



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

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



The Change Institute
of Cook County Health

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



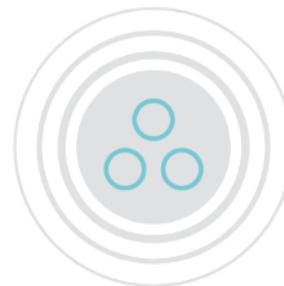
COOK COUNTY
HEALTH

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



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Sign up to receive updates at cicch.org

Heart Disease: Heart Institute Update

Rami Doukky, MD

Chair of Cardiology

Interim Director, Heart Institute



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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

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*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

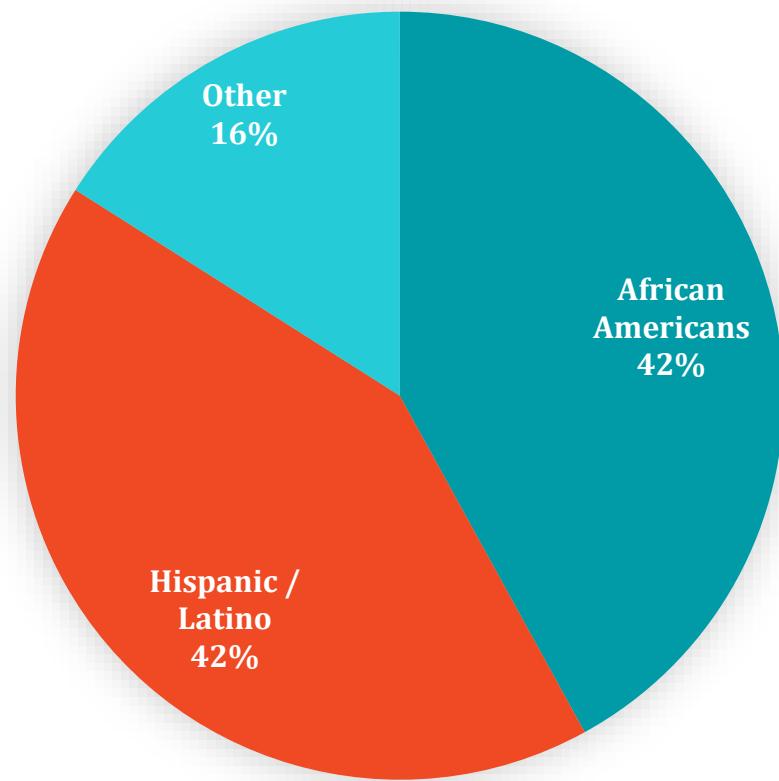
- 2 Professors
- 8 Associate Professors
- 9 Assistant Professors

Training Program

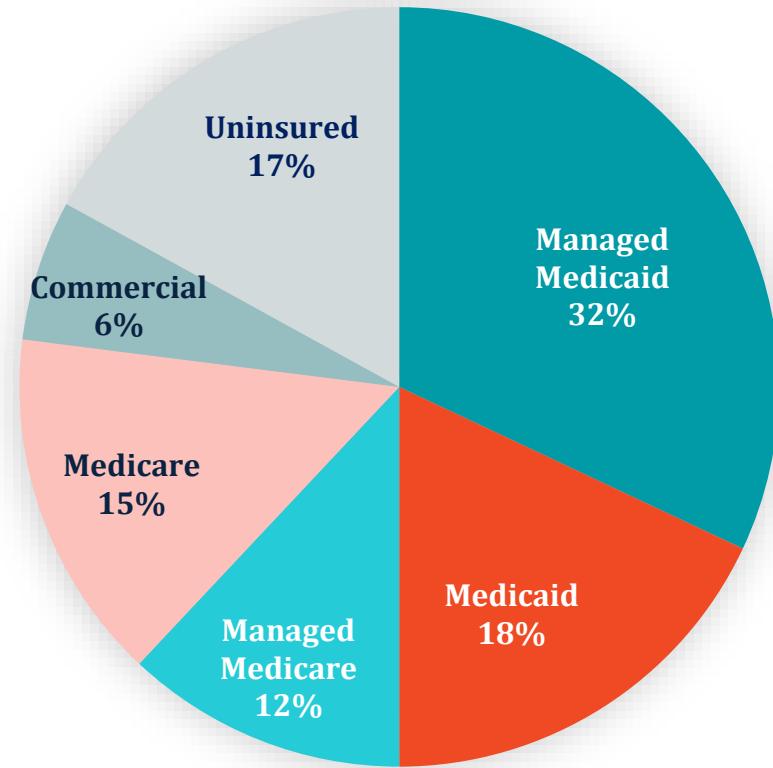
- 11 Cardiology Fellows
- 1 Interventional Cardiology Fellow

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

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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

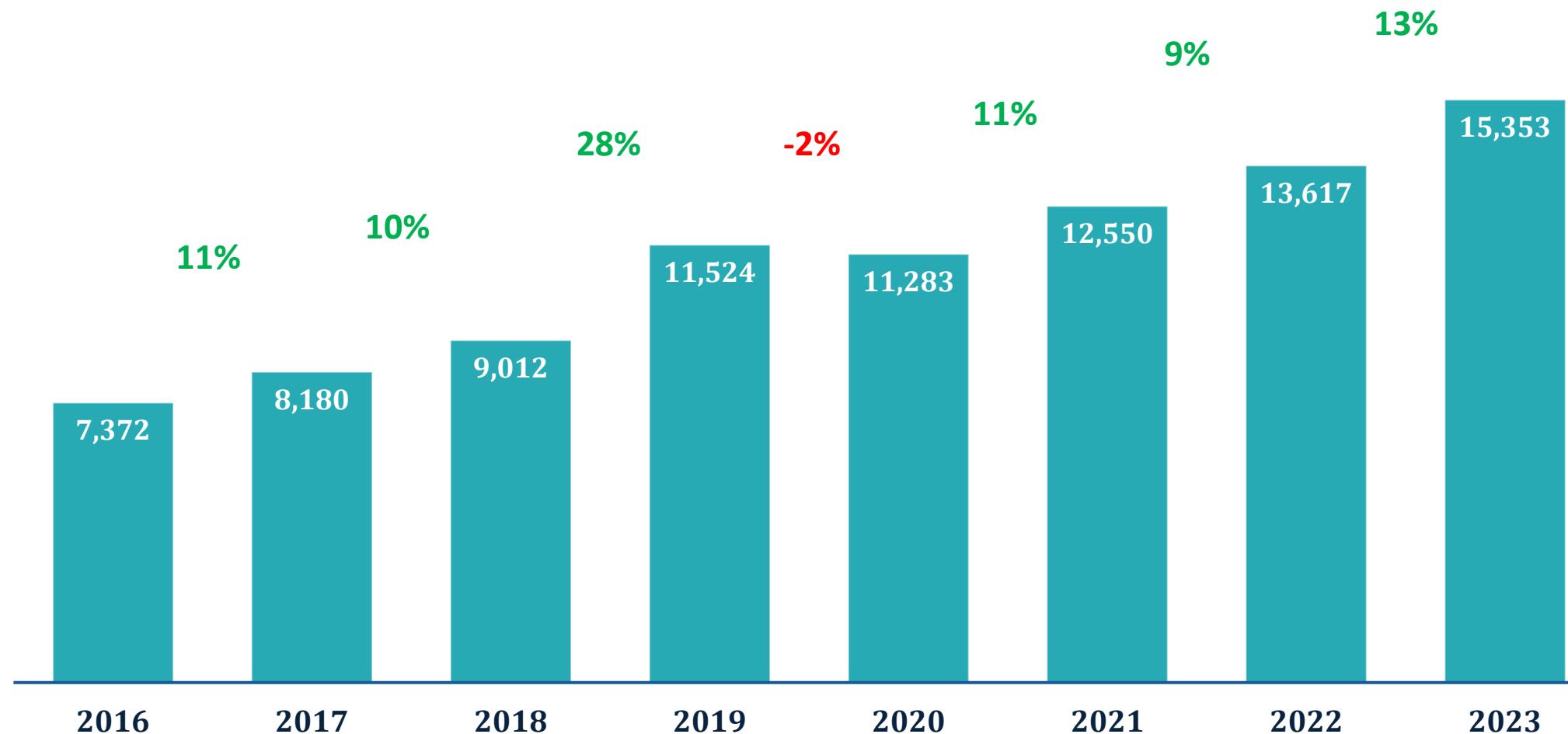
1. Stroger, Specialty Care Center
2. Sengstacke
3. Blue Island
4. Cermak Health Center
5. **CORE Center**

New Locations (2023)

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



Annual Outpatient Volume - Stroger



Outpatient

Inpatient

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Inpatient Cardiology

Cardiac Care Unit (CCU)

