Atrial fibrillation (AF) is the most prevalent cardiac arrhythmia. Research has shown that oral anticoagulant therapy (OAC) with warfarin can decrease stroke risk by up to 68% (Alings, 2016). There is a significant risk for bleeding especially in the elderly population, pharmacodynamic and pharmacokinetic properties of drugs are processed differently than a younger individual. Prescribers must weigh the benefits of OAC therapy combined with the risk of adverse drug reactions. Factors such as cognitive impairment, depression, social support and frailty may impact OAC prescribing decisions.

The goal of this study is to analyze how cognitive status, depression, frailty, and social support play a role in prescribing patterns of oral anticoagulation therapy in elderly patients with AF.

### Table 1 – Study Population Description

<table>
<thead>
<tr>
<th>Cognitive Function</th>
<th>OAC Indication</th>
<th>Non-OAC Indication</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Az (7+)</td>
<td>525 (31)</td>
<td>72 (43)</td>
<td>XNN</td>
</tr>
<tr>
<td>Sex (Female)</td>
<td>505 (49)</td>
<td>81 (47)</td>
<td>0.37</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>875 (81)</td>
<td>150 (87)</td>
<td>0.48</td>
</tr>
</tbody>
</table>

### Results

**Impaired Cognitive Function** – risks of poor adherence and medication literacy may be increased in elderly patients with decreased cognitive status

**Lack of Social Support** – the elderly population is known to be more accepting of warfarin therapy, but can become non-adherent due to lack of community support services, marital status or social isolation

**Frailty** – can be measured in the elderly population as a contributing factor that increases the risk for not only bleeding, but secondary events

**Depression** – depressive symptoms have been shown to have clinically significant impacts on medication side effects, compliance, and target treatment ranges

### References


### Approach

**Participant Screening, Eligibility Determination, and Enrollment**
- Eligible patients were 65 years or older, had a diagnosis of AF, had a CHA₂DS₂-VASc risk score ≥ 2 and were eligible for anticoagulation therapy
- Participants were recruited from 6 sites in MA and GA that were diverse with respect to practice type and setting.

**Study Assessments and Data Collection**
- Study data were collected via patient-reported measures, physical assessments, and abstraction of medical records.

**Participants completed a comprehensive baseline geriatric assessment (cognitive impairment, depression, frailty, vision, hearing, social support), a structured interview and a comprehensive baseline medical record review.**

### Conclusion

- These findings suggest the need for additional studies on outcomes of oral anticoagulants in older adults with AF.
- Although the findings were not statistically significant, the clinical significance of these factors affects the quality of life and the clinical outcomes of patients with this condition.