Improving care and reducing costs through partnerships between clinical and financial leaders

Q: Many of our staff are anxious to use newer therapies for the treatment of certain common diseases, such as deep vein thrombosis. However, we often feel frustrated because clinical managers and financial administrators disagree on the most beneficial and cost-effective treatments. How might we establish a plan that benefits both groups of people while reducing costs and improving the quality of patient care?

A: Effective identification and treatment of patients at risk of deep vein thrombosis (DVT) can meet the goals of both clinical and financial leaders in hospitals. Yet, the demands on their time and resources often prevent clinicians from adequately identifying all patients who can benefit from DVT treatment. At the same time, financial managers often do not have the time or tools to look beyond drug acquisition to the actual cost of treatments. DVT affects over 2.5 million people annually.1 Pulmonary embolism, the most serious of its complications, is associated with 50,000–200,000 deaths each year. Many hospitalized patients are at risk for DVT. These include the elderly, postoperative patients, individuals confined to bed for prolonged periods of time, diabetics, people with blood disorders, patients with congestive heart failure, and those individuals with a history of thrombosis. When patients at risk for DVT are recognized and treated promptly, patient care outcomes are improved, morbidity and mortality are reduced, and length of stay and patient care costs are decreased.

A recent pilot project to study the management of thrombosis developed a process to improve the treatment and prevention of DVT while producing a cooperative effort benefiting both clinicians and financial managers. A model developed as part of the project could significantly affect patient outcomes and yield positive financial benefits to hospital operations.

The pilot initiative, conducted at Morristown Memorial Hospital and Overlook Hospital in Summit, New Jersey, began with interviews of physicians, pharmacists, quality-management personnel, and nurses to determine the procedures and guidelines followed to treat thrombosis and where the hospital staff thought improvements could be made. Researchers found that many patients at risk of thrombotic disorders were not receiving DVT treatment. Another issue of concern was the use of older agents to treat or prevent thrombosis where newer medications would be more effective.

That many clinicians continue to follow older treatment modalities, even in hospitals recognized for their excellence of care, was not surprising. Physicians do not always have the data or information needed to support the use of emerging drug therapies, specifically low-molecular-weight heparins (LMWHs). Numerous studies have found that subcutaneous injection of an LMWH once or twice daily is as safe and effective as intravenous heparin for the benefit of patients requiring medical management across the orthopedic, cardiac, and medicine service lines.2 This pilot study clearly indicated that physicians need additional tools and information to help them achieve a higher comfort level with LMWHs.

Researchers also collected data from the hospitals’ financial records regarding the aggregate cost of care and other information related to the treatment of thrombosis. They learned that financial managers generally equate the cost of administering a drug to the acquisition cost, even when the actual administration cost is much higher than the acquisition cost. These individuals were unaware that, while the cost of acquiring unfractionated heparin is low, the administration cost is high; the reverse is true for LMWHs. It became clear that...
administrators and financial managers need data and tools to enable them to evaluate the total cost of acquiring and administering medications. Researchers then prepared a summary report identifying significant opportunities for improvement, including:

- Addressing risk identification and stratification (how to decide who will be treated and what medication should be used),
- Working with physicians to understand when and how to use LMWHs,
- Providing financial managers with the data and tools they need to understand the overall cost of drugs,
- Providing tools that enable institutions to simultaneously address financial and clinical goals and care delivery processes, and
- Increasing cooperation and communication among clinical, financial, and corporate leadership.

Researchers then developed an actuarial-based simulation model that can help predict the clinical and financial performance of institutions’ thrombosis treatment or prevention programs. This model is at the beginning stages at Morristown and several other hospitals in the United States. Results are expected to be published throughout 2003 as work is completed. However, the model is expected to have improved care for many patients in 2002.

Working with hospital management staff and clinical leaders to identify institutions’ specific needs and goals is the first step toward improving DVT treatment. The coming months will see implementation of various tools and educational opportunities that will move thrombosis treatment to a new level. For example, when clinicians are treating patients at risk of DVT, information to guide decision-making can “pop up” on their computer screens.

The project researchers understand the busy schedules of physicians, staff members, and managers in today’s hospitals. Instead of adding new clinical burdens or responsibilities, this initiative is designed to integrate into the performance-improvement activities in the hospital. Whether hospitals’ interest in the initiative is driven by a wish to improve clinical outcomes, reduce medication errors, or respond to external organizations like the Joint Commission on Accreditation of Health Care Organizations or the Leapfrog Group, the program will help hospitals accomplish their goals. The aim is to provide useful information, support, and guidance that does not diminish physicians’ and pharmacists’ autonomy and sense of authority.

In future months, data will be collected from both study hospitals, and other facilities will be encouraged to use the model to identify opportunities for clinical and financial improvement in their organizations. Researchers will maintain a database for benchmarking data. They will collect information indicating each participating organization’s baseline clinical and financial performance in the management of thrombosis and will work with each institution to identify and implement opportunities for improvement. They will also update the database to enable the organization to compare its results against benchmark data.

The widespread use of this initiative will enable hospitals to identify and more effectively treat patients at risk of thrombosis, using the best possible agent, thereby improving patient care and safety and improving outcomes. It will also help to shorten hospital stays, reduce complications and medication errors associated with heparin use, and reduce costs associated with monitoring and laboratory testing of patients. The result is a win-win situation for clinicians and administrators alike, enabling clinical, financial, and administrative leadership to collaborate to improve care by implementing changes.

Organizations interested in adopting this initiative should have the following:

- Patients at risk of thrombosis,
- An interest in improving thrombosis treatment and experience (such as the use of a specific protocol) in this area,
- One or two key contacts (clinical, financial, pharmacy, or medical thought leaders) who can serve as champions for process improvement,
- A willingness to devote the time necessary to reporting data, and
- The ability of multidisciplinary staff to work together to identify appropriate goals and outcome measures.

This initiative not only represents an elaborate drug-utilization review or therapeutic interchange, it also offers a balance between the principles of quality patient care and appropriate use of medications. By taking a global perspective of patient care costs, including total medication delivery costs, this model enables organizations to reach conclusions objectively about where to spend time, money, and effort without reinventing the wheel. As a result, organizations can make the best use of existing staff members, data, and resources in trying to achieve the best possible clinical and financial outcomes.


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