

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 atria¹
- AF disrupts cardiac blood flow, leading to the formation of thrombi that can then embolize, occluding cerebral blood flow²
- Untreated AF confers a fivefold increased risk of ischemic stroke³
- Treatment with anticoagulant medication reduces stroke risk; but increases bleeding risk^{4,5}
- Evidence-based guidelines exist to inform treatment decisions⁵.
- Only a fraction of eligible patients receive appropriate treatment in accordance with guidelines⁶

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

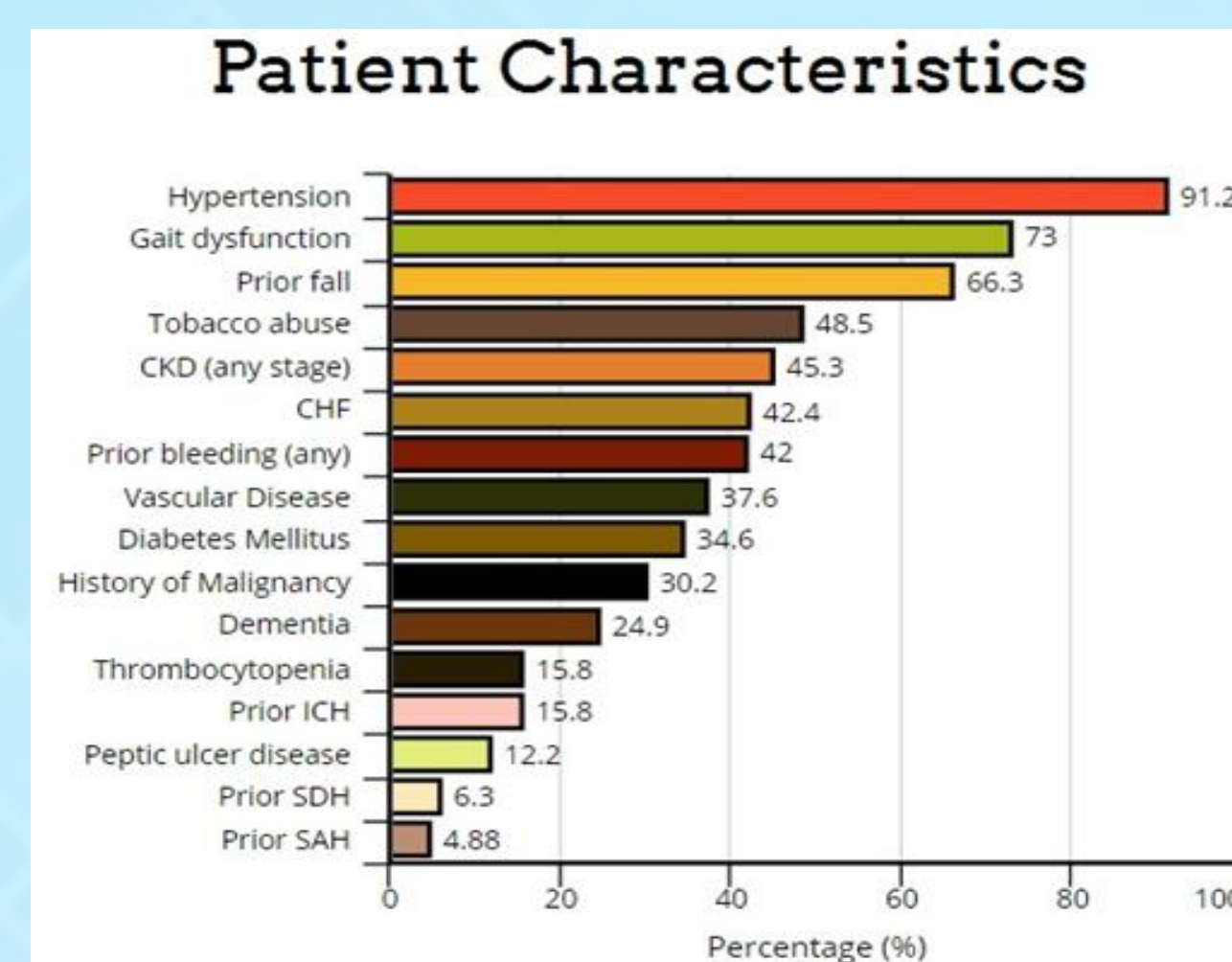


Table 1: Patient Characteristics - Comorbidities of patient population
CKD: Chronic Kidney Disease, CHF: Congestive Heart Failure, ICH: Intracerebral hemorrhage, SDH: Subdural hematoma, SAH: Subarachnoid hemorrhage

