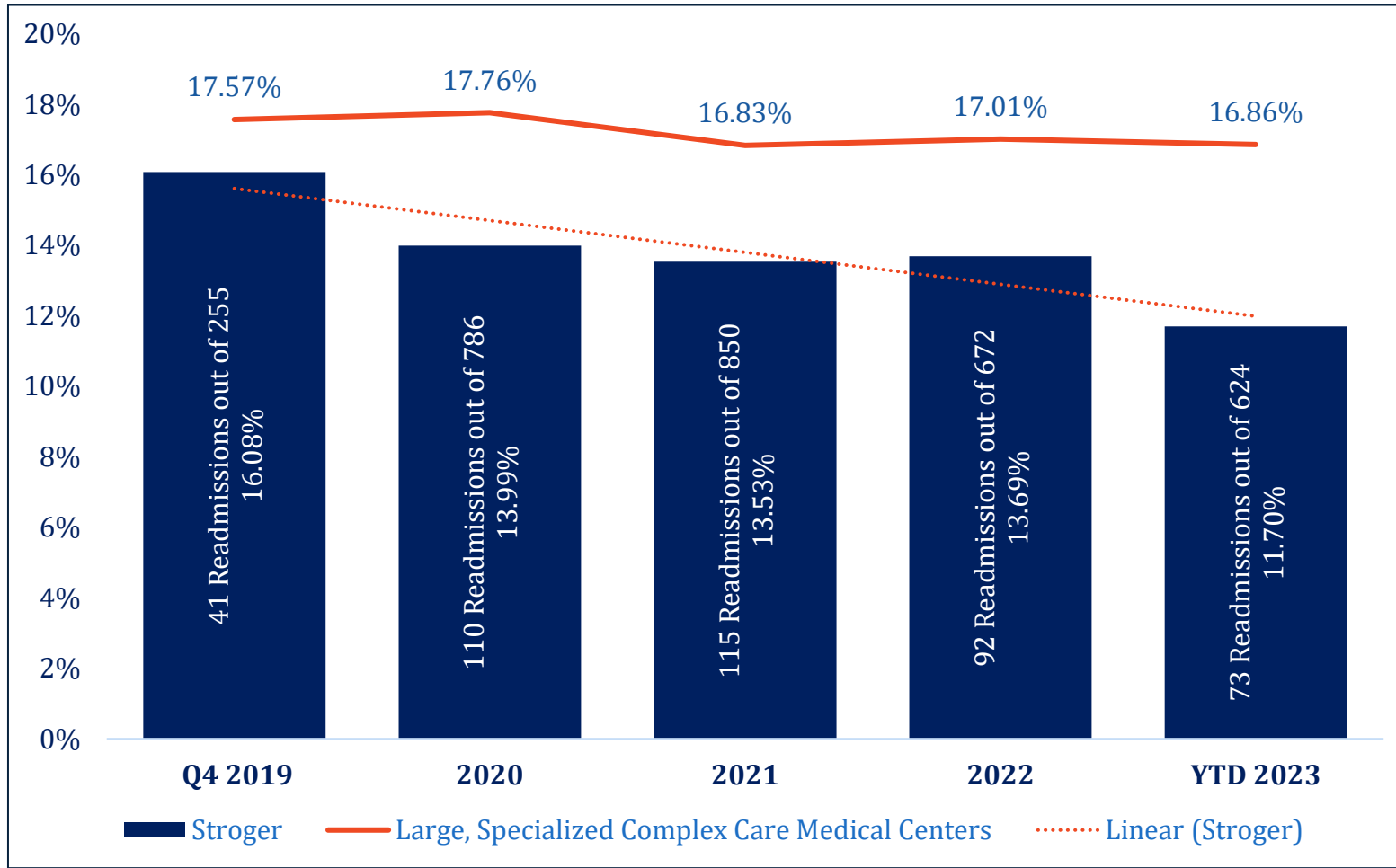
## Heart Failure Service Line

- Team:
  - Heart Failure Specialist
  - 2 HF APPs
- In-patient Advanced HF consultation service
- Transition to HF clinics
- **Palliative care**
- **CardioMEMS**
  - Implanted pressure sensor to predict readmission
- **Elevated Level of Care**
  - Mechanical support
    - Impella®
    - ECMO (2025)
  - Shock team



