



Welcome

How to Successfully Navigate Cardiovascular Trends

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CE Credit Deadline: 09/30/24



How to Successfully Navigate Cardiovascular Trends



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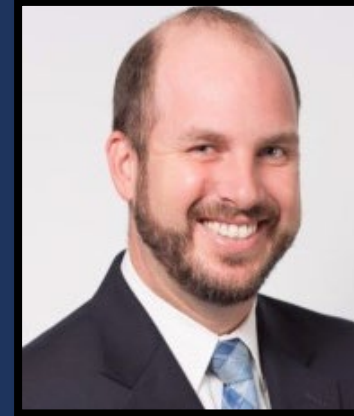
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Disclosures



The presenters have no real or perceived conflicts of interest related to content in this presentation

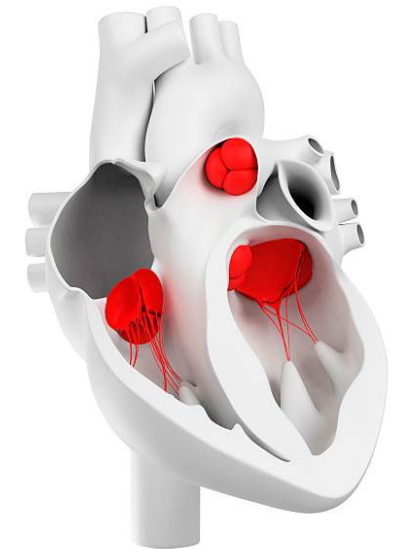
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Learning Objectives

At the end of this session, participants should be able to:

1. Recall new technologies and trends within the cardiovascular space
2. Identify best practices and barriers to adopting new technologies within the cardiovascular space
3. Recognize strategies for partnering with multiple stakeholders, including physicians and hospital executives to drive change



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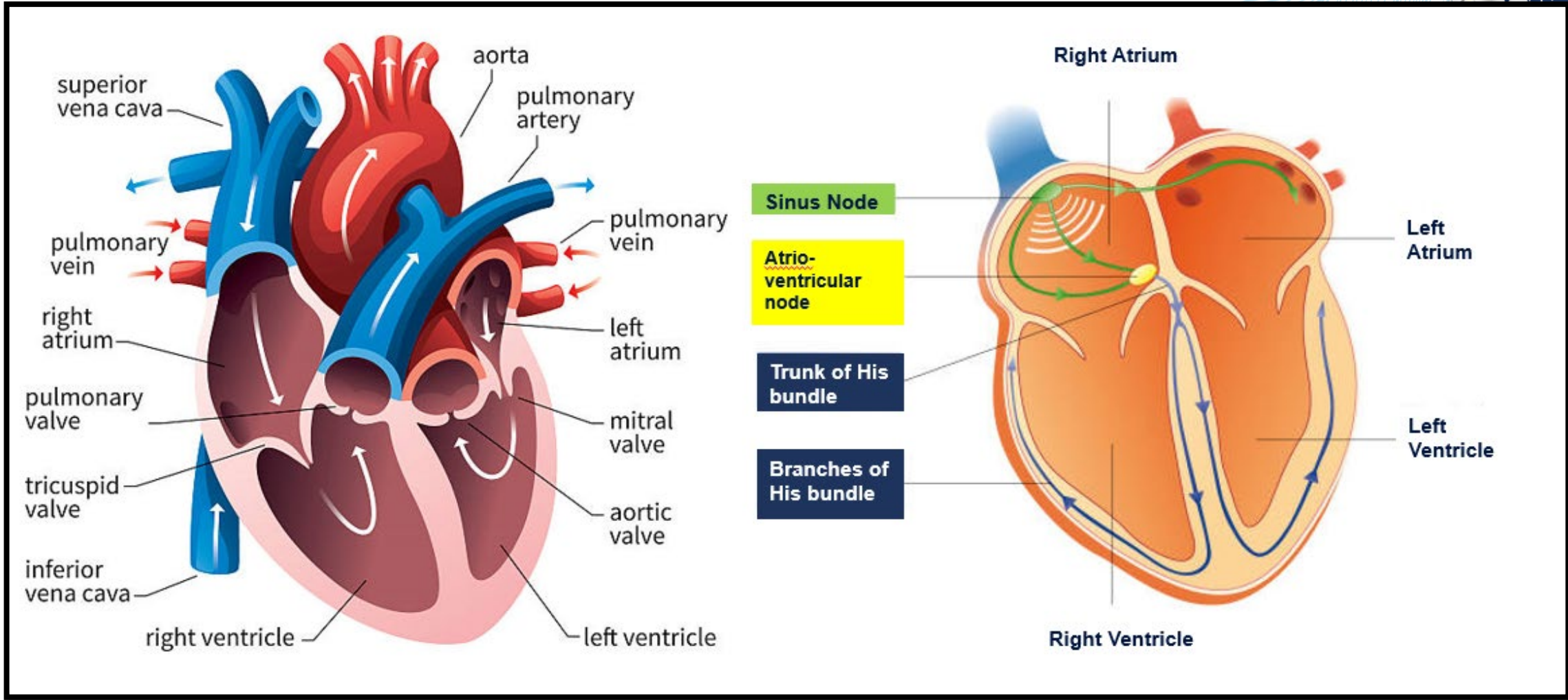
OVERVIEW

