

Vulnerable Time During Patient Transitions

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- Mrs. A is an 82 year old woman with a history of stable CAD and CHF who was admitted to the acute care hospital with a pulmonary embolus. Although in CHF for a number of years, her PCP felt that her EF was not low enough to take on the risks associated with warfarin. She, in fact, never did sustain a systemic arterial embolism but the PE forced reconsideration of the use of warfarin. While in the Hospital, she was started on LMWH and warfarin and, on the 4th hospital day, was transferred to a SNF, with the expectation that she would be able to return home where she lived with her daughter after a couple weeks of R&R. Consider the following management issues:

Issues from the Case



- What does the next clinician need to know?
- What is a reasonable process for transferring responsibility?
- What bridging strategy is appropriate?
(to be addressed in next presentation)

- I. What makes Warfarin so special?
- II. What makes a “Safe Transfer”?
- III. An improvement example
- IV. Best Practices
- V. Questions/Comments
- VI. Appendix

A special case

- The problem with warfarin is that too many things can go wrong
- And when they go wrong, the consequences of missing the therapeutic range are rapid and potentially catastrophic
- Warfarin management is the “stress test” for transitions. If it’s not “defect free” then sooner or later there will be a disaster

I. What makes Warfarin so special?

- It's a High Risk medication all by itself
 - Narrow therapeutic index
 - Need for close and frequent monitoring
- Transitions compound risk of poor follow-up
 - Multiple opportunities for error
 - Inconsistency of management
 - Need to transfer essential information
 - Risk that close monitoring will not occur

Warfarin and Transitions: Three Issues



- Transfer of clinical data
- Transfer of clinical responsibility
- Connecting different management systems
 - Hospital
 - LTAC/IRF Hospital
 - SNF
 - Home
 - With home health services
 - Without services

Dangerous assumptions

- The next clinician will manage warfarin
- The next clinician can figure out duration and target INR from the diagnoses
- The next clinician will know which of two indications will determine target INR and duration of therapy

Problems that have occurred

- Failure to restart warfarin
- Failure to cite multiple indications
- Failure to specify therapeutic goal
- Failure to guide choice of next dose (with resulting failure to hit therapeutic range)
- Failure to establish responsibility for managing warfarin
- Failure to indicate duration of therapy
- Failure to cite indication

II. The Safe Transfer

Five Parts to a Safe Transfer



1. Essential clinical information at discharge
2. Seamless clinical envelope- a responsible clinician at all times
3. Logistical and management support for patients and families
4. Risk stratification and customized interventions for high-risk groups
5. Quality measurement to improve the process

1. Essential Clinical Information

- “Warfarin per INR”

1: Essential Clinical Information

- Warfarin tablet strength
- Daily dose
- Indication
- Duration
- Target INR
- Sufficient information to safely prescribe for the next 72 hours
 - most recent INRs (up to 3)
 - most recent doses (up to 3)
 - suggested doses until next INR
 - suggested time for next INR

3: Support Systems for Patients/Families



- Pre-discharge teaching
- Logistical tools for information management, care management and communication with responsible clinician
- Well planned support and response to potential complications

4: Risk Stratification and Customized Interventions

- High risk for medication errors
 - Intensive medication reconciliation
 - Pharmacist counseling and follow-up
- Identification of patients with inadequate social supports at risk for complications
- Customized interventions to assure safe warfarin use

5: Quality Measurement and Process



Improvement

- How well does your warfarin management system work?
- How would you know?
 - Percent of patients with indication who are on warfarin
 - Time in therapeutic range
 - Percent of transfers with all essential data elements
 - Incidents of failure to restart warfarin
 - Thrombotic or hemorrhagic complications

