

## Understanding Anticoagulation Decisions in Atrial Fibrillation

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# Understanding Anticoagulation Decisions in Atrial Fibrillation

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## Background

- **Atrial fibrillation (AF)** is an abnormal heart rhythm defined by irregular, uncoordinated beating of the atria<sup>1</sup>
- AF disrupts cardiac blood flow, leading to the formation of thrombi that can then embolize, occluding cerebral blood flow<sup>2</sup>
- Untreated AF confers a fivefold increased risk of ischemic stroke<sup>3</sup>
- Treatment with anticoagulant medication reduces stroke risk; but increases bleeding risk<sup>4,5</sup>
- Evidence-based guidelines exist to inform treatment decisions<sup>5</sup>.
- Only a fraction of eligible patients receive appropriate treatment in accordance with guidelines<sup>6</sup>

## Problem Statement

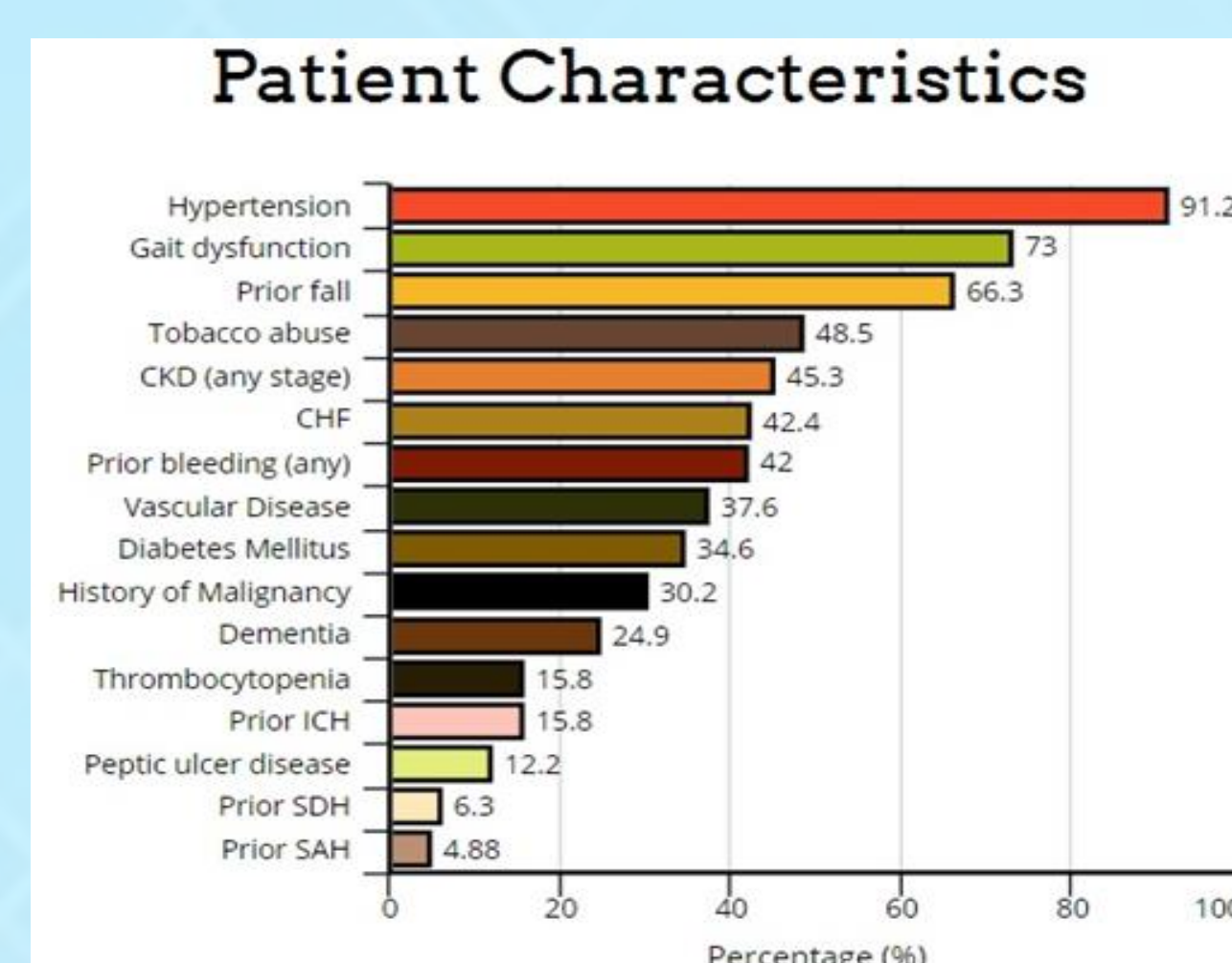
The purpose of the present study is to assess, via review of physician-authored medical documentation, the **reasons for prescriber avoidance of anticoagulation** in patients with histories of both atrial fibrillation and stroke, and the clinical characteristics of these patients.