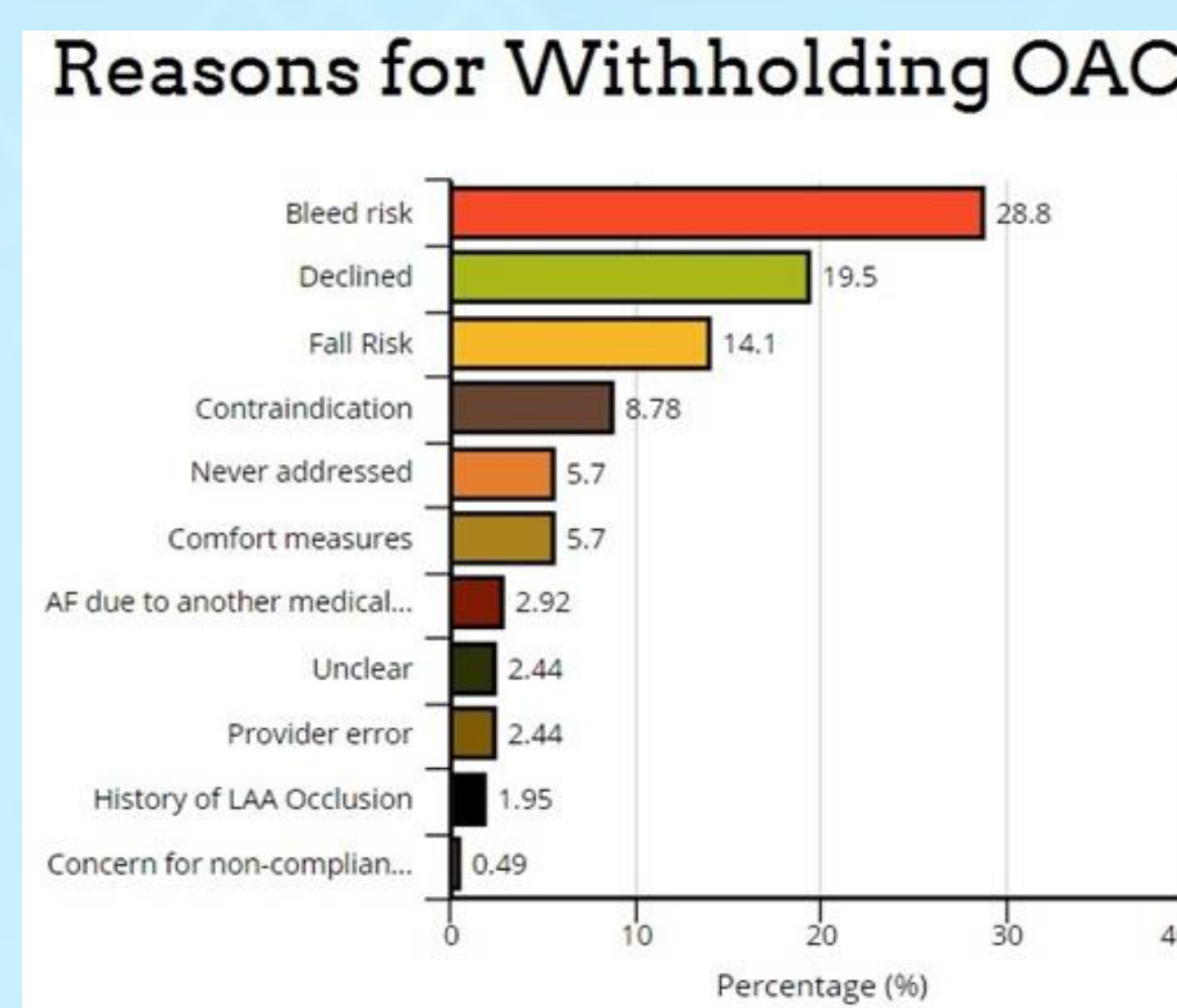


Table 2: Reasons for Withholding OAC Medication.
LAA: Left atrial appendage, Declined: Patient or caregiver declined treatment, Comfort measures: End-of-life or hospice care, AF due to another medical...: AF due to specific time-limited or treatable condition

