

# Therapeutic Choices and Medical Decision-Making: Geriatric Cardiology Perspective

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# Disclosures

- None

# Case #1

- 75 year old with diabetes, hypertension
- Presented with 100 lb. weight loss 2/2021 -> diagnosed with intrahepatic cholangiocarcinoma
- Determined unresectable -> started on chemotherapy (gemcitabine and cisplatin)
- Normal mobility, normal cognition

# Case #1

- Subsequently presented to ED with shortness of breath and chest pain
- Workup:
  - Labs: new anemia (hemoglobin 7.5, baseline 11)
  - EKG: no ischemia
  - Echo: hypertrophic cardiomyopathy (post-Valsalva LVOT gradient 55 mmHg)
  - Stress test: no evidence of ischemia or infarct

# Case #1

- Impression: chemotherapy-induced anemia leading to dyspnea/chest pain in setting of dynamic LVOT obstruction
- Plan:
  - Start beta blocker
  - Referral to HCM program
  - Transfusion to maintain hemoglobin >10

# Case #1

- Decisions:
  - Continue chemotherapy?
  - Continue transfusions?
  - Extent of HCM care?

# Case #2

- 90 year old with hypertension
- CT scan (for abdominal discomfort): possible mass in colon
- Initially declined colonoscopy
- Heme negative stool
- Mild mobility impairment (uses cane), normal cognition

# Case #2

- Office visit: atrial fibrillation
- CHADS-VASC: 4 (age  $\geq 75$ , hypertension, diabetes)

# Case #2

- Decisions:
  - Start oral anticoagulation?
  - Encourage malignancy workup (colonoscopy?)

# The Problem

- We are facing complex decisions that involve multiple domains (cardiology, oncology) *plus* aging related issues (frailty, disability, cognitive impairment)

# Shared Decision Making

# Definition

“An approach where clinicians and patients share the best available evidence when faced with the task of making decisions, and where patients are supported to consider options, to achieve informed preferences.”

# Decision aids

- Tools that enable SDM by synthesizing information to effectively translate treatment options for patients
- Multiple formats: pictures, videos, cards, websites, phone and tablet-based apps
- Shown to increase patient knowledge, improve satisfaction, and reduce anxiety

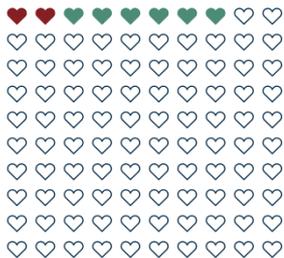
# SDM and decision aids

- Current practice: used for “high-cost, preference-sensitive procedures”
- CMS mandates in cardiology:
  - Primary prevention ICD
  - LA appendage closure
- In guidelines (but no CMS mandate):
  - Valve surgery (TAVR vs. SAVR)

## Blood Thinners

## Closure Device

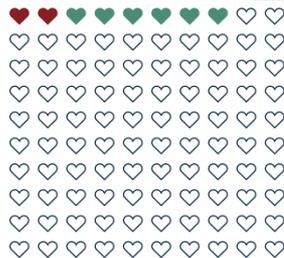
### Stroke Risk



Each year, out of 100 people like you who take **blood thinners**, about:

♥ = 2 will have a stroke

♥ = 6 will be saved from a stroke

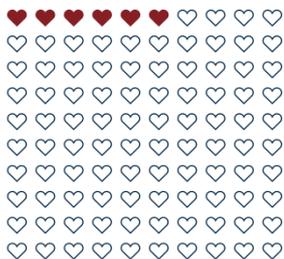


Each year, out of 100 people like you who get a **closure device**, about:

♥ = 2 will have a stroke

♥ = 6 will be saved from a stroke

### Other Risk



Each year, out of 100 people like you who take **blood thinners**, about:

♥ = 6 will have major bleeding



Each year, out of 100 people like you who get a **closure device**, about:

♥ = 1 will have major bleeding

♥ = 1 will have procedure-related stroke

♥ = 1 will have procedure-related damage to the heart

## What We Don't Know

Since the **closure device** is a **new treatment**, we have less understanding of how well it works to prevent stroke and the long term side effects.

- ▶ **Stroke Risk:** Studies show that the closure device reduces strokes in people with AFib about the same as blood thinners. However, the exact benefit is less certain.
- ▶ **Bleeding Risk:** Studies on the closure device have only compared its effectiveness to the warfarin blood thinner. Therefore, we do not know how it compares to the newer DOACs, which appear to have a lower bleeding risk than warfarin.
- ▶ **Procedure Risks:** The procedure risks of the device are different from center to center. The risks are improving and occur less among doctors who have done the procedure many times.
- ▶ **Long Term Risks:** We have less understanding of the long term risks and side effects of the device or what living with the device looks like over several years.

