Pharmacist Education and Training Prior to the Implementation of Clinical Pharmacy Services Focused on Anticoagulation Therapy

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Purpose

This information is designed to share how a systematic approach—including preparation and education—can be an effective way to implement clinical pharmacy services involving anticoagulation management.

Background

The safe and effective use of anticoagulant therapy is an important component of medication use in the inpatient acute care setting due to:

- Frequent use
- Frequent cause of adverse drug events
- Narrow therapeutic margin
- Complexity of dosing

Standardization of practice has the potential to:

- Minimize adverse outcomes
- Increase appropriate use
- Improve compliance with national guidelines

Methods

Training, education and competency assessment on the appropriate use of anticoagulation therapy and expansion of clinical pharmacy services was implemented over a twelve month period in two phases:

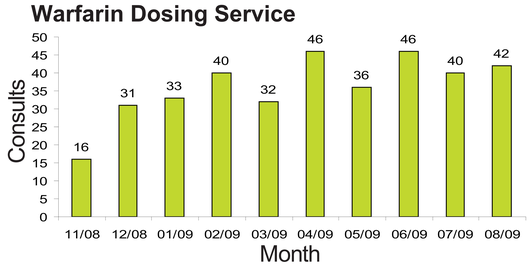
- Phase 1: training and educationfor Pharmacy Warfarin Dosing Consult Service
- Phase 2: training and education for heparin, low molecular weight heparin (LMWH) and other anticoagulants

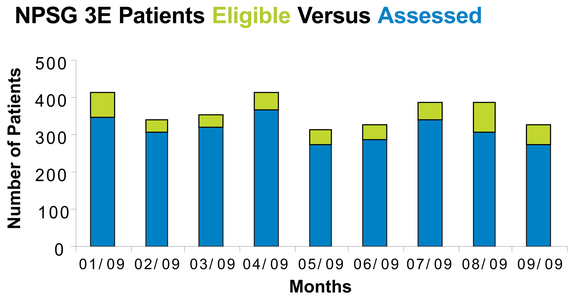
Together, both phases targeted requirements of The Joint Commission's (TJC) National Patient Safety Goal (NPSG) on anticoagulation therapy in the hospital setting.

Methods Continued

Prior to implementation of these services, a step-wise approach to program development was implemented. Steps included:

- Extensive review of the literature
- Approval of materials through Pharmacy and Therapeutics (P&T) Committee
- Establishment of an Anticoagulation Safety Task Force
- Written materials encompassing background, purpose and fundamentals of anticoagulation therapy
- Pharmacist didactic education
- Written competency to ensure understanding of material
- Presentation on policy, procedure and clinical program roll-out
- Small group educational meetings to discuss written competency
- Small group sessions to discuss appropriate and consistent documentation in the medical record
- Standardization of heparin and low molecular weight heparin therapy through the use of approved protocols
- Initial provision of program in pilot setting
- Marketing and promotion of services
- Full implementation after pilot refinement
- Evaluation of programs





Results

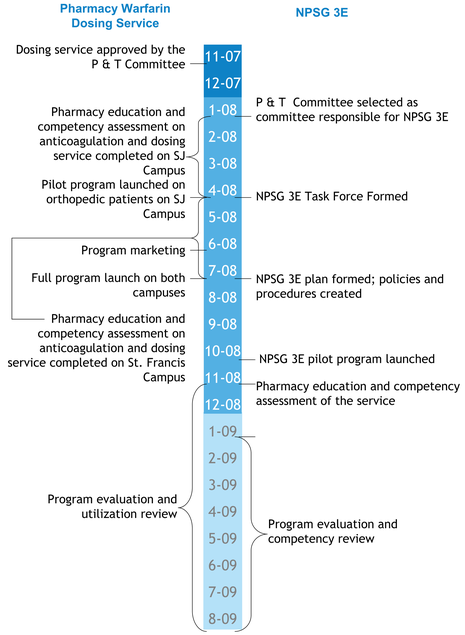
Through the educational process and initiation of services, a number of valuable additions to patient care have been achieved, including:

- Active pharmacist managed warfarin (consult) dosing service
- Standard approved protocols: heparin, LMWH
- Pharmacist-driven standardized laboratory tests upon initiation and maintenance of therapy
- Pharmacist assessment of warfarin therapy documented in the medical record
- Patient/family warfarin education prior to discharge

Conclusion

A comprehensive and systematic educational program to develop competency and to manage anticoagulation therapy is an effective way to implement new clinical pharmacy services by pharmacists with varying levels of preexisting knowledge and expertise.

Timelines



Disclosure

None to disclose

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