- 12 beds

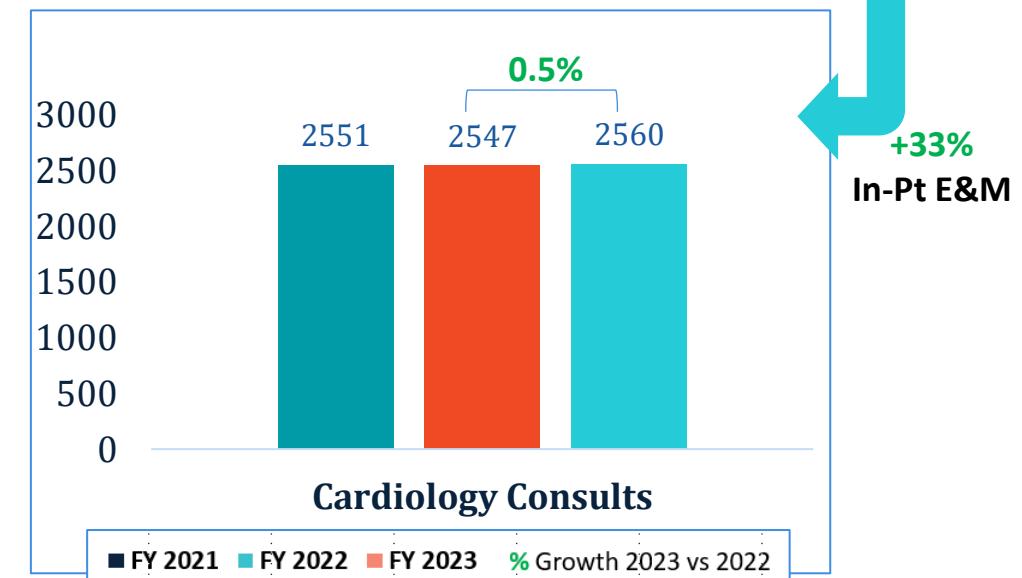
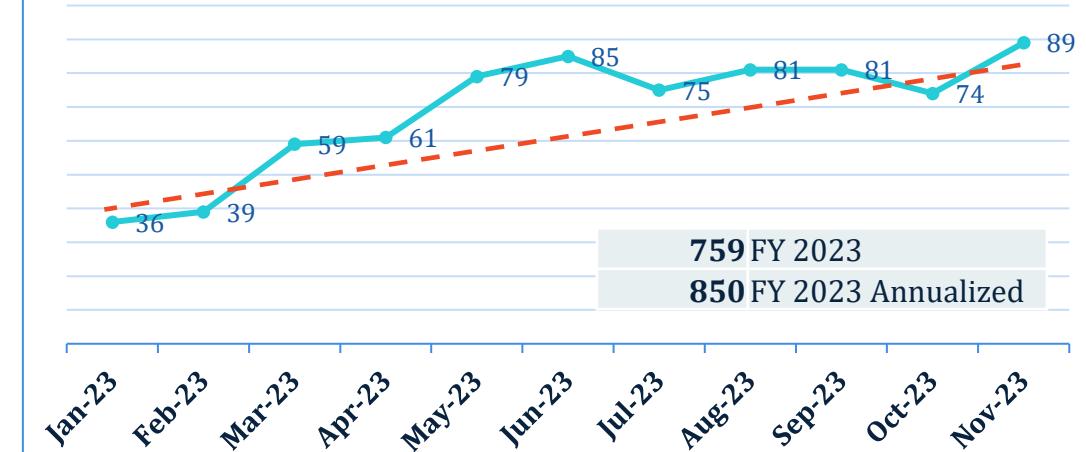
Consultation Service

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

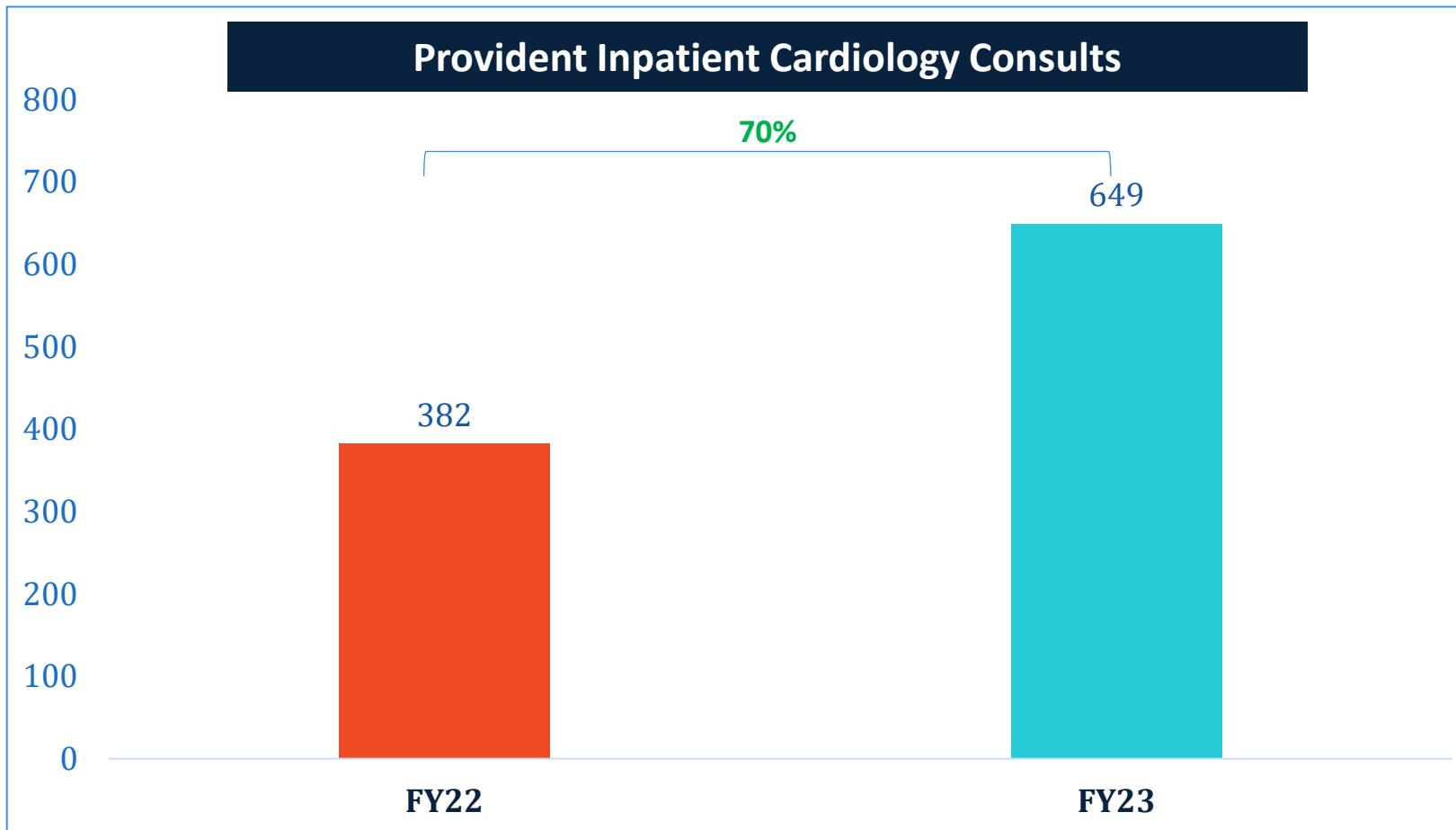
Cardiac Unit

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

Cardiac Unit 2023 Admissions

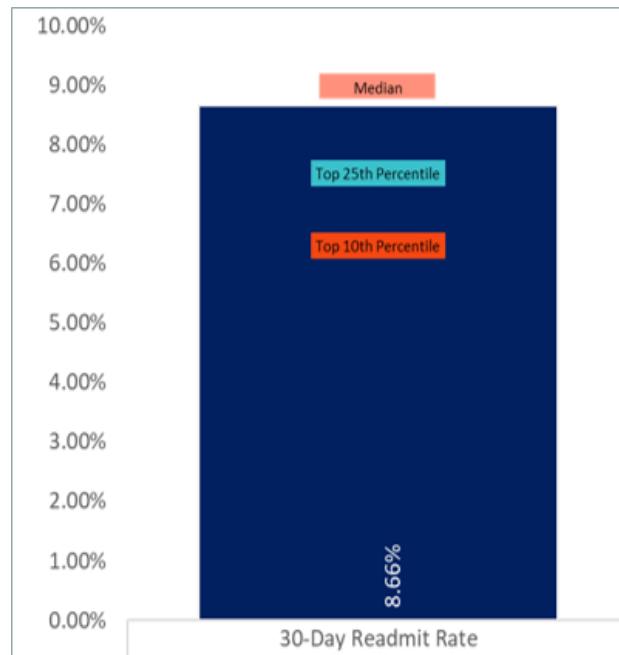


Inpatient Consultation at Provident



Heart Attack

30-Day Readmission Rate



2023

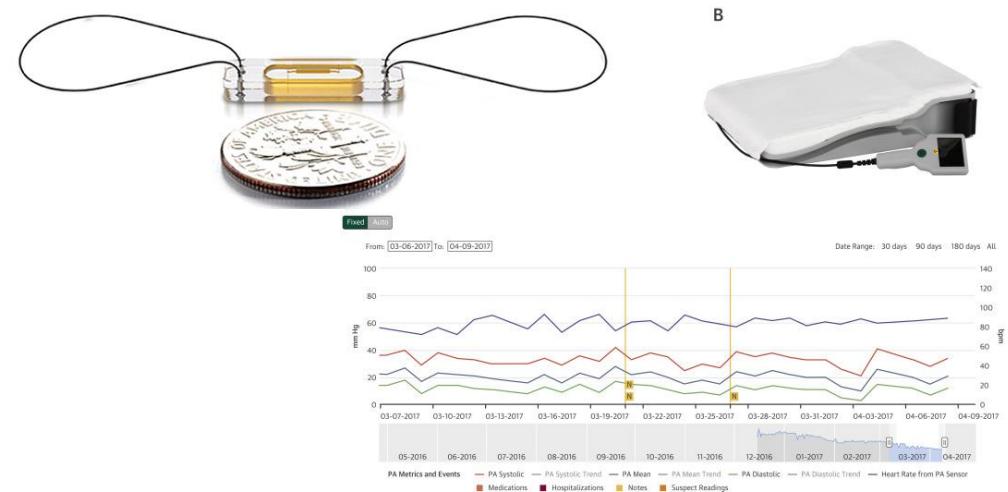
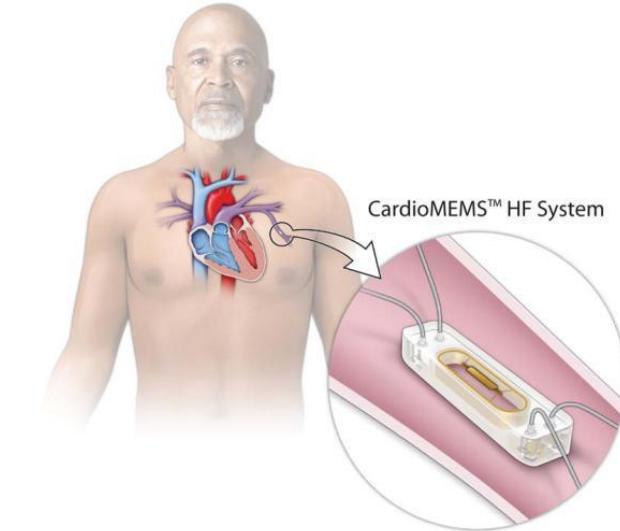


