



Delegation Protocol Number: 7

Delegation Protocol Title:

Initiation and Management of Warfarin - Adult - Ambulatory

Delegation Protocol Applies To:

☒ Wisconsin ☐ N. Illinois
UW Health Clinics

Target Patient Population:

Adult patients anticoagulated with warfarin

Delegation Protocol Champions:

Matthew Wolff, MD – Department of Cardiology; Anticoagulation Clinic Medical Director

Delegation Protocol Reviewers:

Anne Rose, PharmD – Department of Pharmacy

Responsible Department:

Department of Pharmacy

Purpose Statement:

To delegate authority from physicians or advanced practice providers (e.g. nurse practitioners, physician assistants) to Registered Nurses (RNs) and Pharmacists (RPhs) for the initiation, assessment, dose adjustment, and monitoring of warfarin therapy.

To delegate authority from the anticoagulation clinic medical director to anticoagulation clinic pharmacy technicians to administer warfarin assessment questions and to instruct patients to continue their current warfarin regimen for stable patients meeting criteria outlined in the protocol

Who May Carry Out This Delegation Protocol:

Registered Nurses, Pharmacists and Pharmacy Technicians licensed or certified in their respective fields in the state of Wisconsin who have documented completion of warfarin training and passed competency.

Warfarin Training and Competency Expectations:

1. Warfarin training – each RN and RPh will be required to complete one of the two methods for training
 - 1.1. Completion of computer-based training program located on the eLearning website; OR
 - 1.2. Attendance of the live training program.
2. Competency – each RN and RPh will be required to achieve competency in the management of warfarin patients based on the protocol as defined by the following:
 - 2.1. Development of a management plan for a minimum of five patients requiring warfarin dose adjustments.
 - 2.2. These cases will be reviewed and approved by either the responsible provider or clinic anticoagulation champion.
3. The clinic anticoagulation champion has been identified based on their experience and expertise with anticoagulation management.

4. A competency checklist is listed in Appendix A.

A. Protocol Initiation

1. The protocol is initiated in one of two ways:
 - 1.1. Ordering “Consult to Anticoagulation Clinic”
 - 1.2. Verbal/Inbox Messaging/Progress Note documentation to the RN from the Provider
2. All patients receiving warfarin should be managed through the warfarin episode of care. To activate the episode of care, the “Enroll In Anticoagulation” order is required
 - 2.1. The “Enroll In Anticoagulation” order should be entered by a RN or RPh associated with the clinic being delegated the task of warfarin management.
 - 2.2. Within the "Enroll In Anticoagulation" order the responsible pool, target INR range, indication, and anticipated duration of anticoagulation (if known) should be entered. This information will be obtained via the “Consult to Anticoagulation” order or from the authorizing provider verbally or through Inbox Messaging/Progress Note Documentation.
 - 2.3. Within the “Enroll In Anticoagulation” order there is a question regarding the delegation of warfarin management to an RN or RPh. Selecting “YES” confirms delegation. The order must be sent to the authorizing provider for co-signature.
 - 2.4. Upon entering the enroll order an In Basket message is sent to the responsible pool. This In Basket message should be used to double check the patient has a plan for warfarin dosing and next INR date scheduled.

B. Laboratory Monitoring - Prior to Initiating Warfarin

1. The following labs should be resulted prior to initiating warfarin:
 - 1.1. Within the past 30 days
 - Baseline INR
 - Pregnancy test for women unless:
 1. Are postmenopausal (12 months of amenorrhea in a woman over age 45 years old in the absence of other biological or physiological causes)
 2. Had a hysterectomy or bilateral salpingo-oophorectomy
 3. Have ovarian failure
 4. Had a bilateral tubal ligation or another surgical sterilization procedure
 5. Are known to be pregnant
 6. Have had a miscarriage or abortion within the last 7 days
 7. Have given birth within the past 4 weeks
 - 1.2. Within the past 90 days
 - Hemoglobin or hematocrit
 - Platelet count
2. If above baseline labs are not available, the RN or RPH may enter these laboratory orders and send to the responsible provider for co-signature per protocol and request the patient go to lab for the laboratory draw.