Clinical Highlights

Cardiovascular Trends



Clinical Highlights: Cardiac Structure

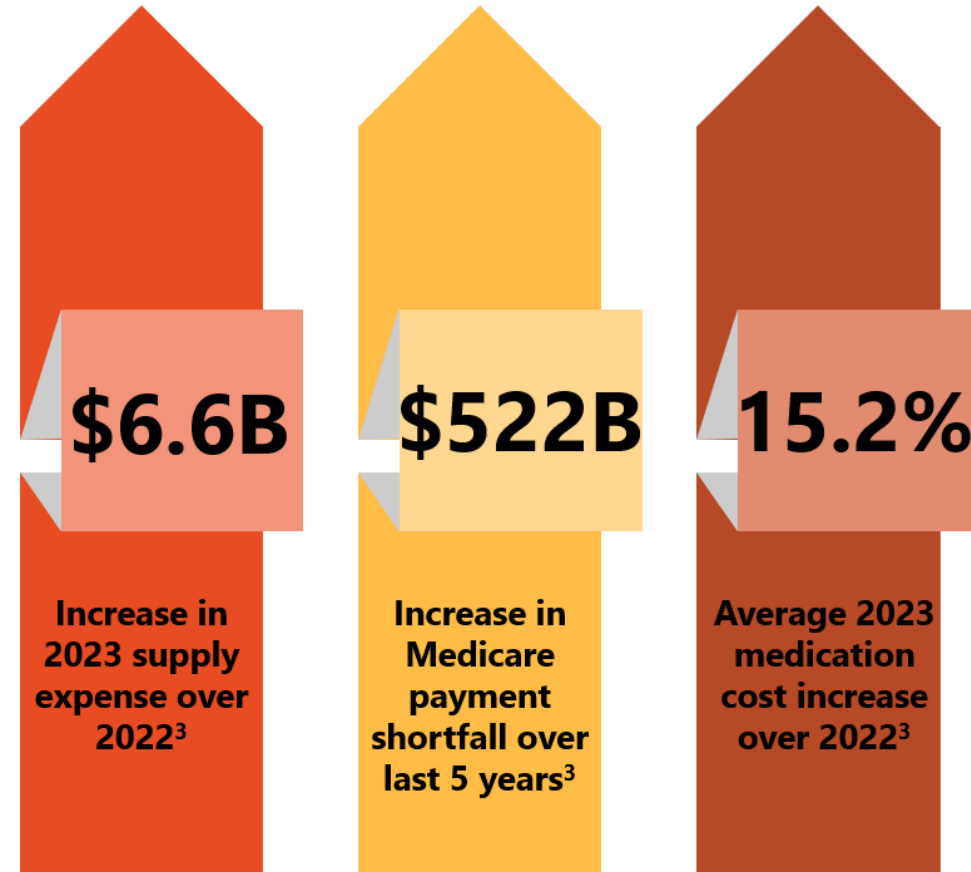


Sources: (2024) Image licensed to HCA Healthcare by Getty Images (#598167278, 151047531)