Data Source: Vizient Clinical Data Base
Dates: Oct 2019– Nov 2023

Heart Failure Service Line

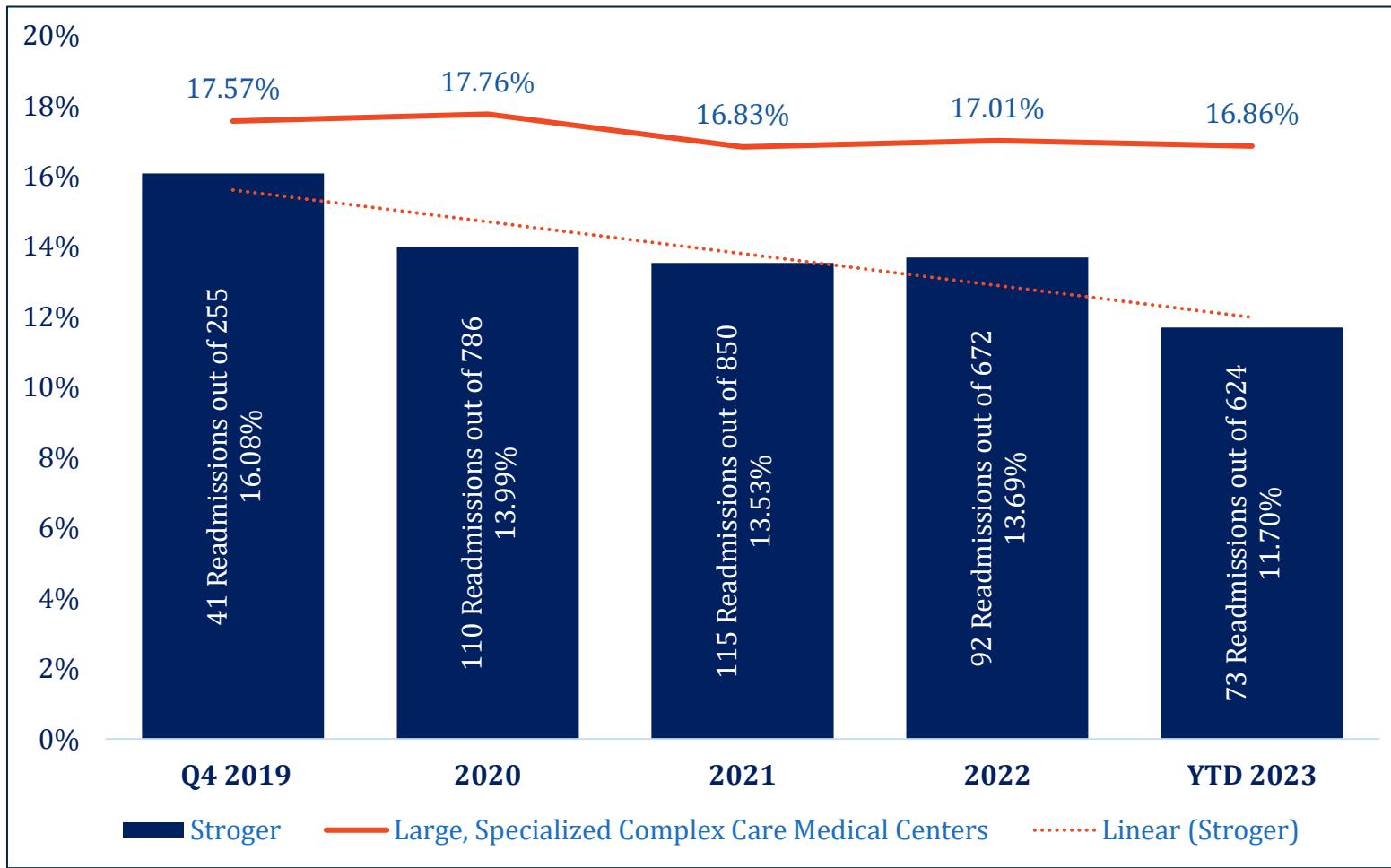
Heart Failure Service Line

- 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



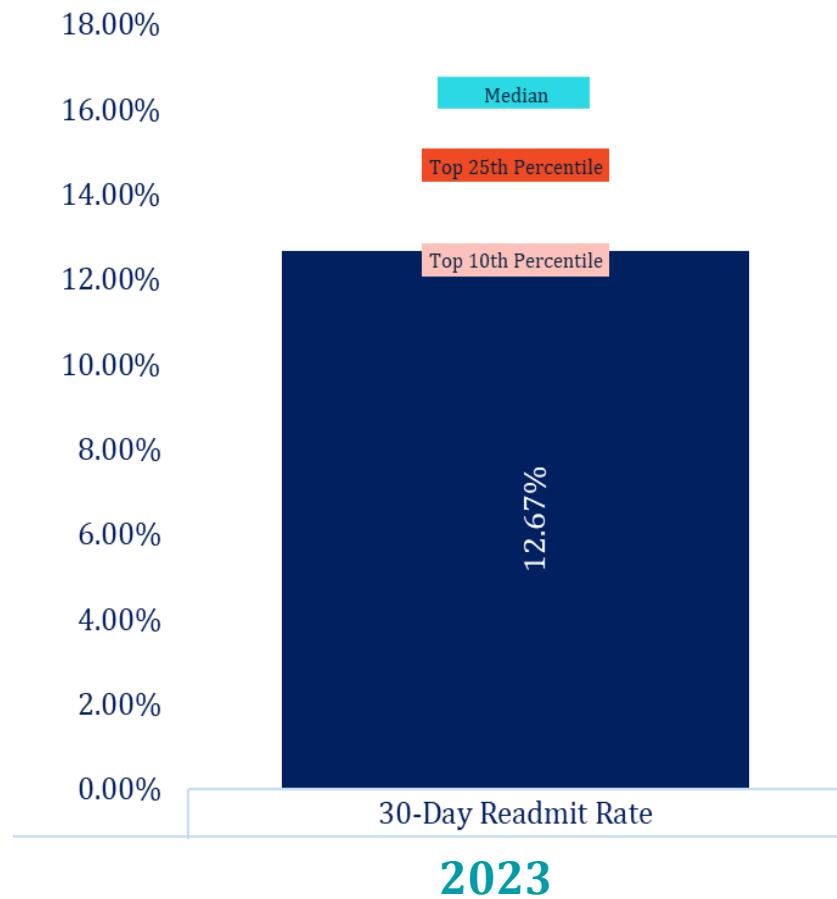
Data Source: Vizient Clinical Data Base

Dates: Oct 2019– Nov 2023



Heart Failure

30-Day Readmission Rate



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



Outpatient

Inpatient

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Imaging



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Noninvasive Cardiac Imaging

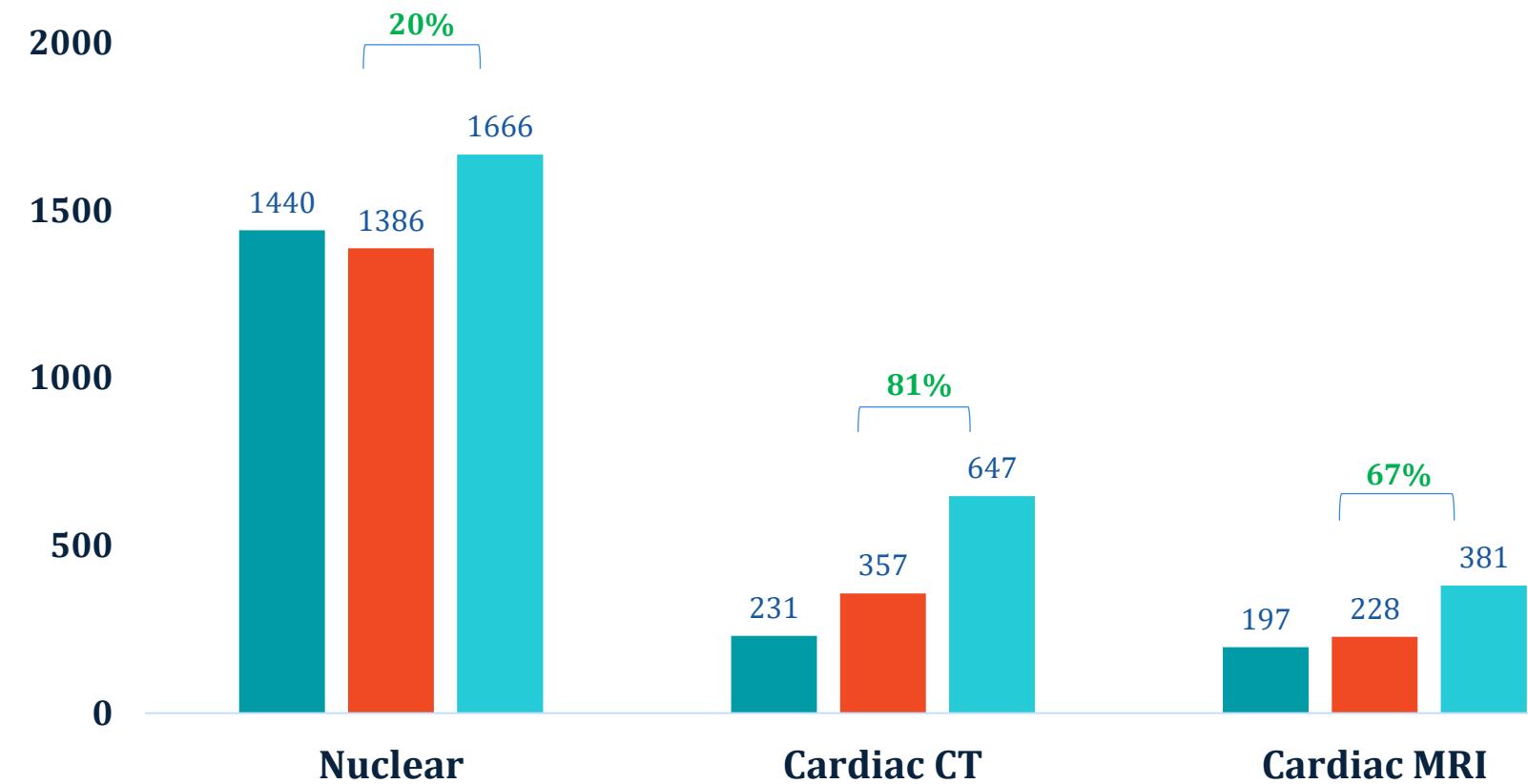
- ❑ Accredited Comprehensive Echo Lab
- ❑ Modernized Nuclear Cardiology
 - Cardiac PET (Fall 2024)
- ❑ **Introduced Cardiac CT**
- ❑ **Introduced Cardiac MRI**
- ❑ **↑ access and timeliness**
- ❑ Referral from University of Chicago