C. Warfarin Dosing - Per Protocol

1. The provider will provide the initial warfarin dose, indication, and target INR goal before delegating management to the RN or RPh.
2. Table 1 may be utilized to identify patients who may be potentially sensitive to warfarin.

3. If the patient is within the first seven days of therapy, Table 2 is utilized for dose adjustments.
4. If the patient is greater than seven days after initiating warfarin therapy, Tables 3-6 are utilized for dose adjustments depending on the target INR range.
 - 4.1. For INR target ranges that do not have corresponding dosing tables the same principles of adjusting the weekly dose by approximately 5-10% for an INR not in target range should be used.
 - 4.2. For patients with mechanical mitral valves and INR goal of 2.5-3.5, if the current INR is below 2.0, bridge therapy with low molecular weight heparin (LMWH) should be considered. The RN or RPh should initiate a discussion with the provider regarding the need for dual anticoagulation coverage.
 - 4.3. For patients with ventricular assist devices (VADs), if the INR falls below the following thresholds, bridging with LMWH should be considered. The RN or RPh should initiate a discussion with the provider regarding the need for dual anticoagulation coverage.
 - INR < 1.4 (for VAD patients with INR goal 1.8-2.5)
 - INR < 1.6 (for VAD patients with INR goal 2.0-3.0)
 - INR < 2.0 (for VAD patients with INR goal 2.5-3.5)
5. Warfarin doses must not be adjusted without a resulted INR, except in the case of significant drug interactions.
6. Missed or extra doses, recent INR trends, changes in dietary intake and/or activity, changes to medications, health status changes, symptoms of bleeding or clotting and upcoming invasive procedures will be considered before making a dosing change.
 - 6.1. Appendix C provides a complete list of patient assessment questions.
 - 6.2. Clinical judgment may be used when completing the patient assessment to tailor the depth of questioning based on patient response and/or INR result.
7. A stable warfarin patient is defined as a patient maintained on the same warfarin dose for at least 3 months.
 - 7.1. If a previously stable patient has one out of range INR and is maintained on the same dose, they may still be considered stable if their next INR is back within target range.
 - 7.2. If a previously stable patient has one or two out of range INRs due to a specified event (e.g., drug interaction, missed dose) and required a temporary dose change due to the event, they may be considered stable once the previously stable dose is resumed.

D. Warfarin Management with Home INR Meters

1. Appendix B outlines recommended criteria to determine if a patient is a good candidate for home INR testing.
 - 1.1. Patients should receive information about the anticipated out of pocket costs of home INR monitoring prior to deciding whether to switch to INR self-testing
 - 1.2. Patients who are deemed appropriate candidates and who wish to proceed with home INR testing will receive device training on the home INR meter prior to switching to self-testing and must demonstrate competency on the device.
 - 1.3. Warfarin will be managed as outlined in Section C with the following exceptions for patients who are testing INRs weekly:
 - 1.3.1. Patients will not be routinely contacted for INR results that are within 0.1 points of the target INR goal (example: 1.9-3.1) unless it is a consecutive occurrence
 - 1.3.2. Patients will be contacted for a full assessment at every 12th home INR if all previous home INRs are within goal
 - 1.3.3. Clinic RPh/Rn will contact patients if the INR results are > 0.1 outside of goal range

- 1.3.4. INR results greater than 3.9 by home meter should be verified by venipuncture at a qualified lab
- 1.4. For patients managed by Anticoagulation Clinic, for the 12th home INR in range assessment, the anticoagulation clinic pharmacy technician can administer the pre-defined patient assessment questionnaire and document patient responses in the medical record (see Appendix C)
 - 1.4.1. If there are any positive findings from the questionnaire, the pharmacy technician will forward to the anticoagulation clinic pharmacist to evaluate and if significant findings exist, the pharmacist will contact the patient.
 - 1.4.2. If all findings from the questionnaire are negative, the pharmacy technician will instruct the patient to continue with the current warfarin dosing regimen and weekly INR testing.
 - 1.4.3. The pharmacy technician will forward the encounter to the pharmacist for review and co-signature.