# Heart Failure

## 30-Day Readmission Rate



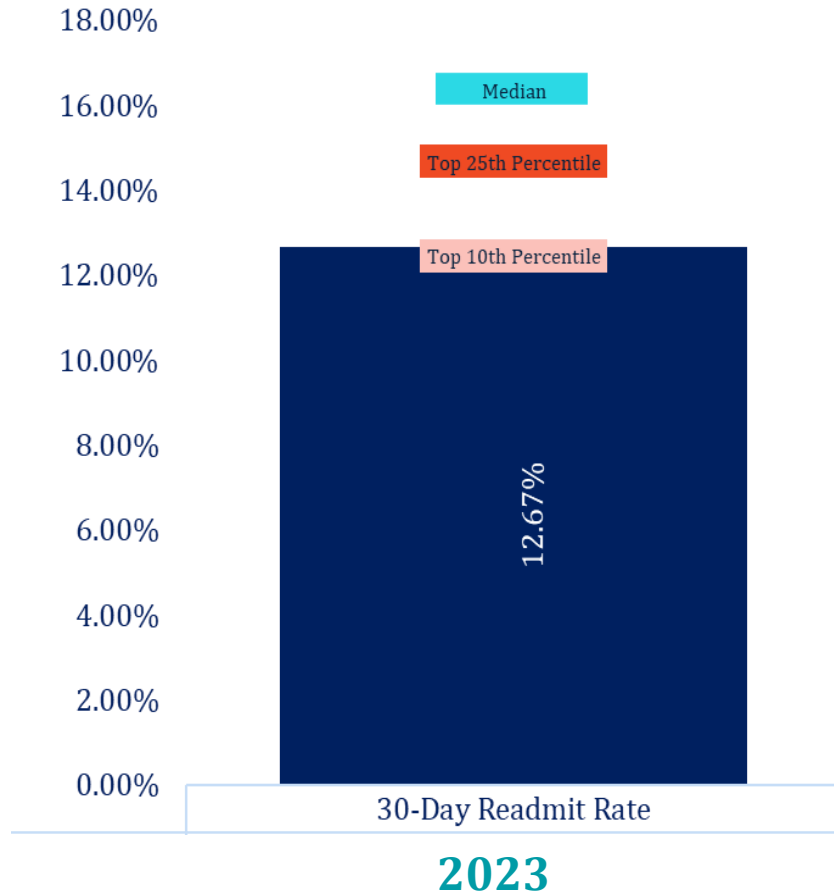
Data Source: Vizient Clinical Data Base

Dates: Oct 2019– Nov 2023



# Heart Failure

## 30-Day Readmission Rate



Data Source: Vizient Clinical Data Base  
Dates: Jan 2022 – Nov 2023

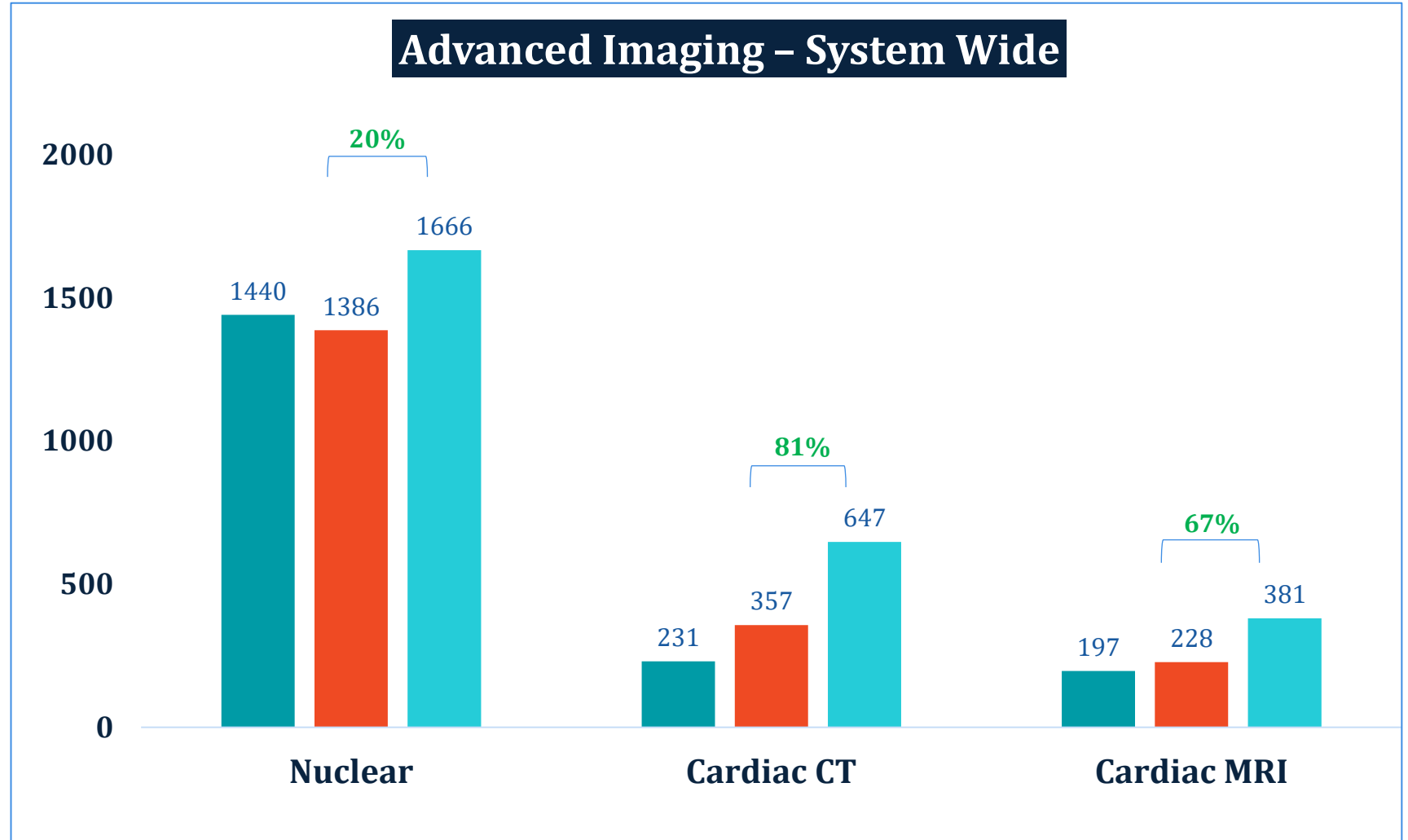
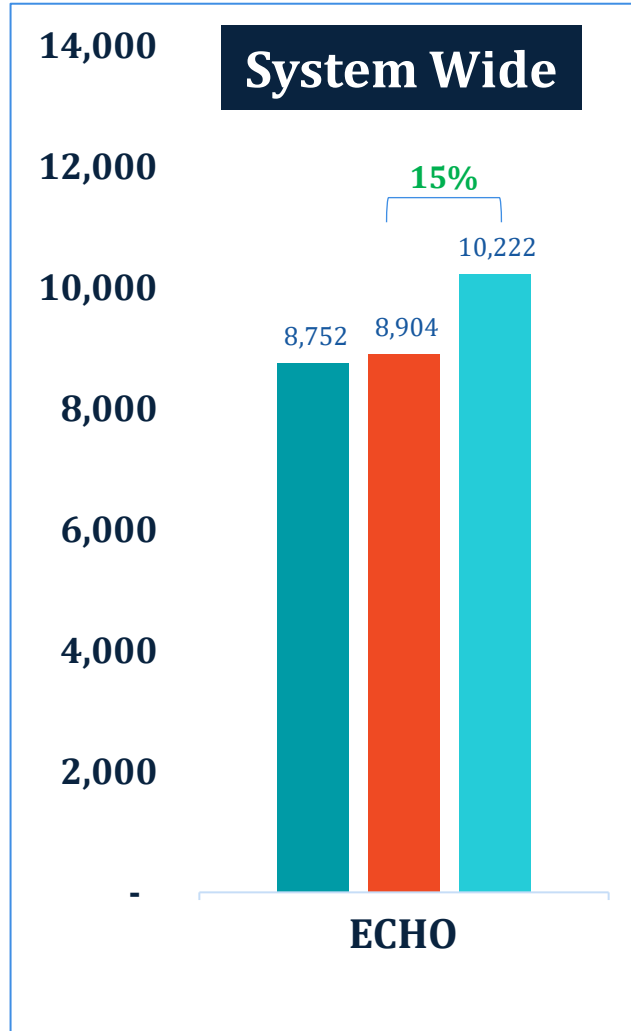


# Noninvasive Cardiac Imaging

- ❑ Accredited Comprehensive Echo Lab
- ❑ Modernized Nuclear Cardiology
  - **Cardiac PET (Fall 2024)**
- ❑ **Introduced Cardiac CT**
- ❑ **Introduced Cardiac MRI**
- ❑ **↑ access and timeliness**
- ❑ Referral from University of Chicago



# Cardiac Imaging





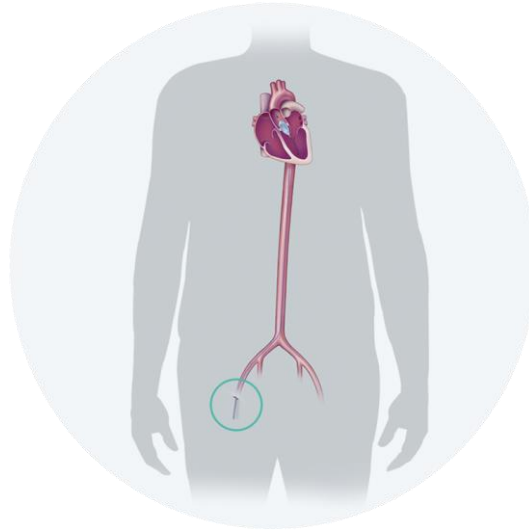
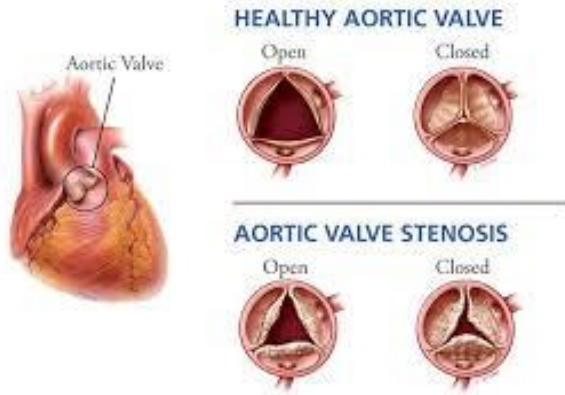