Cardiac Imaging

System Wide



Advanced Imaging - System Wide



Outpatient

Inpatient

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Imaging

Procedures



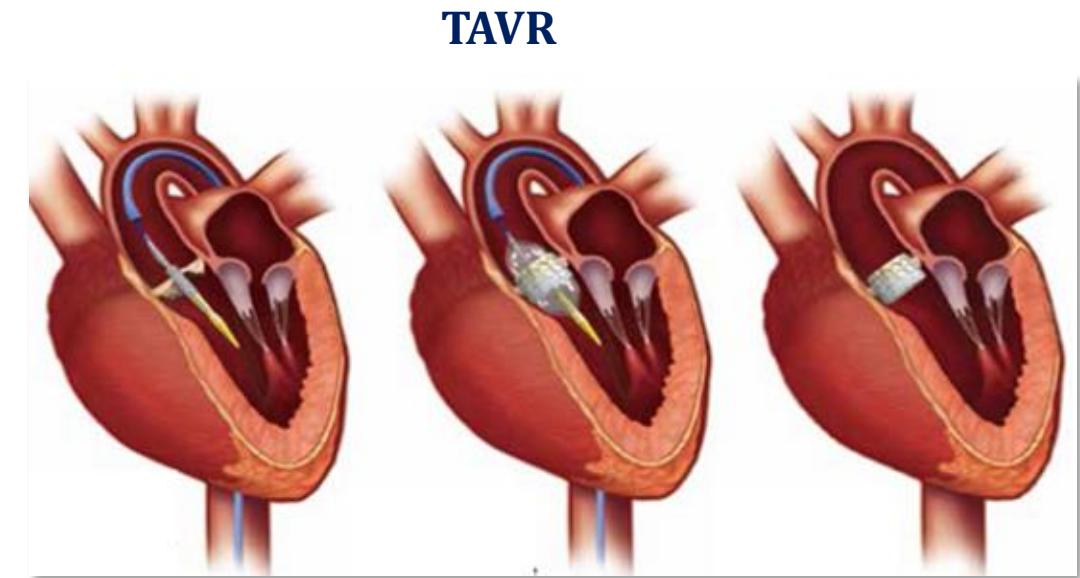
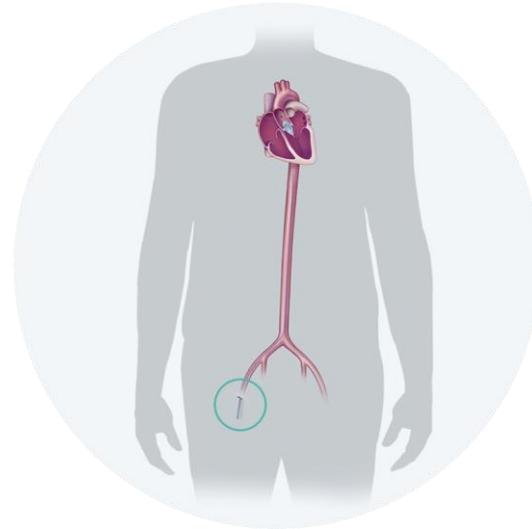
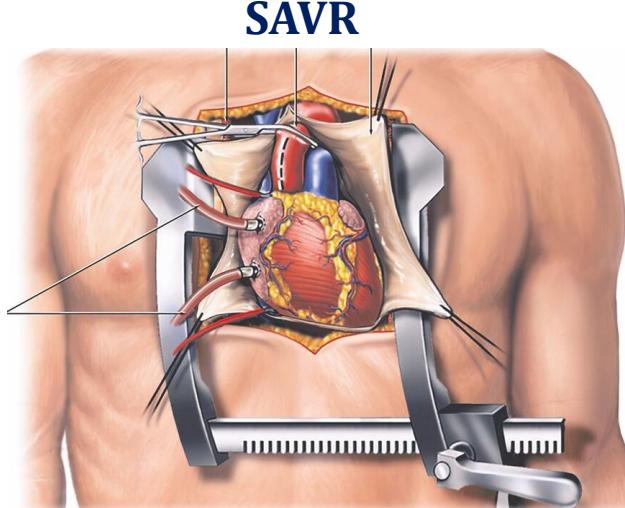
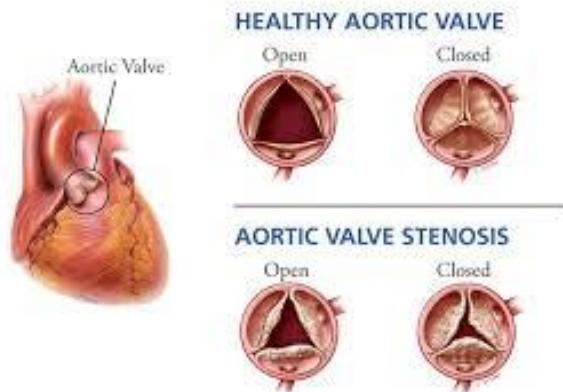
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New Services

	Live	1 ST 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)