E. Warfarin Dosing - NOT on Protocol

1. All patients receiving warfarin should be managed through the anticoagulation monitoring tool and will require the “Enroll in Anticoagulation” order to activate the episode of care.
 - 1.1. The RN may enter the “Enroll in Anticoagulation” order to activate the episode but will select “no” for the delegation question.
 - 1.2. The RN will send the “Enroll” order for provider signature.
2. When evaluating an INR result it is recommended that missed or extra doses, recent INR trends, changes in dietary intake and/or activity, changes to medications, health status changes, symptoms of bleeding or clotting and upcoming invasive procedures will be considered before making a dosing change
 - 2.1. The RN may still complete the patient assessment on each resulted INR for warfarin management, but all findings must be sent to the provider for consideration and dosing recommendations.
3. The RN, LPN, or MA may instruct the patient with warfarin dosing instructions from their provider.

F. Documentation

1. For all patients on warfarin the following should be documented in the warfarin episode of care in the electronic medical record:
 - 1.1. Indication for anticoagulation
 - 1.2. Target INR range
 - 1.3. Current warfarin dose
 - 1.4. Current INR
 - 1.5. Return INR date
 - 1.6. Warfarin tablet strength
2. At each patient encounter for INR monitoring, patients must be assessed for changes that could affect warfarin dosing (Appendix C).
3. Each encounter for anticoagulation management should be linked to the warfarin episode of care within the electronic medical record.
4. Follow up on INRs for warfarin management may be completed via telephone encounter, MyChart communication or scheduled clinic visit and will occur no later than the next business day of the reported INR result.
5. If the clinician is not able to reach the patient, a message should be left (if able) and documentation of the call entered in the medical record.
 - 5.1. Additional attempts to reach the patient should occur every 24-72 hours based on clinic schedule.

6. Patients will be considered non-complaint after three attempts on a weekly schedule have been unsuccessful in contacting the patient. (e.g. initial attempt; attempt 1 week post initial; attempt 2 weeks post initial)
 - 6.1. Documentation of all contact attempts and messages will be included in the progress note.
 - 6.2. After three telephone attempts to contact the patient have been unsuccessful a letter will be sent to the patient's home address or electronically if available (via MyChart).
 - 6.3. If no response to the initial letter and an additional 2 weeks has passed, a second letter will be sent to the patient's home address or electronically if available (via MyChart)
 - 6.4. If no response to either of the 2 letters sent to the patient, the protocol will end, and warfarin management will revert to the provider.
 - 6.4.1. The RN or RPH must contact the provider informing them of the patient non-compliance and end of protocol management
 - 6.4.2. The provider may choose to re-initiate the protocol after verbal communication with the RN or RPH.
7. If the clinic is notified of an inpatient admission, emergency department visit or death, the RN or RPH will determine if the event was due to a thrombotic or bleeding event. If yes:
 - 7.1 Documentation of the event should occur in the warfarin episode of care under "Anticoagulation Related Adverse Events."
 - 7.2 The episode of care should be resolved for deceased patients.