## Methods

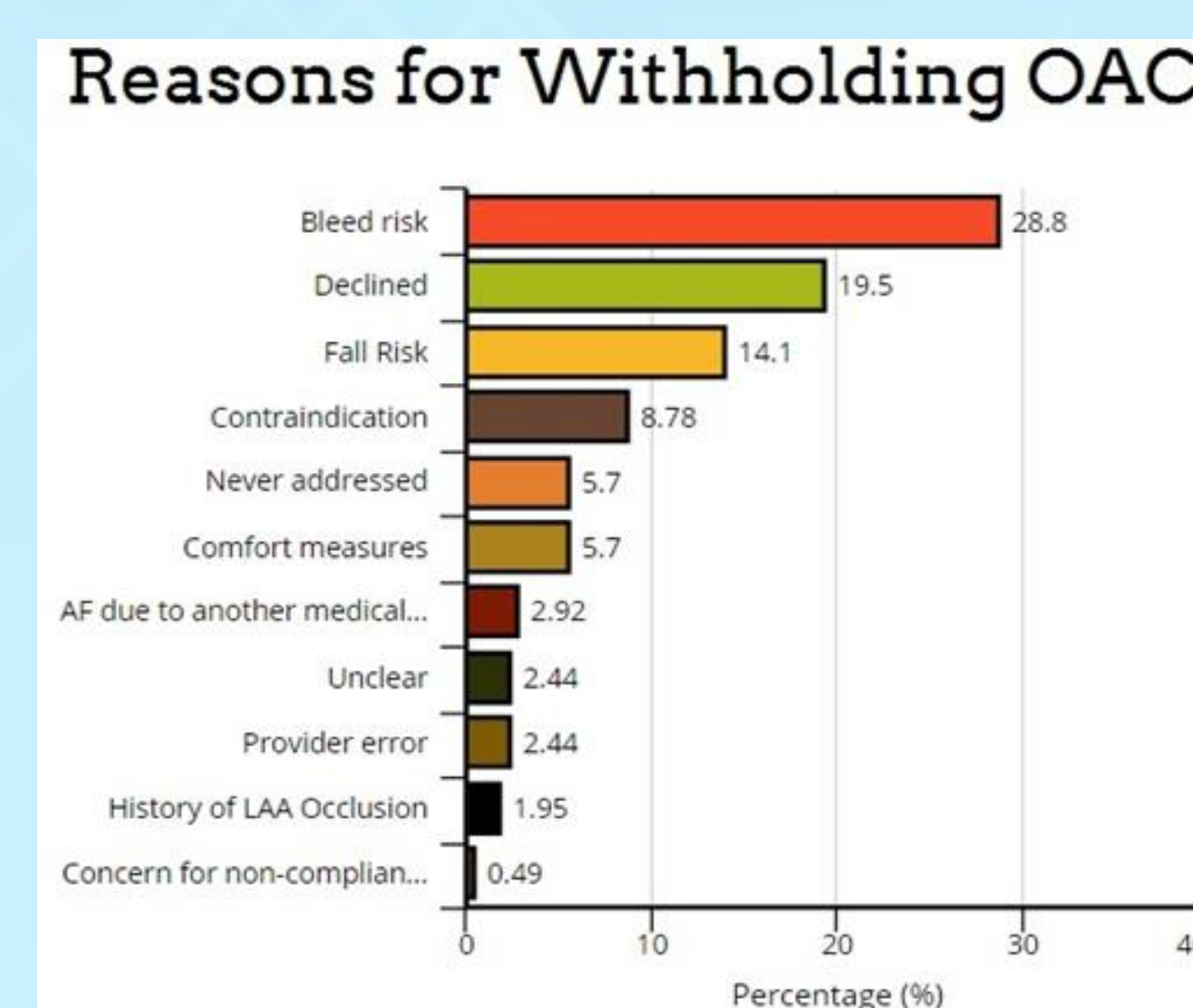
- Retrospective chart review of current LVHN patients
- **Inclusion criteria:**
  - History of atrial fibrillation
    - ICD-10: I48.0 – I48.4, I48.9
  - Documented diagnostic evidence of AF
- History of stroke
  - ICD-10: I63.0 – I63.9
- **Exclusion criteria:**
  - Currently prescribed oral anticoagulant medication (OAC)
  - Less than one month of documented clinical history
  - Greater than twelve months since last documented clinical encounter

