Beth Israel Lahey Health
Beth Israel Deaconess Medical Center

A Novel Role for Team Members in Review of Adverse Events at the Anticoagulation Management Service

TAP TO GO BACK TO KIOSK MENU

Afrah Alkazemi PharmD; Beata M. Rucinski, PharmD, CACP; Diane Brockmeyer, MD

Introduction

- Anticoagulation management is a high risk area, and maintaining a balance between thrombosis prevention and bleeding risks while on anticoagulation therapy can be challenging. Adverse events associated with anticoagulation therapy have a potential for significant morbidity and mortality.
- QI cases arise several times a year in our 700 patients on warfarin. QI Review and Root Cause Analysis have been historically conducted for each case, gathering information from involved team members, from systematic chart review, and from others involved in the case (inpatient care team, prescribing doctor, procedure team, etc.). Two reviews are conducted in parallel by the Medical Director and the Pharmacist Team Lead, who then meet to compare reviews and start to plan interventions and improvements. Further improvements are then designed in consultation with the full team.
- We have three new staff members hired in the past 6 months, and we identified some reluctance around the QI process (perception of QI as punitive, uncertainty about rationale for reporting cases, worry about making trouble for a peer).
- We identified two interventions that we hypothesized could help: 1. Increased familiarity with the QI process and culture at BIDMC, and 2. Individual participation and voice in performing case reviews and designing potential solutions.

Aim

- To improve our QI process by 1. Training new team members explicitly on the role of QI at BIDMC and 2. Initiate a process that adds a 3rd review to each case, to be performed by a rotating front line clinical team member, from all disciplines on our team (LPN, RN BSN, Pharm D, MD).
- To ensure that all team members feel comfortable bringing potential cases forward frequently, and understand the Culture of Safety.

The Team

- DIANE BROCKMEYER MD
- BEATA M. RUCINSKI, PHARM D, CACP
- AFRAH ALKAZEMI , PHARM D
- PATRICIA GLENNON, RN, BSN
- STACY MASK, LPN
- I-CHUN CHE, RN, BSN
- LOANKIM CHU, PHARM D

The Interventions

- We had explicit training at team meeting for the entire team, including our three new team members. The content was on QI at BIDMC (Culture of Safety, how to speak up, non-punitive model).
- We implemented a protocol in which each case would undergo a 3rd review by an additional rotating team member, to include LPN, RN, and staff Pharmacist. We trained all members on how to conduct a review.
- As a training exercise, we identified a case, had all 6 team members perform a full case review using a standardized structured approach, then compared the issues different team members identified.
- The standardized structured approach included a one page rubric for performing a case review, and also a reference article on applying The 5 Whys in Root Cause Analysis.

Results/Progress to Date

- New staff who have worked in other settings may view QI process as punitive, and may be reluctant to engage in QI or to report potential cases of their own or of peers.
- Explicit training on the Culture of Safety and the benefits of QI can help to shift this perception (see team member comments on next page).
- People with different disciplines (LPN, RN, PharmD, MD) review cases with a different eye, commenting on various aspect of clinical decision making, communication, documentation, and patient education. This multidisciplinary review has the potential to offer a holistic, 360° case review, with the potential for better identification of opportunities for systems improvement.

For more information, contact:

Diane Brockmeyer MD, Medical Director ACMS, dbrockme@bidmc.harvard.edu

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Root Cause Analysis of Adverse Events at the Anticoagulation Management Services Clinic: "5 Why's" Technique

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More Results/Progress to Date

ACMS Quality Improvement Review

- Event description
- Assessment of patient factors (e.g. renal, hepatic function)
- Assessment of dosing (adherence to algorithms, policies and guidelines)
- Assessment of patient education
- Communication with patient and between providers
- Documentation

The 5 Whys Method of Root Cause Analysis (Example)

Why • **Why did the patient develop abdominal hematoma?....**Patient was on warfarin and enoxaparin for LV thrombus and atrial fibrillation

Why • **Why was the patient on enoxaparin?....**Patient was initiated on enoxaparin for bridging to warfarin

Why • **Why was the patient anti-Xa level not checked?....**Not common practice unless patient is obese

Why • **Why was the patient injecting once daily?....**Patient informed the team she assumed it was okay to inject once daily

Why • **Why was the patient not educated on correct timing of enoxaparin?**

Root causes and contributing factors: Hematoma is a rare side effect with enoxaparin use and methods for improving safety need to be explored

Areas of Improvement: Reinforce teach-back in patient education initiatives

Reference: Graves CM, Haymart B, Kline-Rogers E, Barnes GD, et al. Root cause analysis: adverse events in outpatient anticoagulation management. Joint Comm J Qual Patient Saf. 2017; 43:299–307.

What do our team members say about this new process? Reflections On The Quality Improvement Initiative

Team Member 1

- The 5 whys made me look deeper into the potential cause for the complication.
- It was great working together as a team in an effort to determine the root cause of the problem.
- It encouraged each team member to share their thoughts.
- A positive way to discuss a problem without blame.

Team Member 2

- Creates space for investigation and reflection.
- Saves time by ensuring repeat mistakes or problems are avoided.
- The team benefits from a short reflection by a small group.
- Avoids placement of blame on any individual.

Team Member 3

- Help everyone involved see the big picture.
- Make best practices a common knowledge.
- Improve and refine your processes.
- Energizes the team to pursue an improved process rather than dwell on disappointment.

Lessons Learned

- Specific training of new team members on the role of QI at BIDMC and the Culture of Safety was well received and shifted reported openness to report cases.
- Engaging all team members in case reviews appears to offer benefits to team members and to the overall QI process. The addition of case review by front line team members identified issues that the Medical Director and Team Lead had not identified.

Next Steps/Generalizability

- We will continue to engage all team members in QI case reviews and monitor impact.
- Although our team is all clinical staff, we envision that this process could also be effective in other settings with non-clinical staff, such as MA, Phone Staff, Front Desk Staff, Unit Coordinator, etc.

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