G. Laboratory Monitoring - Maintenance

1. The RN or RPH will instruct the patient on timing of INR monitoring.
 - 1.1. Table 7 is for newly initiated patients who have not achieved a stable warfarin dose.
 - 1.2. Table 8 is for stable patients with a consistent warfarin dose.
2. For clinics with patients utilizing home INR machines:
 - 2.1. Weekly INR checks on the same weekday is preferred
 - 2.2. Patient reported INR results should be entered into Health Link via enter/edit functionality using the result type "INR – PATIENT REPORTED" and resulting lab name "HOME INR MONITOR".
 - 2.3. If the INR is >3.9 , then a venipuncture INR is required to verify the INR.
3. For POC INR results called into the clinic by another Healthcare Professional (e.g. Home Health agency or Nursing Home)
 - 3.1. The results should be entered into Health Link via enter/edit functionality using the result type "PROTHROMBIN TIME/INR, POC" and resulting lab name of the Home Health agency or Nursing Home that performed the INR.
 - 3.2. If the INR is >3.9 , ask the facility what their cutoff policy is for verifying elevated POC INR with a VP INR. If they don't have one or don't know what it is, use UW Policy for verifying POC INRs >3.9 with a VP INR
4. Additional maintenance labs should be ordered at least yearly:
 - 4.1. Hemoglobin or hematocrit
 - 4.2. Platelet Count
5. All lab orders require provide co-signature
 - 5.1. Order mode: Cosign required protocol/policy
6. Critical INR results for patients followed by Anticoagulation Clinic:
 - 6.1. Upon notification of a critical INR result, the anticoagulation clinic RN or RPH will develop a plan based on patient assessment (appendix C), patient availability for an INR recheck and the dosing tables listed in the protocol
 - 6.2. A physician order is not required for INRs between 5.0-8.9 in a patient with a negative assessment for bleeding or only minor bleeding (e.g. nosebleed)

- 6.3. A physician must be contacted if the resulting INR is ≥ 9.0 or INR between 5.0-8.9 with a positive finding of bleeding in the urine, stool, sputum, or emesis during patient assessment (appendix C)
- 6.4. All critical INRs should have the “Critical Results Flowsheet” completed

H. Patient Education

1. For all patients started on warfarin, patient education that highlights the importance of the following should be completed:
 - 1.1. Follow-up
 - 1.2. Monitoring
 - 1.3. Compliance
 - 1.4. Dietary restrictions
 - 1.5. Potential for drug interactions
 - 1.6. Potential adverse reactions
 - 1.7. Pregnancy: contact provider immediately if patient becomes pregnant or suspects pregnancy; educate patient to utilize contraception to prevent pregnancy while using warfarin (unless patient is postmenopausal [12 months of amenorrhea in a woman over age 45 years old in the absence of other biological or physiological causes]; has had a hysterectomy or bilateral salpingo-oophorectomy; has ovarian failure; has had a bilateral tubal ligation or another surgical sterilization procedure).
2. Documentation of patient education will occur in the electronic medical record.
3. Educational materials for warfarin and parenteral anticoagulants have been created for use:
 - [Warfarin: Health Facts For You #6900](#)
 - [Heparin \(Unfractionated and Low Molecular Weight\): Health Facts For You #6915](#)
 - Warfarin Patient Education Video available at www.uwhealth.org/anticoagulation

I. Periprocedural and Transitioning Therapy

1. Periprocedural anticoagulation should be individualized for each patient depending on bleeding risk of procedure and risk factors for thromboembolism.
 - 1.1. Periprocedural plans may be developed for patients based on the recommendations provided in the [Periprocedural Management with Antithrombotic Therapy UW Health Guideline](#).

J. Identifying Patients Overdue for INRs

1. The episode of care will send an In Basket message for patients who are overdue for INRs based on their return INR date.
2. The warfarin patient registry (workbench report) should be run twice per month to catch patients who may have missed their INR follow up
 - 2.1. The report is titled “Anticoagulation Responsible Pool.” It will pull all patients with an active anticoagulation episode of care associated with the In Basket pool entered. It identifies last INR date and how many days overdue a patient is for an INR check.

K. Medication Prescribing and Renewal

1. For patients followed per the warfarin management protocol, the UW Delegation protocol [186] – prescription renewal will be utilized.
2. Clinic staff may take messages/faxes from patients and pharmacies regarding the anticoagulation prescription renewal and will forward these requests to the RN, RPH, or Pharmacy Technician for completion.

