



# How Should LAA Closure Devices be Integrated into Clinical Practice?

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# Presenter Disclosure Information

**David R. Holmes, Jr., M.D.**

**“How Should LAA Closure Devices be Integrated into Clinical Practice?”**

**The following relationships exist related to this presentation:**

**Both Mayo Clinic and I have a financial interest in technology related to this research. That technology has been licensed to Boston Scientific.**



# LAA and Clinical Practice Issues

- **Where will the patients come from?**
  - **General internal medicine/family practice**
  - **Geriatrics**
  - **Neurology**
  - **Thrombophilia clinics**
  - **Gastroenterology**
  - **General cardiology**
  - **Interventional cardiology**
  - **Electrophysiology**

# LAA and Clinical Practice Issues

- **How will they get to you?**
  - **Inpatient or outpatient services**
  - **Arrhythmia clinics**
  - **Structural heart disease clinics**
  - **Cardioversion units**

# LAA and Clinical Practice Issues

- **Patient protocols**
  - **Need for CT**
  - **Timing of TEE for thrombus screening**
  - **Bridging before and after**
  - **Pre TS medications**
  - **Adjunctive therapy**

# LAA and Clinical Practice Issues



## Which Patients?

- High risk for bleeding
- Unable to take warfarin or a NOAC
- Chooses not to take warfarin or a NOAC
- Issues of convenience – “get it over with”

# LAA and Clinical Practice Issues

- **Stratify risk/benefit issues**
  - **Balance bleeding versus stroke**
  - **Balance short-term procedural risks versus longer-term risks/gains**
- **Patient education**
- **Patient outreach**



# LAA and Clinical Practice

- **Who will perform the procedure?**
  - **Interventional Cardiology and ECHO**
  - **Electrophysiology and ECHO**
  - **Team-based care – Interventional cardiology, EP, ECHO**
- **Where will it be performed?**
  - **Catheterization laboratory**
  - **EP laboratory**
- **Will an industry device specialist always be needed?**

# LAA and Clinical Practice

## How Will it be Done?

- TEE guidance
- ICE guidance
- Angiographic guidance
- CT guidance – robotically

# Patients with AF

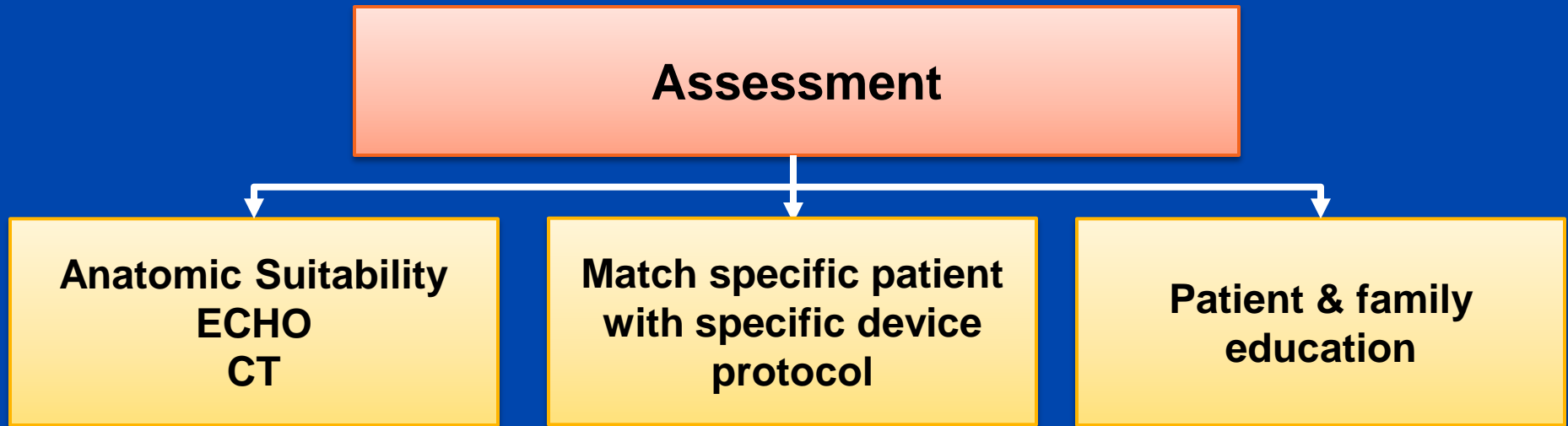
## Screening Phase

Prior History  
Chronicity  
Triggers  
Embolic events  
Hx bleeding  
Prior Rx  
AC profile

Evaluation of Structural Heart Disease  
ECHO  
NVAf vs VAF  
LAA anatomy & function  
RO persistent thrombus  
CT – LAA shape/size

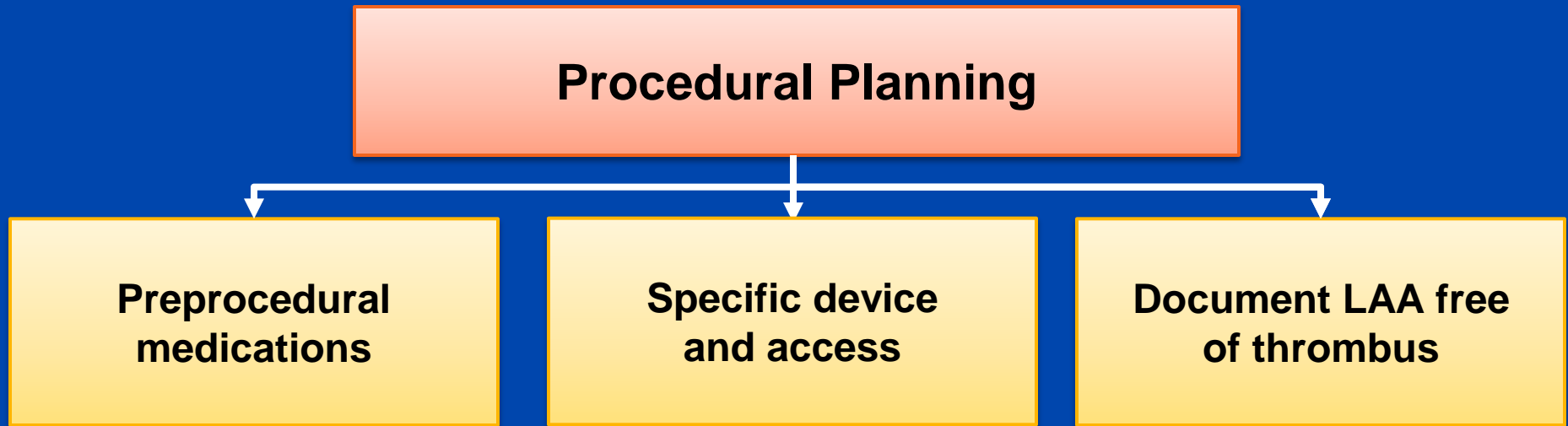
Formal stroke assessment  
CHADS<sub>2</sub>VASC  
Bleeding assessment  
HAS-BLED

# Patients with AF



# Patients with AF

## LAA Occlusion



- Personnel identified
- Equipment available
- EP vs IC

# Patients with AF

## LAA Occlusion

### Post Procedural Management

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graph TD; A[Post Procedural Management] --> B[Requirements for adjunctive medications]; A --> C[Continued treatment of or evaluation of procedural complications]; A --> D[Inpatient vs outpatient];
```

**Requirements for adjunctive medications**

**Continued treatment of or evaluation of procedural complications**

**Inpatient vs outpatient**