Cardiovascular Trends



- Healthcare financials are recovering...for the most part¹
- Outpatient and short-stay procedures are leading the margin recovery¹
- 40% of hospitals still lose money¹
- Industry/Service-Line trends
 - Since 2015, 192 Cardiovascular devices have received “Breakthrough” designations, next highest is Neurology (161)²



Sources: 1) The Numbers Behind the National Hospital Flash Report | Kaufman Hall. (2024, February 21). <https://www.kaufmanhall.com/insights/thoughts-ken-kaufman/numbers-behind-national-hospital-flash-report> Accessed 6/24/2024; 2) Breakthrough Devices Program. (2024, March 21). FDA. <https://www.fda.gov/medical-devices/how-study-and-market-your-device/breakthrough-devices-program#metrics> Accessed 6/24/2024; 3) Costs of caring | AHA. (2024, August 5). American Hospital Association. <https://www.aha.org/costsofcaring#:~:text=Hospital%20Supply%20Costs&text=Comprising%20approximately%2010.5%25%20of%20the,data%20from%20Strata%20Decision%20Technology>. Accessed 8/8/2024



INFLUENCING TECHNIQUES



Poll Question: Shifting Practice

Poll Question: When implementing a practice change, the resource I leverage the most is:

- A. Chief Medical Officer | Physician Stakeholder
- B. Service Line Medical Director
- C. Evidence-based clinical data
- D. Vendor education | clinical specialist
- E. Financial pro forma



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Clinical Overview: TAVR

- **Criteria:** Transcatheter aortic valves are stented, biologic valves used to replace diseased, damaged or malfunctioning native or prosthetic aortic heart valves through a catheter¹
- **Evidence:** Transcatheter or Surgical Treatment of Aortic-Valve Stenosis – Among patients with severe aortic stenosis at low or intermediate surgical risk, TAVR was non-inferior to SAVR with respect to death from any cause or stroke at 1 year²
- **Trend:** Level I study sponsored by vendor advocating for technology



Sources: (2024) Image licensed to HCA Healthcare by Getty Images (#2152060057); (2024) Randomized Controlled Trial, N Engl J Med. 2024 May 2;390(17):1572-1583. doi: 10.1056/NEJMoa2400685. Epub 2024 Apr 8.

Scenario: TAVR

Partnering with vendor to provide continuous education opportunities

- **Scenario:** Shifting from higher cost impact legacy device to lower cost newer device with supporting clinical evidence
- **Technique: Partnering with vendor to provide continuous education opportunities**
 - Champion awareness of vendor clinical trial results
 - Establish lower cost option as primary valve for all new programs based on clinical evidence
 - Require an exception form be completed to identify clinical indications for non-preferred option
- **Results:** Historical shift from legacy vendor 75–85% to 35–40% current state



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Scenario: TAVR Exception Form

