Rates of Oral Anticoagulation Use, While Improving Over Time, Remain Low Among Hospitalized Patients with Atrial Fibrillation

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**Background:** Oral anticoagulant (OAC) under-treatment for stroke prevention in atrial fibrillation (AF) has been demonstrated. Limited data are available on treatment trends over time, as non-vitamin K antagonists (NOACs) were introduced.

**Methods:** Included patients from the Premier Health Database (representing 1 in 5 US discharges) were age ≥ 40 years, admitted January 2011 to June 2015 with a primary or secondary AF diagnosis, CHA2DS2-VASc score ≥2, and length of stay >1 day. Those with a mechanical heart valve, any bleed, major surgery during admission; left against medical advice, hospice, transfer to another acute care facility; or died in-hospital were excluded. The primary measure, assessed quarterly, was OAC use at discharge, defined as OAC the day before or day of discharge.

**Results:** Among 1,579,456 admissions in 812 US hospitals, OAC use at discharge increased by 2% per year from 42% in 2011 to 50% in 2015, with an increase in NOAC (3% in 2011 to 25% in 2015) and a decrease in warfarin use (Figure). Aspirin with OAC increased from 12% in 2011 to 15% in 2015, while triple therapy remained unchanged (6% in 2011 and 5% in 2015). Median age was 78 (IQR 69-85) years, 53% female, and median CHA2DS2-VASc score was 4 (IQR 3-5).

**Conclusions:**
The proportion of AF patients treated with OAC for stroke prevention increased by 2% per year from 2011 to 2015, however, only 1 in 2 AF patients at risk for stroke were treated with OAC as of 2015. Initiatives to increase guideline-directed stroke prevention in AF are needed.

Figure: Temporal Trends in Rates of Use of Antithrombotics in Atrial Fibrillation