Sapien 3

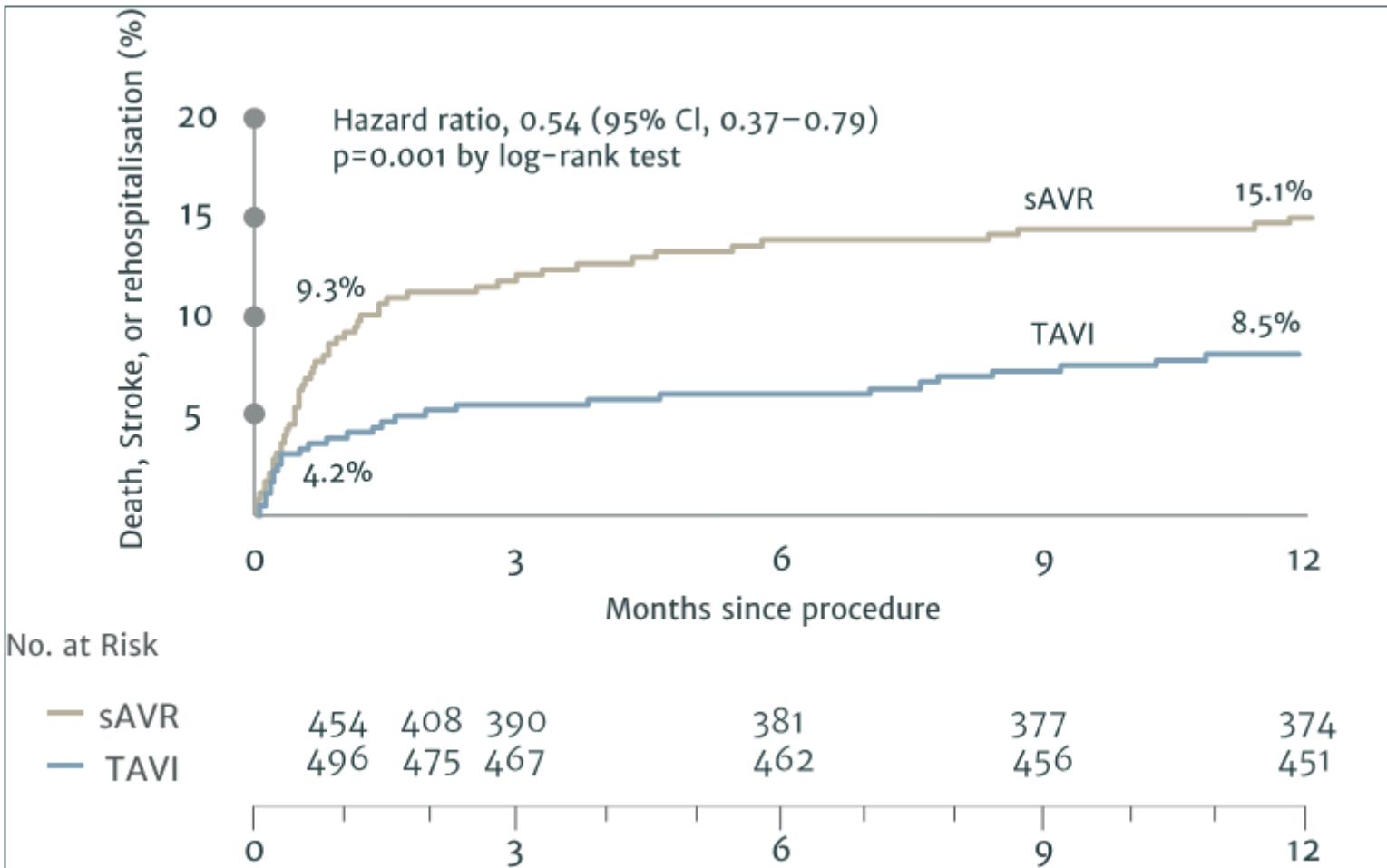


CoreValve



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PARTNER 3 Trial



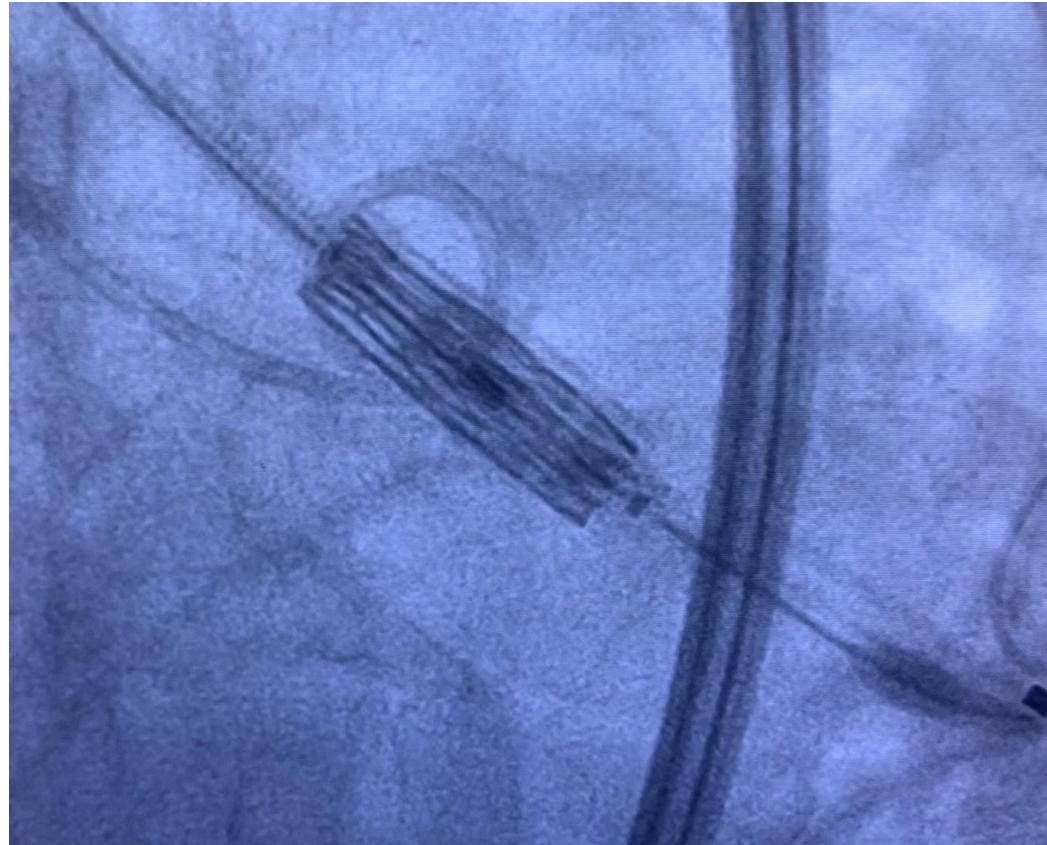
Mack et al. N Engl J Med 2019;380:1695-705



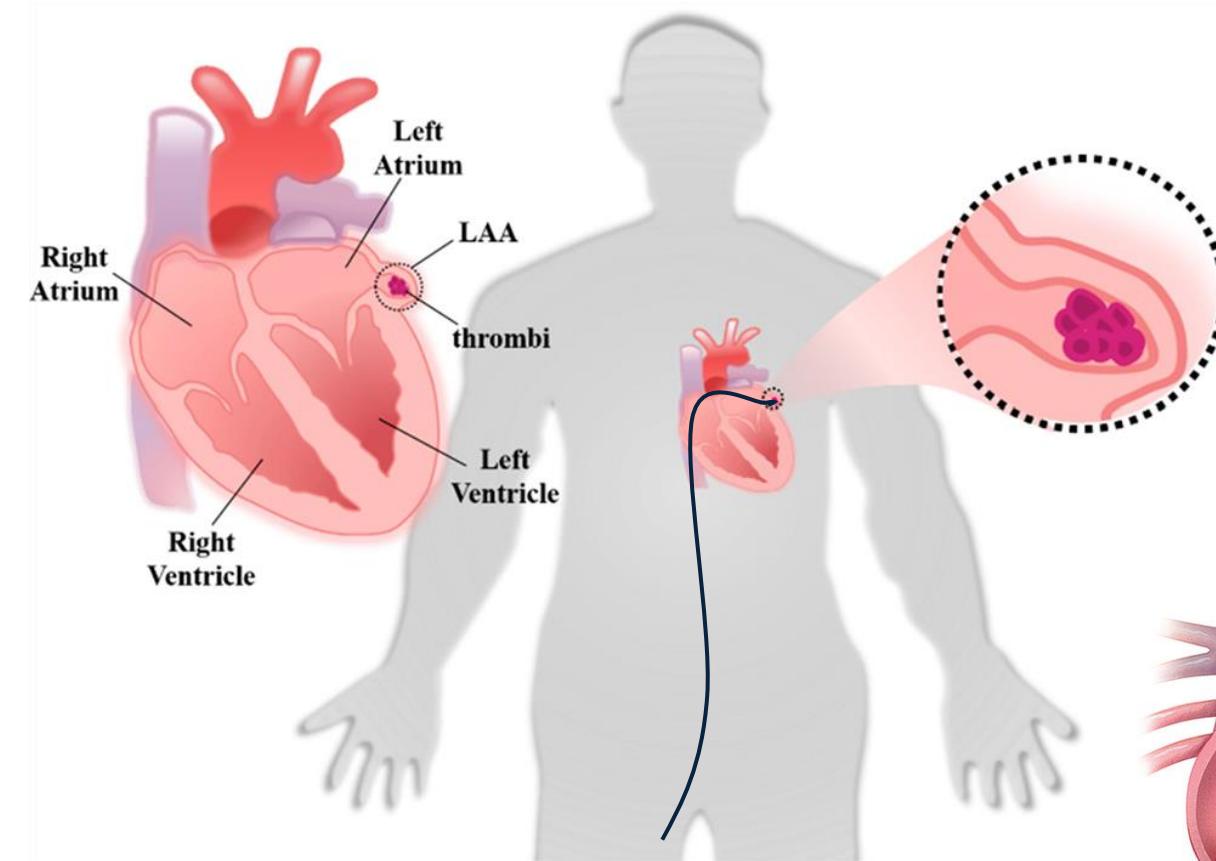
Transcatheter Aortic Valve Replacement (TAVR)

Launched in August 2021

- 45 cases since launch

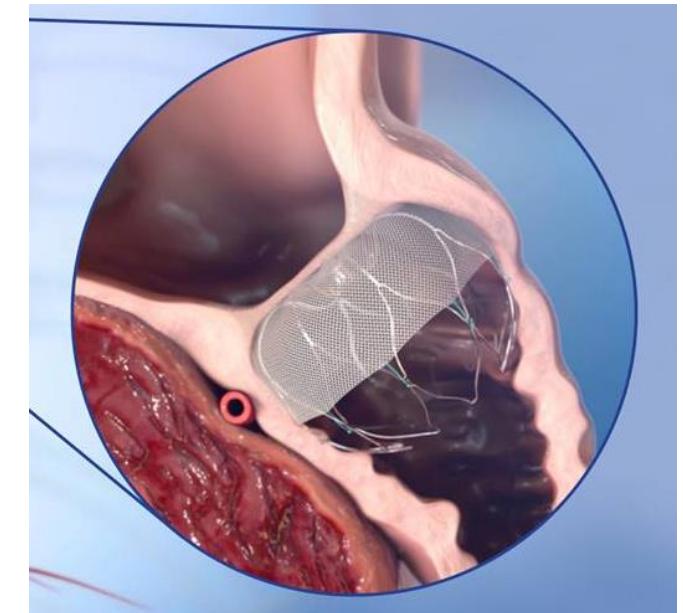
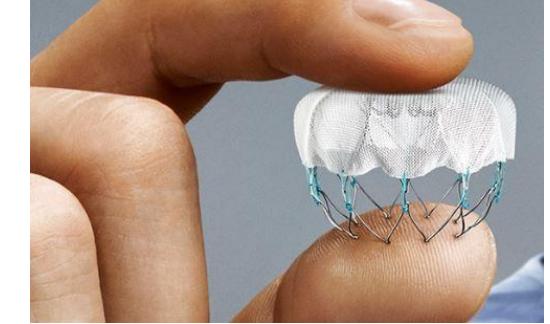
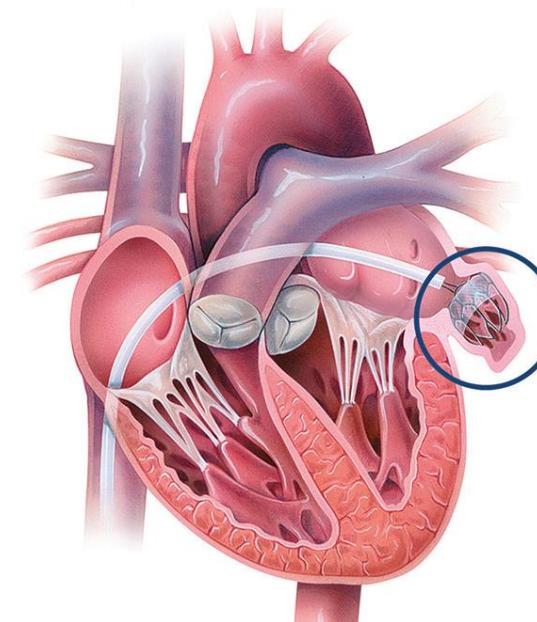


Left Atrial Appendage Occlusion (Watchman®)