Establishing Clinical Guidelines for Selection

Clinically Driven

**Physician
Collaboration**

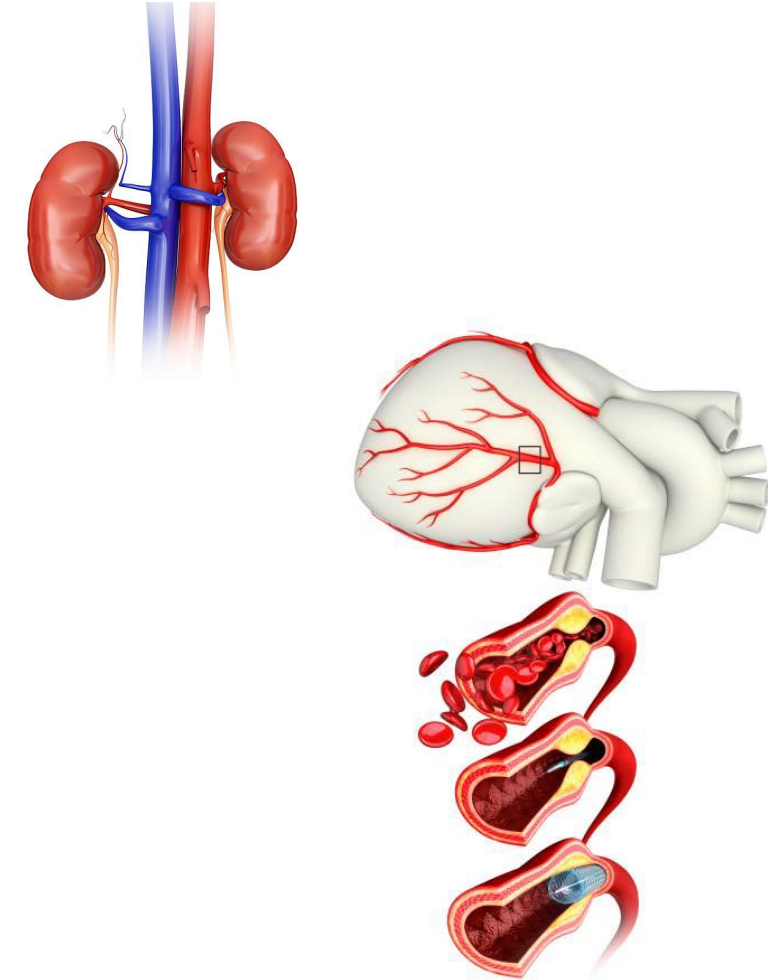
**Develop Tracking
Mechanism**

- **Understanding the Indications for Use between valve options**
- **Risk factors associated with re-access or needs for re-intervention**
- **Anatomical differences**

Poll Question: New Technology

Poll Question: The primary way I balance the cost of new technology with the clinical demand is (e.g., AI, proprietary system requirements):

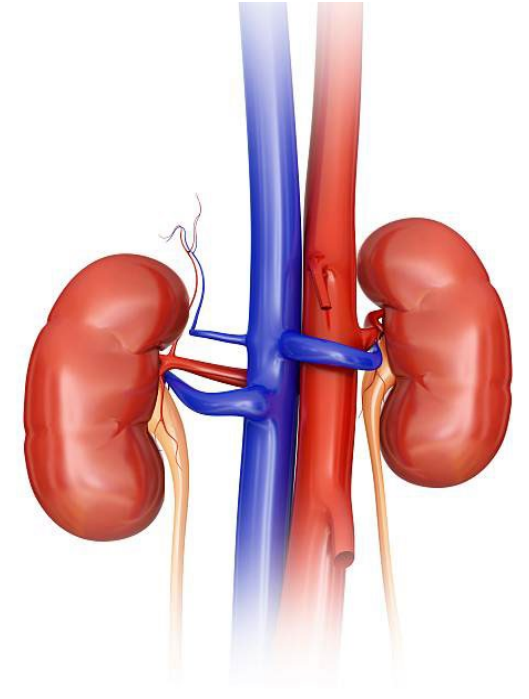
- A. Clinical evidence and patient criteria
- B. Pressure based on physician interest
- C. Implement off-set cost savings initiative
- D. Reduction through standardization



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Clinical Overview: Renal Denervation

- **Criteria:** Renal Denervation Systems are used to ablate sympathetic nerve endings attached to the renal artery to reduce blood pressure in hypertensive patients.
- **Evidence:** Cost effectiveness of Endovascular Ultrasound Renal Denervation in patients with Resistant Hypertension – Endovascular ultrasound RDN with the Paradise system offers patients with rHTN, clinicians, and healthcare systems a cost-effective treatment option alongside antihypertensive medication²
- **Trend:** Level III study sponsored by vendor advocating for technology

