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## Comparison of Decentralized Versus Centralized Pharmacist Management of Patients with Atrial Fibrillation Treated with Direct Oral Anticoagulants (DOACs)

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### Background

Atrial fibrillation affects one in four people aged 40 years and older  
DOACs have gained popularity since initial FDA approval in 2010  
National adherence rate to DOACs was reported as 72.2% in one study at a VA Pharmacist-led DOAC monitoring

- Focus on adherence and adverse event monitoring
- Telephone visits
- Requires consult from physician to pharmacist clinic for enrollment and ordering

#### Pre-centralization group:

Nov 1, 2011 to  
Oct 31, 2012  
Primary care pharmacists

**Centralization date:**  
Nov 1, 2012

#### Post-centralization group:

Nov 1, 2012 to  
Oct 31, 2013  
Anticoagulation pharmacists

### Purpose

Investigate how the centralization of DOAC management affected:

- Patient adherence as determined by medication possession ratio (MPR)
- Safety outcomes
- Primary care pharmacotherapy visits

### Methods

- Retrospective evaluation
- Expedited IRB and R&D approval

MPR =  $\frac{\text{sum of days' supply obtained except for last fill}}{\text{total number of days between the first and last refill date of the prescription within 52 weeks}}$

### Results

Primary objective: medication compliance determined by MPR

Study Group (n)	MPR, mean (95% CI)	MPR <0.8, n (%)
Pre-centralization (n = 34)	1.01 (0.95-1.07)	3 (8.82)
Post-centralization (n = 55)	0.96 (0.92-1.01)	8 (14.55)
p = 0.91		

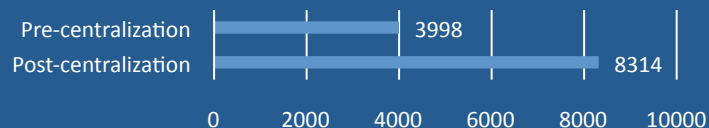
Secondary objective: safety, p=0.52

Bleeding events in pre-centralization group: 6

Bleeding events in post-centralization group: 7

Tertiary objective: primary care pharmacotherapy visits increased 108%

#### Number of Primary Care Pharmacist Encounters



### Conclusions

Following centralization of DOAC management by pharmacists:

- No clinically or statistically significant difference in adherence to dabigatran
- No clinically significant difference between patient-centered outcomes in bleeding
- Primary care pharmacist encounters were doubled without addition of more staff

Limitations:

- MPR was calculated over a short time period and assumes compliance based on refills
- Prescribed follow up as defined by national VA guidelines

**Overall, adherence rates greater than a reported national average were retained through streamlined efficiencies in clinical workload**

Disclosure: The authors of this study have nothing to disclose concerning possible financial or personal relationships that may affect this presentation  
References: JAMA. 2015; 313(14): 1443-50.