# New Services

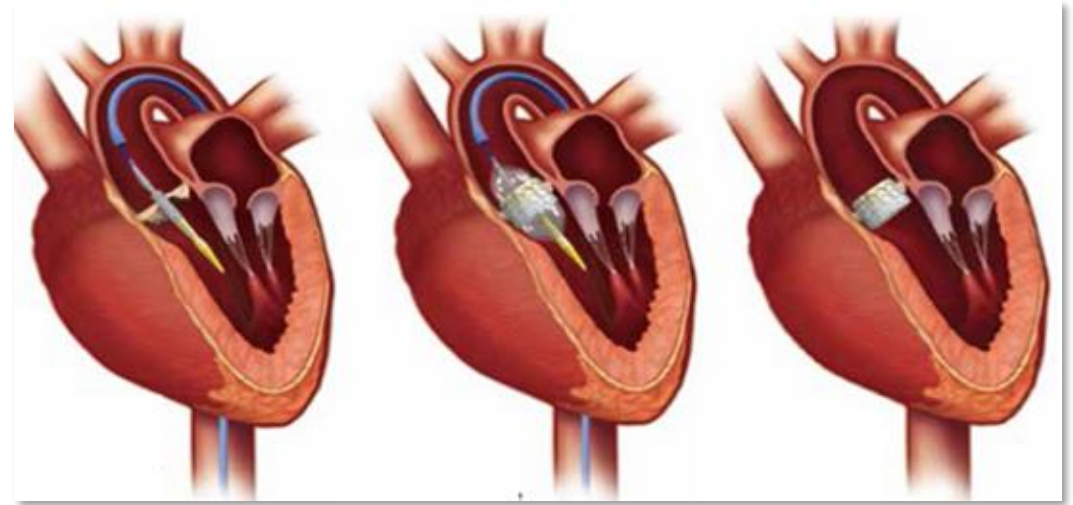
	Live	1 <sup>ST</sup> Case
EP Device Implantation	Yes	Aug 2020
Balloon Valvuloplasty	Yes	May 2021
TAVR / TMVR	Yes	Aug 2021
EP Studies / Ablation	Yes	Nov 2021
Catheter Pulmonary Embolism Tx	Yes	Nov 2021
CardioMEMS (HF monitoring)	Yes	July 2022
Watchman (LAA closure)	Yes	Jan 2023
MitraClip (MV repair)	Yes	May 2023
Impella (LV assist device)	Yes	Oct 2023
Lead extraction program	Yes	Oct 2023
Cardiac PET Program	No	Fall 2024
ECMO	No	2025
Cardiac Rehab	No	???



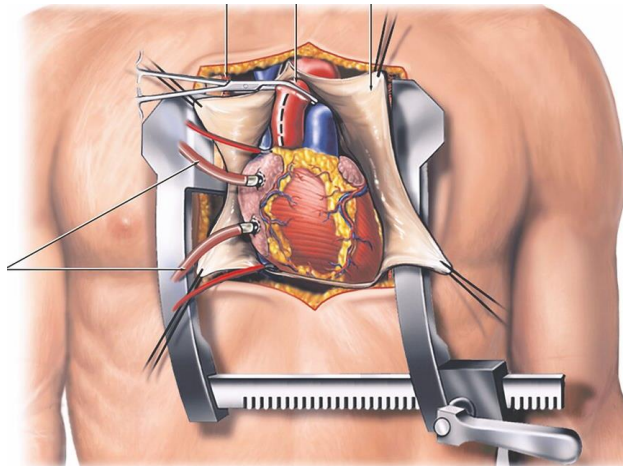
# Transcatheter Aortic Valve Replacement (TAVR)



