

Objective

- Evaluate the appropriateness of DOACs utilization in patients in a primary care setting

Background

Current Anticoagulation Practices

- Updated guidelines now recommend direct oral anticoagulants (DOACs) over warfarin as the preferred anticoagulant.¹⁻³
- Primary indications for DOAC use: Non-valvular atrial fibrillation, Venous thromboembolism, Pulmonary embolism

Benefits with DOACs^{1,4}

- Lower risk of adverse bleeding events than warfarin
- Predictable pharmacokinetic effect with quicker onset of action than warfarin
- No laboratory monitoring required

Limitations with DOACs

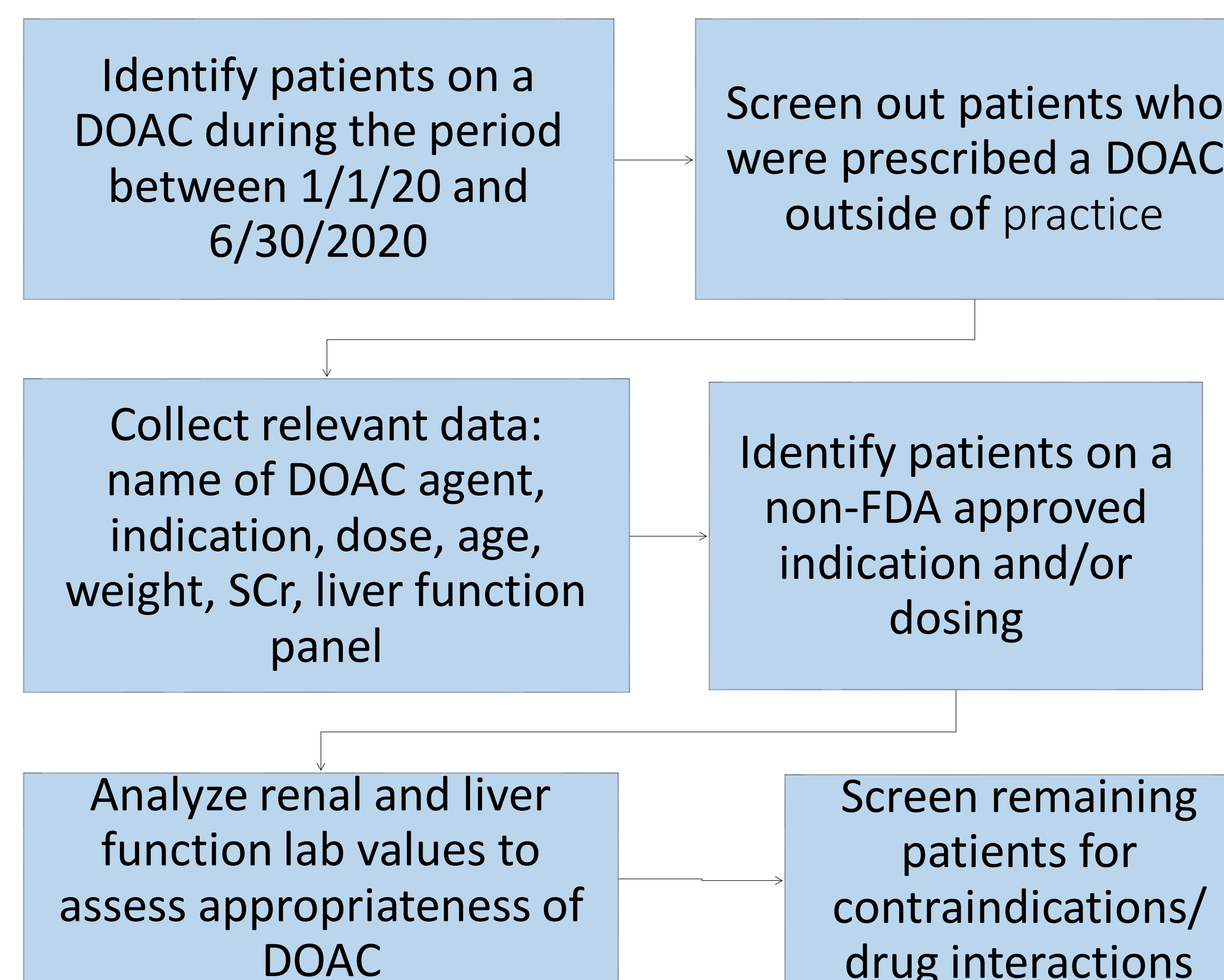
- Dosing considerations (disease state indication, renal/liver function, age, gender, weight, drug interactions)⁵
- Requires strict adherence: only 50% remain adherent during first 6 months of therapy⁶
- Inappropriate prescribing practices with lack of blood monitoring
- More expensive than warfarin
- Contraindications⁷
 - Mechanical prosthetic valve
 - Moderate to severe mitral stenosis
 - Severe hepatic impairment (Child-Pugh B/C)

Methods

- A retrospective cohort chart review conducted on patients receiving a direct oral anticoagulant from January 1, 2020 to June 30, 2020 at Trinity Medical Associates
- Statistical analysis: Fisher's exact test was utilized to assess the association of the choice of DOAC agents with the inappropriateness of specific criteria (see Table 1).

