Health System Approaches to Assess and Improve Direct Oral Anticoagulant Adherence in Non-Valvular Atrial Fibrillation

Jennifer Obenrader PharmD, CDCES,[1] Elizabeth Ruvalcaba, MSPH,[1] Elizabeth Ciemins, PhD, MPH, MA[1]
[1]AMGA (American Medical Group Association), Alexandria, VA

Background

- **Primary non-adherence**, defined as not filling an initial prescription, and **secondary non-adherence**, defined as filling only the first prescription and none subsequently, are challenges for healthcare systems and may lead to increased healthcare utilization and worse patient outcomes.[1,2]
- Poor direct oral anticoagulant (DOAC) adherence can lead to higher hospital admissions and greater risk of stroke, heart attack, and pulmonary embolism in patients with non-valvular atrial fibrillation (NVAF).[3,4]
- Patient cost, medication access, and health system's variable access to fill data for systematic identification of patients needing adherence intervention as part of routine clinical care are key barriers contributing to suboptimal DOAC adherence.[5,6]

Methods

- Three health care organizations (HCOs) aimed to improve primary and secondary DOAC adherence for patients with NVAF through multi-level interventions within their identified target populations.
- Adherence data were collected following a pragmatic measures' specification aimed at standardizing submissions across HCOs.
- The index NVAF patient cohort (denominator for measures) was defined per the table below; ICD-10, CPT, and NDC codes were provided for standardized reporting.

Inclusions	Exclusions
• Age 18 or older • Atrial Fibrillation diagnosis • Newly prescribed DOAC in ambulatory setting	• History of mitral stenosis or venous thromboembolism • Procedure history of mechanical or bioprosthetic heart valve or mitral valve repair. • Nursing home, hospice care, or pregnant • Surgery within 30 days of index diagnosis

- Primary adherence was defined as filling a prescription within 45 days to account for copay assistance cards and sample medications.
- Secondary adherence was defined as filling at least 2 prescriptions within the reporting period to target patients with a "one and done" approach.
- Data were requested by quarters for the reporting period July 2023- June 2024.
- Medication fill data sources varied among the 3 HCOs with some interventions focused on expanding access to data.

Objectives

- Determine needs of three HCOs to support primary and secondary adherence to DOACs for patients with NVAF.
- Develop interventions to address primary and secondary non-adherence to DOACs for patients with NVAF.
- Systematically assess baseline adherence rates within the HCOs.

Results

Targeted cohorts selected by HCOs for interventions varied and included cardiology patients, all primary care patients, and patients of top 12 DOAC prescribers within organization.

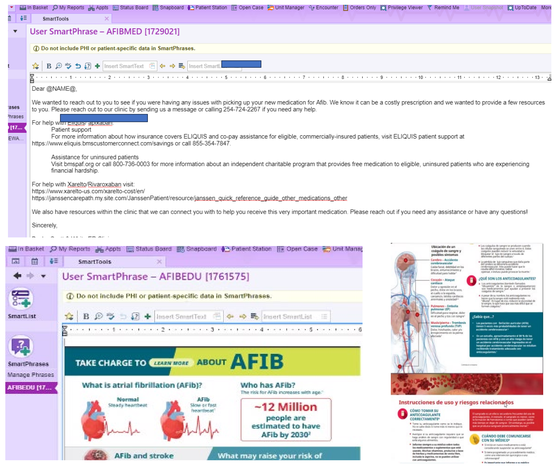
Interventions varied within HCOs at DOAC initiation and included engaging pharmacists, advanced practice providers (APPs), and nurses for patient outreach, an easy button for prior authorization support, systematic payment assistance support, and patient education materials and videos.

HCOs acted on real time fill data by utilizing developed reports and standardized smartforms for outreach, patient reminders, education, and financial support measures.

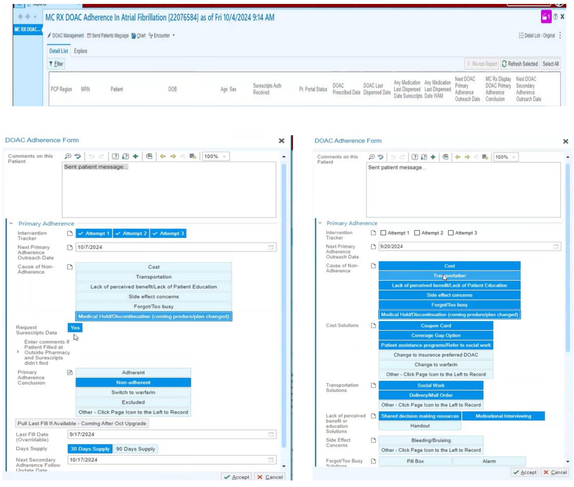
Participating HCOs reported baseline primary adherence rates (mean 78%; range 60%-87%) with all groups experiencing a ~20% drop for secondary adherence (mean 54%; range 38%-67%).

Post implementation data, metrics on intervention uptake, and further learnings on intervention adaptations are expected in May 2025.

HCO 1 SmartPhrase / Education Material Examples



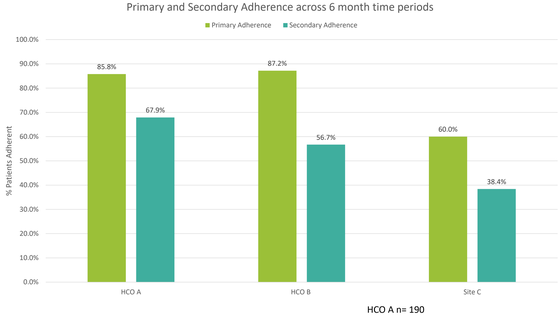
HCO 2 SmartSheet / Reporting Examples



Results

	Target Population	Adherence Data Source	Data Considerations
HCO A	Cardiology patients only	Surescripts (manual data pull)	Automated data report is being created to replace the manual Surescripts data pull
HCO B	All patients	Value based contracts	Registry is being created to monitor adherence more broadly
HCO C	All primary care patients	Surescripts utilizing medication history for populations module	Report takes up to 72 hours for fill data to auto-populate within report for primary and secondary adherence

Baseline Adherence Data: Across Groups



HCO A n= 190
HCO B n= 1147
HCO C n= 1112

Conclusions & Future Steps

- Implementing multi-level interventions to improve medication adherence is feasible within health systems and is needed, however inconsistent access to and limited understanding of how to integrate adherence data for clinical care presents challenges.
- This study provides insights into multiple methods of data capture and how multidisciplinary teams can be engaged to support medication adherence which will ultimately reduce hospitalizations and ED visits and improve overall patient care.
- Post implementation data, metrics on intervention uptake, and further learnings on intervention adaptations are expected in May 2025.

Acknowledgements

Funding. The American Medical Group Association (AMGA) received funding for this study from Janssen Scientific Affairs, LLC.
Acknowledgements. The authors would like to extend our deep appreciation to the three health care organizations that participated in the study, improving direct oral anticoagulant (DOAC) adherence in patients with non-valvular atrial fibrillation (NVAF). We also thank Janssen Scientific Affairs, LLC for funding this research. All AMGA research is "above brand," focusing on care process design and implementation science.
Conflicts of Interest. All authors declare no conflicts of interest.

Contact: **Jennifer Obenrader, PharmD, CDCES**
jobenrader@amga.org

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