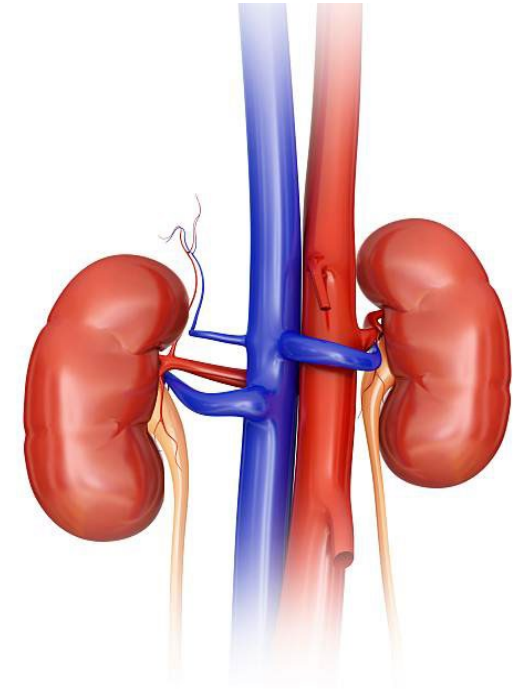


Sources: (2024) Image licensed to HCA Healthcare by Getty Images (#590279157); Vendor Sponsored: Pharmacocon Open. 2024 Jan 30. doi: 10.1007/s41669-024-00472-z. Online ahead of print.

Scenario: Renal Denervation

Using clinical evidence with financial pro forma to determine adoption strategy

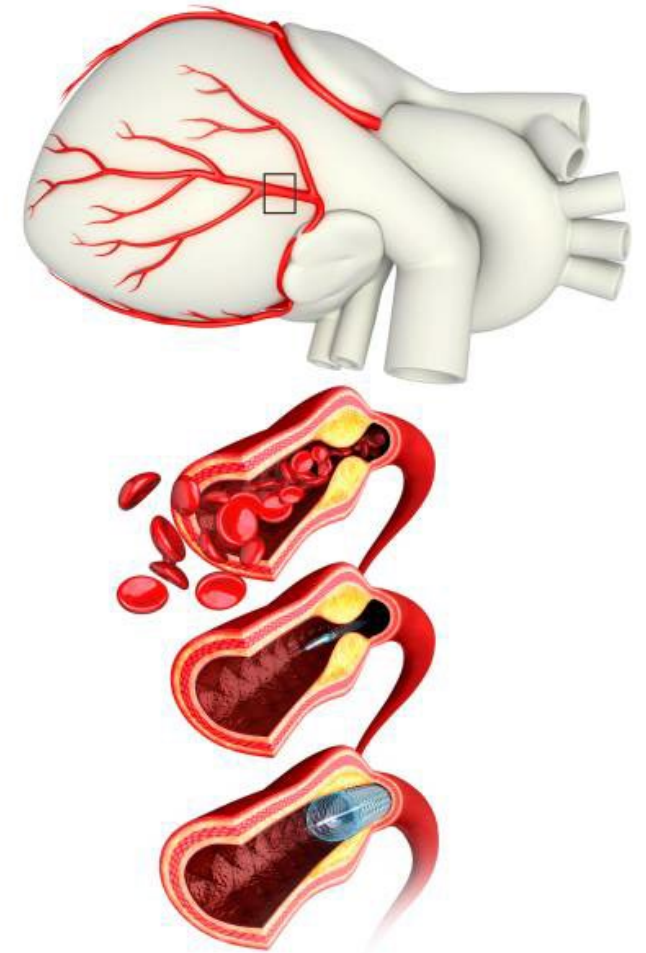
- **Scenario:** New technology (FDA) offering for renal denervation that has physician interest
- **Technique:** Using clinical evidence with financial pro forma to determine adoption strategy
 - Two primary vendors relaunching or offering new products
 - Current reimbursement guidelines suggest more caution is needed before launching
- **Results:** Partnered with interested physicians on “pausing” request to develop program infrastructure (e.g., hypertension clinics) while waiting for the reimbursement landscape to mature



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Clinical Overview: Drug-coated Balloon (Coronary)

- **Criteria:** Drug-coated balloon percutaneous transluminal coronary angioplasty (PTCA) catheters are used for treating in-stent restenosis (ISR) and small vessel diseases.
- **Evidence:** Paclitaxel-Coated Balloon vs. Uncoated Balloon for Coronary In-Stent Restenosis: Randomized Clinical Trial
 - Among patients undergoing coronary angioplasty for in-stent restenosis, a paclitaxel-coated balloon was superior to an uncoated balloon with respect to the composite end point of target lesion failure.
 - Paclitaxel-coated balloons are an effective treatment option for patients with coronary in-stent restenosis.²
- **Trend:** Level I study sponsored by vendor advocating for technology