3. The requested prescription renewal will be completed during normal clinic hours and within 48 hours, unless marked as urgent. In addition to Delegation protocol [186] – prescription renewal, patients followed per protocol may have the following prescriptions prescribed by the RN or RPH:
 - 3.1. Warfarin (Coumadin®)
 - 3.2. Low Molecular Weight Heparins
 - 3.3. Fondaparinux (Arixtra®)
 - 3.4. Phytonadione/Vitamin K (Mephyton®)
4. For all warfarin prescription:
 - 4.1 Instructions should read “Take as directed based on INR. RPh: *** tablets = *** day supply.”
 - 4.2 The number of tablets per 30- or 90-day supply must be entered in the prescription for outpatient pharmacies to bill through insurance.

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Table 1. Factors for Identifying Patients with Increased Warfarin Sensitivity

Table 1. Warfarin sensitivity factors	
Increases sensitivity (usually require lower doses)	
<ul style="list-style-type: none"> • Baseline (pre-warfarin) PT/INR (e.g., greater than 1.4) • Advanced age (e.g., 60 years of age or older) • Underweight (e.g., BMI less than 18kg/m²) • Nutritional status (e.g., malnourished, low vitamin K intake/stores) • Genetic factors (e.g., CYP2C9, VKORC1 phenotypes) • Drug-drug interactions • Hypoalbuminemia • Ethnicity (Asian) • Liver disease • Thyroid Disease (e.g., hyperthyroidism, Graves' disease) • Heart Failure • Febrile illness • Prolonged vomiting and diarrhea • Cannabinoids • Alcohol • 	
Decrease warfarin sensitivity (may require higher doses)	
<ul style="list-style-type: none"> • Enteral feedings • High-vitamin K intake • Drug interactions • Chewing tobacco 	

Table 2. Warfarin Initiation Dosing Protocol (Week 1) with INR Goal 2-3

Day Therapy	INR Value	Dose Adjustment
Day 1		5 mg daily (2.5 mg daily if high sensitivity to warfarin identified)
In 2-3 days after initiation	<1.5 1.5-1.9 2.0-2.5 >2.5	5-7.5 mg daily 2.5-5 mg daily 1-2.5 mg daily Hold and recheck INR next day
In additional 2-3 days after last INR check	<1.5 1.5-1.9 2.0-3.0 >3.0	7.5-10 mg daily 5-10 mg daily 2.5-5 mg daily Hold warfarin, recheck in 1-2 days
*If patient is started on 2.5 mg then target lower warfarin dose adjustments to avoid overshooting INR goal		

Table 3. Warfarin Maintenance Dosing Protocol with INR Goal 1.5-2.0

INR less than 1.5	INR 1.5-2.0	INR 2.1-3.0 [‡]	INR 3.1-3.9*	INR 4.0-4.9*	INR 5.0-8.9* [^]	INR greater than or equal to 9.0
Increase weekly dose 5%	No change	Decrease weekly dose 5%	Consider half dose x 1 and decrease weekly dose 10%	Hold 1 dose and decrease weekly dose by 10-20%	Order required Consider: Hold 2-3 doses, when able recheck INR before resuming warfarin. Decrease weekly dose 10-20%; Check HCT or Hgb	Contact provider for urgent patient evaluation

*If a POC INR is above 3.9, a repeat venipuncture INR is required to verify INR

‡See Table 6.

[^]Provider order for critical INR is not required for patient's managed by the Anticoagulation Clinic

Table 4. Warfarin Maintenance Dosing Protocol with INR Goal 2-3

INR less than 1.5	INR 1.5-1.9 [‡]	INR 2.0-3.0	INR 3.1-3.9* [‡]	INR 4.0-4.9*	INR 5.0-8.9* [^]	INR greater than or equal to 9.0
Extra dose and increase weekly dose 10-20%	Increase weekly dose 5-10%	No change	Decrease weekly dose 5-10%	Hold 1 dose and decrease weekly dose 10%	Order required Consider: Hold 2-3 doses, when able recheck INR before resuming warfarin. Decrease weekly dose 10-20%; check HCT or Hgb	Contact provider for urgent patient evaluation

*If a POC INR is above 3.9, a repeat venipuncture INR is required to verify INR

‡See Table 6.