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> On a DOAC (apixaban, rivaroxaban, dabigatran, or edoxaban) anytime between January 1, 2020 and June 30, 2020. A patient with Trinity Medical Associates 	<ul style="list-style-type: none"> Patients on a DOAC due to hip/knee replacement surgery Has received DOAC dosing only by a physician outside Trinity Medical Associates

Methods



Results

Figure 1. DOAC agents prescribed at Trinity Medical Associates

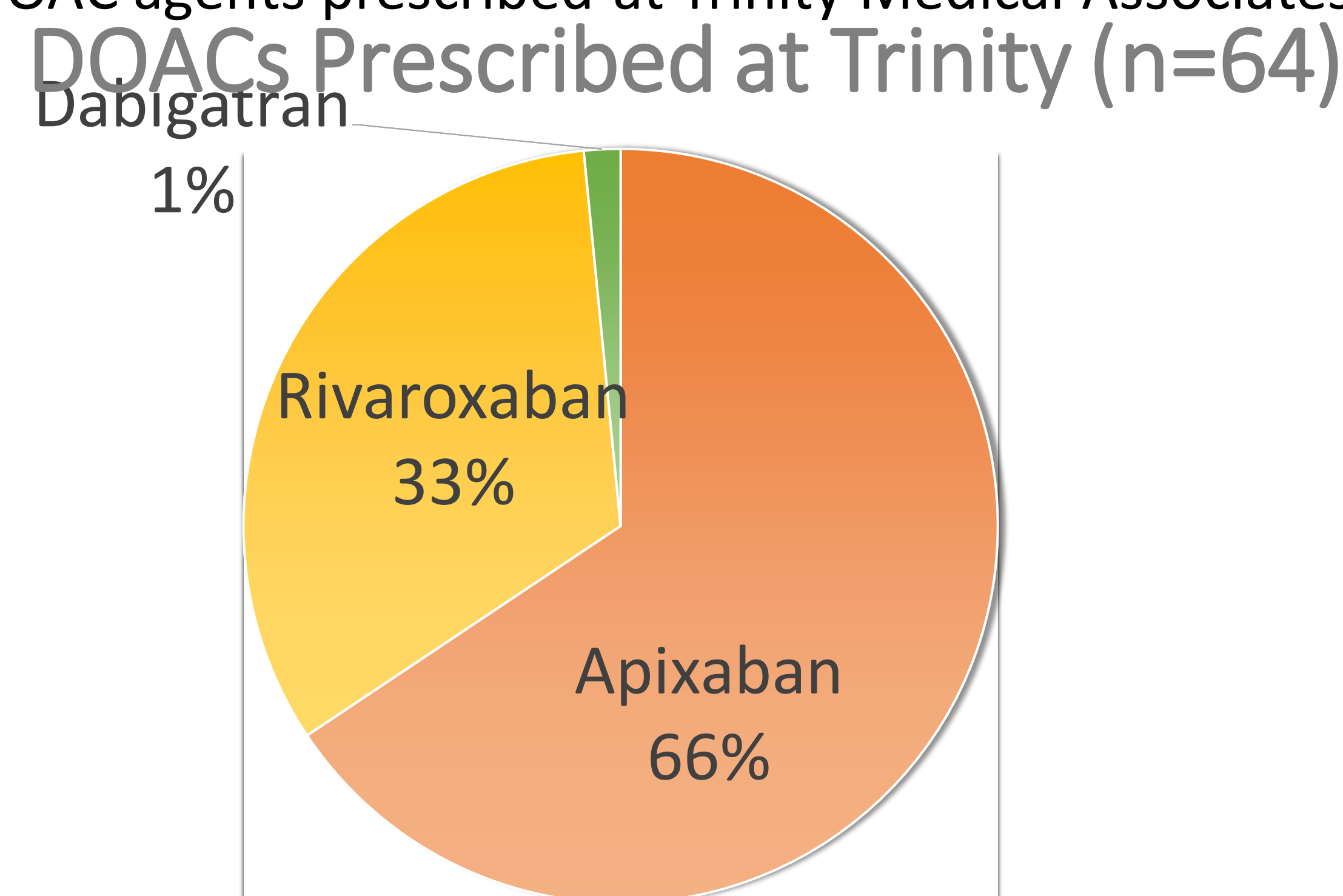


Table 1. Inappropriate utilization of DOACs based on criteria

Inappropriate DOAC Utilization Criteria	Apixaban (n = 42)	Rivaroxaban (n=21)	Dabigatran (n=1)	P-value
Inappropriate/Unknown Indication	0 (0%)	3 (14.3%)	1 (100%)	0.002
Inappropriate Dose	2 (4.8%)	5 (23.8%)	0 (0%)	0.075
Inappropriate Dosing Frequency	1 (2.4%)	0 (0%)	0 (0%)	1.00
Missing Renal Function Lab Values	1	2	1 (100%)	0.025
Missing Hepatic Function Lab Values	3	2	1 (100%)	0.106

Discussion

- 64 patients received their DOAC prescription within the clinic practice, with apixaban and rivaroxaban being the preferred agents (Figure 1).
- 13 patients identified for having at least one inappropriate criterion for DOAC utilization
- As of February 2020, no bleeding or clotting events have been identified.
- Ongoing medication review to identify high-risk drug interactions with DOAC agents.
- No documented follow-up monitoring on DOAC usage to assess patient's response
- Room for pharmacist intervention to monitor and assess appropriateness of a DOAC in patients
- Final results will be presented at the Southeastern Residency Conference (SERC) in April 2021.

Limitations of Study

- Small sample size
- Patient medication list may not be up to date
- Difficult to assess patient compliance to DOAC agents
- Unknown whether all patients initiated on a DOAC prior to the observed timeframe were appropriately reviewed for renal and hepatic function

References

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Disclosures

- Authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.