## TAVR



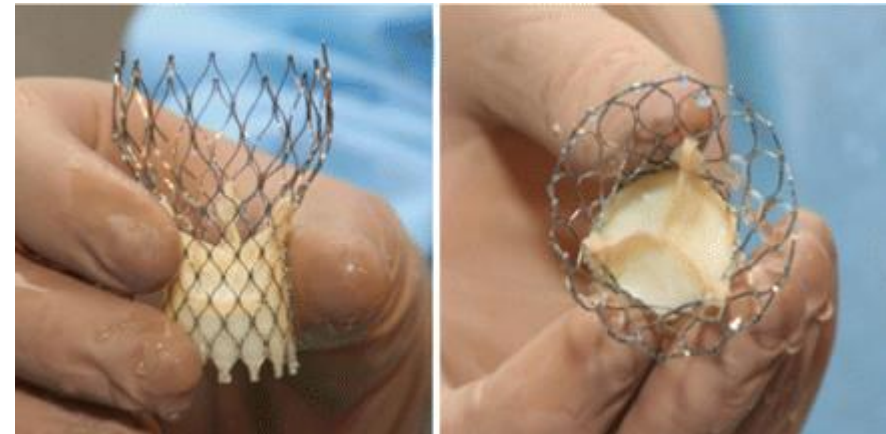
## SAVR



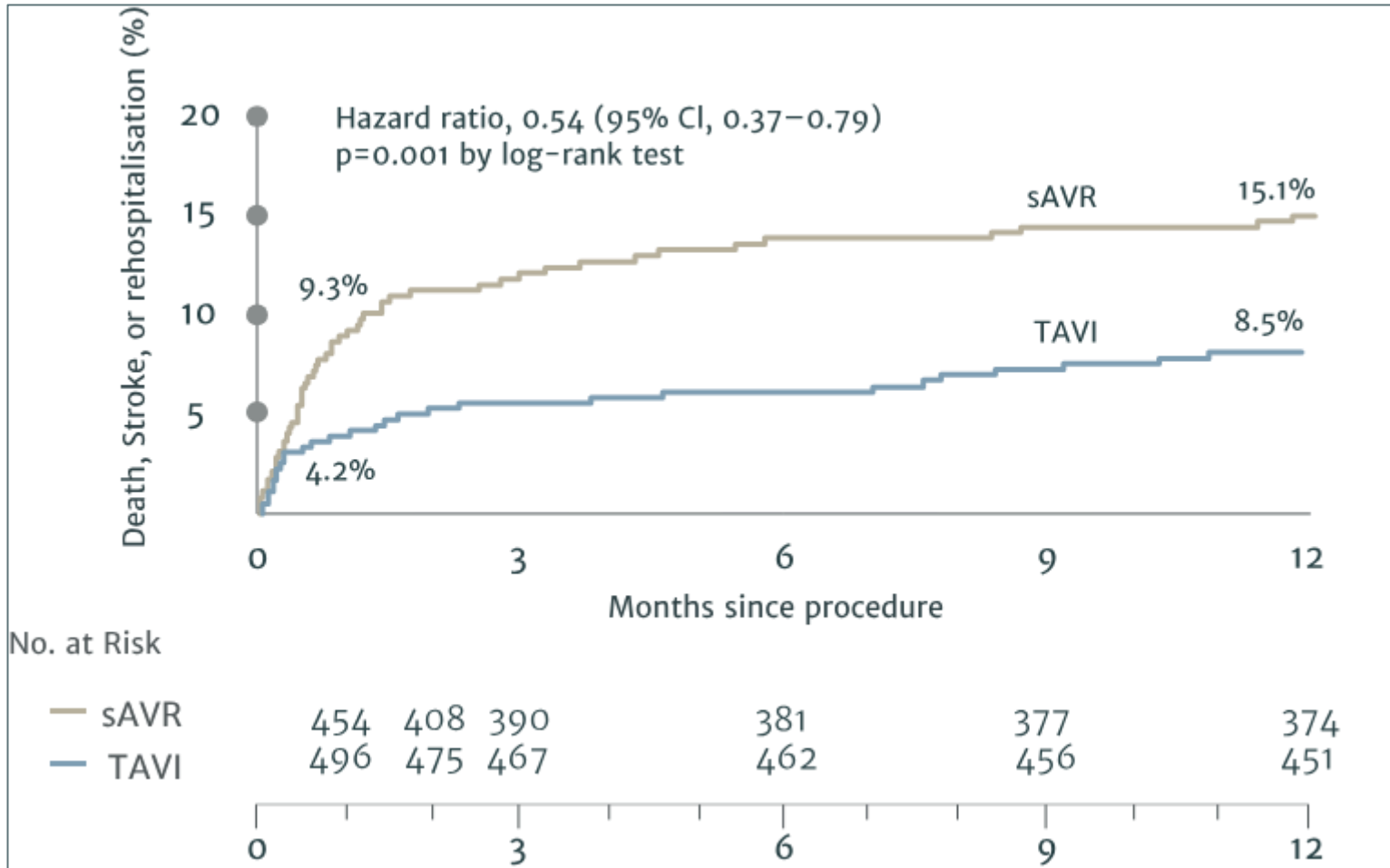
Sapien 3



CoreValve



## PARTNER 3 Trial



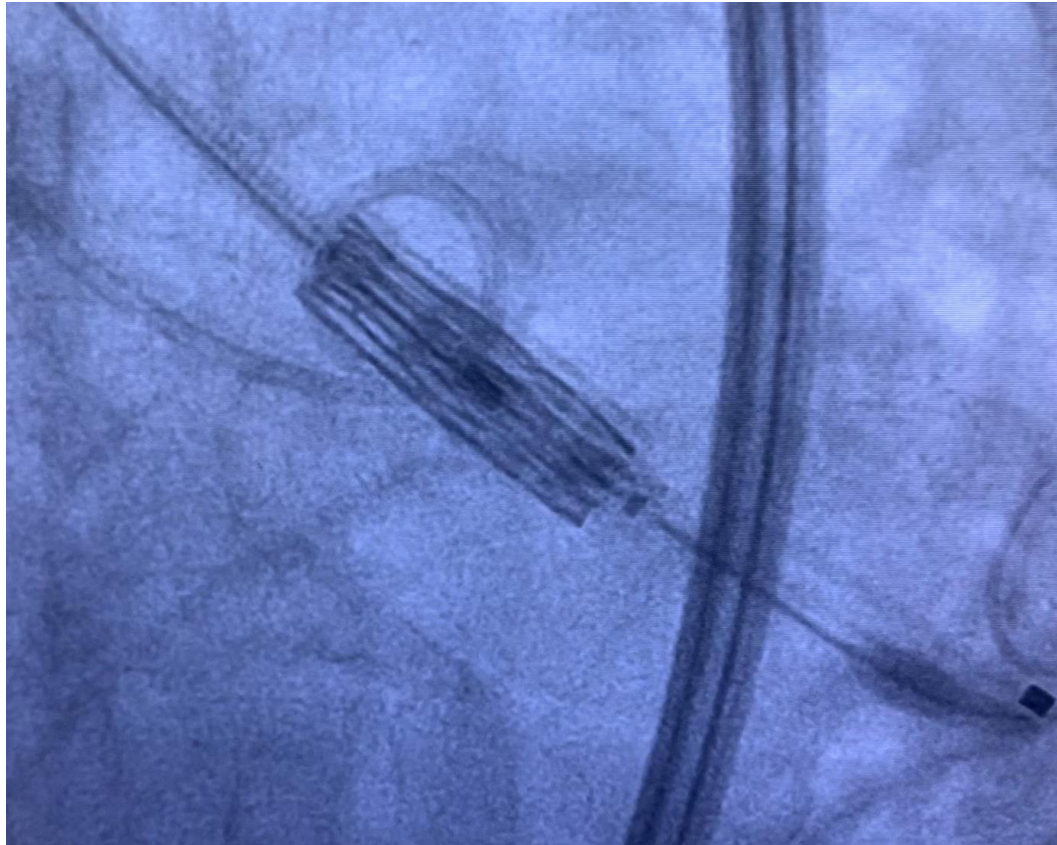
Mack et al. N Engl J Med 2019;380:1695-705



# Transcatheter Aortic Valve Replacement (TAVR)

**Launched in August 2021**

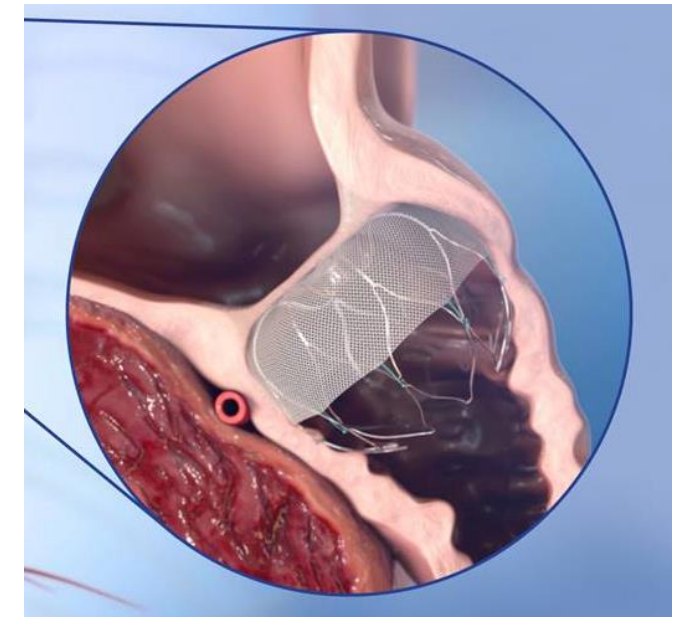
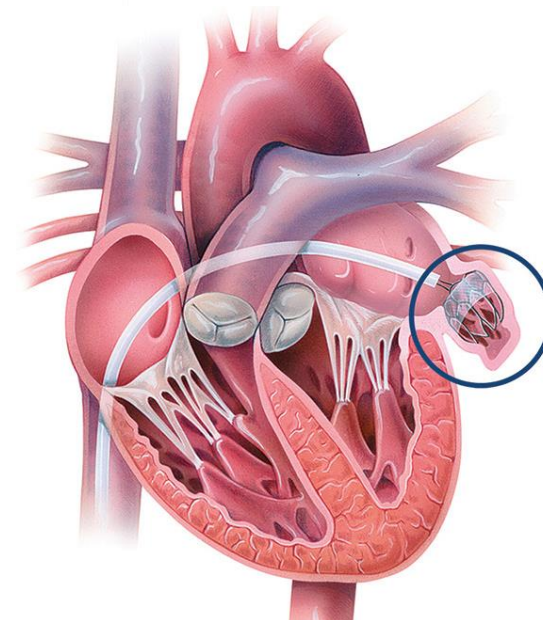
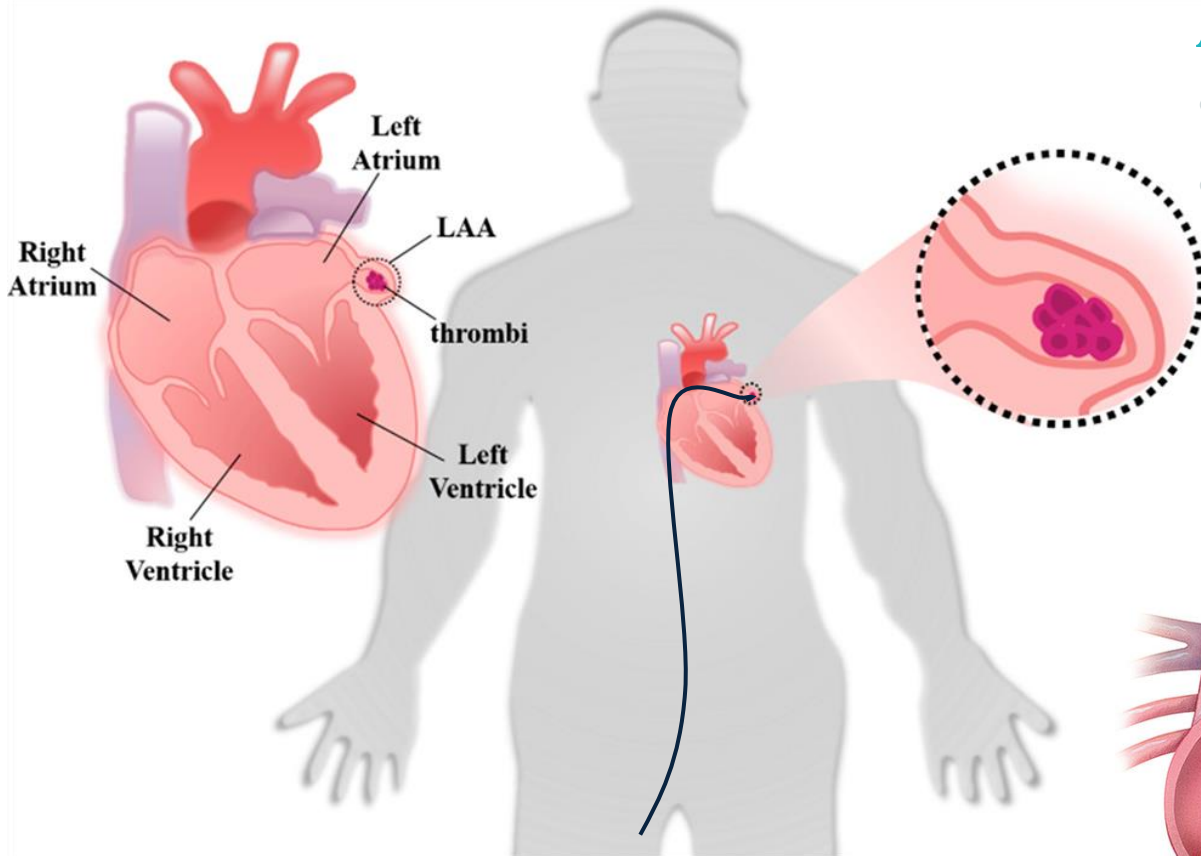
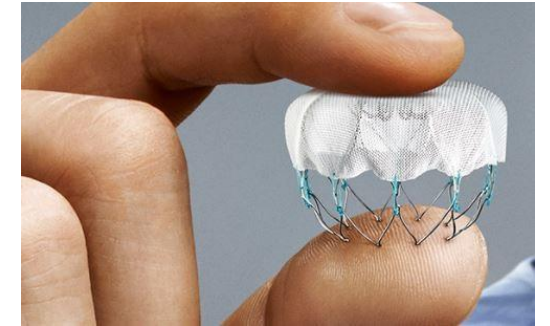
- 45 cases since launch