Atrial Fibrillation

- High stroke risk
- High risk of bleeding



Launched in January 2023

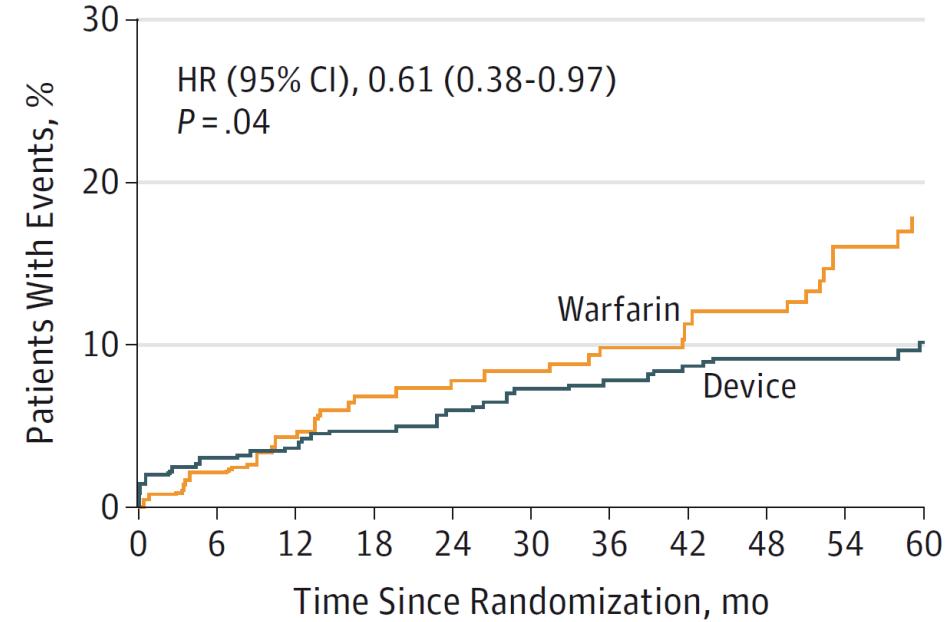
- 45 cases



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Left Atrial Appendage Occlusion (Watchman®)

PROTECT AF



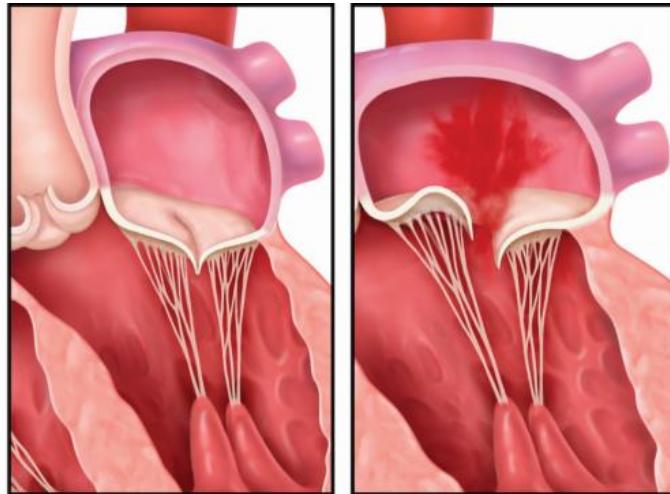
No. of patients

Device	463	398	382	370	360	345	337	327	317	285	196
Warfarin	244	230	218	210	200	188	173	159	147	121	87

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



Transcatheter Edge-to-edge Repair (MitraClip®)

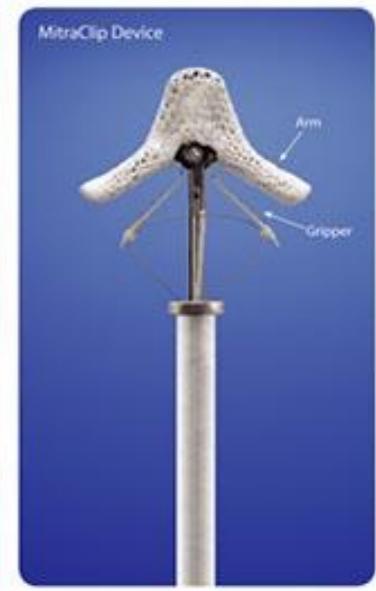
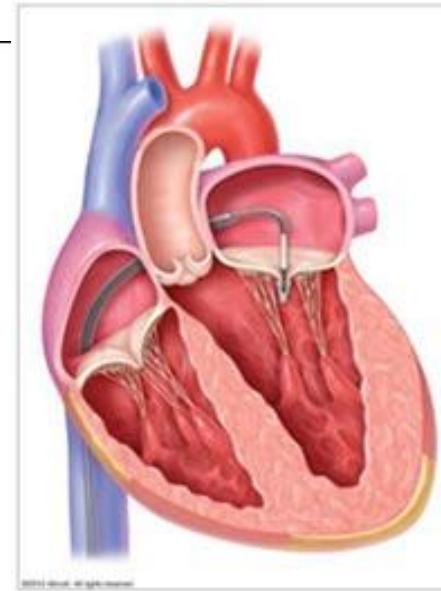
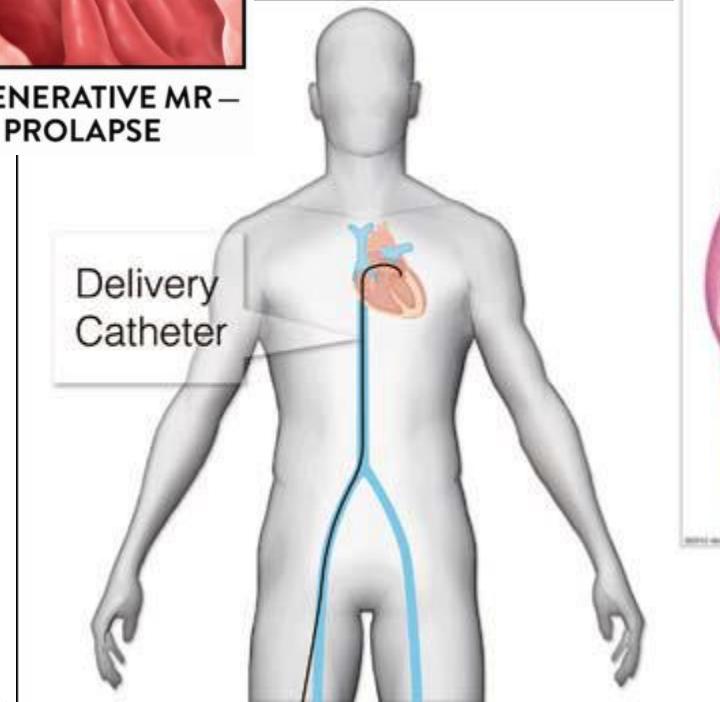


NORMAL VALVE

DEGENERATIVE MR –
PROLAPSE

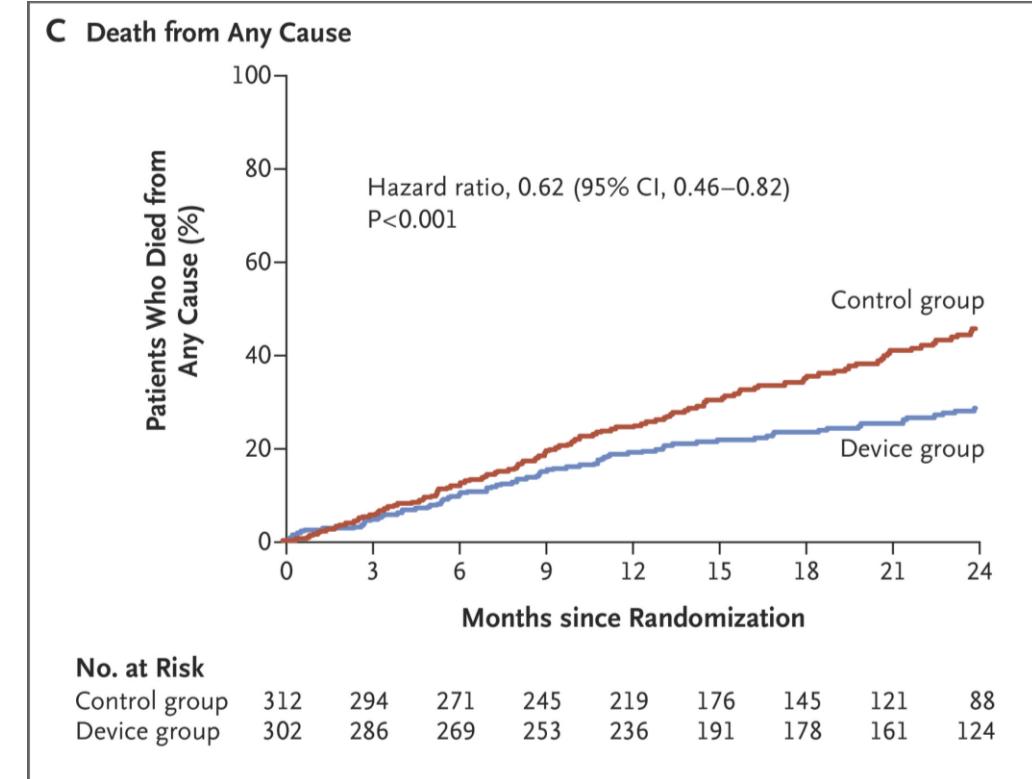
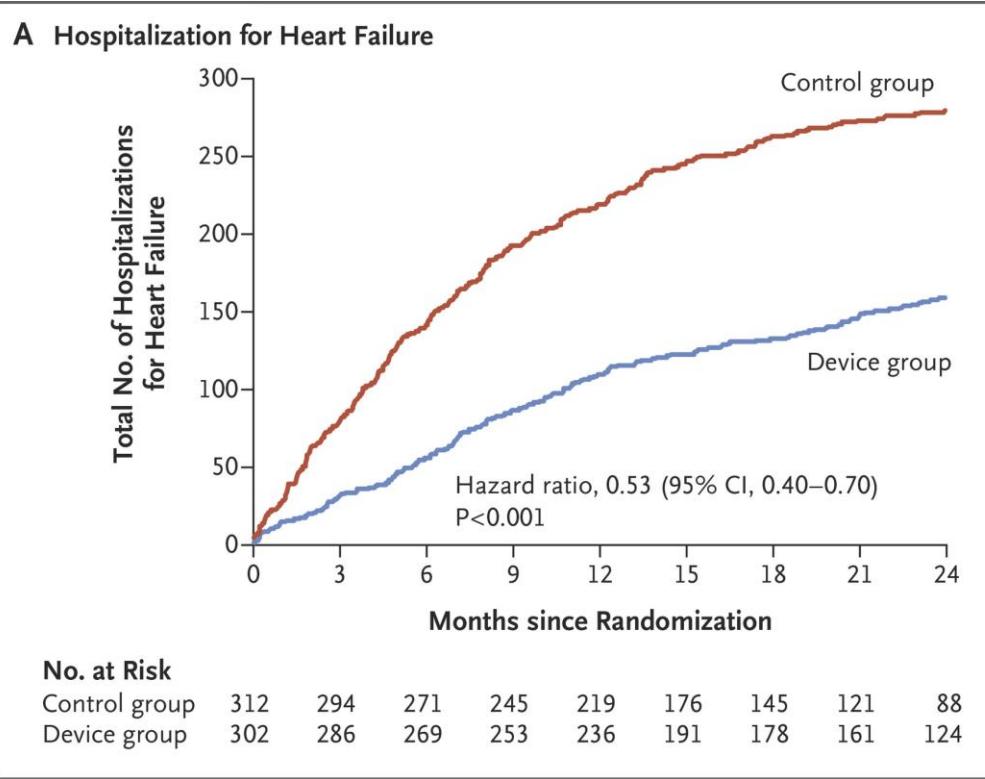
Moderate-Severe / Severe Mitral Regurgitation