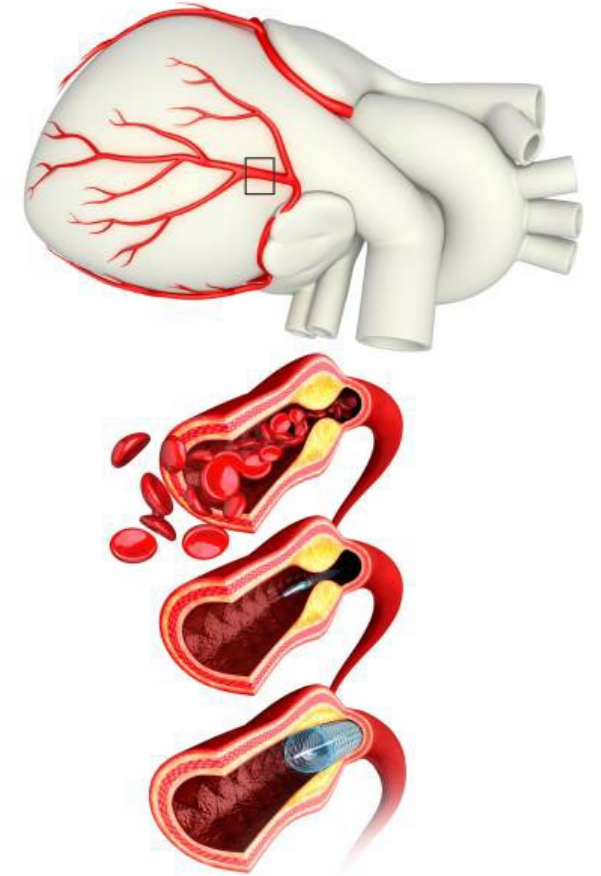


Sources: (2024) Image licensed to HCA Healthcare by Getty Images (#758313211); Vendor Sponsored: JAMA. 2024 Mar 26;331(12):1015-1024. doi: 10.1001/jama.2024.1361.

Scenario: Drug-coated Balloon (Coronary)

Using physician-led committees to establish protocols for use

- **Scenario:** New technology (FDA) offering for percutaneous coronary intervention utilizing Paclitaxel-Coated Balloon Catheter
- **Technique:** Using physician-led committees to establish protocols for use
 - Establish and engage with Clinical Value Analysis Committees
- **Results:** Committee agreed to endorse the following considerations for use:
 - Treatment site selection
 - Focused patient population
 - Governance/Oversight



Source: (2024) Image licensed to HCA Healthcare by Getty Images (#758313211)

Organizational Chart: Cardiovascular



Cardiovascular Executive Governance Committee

Clinical Value Analysis Team	Interventional Cardiology	Surgery	EP	Heart Failure	Imaging
<ul style="list-style-type: none">• Cadence: Every other month• Scope: New technology; cost containment opportunities	<ul style="list-style-type: none">• Cadence: Quarterly• Scope: Quality; growth; operational workflow; clinical pathways; outreach opportunities	<ul style="list-style-type: none">• Frequency TBD• Scope: Quality; OBPA metrics; growth; operational workflow; clinical pathways; outreach opportunities	<ul style="list-style-type: none">• Quarterly• Scope: Quality; growth; operational workflow improvement; clinical pathways; PSG/hospital integration; outreach opportunities	<ul style="list-style-type: none">• Quarterly• Scope: Operational KPIs; workflow improvement; growth; quality; staffing; outreach locations	<ul style="list-style-type: none">• Quarterly• Scope: Operational KPIs; workflow improvement; growth; quality; staffing; outreach locations

Clinical Overview: Pulse Field Ablation (PFA)

- **Criteria:** Pulsed Field Ablation (PFA) generators use non-thermal, selective ablation through irreversible electroporation to treat cardiac arrhythmias
- **Evidence:** FDA indications are for PVI (pulmonary vein isolation) and Paroxysmal AFib (intermittent, not chronic)
- **Trend:** Level II evidence reinforcing early excitement on PFA adoption vs. current ablation technologies

Source: Meta-Analysis Pacing Clin Electrophysiol. 2024 May;47(5):603-613. doi: 10.1111/pace.14971. Epub 2024 Mar 25.

