Anticoagulant Prescribing PDSA
(PLAN, DO, STUDY, ACT) SAMPLE

This sample form provides facilities with a framework and ideas for developing facility-specific content and action steps. This form can be modified or utilize a blank template (Alliant Health Solutions Blank PDSA Worksheet) to create the facility-specific PDSA plan.

Facility Name: _____

CCN#: _____ Date: _____

Goal Setting: Describe the problem to be solved

State the problem. Who, what when, where, and how long?	Direct Oral Anticoagulants (DOACs) and warfarin can prevent cardiovascular complications and maintain function for residents at risk for DVT, VTE, pulmonary embolism, etc. It is essential for the institution to identify residents who are prescribed a DOAC or warfarin correctly and prevent adverse events such as hospitalizations and death caused by anticoagulant medications. Anticoagulants are also the most frequent causes of adverse drug events to occur in a nursing home setting. Current orders for 10 of the 15 patients/residents (change to reflect your facility patient/ resident numbers). Example problem statement: After reviewing the resident's chart, it was identified that their most recent INR was not done when scheduled (missed getting updated INR).
What do you want to accomplish/ what idea do you want to test? Identify the goal and estimated time frame for resolution.	Goal: To optimize DOACS/warfarin use in nursing homes to prevent adverse related events. Idea(s) to test: 1. Implementing a multi-disciplinary anticoagulant stewardship program, providing education on CHEST and, American Heart Association guidelines and establishing a process for ongoing surveillance by a QAPI (Quality Assurance and Performance Improvement) team will increase awareness. 2. Identify patients who may be potential candidates for anticoagulant therapy. After identifying a patient, use **HASBLED** and **CHA2DS2-VASc** tests to determine eligibility. 3. Use HASBLED for patients on warfarin for Afib risk.

What changes will result in improvement? e.g., safety, effectiveness, patient-centered care, timely, efficiency, equitability, etc.	*What are you going to change based on your RCA (root cause analysis) that you feel will result in improvement?* Changes will be made to the admission , staff education, care plan, and surveillance processes.
Who will be affected by accomplishing the goal?	Staff, Prescribers, Patients and Residents

Plan: Describe the change (intervention) to be implemented

What exactly will be done?
 	
e.g., initial intervention(s), expected outcome for each intervention, goal(s), and expected overall outcome goal rate in a percentage format
	List interventions you will provide and your expectations for improvement rates.
	
	1. Establish a QAPI team (recommended composition includes pharmacist, medical director or designated prescriber, nurse leader, front line staff, patient/resident and/or family representative) by (insert date) to:
	   a. Conduct a review of current patients and residents with active DOAC and warfarin orders. (Note: the review should include:
	      i. Determine INR goal ranges for pts on warfarin
	      ii. Indication, dose, directions, start date
	      iii. Whether the patient/resident is a fall risk
	      iv. Whether the resident is a bleed risk
	      v. Documenting warfarin failure
	      vi. Identify key prescribers
	   b. Identify any trends in patients who are not within established INR goals.
	   c. Conduct ongoing surveillance of DOACS and warfarin orders to identify anticoagulation-related care concerns (falls, drug/drug, drug/food interactions).
	   d. Establish a process for flagging, reviewing and actions for any INR that is out of goal.
	2. Establish monitoring protocol for patients on warfarin.
	3. Implement standardized order sets, clinical support features, decision algorithms and warfarin dosing nomograms.
	4. Provide training for all clinical staff by (insert date) and incorporate training on DOAC and warfarin prescribing guidelines, box warnings, drug-drug interactions, signs of a bleeding event, dose adjustments and the use of DOAC reversal agents into:
	   a. New hire orientation
	   b. Annual competency reviews
	5. Establish a protocol for DOAC and Warfarin reversal.
	6. Collaborate with the multidisciplinary team to establish a process for identifying underutilization, overutilization, inappropriate prescribing, and suboptimal management of anticoagulants.
	7. Collaborate with the multidisciplinary team to establish a process for managing bleeding events.
	8. Have protocols for residents who undergo various procedures on DOACS and warfarin, if applicable.

	9. Revise intake process by (insert date) to include identification of:
	    a. Indication, dose, start and stop date of DOAC/warfarin
	    b. INR goal ranges for patients on warfarin
	    c. Identify actual or potential drug/drug or drug/food interactions
	    d. Document history of strokes and bleeds
	    e. Optimize coordination between transitions of care
	    f. Interdisciplinary team members to notify (nurse leader, medical director or QAPI team member) of any new admission with an initiation of DOAC/warfarin or changes from DOACS to warfarin or warfarin to DOACS
	10. Develop and implement a plan to communicate initiative goals to patients, residents, families, health care agents and care partners by (insert date).
	11. Establish a schedule for reviewing DOAC and prescription data by the QAPI committee.