## Results

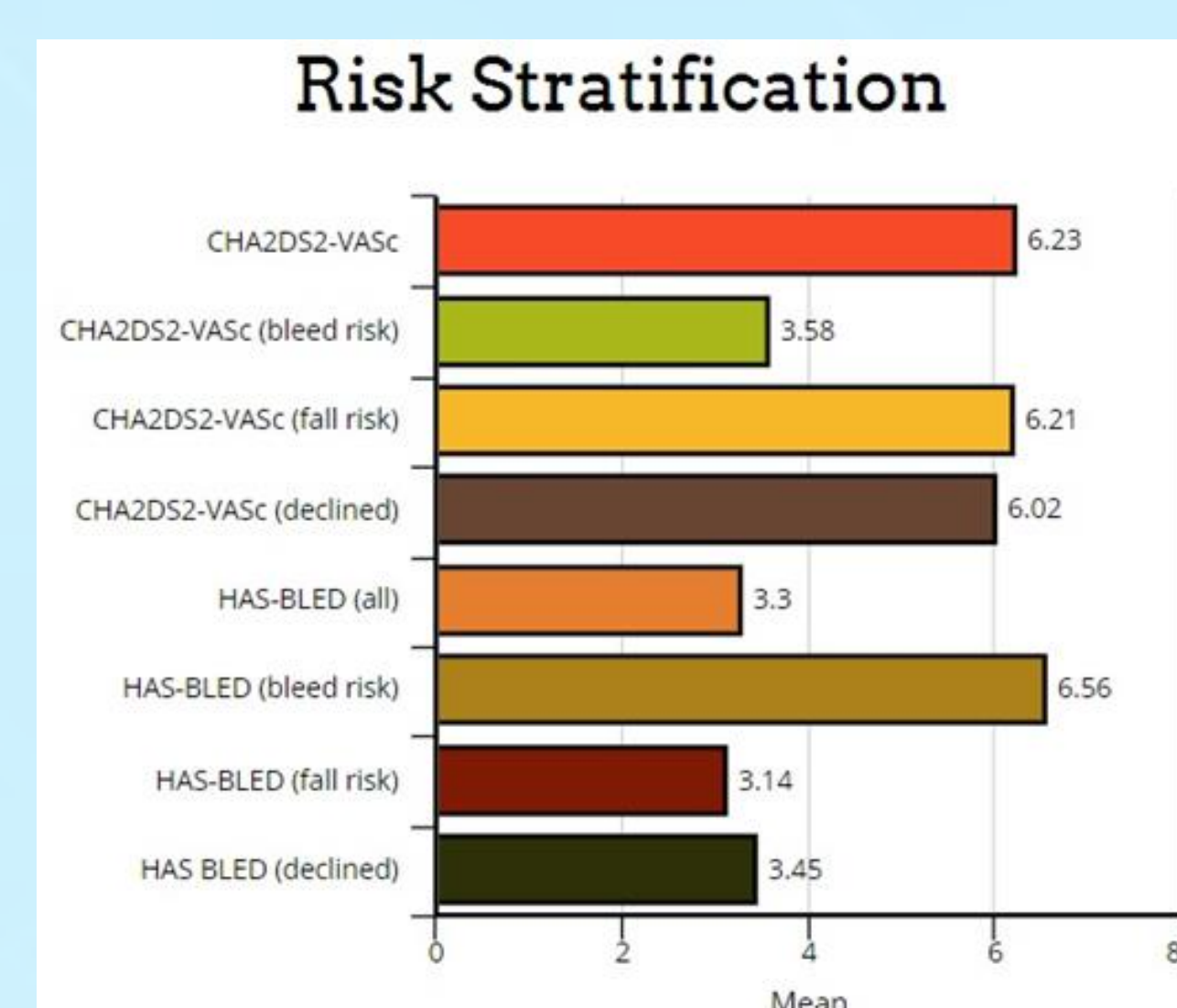
- Demographics
  - 205 of 526 patients eligible for inclusion
  - Mean age of 81 years
  - 54% female