[^]Provider order for critical INR is not required for patient's managed by the Anticoagulation Clinic

Table 5. Warfarin Maintenance Dosing Protocol with INR Goal 2.5-3.5

INR less than 1.9	INR 1.9-2.4 [‡]	INR 2.5-3.5	INR 3.6-4.5 ^{*‡}	INR 4.6-4.9 [*]	INR 5.0-8.9 ^{*^}	INR greater than or equal to 9.0
Extra dose and increase weekly dose 10-20%	Increase weekly dose 5-10%	No change	Decrease weekly dose 5-10%	Hold 1 dose and decrease weekly dose 10%	Order required Consider: Hold 1-2 doses, when able recheck INR before resuming warfarin, Decrease weekly dose 10-20%; check HCT or Hgb	Contact provider for urgent patient evaluation

*If a POC INR is above 3.9, a repeat venipuncture INR is required to verify INR

[‡]See Table 6.

[^]Provider order for critical INR is not required for patient's managed by the Anticoagulation Clinic

Table 6. All INR Ranges

If there is a transient reason for INR to be out of range (e.g. missed dose) or patient previously stable with unknown reason to be out of range, then may consider rechallenging the dose before making a weekly dose adjustment. Recheck the INR in 1-2 weeks

Table 7. Frequency of INR Monitoring After Initiation of Warfarin

INR Check	
Every 2-3 days	Until INR within therapeutic range on two consecutive INR checks
Then every week	Until INR within therapeutic range on two consecutive INR checks
Then every 2 weeks	Until INR within therapeutic range on two consecutive INR checks
Then every 4 weeks	When dose is stable check monthly

Table 8. Frequency of INR Monitoring for Maintenance of Warfarin

INR Check	
In 1 week	If dose adjusted by 10-20%, starting or stopping an interacting medication, change in diet, change in activity level, or other change that could affect INR
Every 1-2 weeks	If dose adjusted by 5-10% or if using a home INR meter
Every 4 weeks	If maintained on same stable dose fewer than 3 months
Every 8-12 weeks	If maintained on same stable dose for at least 3 months

*If INR stable every 8 weeks x 2 consecutive checks, then may consider every 12 weeks.

Order Mode:

Cosign Required Protocol/Policy

References:

1. Ageno W, Gallus AS, Wittkowsky A, Crowther M, Hylek EM, Palareti G. Oral anticoagulant therapy: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines. *Chest*. 2012;141(2 Suppl):e44S-e88S.
2. Garcia DA, Witt DM, Hylek E, et al. Delivery of optimized anticoagulant therapy: consensus statement from the Anticoagulation Forum. *Ann Pharmacother*. 2008;42(7):979-88.
3. Holbrook A, Schulman S, Witt D, Vandvik P, et al. Evidence-based Management of Anticoagulant Therapy: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines. *Chest*. 2012;141(2 Suppl):e152s-e184s.
4. Holbrook AM, Pereira JA, Labiris R, et al. Systematic overview of warfarin and its drug and food interactions. *Arch Intern Med*. 2005;165(10):1095-1106.
5. Wittkowsky AK. Drug interactions update: drug, herbs, and oral anticoagulation. *J Thromb Thrombolysis*. 2001; 12(1):67-71.
6. Wittkowsky AK, Boccuzzi SJ, Wogen J, et al. Frequency of concurrent use of warfarin with potentially interacting drugs. *Pharmacotherapy*. 2004;24(12):1668-1674.
7. Barnes GD, Kong X, Cole D, et al. Extended international normalized ratio testing intervals for warfarin-treated patients. *J Thromb Haemost*. 2018;16(7):1307-1312.
8. Margolis AR, Porter AL, Staresinic CE, Ray CA. Impact of an extended International Normalized Ratio follow-up interval on healthcare use among veteran patients on stable warfarin doses. *Am J Health Syst Pharm*. 2019;76(22):1848-1852.
9. Rose AE, Robinson EN, Premo JA, Hauschild LJ, Trapskin PJ, McBride AM. Improving Warfarin Management Within the Medical Home: A Health-System Approach. *Am J Med*. 2017;130(3):365 e367-365 e312