# Left Atrial Appendage Occlusion (Watchman®)

## Atrial Fibrillation

- High stroke risk
- High risk of bleeding

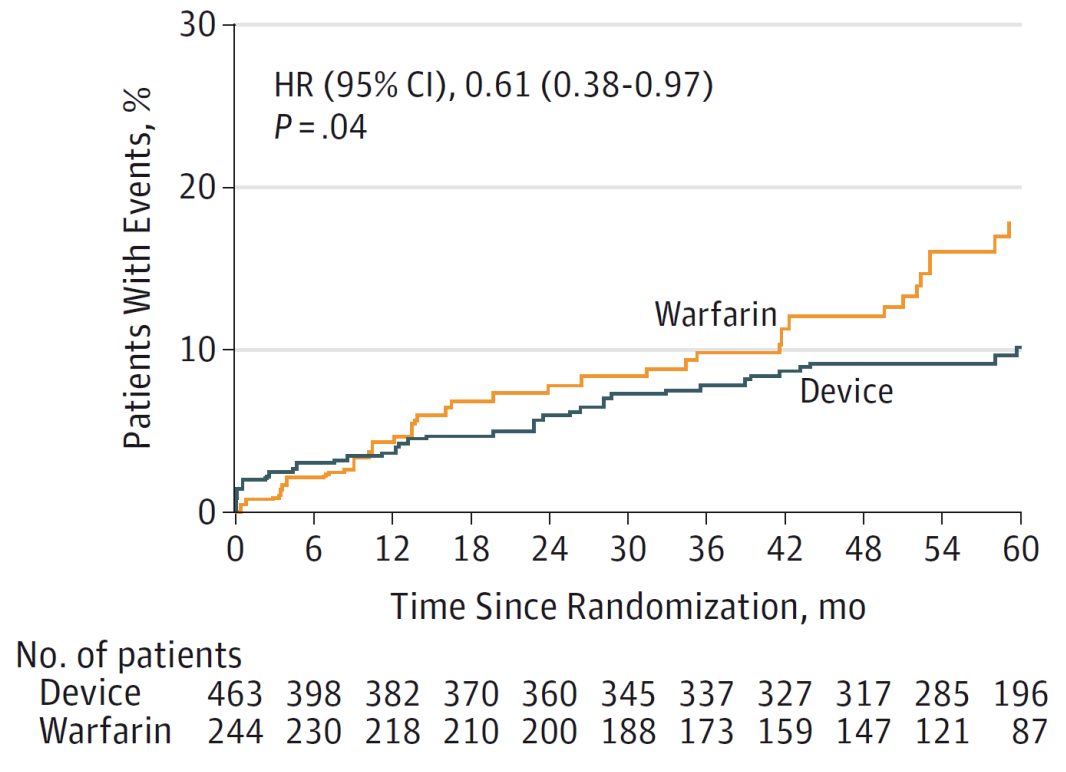


Launched in January 2023

- 45 cases

# Left Atrial Appendage Occlusion (Watchman®)

## PROTECT AF



Reddy et al. JAMA 2014;312(19):1988-1998

# Transcatheter Edge-to-edge Repair (MitraClip®)



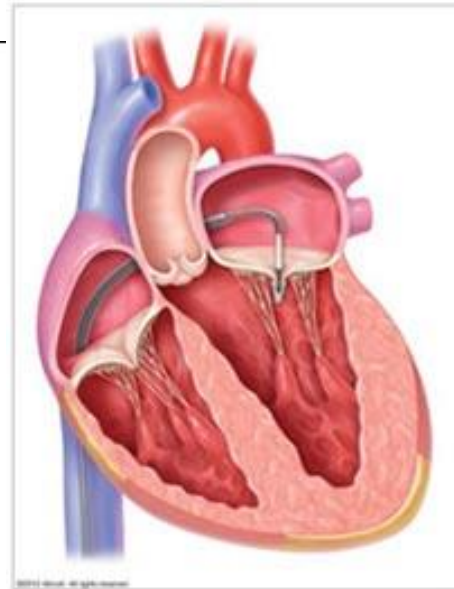
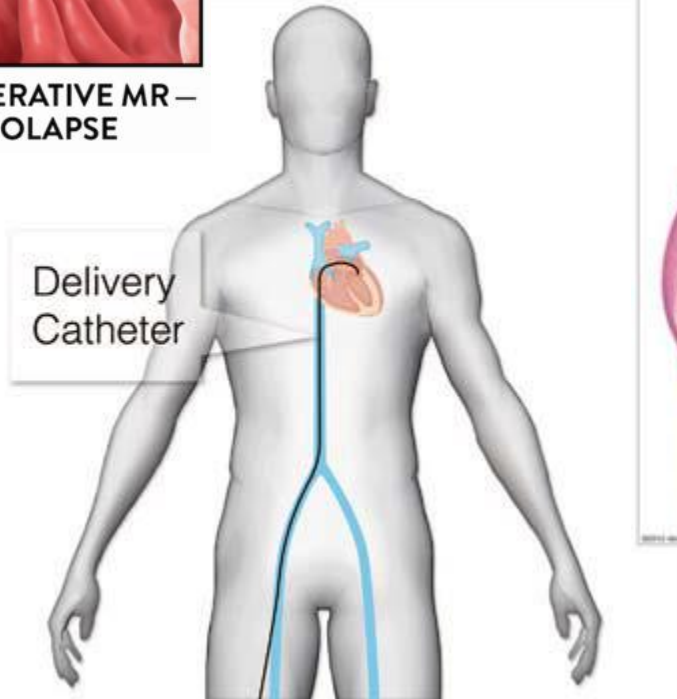
NORMAL VALVE