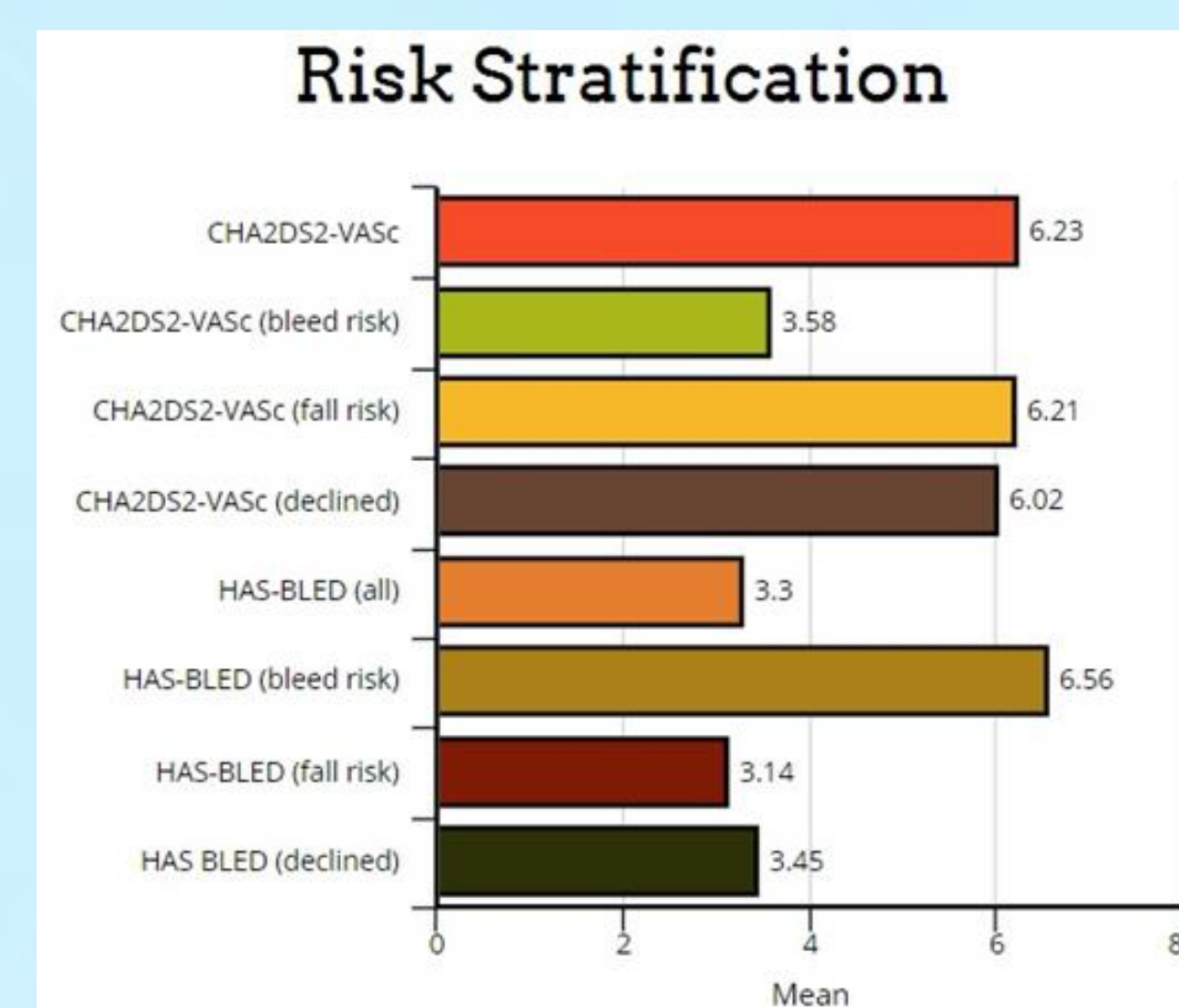


Table 3: Risk Stratification
Compares CHA₂DS₂-VASc and HAS-BLED scores of patients deemed bleed risks, fall risks, and those who declined treatment with the cohort as a whole.