Collateral Documents/Tools:

1. [Periprocedural Management with Antithrombotic Therapy UW Health Guideline](#)
2. [Warfarin: Health Facts For You #6900](#)
3. [Heparin \(Unfractionated and Low Molecular Weight\): Health Facts For You #6915](#)
4. Delegation protocol Prescription Renewal – Adult/Pediatric – Ambulatory [186]

Approved By:

UW Health Ambulatory Anticoagulation Committee: May 2022

UWHC Pharmacy and Therapeutics Committee: May 2022

UWHC Medical Board: June 2022

UW Health Chief Clinical Officer: June 2022

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Appendix A. UW Health Warfarin Protocol Skills Training Checklist

1. Develop warfarin management plan for patients followed in clinic based on standardized protocol/practices

Name _____ Employee # _____

Clinic: _____

	Employee's initials	Preceptor's initials	Date of completion
1. Complete "Anticoagulation Management with Warfarin Guidelines" computer-based training program located within the Learning and Development System			
2. Attend live training program on "Anticoagulation Management with Warfarin Guidelines" given quarterly (optional)			
Develop warfarin management plans for a minimum of 5 patients requiring dose adjustments – cases must be reviewed and approved by anticoagulation champion or responsible provider			
3. Case 1			
4. Case 2			
5. Case 3			
6. Case 4			
7. Case 5			

Resources:

- [UW Health Anticoagulation](#)
- [Warfarin Management – Adult – Ambulatory Clinical Practice Guideline](#)
- [Initiation and Management of Warfarin - Adult - Ambulatory Delegation Protocol \[7\]](#)
- [Warfarin: Health Facts For You #6900](#)
- [Heparin \(Unfractionated and Low Molecular Weight\): Health Facts For You #6915](#)

Name: _____ Date: _____

Anticoagulation Champion/Nursing Supervisor/Clinic Manager

Name: _____ Date: _____

Physician Lead

Appendix B. Recommended Criteria for Home Point of Care INR Testing

The patient has:

1. Good compliance with anticoagulation management and the ability to follow directions
2. Manual and visual dexterity to perform testing or has a committed support person to assist with testing
3. A chronic condition that would require long term anticoagulation (ex. atrial fibrillation, valve replacement)
4. Completed training on self-testing and demonstrated competency on the device
5. Been on at least 3 months of warfarin therapy

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Appendix C

Full Patient Assessment Tool

1. Verify patient dose
 - patient repeats what dose they have been taking
2. Missed doses
 - Y/N
3. Medication or OTC Changes
 - Y/N
4. Changes in diet/alcohol
 - Y/N
5. Recent Illness
 - Y/N (*If yes identify symptoms*)
 - Diarrhea
 - Nausea/Vomiting
 - Hospitalization
 - Upcoming surgery or procedure
 - New Diagnosis
6. Signs of bleeding
 - Y/N (*If yes identify symptoms*)
 - Nose
 - Sputum/Emesis
 - Urine/Stool
 - Bruising
 - Other
7. Falls/Injuries
 - Y/N
8. Clotting Symptoms
 - Y/N (*If yes identify site*)
 - Chest pain
 - Shortness of breath
 - Leg/Calf pain
 - Leg/Calf redness or swelling
9. Stroke Symptoms
 - Y/N (*If yes identify symptoms*)
 - Headache
 - Numbness/Weakness one sided
 - Vision changes
 - Confusion/Slurred speech