Low Rates of Oral Anticoagulation Use Among Patients Hospitalized with Atrial Fibrillation and at High Risk for Stroke

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Introduction: Despite the increased risk of stroke with atrial fibrillation (AF), outpatient prescription data suggest approximately half of AF patients with guideline indications for oral anticoagulants (OAC) remain untreated. We performed a retrospective analysis using the Premier Healthcare Database, representing 1 in 5 US discharges, to assess inpatient OAC use at discharge among patients hospitalized with AF.

Methods: Included patients were age ≥ 40 years, admitted between January 2010 and September 2015 with a primary or secondary AF diagnosis, CHA2DS2-VASc score ≥2, and length of stay (LOS) >1 day. Those with a history of heart transplant, mechanical heart valve replacement, any bleed during admission, or discharge status of left against medical advice, hospice, transfer to another acute care facility, or expired were excluded. The primary measure was OAC use at discharge defined as having at least one charge on the day before and/or day of discharge for warfarin or a non-vitamin K antagonist (rivaroxaban, apixaban, dabigatran or edoxaban).

Results: Among 1,579,456 admissions in 812 US hospitals, 46.2% of inpatients with AF received an OAC at discharge, and rates were consistent across a diverse set of patient subgroups (Figure 1). The median age at admission was 78 (IQR 69-85) years, and patients were 53% female and 81% Caucasian with a history of prior stroke (19%), hypertension (89%), heart failure (51%), and diabetes (41%). Median CHA2DS2-VASc score was 4 (IQR 3-5). Admissions in urban and teaching hospitals were 86% and 40% respectively. Median LOS was 4 (IQR 3-7) days. Aspirin use was documented alone in 14% or in combination with OAC in 14%.

Conclusion: Fewer than 1 in 2 patients hospitalized with AF and a guideline indication for anticoagulation for stroke prevention received an OAC at discharge. This low rate of OAC use in hospitalized patients highlights an important opportunity to improve stroke prevention care among AF patients.
Figure 1: Rates of OAC Use Among Inpatients with AF

Character Count: $1671 + 250 = 1921$ (Limit 1950)