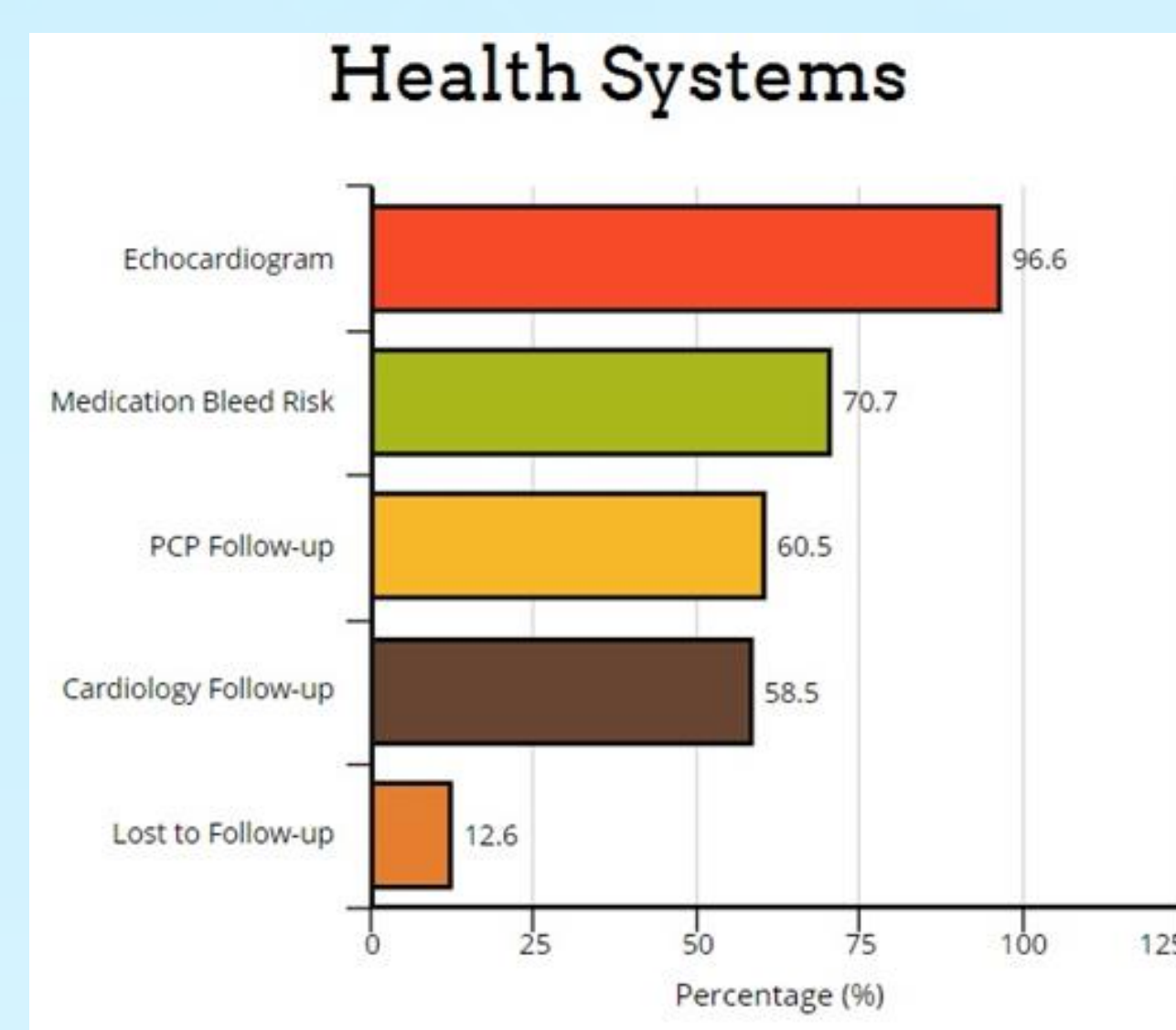


Table 4: Health System-related cohort data
Echocardiogram: Percentage of patients receiving echocardiogram within 6 months of AF diagnosis, Medication Bleed Risk: Percentage of patients on medications that increase bleed risk, PCP Follow-up: Percentage of patients who follow-up with a primary care provider (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

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