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



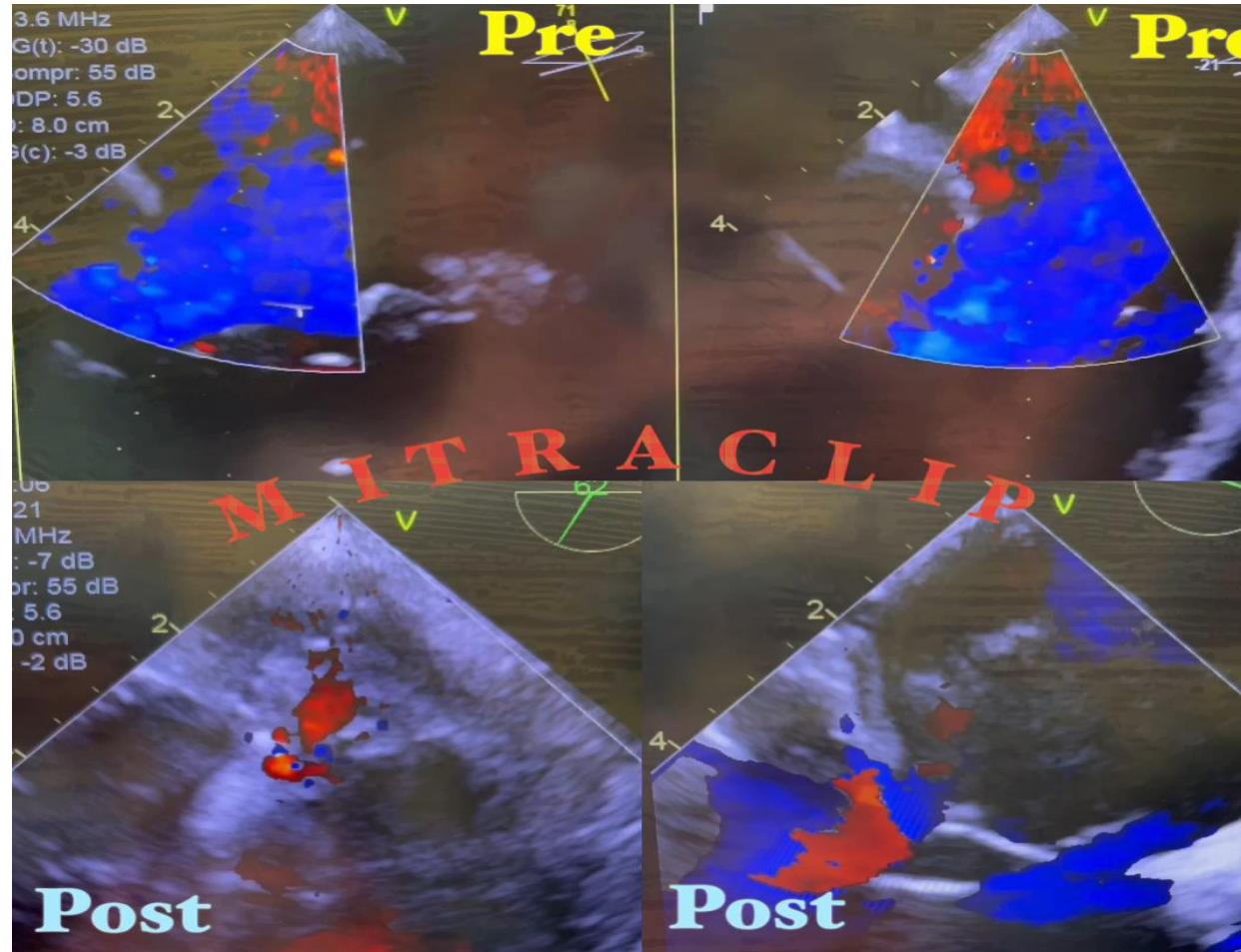
Transcatheter Edge-to-edge Repair (MitraClip®)

