

Warfarin Initiative for Post-Discharge Follow-Up and Management

Giuseppe Amore, MD, MPH Ramsay Elhindi, MD

Unified Quality Improvement Symposium February 5, 2020

Collaborative Team Members

- Giuseppe Amore, Physician
- Ramsay Elhindi, Physician
- Clinton Faulk, Physician
- Terri Howard, Pharmacist

Team Leader Key Contact Info: Giuseppe Amore; (252)847-2673; Amoreg16@ecu.edu

OF MEDICIN

VIDANT HEALTH

Background / Introduction

- Warfarin management involves a multi-disciplinary approach that requires adequate communication among each discipline to improve patient safety by reducing potential adverse events.
- Patients who are discharged from a hospital with a new diagnosis requiring warfarin for anticoagulation are at especially high risk for potential safety events.
- Patients who are on warfarin require close follow-up with PT/INR checks for management and therapeutic dosing.



AIM Statement with Numerical Goals

The Aim Statement for our project was:

- To identify patients admitted to VMC inpatient rehabilitation facility (IRF) on warfarin and identify (if applicable) pre-admission warfarin management and monitoring to initiate and ensure post-discharge follow up within 10 days of discharge.
- Our goal was to increase the percentage of appropriate follow-up for patients discharged from IRF on warfarin within 10 days after study intervention by 15%.



How Will We Know This Change Is An Improvement?

Performed in 2 phases:

- <u>Phase I:</u> Retrospectively identified all patients discharged on warfarin from October 1st, 2018 through January 31st, 2019.
 - Identify the percent of patients that had appropriate follow up for management of warfarin within 10 days of discharge from IRF.

Phase II: Retrospectively quantified percent of patient population discharged from IRF between April 1st, 2019 and July 31st, 2019 with appropriate follow up for management of warfarin within 10 days of discharge following implementation of admission questionnaire.

Baseline Data

11.54 - Average Days to Follow up

PT	Discharge	Follow-up	<u>Days</u>	<u>Within</u> Window
1	1/4/19	1/22/19	18	0
2	1/11/19	_,,	N/A	0
3	12/20/18	1/3/19	14	0
4	12/5/18	12/18/18	13	0
5	10/23/18	10/30/18	7	1
6	1/9/19	1/11/19	2	1
7	1/11/19	-	-	0
8	10/9/18	10/24/18	15	0
9	11/15/18	-	-	0
10	11/21/18	12/3/18	12	0
11	12/31/18	2/7/19	38	0
12	1/18/19	1/23/19	5	1
13	1/7/19	1/7/19	0	1
14	1/23/19	1/29/19	6	1
15	12/18/18	1/3/19	16	0
16	1/3/19	1/16/19	13	0
17	10/19/18	11/1/18	13	0
18	10/17/18	10/24/18	7	1
19	11/26/18	11/29/18	3	1
20	10/18/18	10/24/18	6	1
21	12/21/18	12/21/18	7	1
22	11/14/18	-	-	0
23	1/16/19	1/23/19	7	1
24	2/1/19	3/19/19	46	0
25	12/12/18	12/19/18	7	1
26	11/4/18	11/8/18	4	1
27	2/8/19	2/18/19	10	1
28	1/2/19	1/10/19	8	1

BRODY SCHOOL OF MEDICINE





Improvement Strategies Employed

Each admitting resident was given a questionnaire/guideline during the "implementation phase"

- Is the patient currently on warfarin? Yes or No
- Does the patient currently follow up with a PCP or INR clinic? Yes or No
- If NO, begin process to establish care with PCP or INR clinic to ensure follow up within 10 days of discharge for management of warfarin.
- Ensure PCP and/or INR clinic appointment documented on discharge summary.



Outcomes

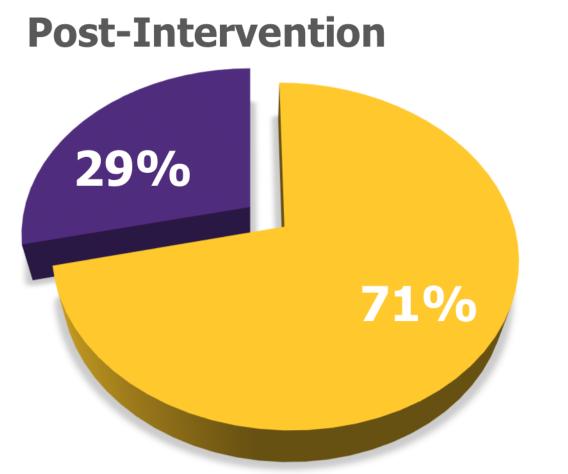
With Appropriate follow up

% With No
Appropriate follow
up

Pre-Intervention 46% 54%



Outcomes



With
Appropriate
follow up

With No Appropriate follow up

Increase in percent of all patients discharged on warfarin with appropriate follow up within 10 days by 17.6%.



Challenges Encountered in QI Process

- Some patient follow up appointments were difficult to confirm
- Appropriate utilization of questionnaire by admitting physician



Lessons Learned Through QI Efforts

 Through utilization of the questionnaire, follow-up for management of warfarin was markedly improved.



Next Steps

Plan to implement a "Best Practice Advisory" for IRF patient discharges who will need follow up for INR checks.

If successful, implement BPA hospital-wide.



Questions?

Giuseppe Amore, MD, MPH (252)847-2673 Amoreg16@ecu.edu

Ramsay Elhindi, MD (252)847-7867 Elhindir16@ecu.edu