Anticoagulation Stewardship: The Why & The How

Nebraska Hospital Association
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# Objectives

## Core Elements of Anticoagulation Stewardship

<table>
<thead>
<tr>
<th>Future impact</th>
<th>What are they?</th>
<th>Implementation strategies</th>
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</thead>
</table>

## National Patient Safety Goals

How could these impact critical access hospitals in the future?

## Anticoagulation Transitions of Care

Discuss challenges and tools

## Introduction to the Anticoagulation Forum Resource Center
Core Elements of Anticoagulation Stewardship

Published by the Anticoagulation Forum & funded by the FDA

Closely mirrors the antimicrobial stewardship core elements document

Basis for future regulatory standards?

Describes 7 Core Elements with examples

Includes checklist for gap analysis
What are the Core Elements?

Review document here: Core Elements

- Secure administrative leadership commitment
- Establish professional accountability and expertise
- Engage multidisciplinary support
- Perform data collection, tracking, and analysis
- Implement Systemic Care
- Facilitate transitions of care
- Advance education, comprehension, and competency
Core Elements: interpretation and implementation

Admin Commitment
- Financial
- Include in strategic priorities: metrics, goals
- Resources for staff training & patient education
- Promote system-wide multidisciplinary involvement in stewardship activities

Establish accountability & expertise
- Visible champion
- Physician, nurse, pharmacist
- CACP certification

Multidisciplinary support
- Anticoagulation stewardship is unique in its wide scope
- Possible perspectives: clinical providers, lab, educators, informatics, nursing, pharmacy, quality improvement, case management

Data collection, analysis
- Dashboards?
- Understand your population and then identify targets/metrics
- Examples: TTR, adherence, education rates, appropriateness of prescriptions
Core Elements: interpretation and implementation

Systemic Care
- Policies and procedures
- Protocols
- Order sets
- Decision support

Transitions of care
- Consistent communication and education
- Accurate medication reconciliation
- Anticipation of barriers

Education, comprehension, competency
- Patients
- Care staff
What next?

Evaluate current state
Gap analysis
Align goals and efforts
Prioritize
Anticipate needs

Checklist for Core Elements of Anticoagulation Stewardship Programs

The following checklist supports the Core Elements of Anticoagulation Stewardship Programs. This checklist should be used to systematically assess key elements and actions that are integral to successful anticoagulation stewardship efforts and high-quality patient care.

Healthcare organization administrators should work in tandem with healthcare staff knowledgeable in anticoagulation therapy, using this checklist as a guide to determine if essential support, resources, and initiatives are in place for optimal management of patients on anticoagulation medications.

As each healthcare setting is unique, it is recognized that no single anticoagulation stewardship program model will fit all facilities. As such, implementation of checklist elements may need to be customized, based on infrastructure and access to resources.

Scoring: Evaluate your organization’s current state and provide a score for each item using the following scale.

0 = Not yet addressed
1 = Partially implemented
2 = Fully implemented
NA = Not applicable to organization
Joint Commission: National Patient Safety Goal

Why?

• Anticoagulation is a leading cause of adverse drug associated ER visits
• ~1/4 of DOAC dosing in atrial fibrillation is inappropriate
  • Studies have shown underdosing leads to worse outcomes WITHOUT reduction in bleeding

What?

• Elements of performance listed here: [LINK](#)

How does it impact Nebraska?

• Highlights the advocacy in the area
• Anticipate possible targets for CMS regulations
• These patients are high risk for complications & there is a need to improve care in this area for patient safety and minimize strain on healthcare resources

Anticoagulation & Transitions of Care

**Education**
- Patient and care teams!
- Support with workflows
- Multidisciplinary

**Communication & Documentation**
- Multidisciplinary
- Across care settings and hospital systems
- Consistent & reliable
- Automate processes

**Anticipate**
- Cost barriers
- Access to care barriers
- Know and use your resources!

**Establish Accountabilities**
- Who does #1-3?
- Set expectations
- Efficiency
Anticoagulation Stewardship Example: DOAC prescribing

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients reviewed</td>
<td>232</td>
<td>10% of Heart and Vascular Center patients that live in NE</td>
</tr>
<tr>
<td>Average age (yr)</td>
<td>70.4</td>
<td></td>
</tr>
<tr>
<td>Inappropriate DOAC dose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overdosed</td>
<td>54</td>
<td>23.3</td>
</tr>
<tr>
<td>Underdosed</td>
<td>12</td>
<td>22.2</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>77.8</td>
</tr>
<tr>
<td>Interacting medications</td>
<td>48</td>
<td>20.7</td>
</tr>
<tr>
<td>History of Anticoagulation-associated bleed</td>
<td>72</td>
<td>31.0</td>
</tr>
</tbody>
</table>

Improve appropriate prescribing and monitoring
Facilitate transitions of care
Systematic Care
Data collection and analysis
Anticoagulation Stewardship Example

Indication-based order panels for DOAC initiation

- Care area specific
- Patient-specific data incorporated
- Lab panel included

"One-off" orders removed

Required indications
Anticoagulation Stewardship Example

Ambulatory prescribing

Guidance provided on medication approved for indication
Anticoagulation Stewardship Example

Indication guidance

Available dosing for specific indication
Anticoagulation Stewardship Example
### Data Analysis

#### DOAC Panel Utilization
- Initiation Orders Only
- Systemwide at 6 months

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<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients in Cardiology Departments with First Outpatient DOAC Prescription</td>
<td>22/38</td>
<td></td>
</tr>
<tr>
<td>Appropriate DOAC Indication</td>
<td>21</td>
<td>95%</td>
</tr>
<tr>
<td>Inappropriate DOAC dose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overdosed</td>
<td>0</td>
<td>4.5</td>
</tr>
<tr>
<td>Underdosed</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>No Labs prior to initiation</td>
<td>1</td>
<td>4.5</td>
</tr>
<tr>
<td>Average time (months) since last: BMP/CMP</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>CBC</td>
<td>2.5</td>
<td></td>
</tr>
</tbody>
</table>

Patients less than 1 month prior:
- BMP/CMP: 50%
- CBC: 40%
Anticoagulation Forum: Comprehensive Anticoagulation Resource

Resource Center

Disease State and Situational Management

Literature Updates

Quality Improvement

Examples of Excellence

Interesting in learning more about becoming a Center of Excellence? Free assessment online!

WEBSITE HERE
Data shows opportunity to improve patient safety & healthcare resource utilization in our patients on anticoagulation

- **Consistent themes:** transitions of care, education, systematic approach
  - Looks different everywhere!
- **Regulatory Requirements:** The Joint Commission Standards live since 2019
  - Framework for additional requirements set
- **Resources plentiful:** Don’t recreate the wheel!
  - Identify prioritizes and streamline efforts
References


Questions/Comments?

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