Who will be responsible for implementing the change?	*Usually, leadership for QAPI methodology. This person will support and supervise the process the team is working on.*
Where will it take place?	*Where and when will you provide the interventions listed?*
What will be measured? Describe the measure(s) to determine if prediction succeeds.	*What data or outcome will you measure?* Underutilization/Overutilization Inappropriate prescribing Suboptimal management of anticoagulant-related adverse events Excessive events rate
Who will be responsible for measuring the data?	*This can be a group or an individual.*
How will the data be collected/computed/analyzed?	*Identify process owner(s) for data collection and schedule for review and analysis*
What is the current data figure for that measure? e.g., count, percent, rate, etc.	*Baseline*
What should the number increase/decrease to in order to meet the goal?	*Goal rate should show improvement from baseline.*
Did you base the measure or figure you want to attain on a particular best practice/average score/ benchmark?	*Based on Anticoagulation Desktop Reference* https://anticoagulationtoolkit.org/sites/default/files/toolkit_pdfs/toolkitfull.pdf

Do: Implement Change

Enrollment in upcoming learning collaborative. The learning collaboratives will provide group technical assistance using a data-driven, action-oriented approach. Unlike individual learning, people engaged in learning collaboratives capitalize on one another's resources and skills.

Was the plan executed?	*Yes, on (what date did you do the first audits)*
How long was the plan executed?	*You will answer this at the conclusion of your project.*
Document any unexpected events or problems	*Put employee comments, change in staff and any other events that affected the outcomes here.*
Describe what actually happened when you ran the test e.g., the indicators measured, the adoption of the change by staff, process change, etc.	*Did you see improvement in reducing opioids? What feedback did the team observe/receive around the use of the comfort menu?*

Study: Review and Reflect on Results of the Change

Scheduled monthly check-in with Alliant Health Solutions will include data analysis and building sustainability.

Describe the measured results and how they compared to the predictions State at least 1 or more interventions that contributed to the improvement of the problem	*Did you see the outcome you expected? What interventions made the improvement possible?*
Graphically illustrate data improvement comparison from baseline to current data in percentages.	Baseline= % Weekly or monthly audits = %
Is this change likely to continue? Identify at least one or more of the continued sustainable interventions that addresses the problem	*Answer here if your intervention(s) led to an improvement in opioid prescribing practices and reduction efforts.*

Act: Determine the Action Needed Based on Results of the Change

Monitor data and adjust interventions/tactics.

What will you take forward from this PDSA?	*Answer here (later) if you will Adopt, Adapt, or Abandon this Plan.*
Describe what modifications to the plan will be made from what you learned	*If you make changes or additions to this process, add changes here as an adaptation*

Intervention/Improvement Details: *(sample action steps)*

Action Step	Start Date	Target Completion Date	Person Responsible	Monitoring Strategy	Findings and Lessons Learned	Outcome, Recommendations and Next Steps
Conduct a review of all DOACS and warfarin			Pharmacist	QAPI to review		
Develop a strategy to establish framework for DOAC /warfarin optimization			ED/DNS	QAPI to review in-service records		
Optimized protocols for bridging and changing between anticoagulant agents			Director, pharmacy, providers	Scheduler to audit selection to ensure inclusive of weekend staff, all shifts, PRN and contract agency staff.		

Findings from the Root Cause Analysis:

Category	Barriers Identified

Communication/Notes:

Additional Resources:

1. Anticoagulation Desktop Reference:
   https://anticoagulationtoolkit.org/sites/default/files/toolkit_pdfs/toolkitfull.pdf
2. CMS State Operations Manual:
   https://www.cms.gov/medicare/provider-enrollment-and-certification/guidanceforlawsandregulations/downloads/appendix-pp-state-operations-manual.pdf
3. Alliant Health Solutions tools and resources: quality.allianthealth.org
4. Alliant Health Solutions YouTube channel: https://www.youtube.com/channel/UC4uFyOABx6fHiXkz2lLbF7g
5. ISMP Medication Safety Self Assessment for High-Alert Medications:
   https://www.ismp.org/sites/default/files/attachments/2018-01/EntireAssessmentWorkbook.pdf
6. Alliant Health Solutions Anticoagulant Zone Tool: https://quality.allianthealth.org/wp-content/uploads/2021/03/AnticoagulationBloodThinnerZoneTool_AHSHQIC-TO3H-21-554_508-2.pdf

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