

6-8-2016

Barriers to Anticoagulation in Atrial Fibrillation among Cardiologists, Internists and Family Physicians

Jad Al Danaf, MD, MPH

Department of Internal Medicine, Thomas Jefferson University, jad.danaf@jefferson.edu

Mitul Kanzaria, MD

Division of Cardiology, Thomas Jefferson University, Mitul.Kanzaria@jefferson.edu

John U. Doherty, MD

*Division of Cardiology, Thomas Jefferson University, John.Doherty@jefferson.edu*Follow this and additional works at: <http://jdc.jefferson.edu/patientsafetyposters>Part of the [Cardiology Commons](#), and the [Internal Medicine Commons](#)

Recommended Citation

Al Danaf, MD, MPH, Jad; Kanzaria, MD, Mitul; and Doherty, MD, John U., "Barriers to Anticoagulation in Atrial Fibrillation among Cardiologists, Internists and Family Physicians" (2016). *House Staff Quality Improvement and Patient Safety Posters*. Poster 3. <http://jdc.jefferson.edu/patientsafetyposters/3>

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in House Staff Quality Improvement and Patient Safety Posters by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.



Barriers to Anticoagulation in Atrial Fibrillation among Cardiologists, Internists and Family Physicians

Jad Al Danaf, MD, MPH*; Mitul Kanzarria, MD**; John Doherty, MD**

*: Department of Internal Medicine, Thomas Jefferson University, Sidney Kimmel Jefferson Medical College

** :Division of Cardiology, Thomas Jefferson University, Sidney Kimmel Jefferson Medical College

BACKGROUND

Stroke is the most common complication of atrial fibrillation (AF). Despite clinical guidelines recommending oral anticoagulation (AC) for stroke prevention in patients with AF at moderate-high risk for stroke, the literature still shows underutilization of AC irrespective of the type of practice.

CURRENT PERFORMANCE

The rates of AC in patients 18 years or older who visited general internists & family physicians not seen by cardiologists from 4/30/2013 to 4/30/2015, cardiologists from 11/29/2012 to 11/29/2014 and all 3 specialties from 1/30/2014 to 1/30/2016 were derived from the EHR. (table 1)

A 12-question survey was shared using RedCap with these physicians to examine potential reasons for not prescribing AC.(table 2)

Division	Cardiology		General Internal Medicine		Family and Community Medicine	
Number of MDs, NPs	33	33	199	210	71	80
Total patients seen	21,164	21,186	25,022	25,061	30,201	30,306
Patients with Atrial Fibrillation	3,516	3,560	324	309	233	257
Patients with CHA2DS2-VASc >1	3,310	3,367	319	305	228	249
Patients prescribed oral AC	2,505	2,726	239	226	152	166
Percent prescribed oral AC	75.7%	81%	74.9%	74%	66.7%	66.7%
Patients on DOACs (%)	902 (36%)*	1,331 (49%)*	111 (46.4%)*	120 (53%)*	49 (32%)*	70 (42%)*
Patients on Warfarin (%)	1,956 (78%)*	1,860 (68%)*	164 (68.6%)*	144 (64%)*	120 (78.9%)*	121 (73%)*

Table 1
*: sum of patients on DOAC and Warfarin may include patients recorded as being on "both" on the EMR.

Division	Cardiology (N=34)	General Internal Medicine (N=27)	Family and Community Medicine (N=66)
Response rate	62%	78%	59%
Use of CHA2DS2-VASc	95%	52%	69%
Calculate the bleeding risk of AC	81%	67%	49%
Possible reasons for no AC	-Previous ICH (95%) -Hospice (86%) -Falls risk (71%)	-Falls risk (76%) -Hospice (62%) -Previous ICH (62%)	-Previous ICH (62%) -Patient preference (69%) -Hospice (67%)
Most common reason for no AC	Falls risk (48%)	Falls risk (48%)	Falls risk (51%)
Most common AC prescribed	Apixaban (52%)	Warfarin (43%)	Warfarin (67%)
Lectures or webinars about AC are helpful	43%	67%	85%
Believe in importance of shared decision-making	71%	43%	39%

Table 2

OBSERVATIONS

- Extraction of EHR data and formation of dashboards facilitate quality monitoring for AC in patients with AF.
- Physicians' perception of barriers to AC differs by specialty.
- Cardiologists calculate stroke and bleeding risks more often
- There was an increasing trend of increased DOAC adoption among all specialties, and increase in AC rates -even before any intervention- for Cardiologists.
- Shared decision-making is more common among cardiologists.

AIM

- To improve rates of AC in each department to at least 80% as part of their quality metrics and to ensure more patients with Atrial fibrillation are on oral AC agents whenever indicated.

TAILORED PROPOSED INTERVENTIONS

- For Cardiologists:** create individualized performance reports indexed to their peers and include information regarding bleeding risk in patients who are at high risk for falls or have a history of ICH.
- For Family physicians and Internists:** present a summarized 20 minutes presentation about novel agents, data about falls risk and introduce the ACC "Anticoag evaluator" smartphone application.

IMPLEMENTATION PLAN

- Deliver the presentations to the divisions of IM and FM during their faculty meeting and grand rounds respectively.
- Individualized performance reports for Cardiologists will be shared with them in a packet that also highlights the available literature on "falls risk".
- Updated data on AC rates will be obtained on a monthly basis to track adoption patterns of AC agents.

Challenges and Limitations

- Presentations can have low impact in changing a culture of adopting AC whenever indicated.
- Interdepartmental data can not be reliably compared due to variation in resources available within each department to prescribe AC agents, and the population of patients are also variable.
- We did not explore patient outcomes data.

References

- Kovacs R, Flaker G, Saxonhouse S, et al. Practical management of anticoagulation in patients with atrial fibrillation. JACC 2015;65:1340-60
- Rowan S, Bailey D, Bublitz C et al. Trends in anticoagulation for atrial fibrillation in the U.S. JACC 2007;49:1561-5.
- Donze J, Clair C, Balthasar H, et al Risk of falls and major bleeds in patients on oral anticoagulation therapy. Th American Journal oMedicine 2012;125:773-778.