2: The Seamless Clinical Envelope

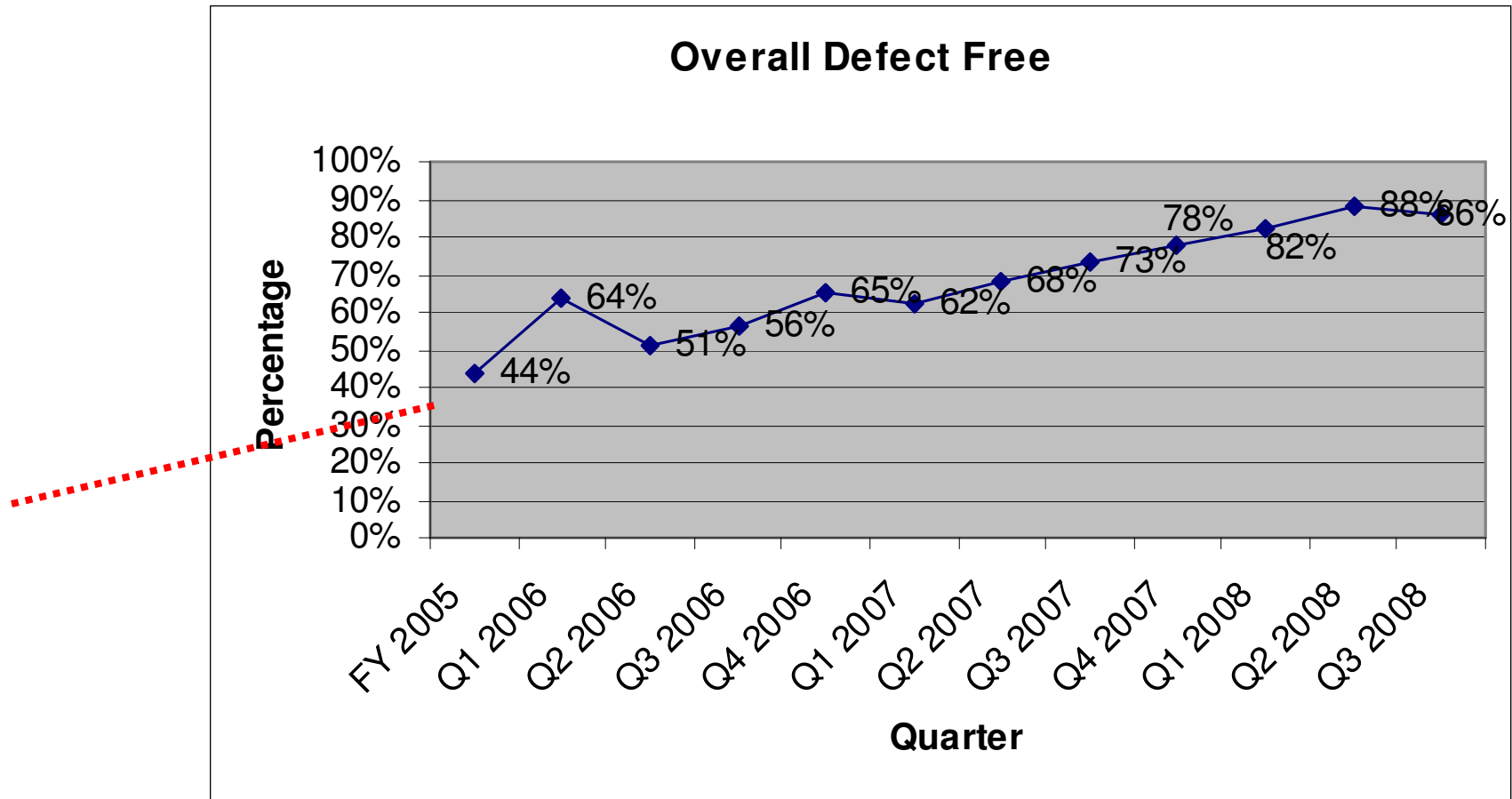


- A clearly identified clinician who:
 - Is responsible for managing Warfarin dosing
 - Manages abnormal test results
 - Responds to emergent issues
 - Answers questions
- 24/7
- Easily accessible

PHS Clinical Transitions Project



Performance- 12 Items Network Wide



History of Improvement:

Entity Specific Results for Clinical Transitions

	FY 2005	FY 2006				QFY 2007				FY 2008		
	FY	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
BWH	33%	22%	37%	33%	33%	40%	49%	83%	79%	88%	92%	96%
MGH	54%	50%	44%	45%	60%	67%	58%	76%	76%	87%	92%	91%
FH	42%	39%	46%	54%	62%	60%	59%	75%	71%	70%	76%	54%
NWH	32%	50%	59%	66%	78%	77%	90%	83%	89%	76%	86%	91%
NSMC	52%	62%	63%	67%	67%	60%	80%	84%	80%	91%	96%	98%

III. PHS Clinical Transitions Project



Transitions in Care		BWH	FH	MGH	NWH	NSMC
Individual Data Element Score (1)		0-89%	86-90%	97-100%		
1) Hospital Course		98%	100%	100%	100%	100%
Treatment Rendered	Percent Compliance with each Element	100%	100%	100%	100%	100%
Response to Treatment		98%	100%	100%	100%	100%
2) Procedures		98%	98%	100%	100%	100%
3) Allergies		100%	96%	100%	100%	100%
4) Medications						
Pre-admission Medications List		100%	96%	91%	100%	100%
Discharge Medications		100%	100%	100%	100%	100%
5) Follow-up Plans		100%	67%	100%	95%	100%
6) Physician Contact		100%	100%	100%	100%	100%
7) Warfarin Overall		100%	90%	100%	95%	98%
Warfarin: Indication	100%	100%	100%	100%	100%	
Warfarin: Target INR	100%	96%	100%	95%	98%	
Warfarin: Anticipated Duration	100%	90%	100%	100%	100%	
Warfarin: Sufficient Info (72 Hrs)	100%	98%	100%	100%	100%	
Overall Defect Free Score (2)		96%	54%	91%	91%	98%
OVERALL DEFECT FREE RATE		96%	54%	91%	91%	98%

PHS Performance-Warfarin Measures



	Q1 FY2007	Q2 FY2007	Q3 FY2007	Q4 FY2007	Q1 FY2008	Q2 FY2008	Q3 FY2008	Q4 FY2008
PHS	85%	87%	93%	95%	96%	97%	97%	96%
BWH	81%	85%	98%	94%	100%	98%	100%	100%
FH	79%	86%	91%	100%	95%	91%	90%	84%
MGH	91%	83%	93%	100%	98%	100%	100%	100%
NSMC	86%	87%	90%	87%	94%	98%	98%	96%
NWH	86%	92%	94%	95%	94%	95%	95%	98%

Key <90% 90-95% >95%

What Can You do:

Elements of a Safe Transition

- Establish and document the transition of responsibility to the next clinician
- Provide all essential clinical information
- Provide the clinical envelope until the patient is safely under the next clinician's care

- Call the receiving clinician or responsible party (AMMS) to confirm they accept responsibility for continuing warfarin management
- Document this in the record
- Identify the clinician responsible for all management issues until patient is under the care of the receiving clinician (the Clinical Envelope)
- Send the essential clinical data elements with the patient
 - Warfarin tablet size
 - Daily dose
 - Indication
 - Duration
 - Target INR
 - Sufficient information to safely prescribe warfarin for the next 72 hours
 - most recent INRs (up to 3)
 - most recent warfarin doses (up to 3)
 - suggested doses until next INR
 - suggested time for next INR
- Confirm with the receiving clinician that the patient is under care
- Document this in the record
- Perform quality monitoring to assure “Defect Free Care”