	<b>Blood Thinner (Coumadin, Eliquis, Pradaxa, Savaysa, Xarelto)</b>	<b>Closure Device (WATCHMAN)</b>
<b>Side Effects</b>	Increased risk of bleeding, so must avoid activities that could cause bleeding or bruising.	Usually requires only short-term use of blood thinners, so there is a lower bleeding risk, which means you will not have to avoid activities.
	Bleeding in the brain or stomach is possible.	
	Depending on which blood thinner you take, side effects include skin rash, stomach upset or pain, or anemia (low red blood cells).	Since the device requires a procedure to place it in the heart, there are some risks during and after the procedure.
	Can also cause severe and noticeable bruising.	Less is known about long term side effects.
<b>Medicine Details</b>	Medicine must be taken daily – usually once or twice per day.	Blood thinners do not usually need to be taken after the first 45 days. Other medicines will still need to be taken.
	May interact with other medicines.	Device does NOT interact with other medicines.
	Can be used by patients with any type of AFib because it reduces risk of clotting throughout the heart.	Can be used as a long term therapy to prevent stroke only in non-valvular AFib patients because it reduces clotting in left atrial appendage.
<b>Lifestyle</b>	Depending on which blood thinner you take, it may require regular blood testing to make sure it's working correctly.	Requires clinic follow-up visits in the beginning and a follow-up echo procedure.
	Depending on which blood thinner you take, it may require changes to and monitoring of your diet.	Does NOT require change to your diet.
	Once started, medicine should be taken for the rest of your life.	One-time procedure where blood thinners can usually be stopped after the first 45 days.
<b>Cost</b>	Depending on which blood thinner you take and your insurance, the cost could be low (where a 1-year supply costs about \$100) or high (where a 1-year supply can cost about \$3,500 without insurance). Cost of follow-up blood testing may apply.	Depending on your insurance, the device could be covered. Medicare has strict rules on what type of patient can receive the device, so talk to a clinician to know if you would be covered.

# Decision Aids

- Current paradigm in cardiology: limited to major procedures

# SDM for cardio-oncology

- Current decision aids are situation-specific; may not be adaptable for complex decisions
- In addition, aging-specific barriers to use: sensory impairment (vision, hearing), cognitive impairment

# Moving Forward

# Improving Care Using a Bidirectional Geriatric Cardiology Consultative Conference

*Eleonore V. Grant, BA,\*  Adam H. Skolnick, MD,\* Joshua Chodosh, MD,†  
Michael H. Perskin, MD,† Nicole M. Orr, MD,‡ Caroline Blaum, MD,†§ and  
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More than 13 million persons in the United States aged 65 and older have cardiovascular disease (CVD), and this population is expected to increase exponentially over the next several decades. In the absence of clinical studies that would inform how best to manage this population, there is an urgent need for collaborative, thoughtful approaches to their care. Although cardiologists are traditionally regarded as leaders in the care of older adults with CVD, these individuals have multiple comorbidities, physiological differences, and distinct goals of care than younger patients that require a specialized geriatric lens. Thus, col-

**Key words:** cardiology; geriatrics; multidisciplinary; innovation

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**W**ith longer life expectancy, the population of older adults in the United States is expanding rapidly. Between 2000 and 2030, it is estimated that the number of persons aged 65 and older will increase from 40 million



PowerPoint Slide Show - [12-20 GCC\_Aaron Troy Presenting]

**Function**

- Independent in all IADLs except paying bills
- Newly using walker for ambulation as of 3 weeks PTA
- No fall history

**Cognition**

- Ms. S and son note no memory impairment
- Ms. S notes slight confusion when giving her son instructions
- CAM negative

**Mood**

- Feels anxious and panicked in association with any other symptoms
- PHQ 2 negative

**ACP**

**Mini-Cog Score: 2**

- 3/3 Word Recall
- 0/2 Clock Draw

iPad (10)

## Discussion Questions

- How should we manage atrial fibrillation in older adults?
  - Rate vs. rhythm control?
  - Specific medications / adverse effects?
- How do we approach anticoagulation in high bleeding risk elders?
  - Left atrial appendage occlusion device?
- How should we manage a patient with isolated clock-drawing difficulty on Mini-Cog?
  - Connection between atrial fibrillation and dementia?
  - Responding to patient preference for family interpretation?
- How can we support smooth care transitions and provider consistency?
- How should we partner with patients who decline recommended treatment?





**THANK YOU**