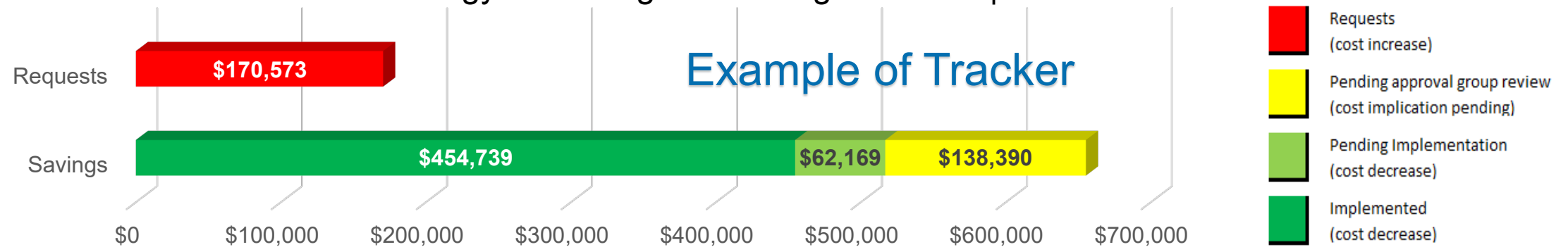
Scenario: Pulse Field Ablation (PFA)

Using excitement of new technology to leverage off-setting initiatives

- **Scenario:** New technology (FDA) for cardiac ablations. Overwhelming EP physician interest (and previous participation in studies prior to FDA approval)
- **Technique:** Using excitement of new technology to leverage off-setting initiatives
 - Partner with facility leadership and physicians to re-focus cost reduction strategies
 - Partner with physicians on increasing volume and through additional off-setting cost initiatives to overcome margin erosion
- **Results:**
 - Clinical governance and executive stakeholders accountable to the roll-out plan
 - Aligned with FDA clinical indications
 - (Aggressively) working through off-setting cost initiatives to be implemented

Summary

- CV technology trends over the last six to nine months
- Identify and utilize techniques
 - Vendor relationships | TAVR
 - Clinical evidence with financial pro forma | renal denervation
- Message financial impact through leveraging physicians, vendors and existing governance structures
 - Physician-led committees to establish protocols for use | drug coated balloon (coronary)
 - Excitement of new technology to leverage off-setting initiatives | PFA



Source: (2024) Example Made in Excel

Resources

- **CV Trends:**

<https://www.kaufmanhall.com/insights/thoughts-ken-kaufman/numbers-behind-national-hospital-flash-report>

<https://www.fda.gov/medical-devices/how-study-and-market-your-device/breakthrough-devices-program#metrics>

<https://www.kaufmanhall.com/insights/thoughts-ken-kaufman/numbers-behind-national-hospital-flash-report>

- **TAVR:**

<https://hcahealthcare.ovidts.com/logging/outgoing?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F38588025&key=08420800-4bae-4239-b3ae-1d7a1e94c5af>

- **Renal Denervation:**

<https://hcahealthcare.ovidts.com/logging/outgoing?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F38289517&key=87f586fa-8b3b-4865-92f0-ffb73be9f084>

- **Drug-Coated Balloon (Coronary):**

<https://hcahealthcare.ovidts.com/logging/outgoing?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F38460161&key=e79cc1d9-8280-4476-b520-8bcce57b4311>

- **Pulse Field Ablation (PFA):**

<https://hcahealthcare.ovidts.com/logging/outgoing?url=https%3A%2F%2Fpubmed.ncbi.nlm.nih.gov%2F38525525&key=a83c2aba-d036-45f0-9bed-5489ab146100>

- **Pictures:**

<https://www.gettyimages.com/search/2/image?alloweduse=availableforalluses&agreements=pa%3A183898&family=creative&phrase=heart%20valve&sort=best&mediatype=illustration&assetfiletype=>



Thank You