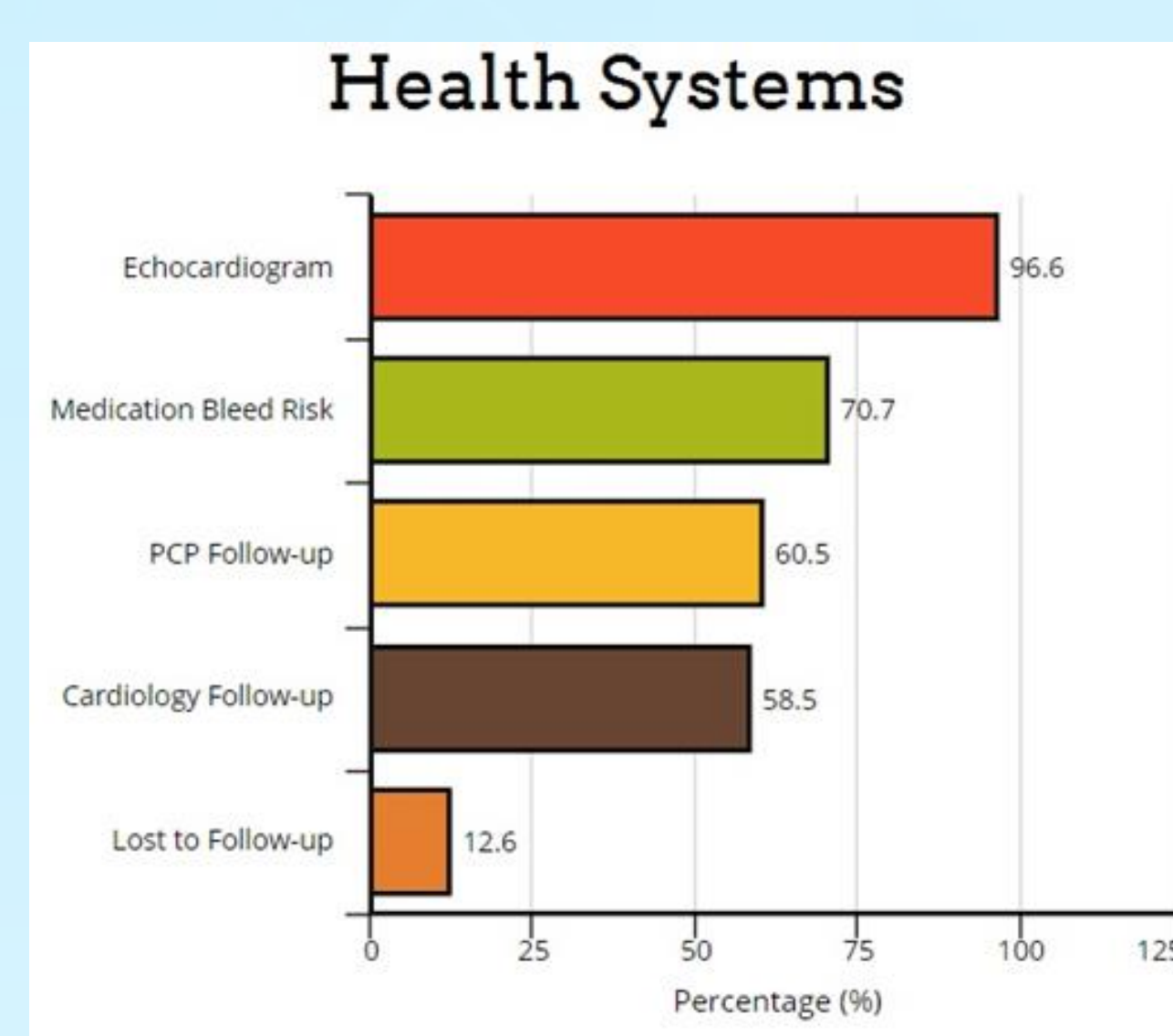
**Table 1:** Patient Characteristics - Comorbidities of patient population  
CKD: Chronic Kidney Disease, CHF: Congestive Heart Failure, ICH: Intracerebral hemorrhage, SDH: Subdural hematoma, SAH: Subarachnoid hemorrhage



**Table 2:** Reasons for Withholding OAC Medication.  
LAA: Left atrial appendage, Declined: Patient or caregiver declined treatment, Comfort measures: End-of-life or hospice care, AF due to another medical...: AF due to specific time-limited or treatable condition



**Table 3:** Risk Stratification  
Compares CHA2DS2-VASc and HAS-BLED scores of patients deemed bleed risks, fall risks, and those who declined treatment with the cohort as a whole.



**Table 4:** Health System-related cohort data  
Echocardiogram: Percentage of patients receiving echocardiogram within 6 months of AF diagnosis, Medication Bleed Risk: Percentage of patients on medications that increase bleed risk, PCP Follow-up: Percentage of patients who follow-up with a primary care provider (PCP) following AF diagnosis, Cardiology Follow-up: Percentage of patients seen by outpatient cardiology following AF diagnosis Lost to Follow-up: Percentage of patients with no documented clinical encounters for 60 days following their last encounter

## Discussion

- Plurality of patients (42.9%) denied OAC due to bleed or fall risk
  - Inconsistent with current guidelines
  - Modifiable risk factors
  - Targets for physician- and patient-directed educational interventions
- Physicians have legitimate concerns and are accurately identifying patients at higher risk of bleeding
  - Increased use of shared decision making may assist proper navigation of risks / benefits of OAC
- Low usage rate of left atrial appendage occlusion surgery

## Conclusions

- Both OAC treatment and withholding carry the potential for catastrophic outcomes
- The gravity of this decision requires special attention to patient education and involvement in the decision-making process, including:
  - Shared-decision making tools
  - Visual aids for patient education
  - Usage of composite risk / benefit, "Net clinical benefit," measures in both physician and patient-directed education

## REFERENCES

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