DEGENERATIVE MR –  
PROLAPSE

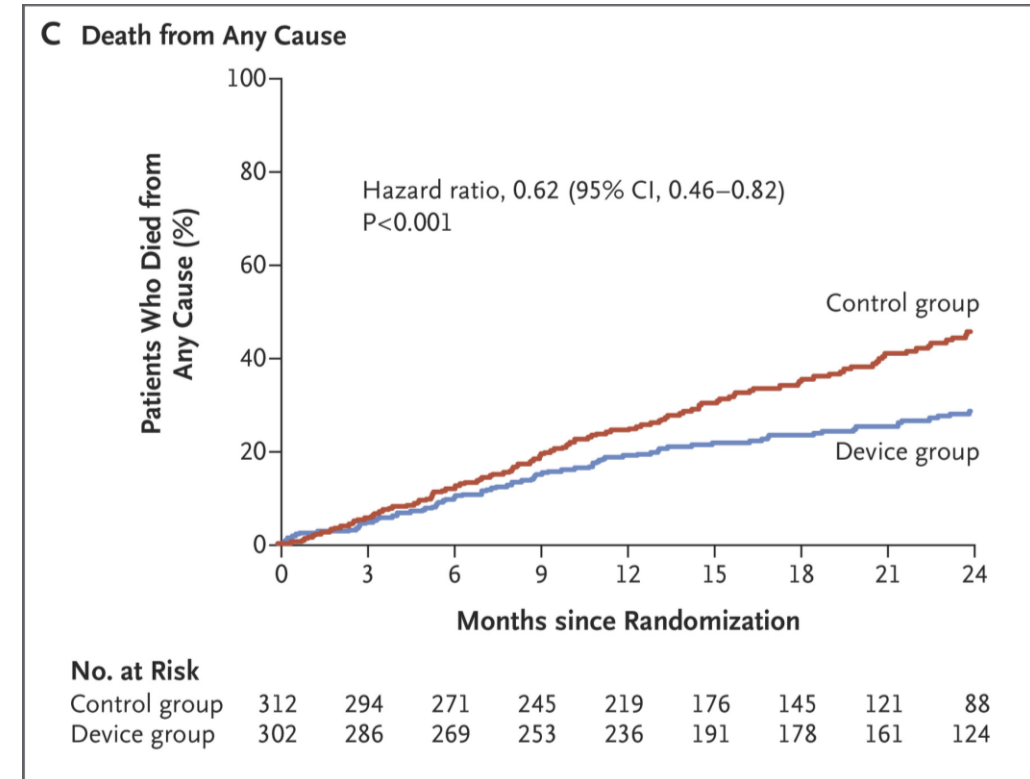
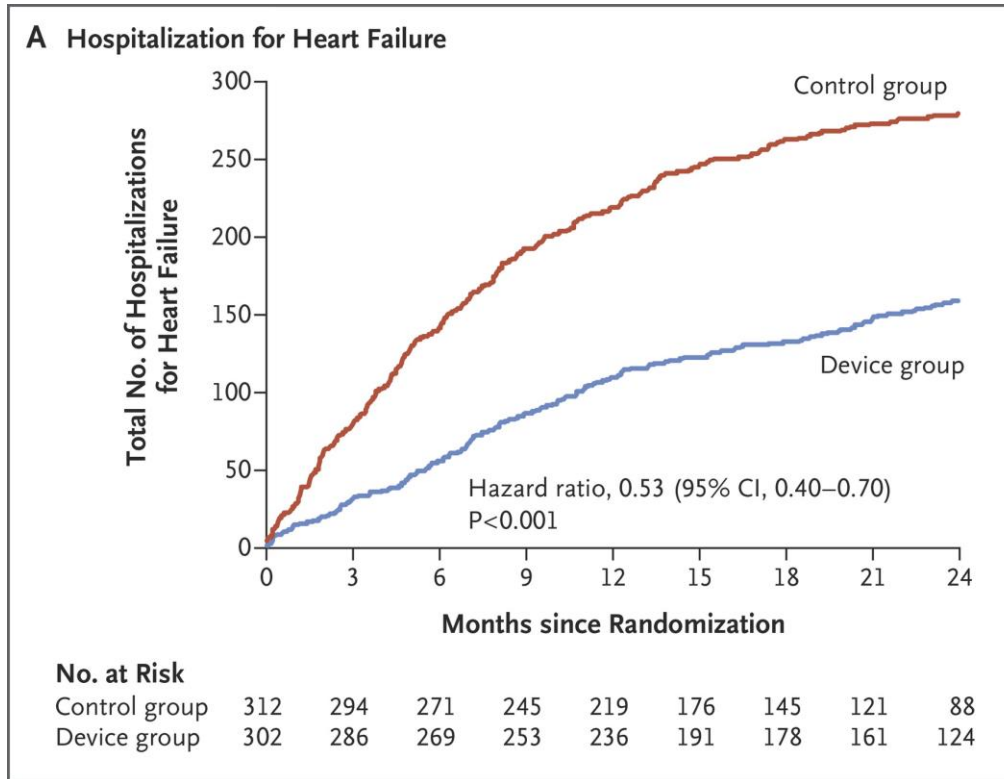
## Moderate-Severe / Severe Mitral Regurgitation