COAPT Trial



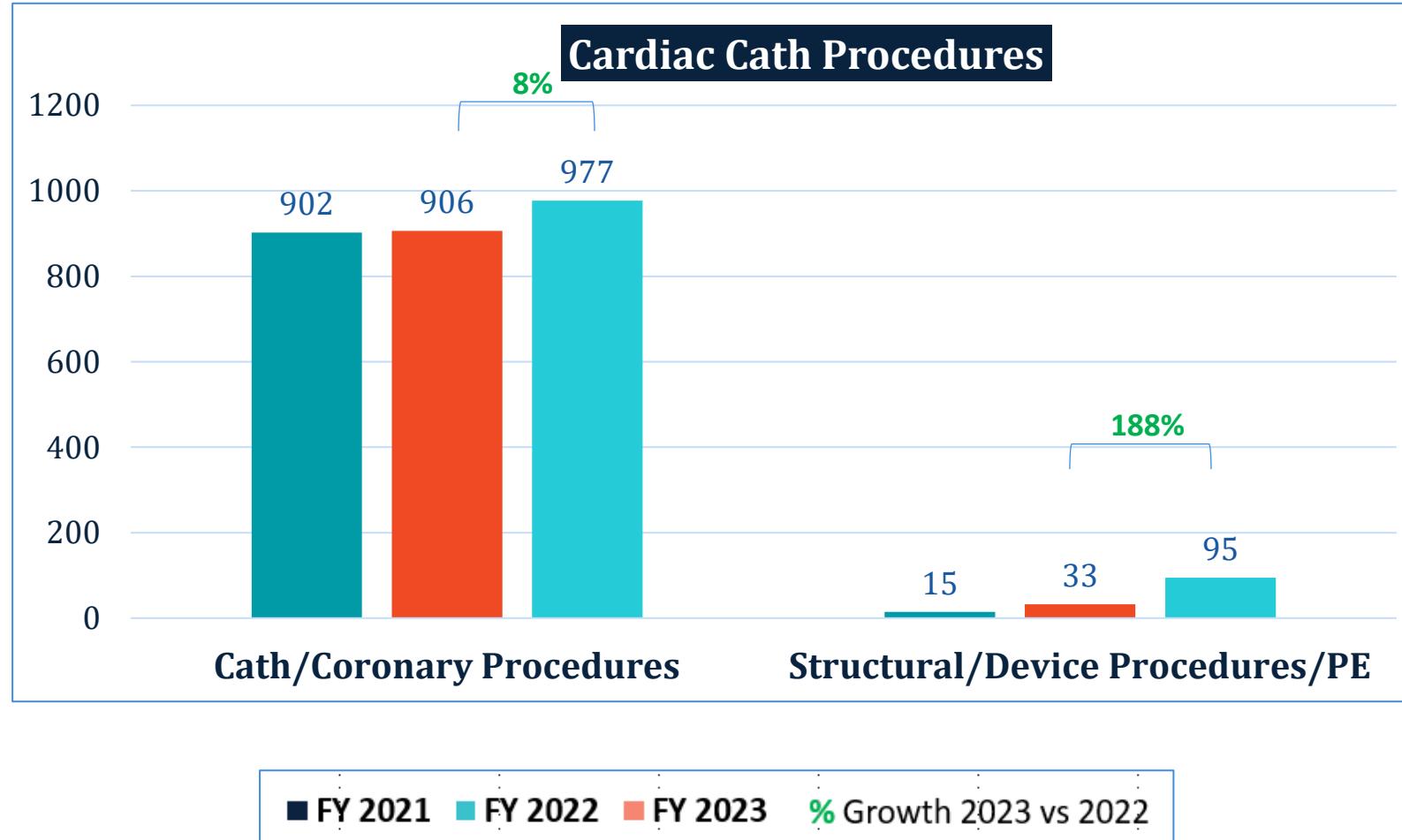
Launched in May 2023

- 20 cases



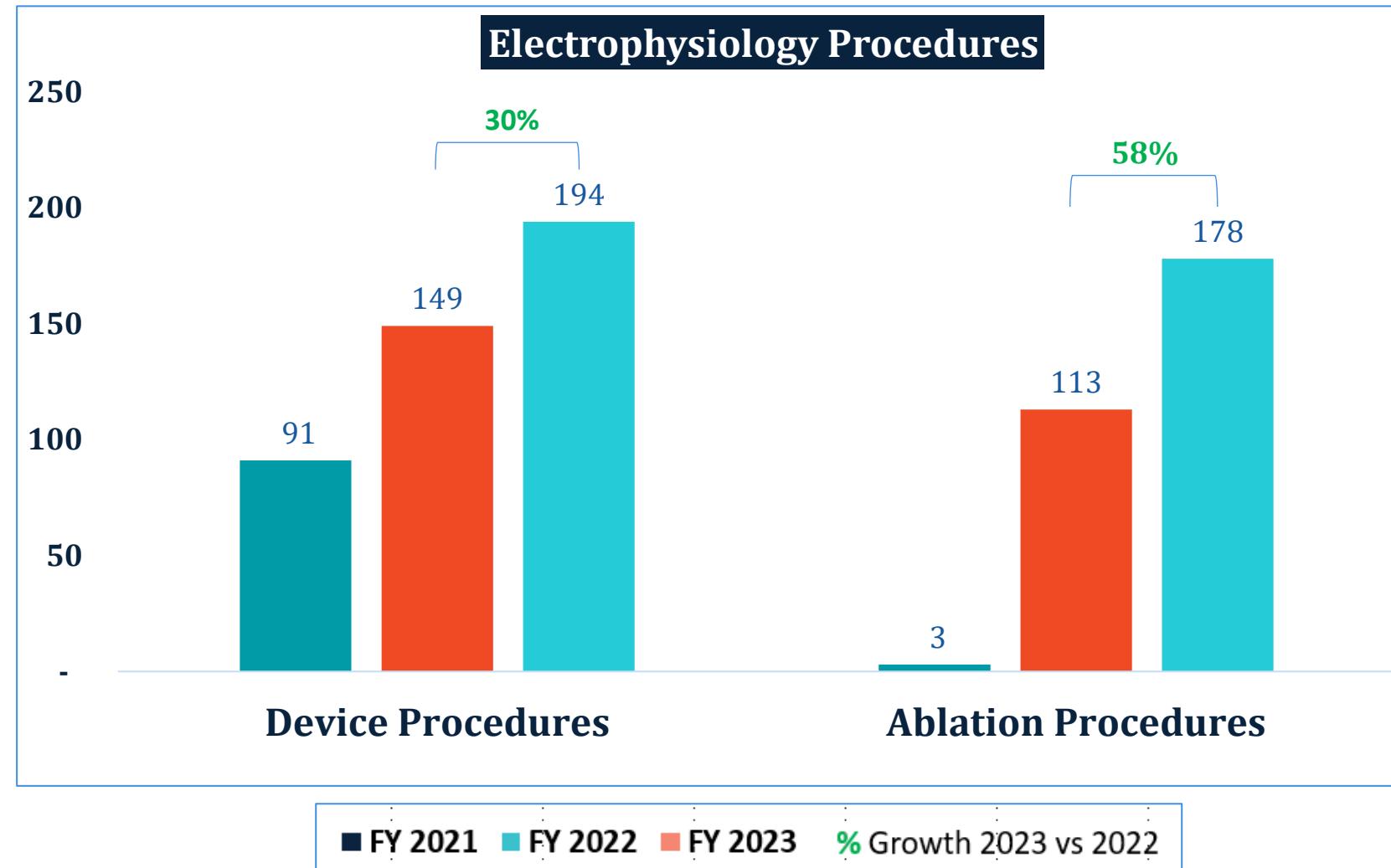
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Coronary & Structural Interventions



Electrophysiology

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



Outpatient

Inpatient

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Surgery

Imaging

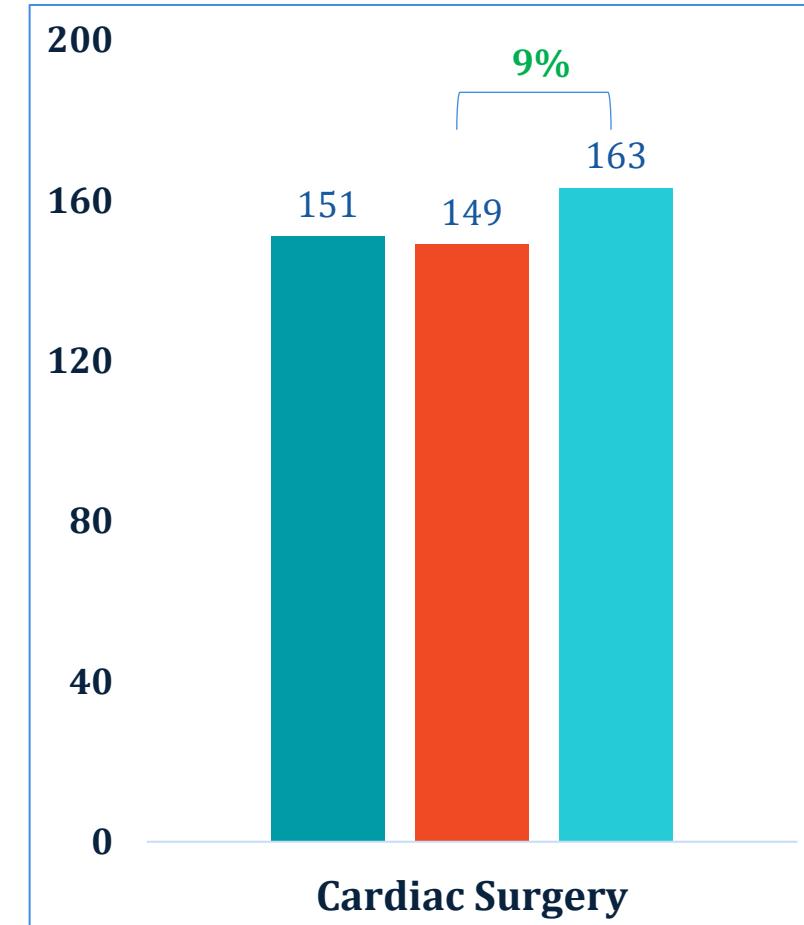
Procedures



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Cardiac Surgery

**Insight Hospital (Mercy)
Transfer Agreement**



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



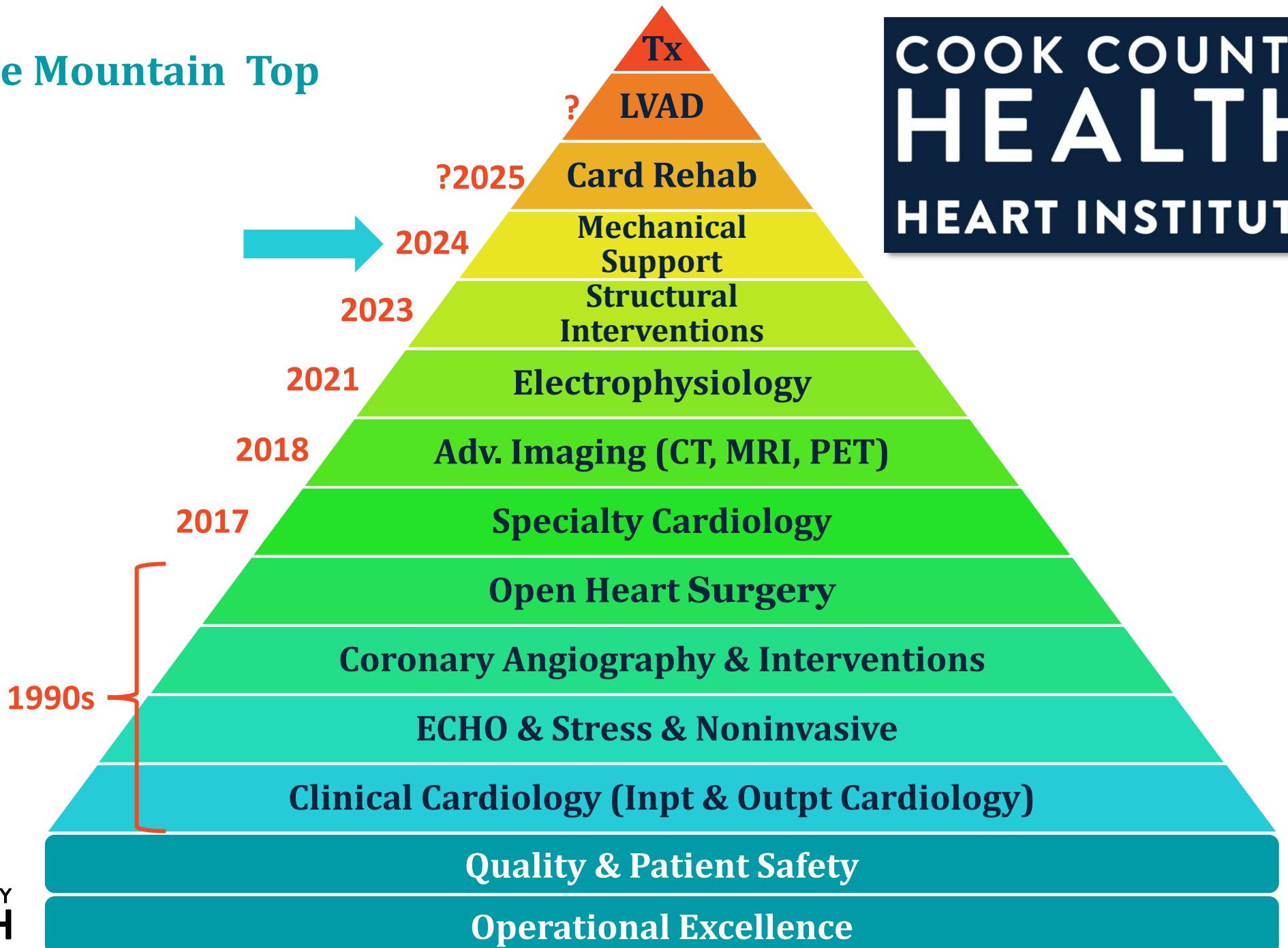
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Climbing to the Mountain Top



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 



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