- Not candidate for open heart surgery
- Heart Failure with severe MR



# Transcatheter Edge-to-edge Repair (MitraClip®)

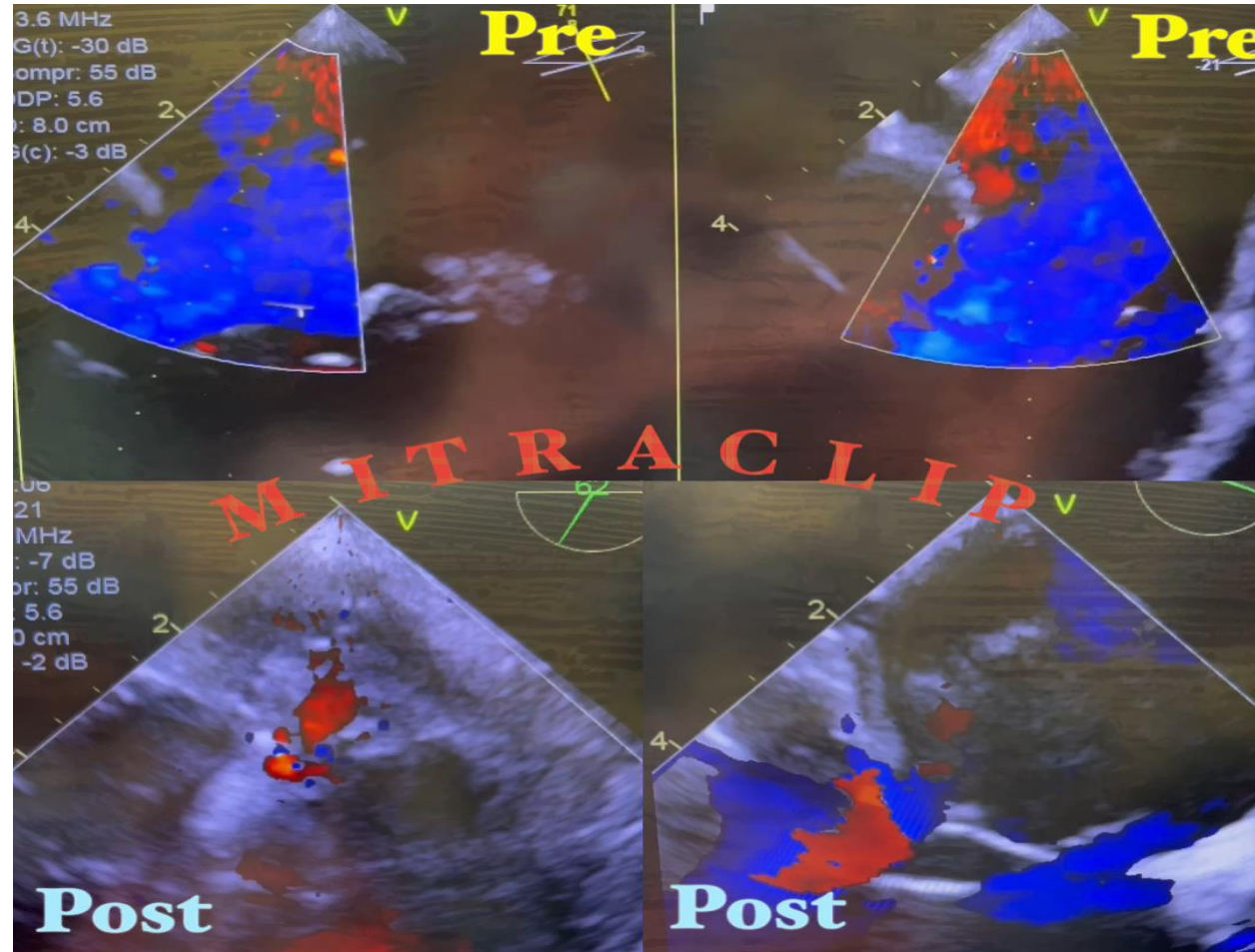
## COAPT Trial



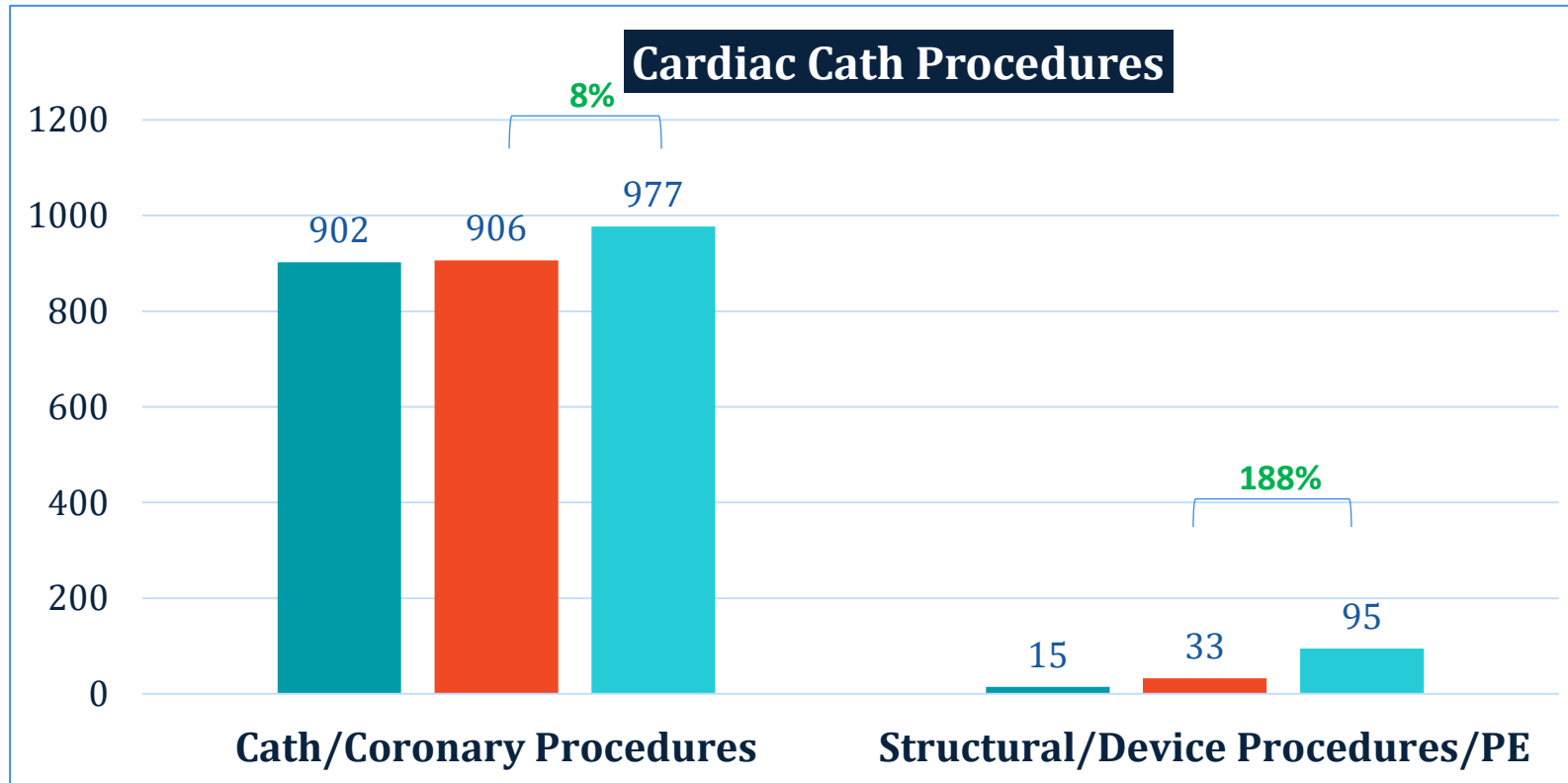


## Launched in May 2023

- 20 cases



# Coronary & Structural Interventions

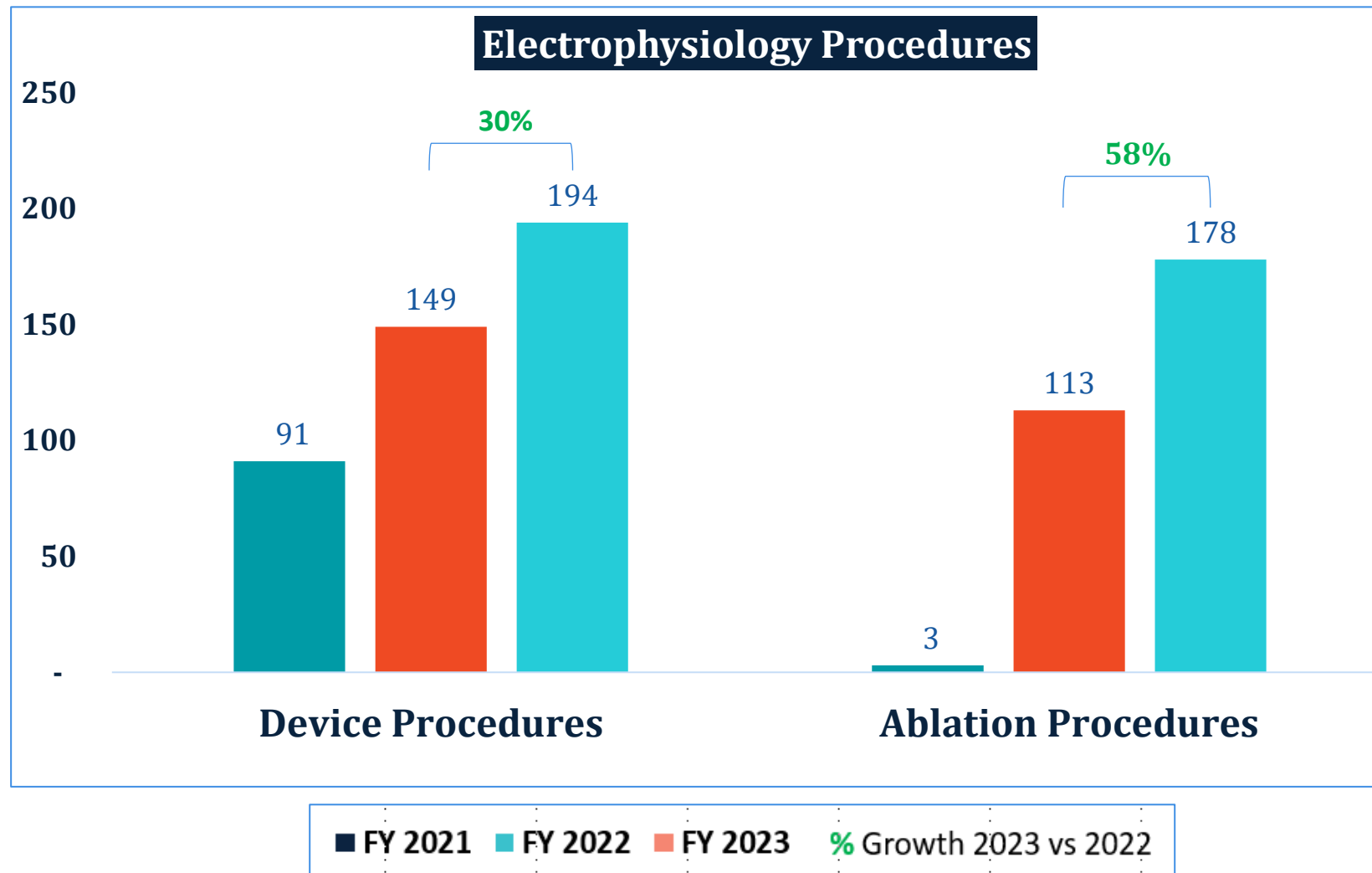


■ FY 2021 ■ FY 2022 ■ FY 2023 % Growth 2023 vs 2022



# Electrophysiology

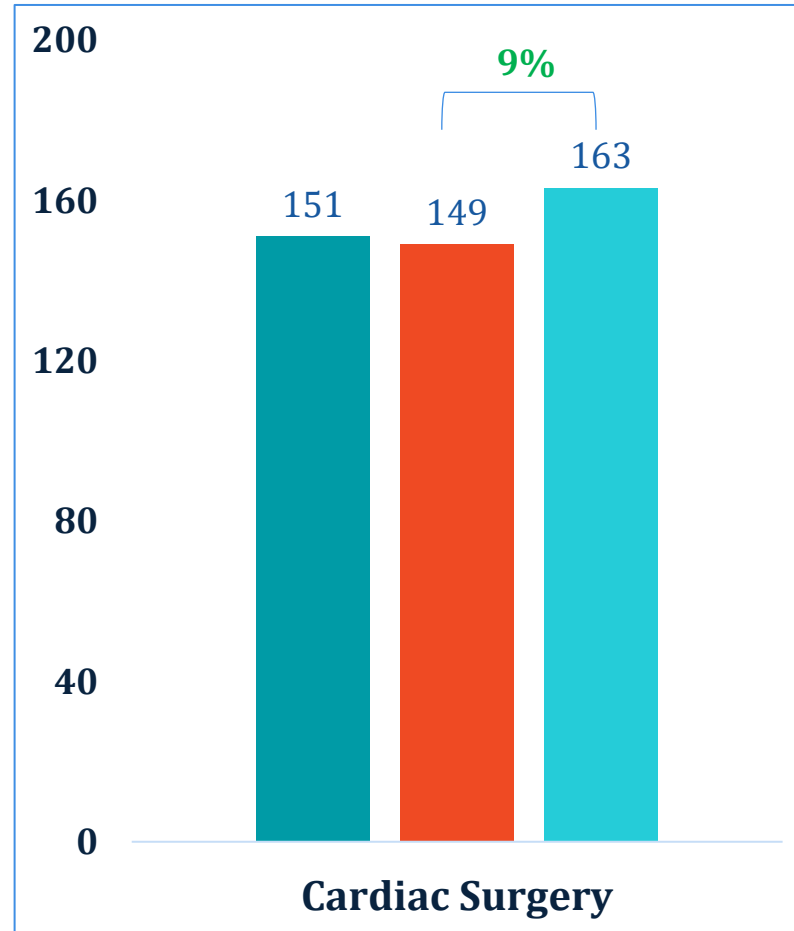
- Outpatient Clinics
- 27/7 inpatient consultations
- Device Management Clinics
- EP studies and ablations
- Lead extraction





# Cardiac Surgery

**Insight Hospital (Mercy)  
Transfer Agreement**



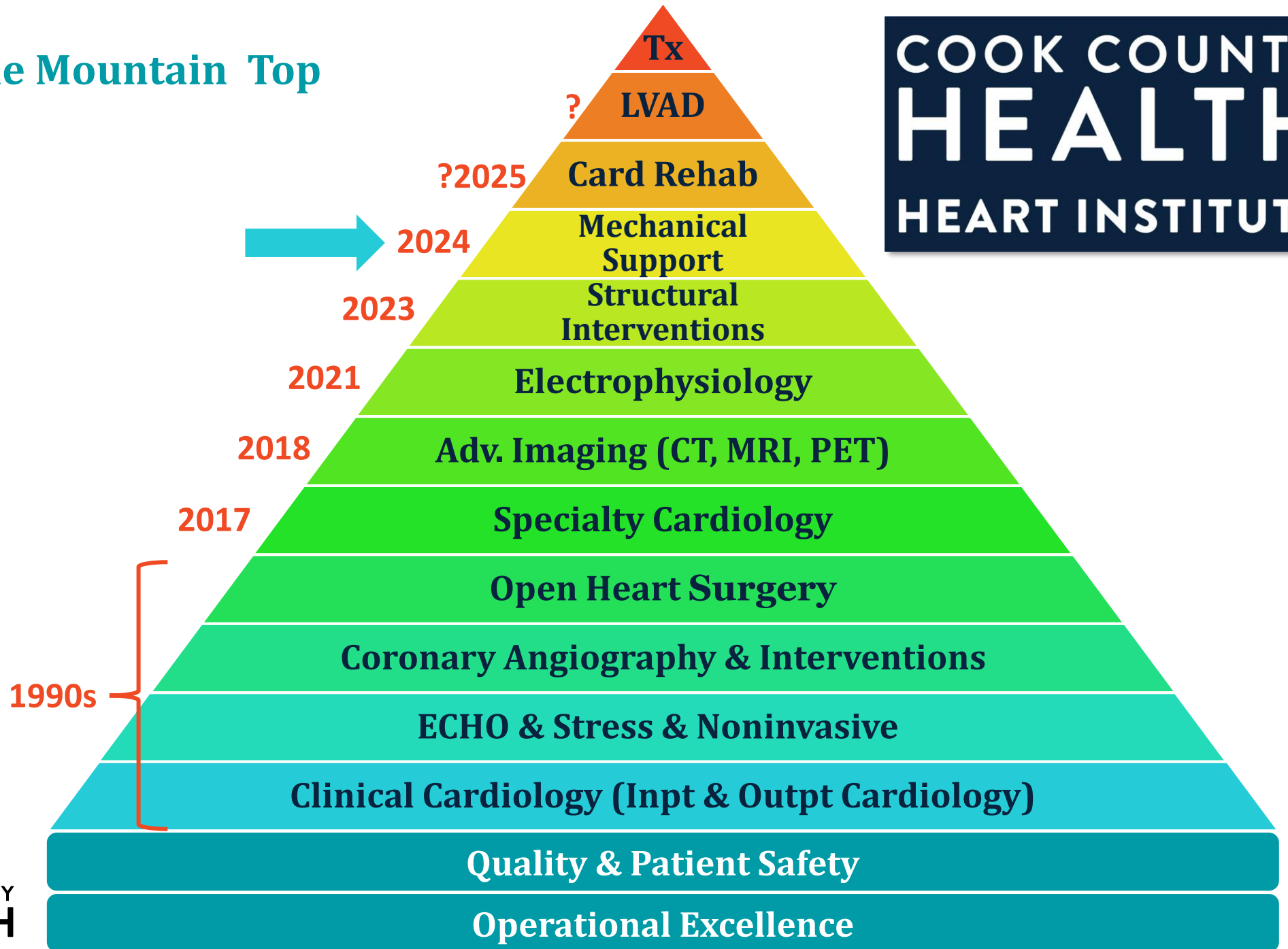
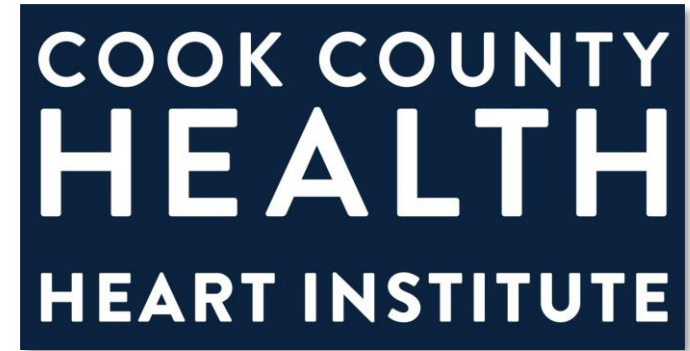
■ FY 2021 ■ FY 2022 ■ FY 2023 ■ % Growth 2023 vs 2022





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**HEALTH**

# Climbing to the Mountain Top





# Achievement & Recognitions

- ❑ Senior Faculty (Assoc Prof / Professor) ~ 50% of attending staff
- ❑ Graduating Fellows: 100% pass rate x 15 years
- ❑ 59 published manuscript in 2023
- ❑ **Jon Tottleben:** CCH Patient Choice Award
- ❑ **Bosko Margeta:** Chicago Magazine – Top Doctors
- ❑ National Service at Board of Directors Level
  - American Society of Nuclear Cardiology (ASNC)
  - Society of Nuclear Medicine and Molecular Imaging (SNMMI)
  - Foundation of the National Lipids Association (NLA)

# 2024 Outlook

- Focus on safety & quality
- Operational efficiency
- Cardiac PET program
- Heart Disease in Women program
- Plan ECMO program – 2025 launch
- Marketing
  - Grow referral base

Thank you 



COOK COUNTY  
**HEALTH**