Integrated Medical Management: Engaging Physicians to Improve the Quality and Cost of Care

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The mandate to improve the quality of care while reducing costs is painfully evident to anyone working in health care today. Although it is unquestionably the most sophisticated and productive health care system in the world, the U.S. health delivery system is very costly (compromising almost 14% of the U.S. gross domestic product in recent years); it produces inconsistent outcomes; and it has a history of errors and inefficiency. A frequently cited report from the Institute of Medicine entitled “Crossing the Quality Chasm: A New Health System for the 21st Century” discusses these facts and even goes one step further, calling for a total overhaul of the U.S. health care system. Private companies have taken a similar position in calling for large-scale changes in the care of their employees.

The Health Care Financing Administration (HCFA) acted to control health care inflation with the passage of the Balanced Budget Act (BBA) of 1997. The BBA enacted sweeping reductions in Medicare and Medicaid reimbursement to hospitals and physicians, and took hundreds of millions of dollars in future payments away from health care providers. However, the BBA did more than just reduce reimbursement for services; it was a veritable “wake-up call” for health care systems that suffered from inefficiency and varying degrees of effectiveness. Vulnerability in operating performance, exposed by an inability to respond or adapt to the reductions in payment, put many facilities in significant financial peril.

Despite BBA relief, provided by Congress in 1999, and recent successes in managed care contracting, hospitals and physicians are facing the likelihood of a new round of payment cuts over the next two to three years. The declining economy, combined with over three years of double-digit medical inflation, has set the stage for further reductions in hospital and physician reimbursement. Coming on the heels of cuts in managed care and the passage of the BBA, these cuts portend a difficult future for health care providers unless new adaptive techniques can be developed and successfully implemented.

Money is not the only diminishing resource with which the health care system must contend. The nursing shortage is deepening, affecting almost every aspect of health care delivery. The numbers of diagnostic technicians, pharmacists and non-professional nursing staff are also dwindling. Predictions are that these shortages will continue unabated, at least in the near future. New methods of care are necessary in order to maintain high quality service in the absence of “ideal” numbers of staff.

How do we provide good care with less money and fewer staff? The usual response of hospitals to financial shortfalls is to cut staff, reduce programs, or both. While this has been successful in the past, this option is less viable today. Most hospitals have already cut staff to minimum levels and “non-core” services have been eliminated in many systems. Most importantly, further reductions in staff might be unsafe for patients. Where are the new cost savings? Can hospitals do the same or better work for less? One solution might lie in medical management.

THE PROMISE OF MEDICAL MANAGEMENT

Medical management in the acute care hospital is the compendium of processes by which patient care is coordinated during a hospital stay. Medical management is typically a hospital function, designed to meet the payment requirements of insurance companies and regulatory/accreditation requirements of the Joint Commission for Accreditation of Healthcare Organizations (JCAHO) and other state and local authorities. Medical management also seeks to improve patient care through quality improvement programs, designed to measure outcomes and make comparisons among treating physicians. Examples of traditional medical management include authorization/pre-certification, case management, utilization review, quality improvement, and discharge planning. The goals of traditional medical management are to assist physicians in caring for patients, obtain approval from payers, assist in discharge planning, and conduct quality improvement projects. Profitability has generally not been a direct measure of success for medical management.

Can medical management do more? Catholic Health East, a health care system of 33 hospitals and 23 long-term care facilities located in 10 states on the eastern seaboard, is examining how a new form of “integrated” medical management might be a potential solution to the problem of diminishing profitability in its hospitals.

WHY “INTEGRATION?”

Although there is great potential for cost reduction and improved quality from traditional medical management, meaningful results are not always evident from this method. Symptoms of ineffective medical management include unacceptably long lengths of stay (LOS), significant variation among physicians in the use of medications/tests/treatments, lack of consistent use of evidence-based...
Integrated Medical Management

Components of Integrated Medical Management

Integrated medical management combines all of the traditional elements described above with a focus on EBM and best practices of care. As an academic endeavor, EBM is an “ideal” medical practice determined by scientific analysis and highly significant conclusions, supported in most cases by randomized controlled trials. As a practical matter, EBM conveys tangible, often immutable facts to physicians and provides a framework for effective and efficient care. Examples of evidence-based care for common medical conditions include administering aspirin after acute myocardial infarctions; using ACE-inhibitors for patients with congestive heart failure (CHF) and diabetic nephropathy; the appropriate choice and timing of intravenous antibiotics for community-acquired pneumonia (CAP); and using thromboembolism prophylaxis for patients undergoing joint replacement and other surgical procedures.

This type of clinically relevant medical management requires meaningful participation by treating physicians, and physician leadership is essential. The next phase of medical management, therefore, requires that treating physicians become engaged in processes that heretofore were only of interest to the hospital. Engaging physicians is the major challenge to implementing integrated medical management.

Various means have been used to introduce the concepts of EBM to treating physicians. Guidelines, clinical pathways, standard order sets, and most recently, clinical decision support embedded in computerized order-entry information systems have all been used with varying success. Based on early efforts with integrated medical management at Catholic Health East (CHE) hospitals and elsewhere, physician engagement and support are the prime determinants of success in these activities.

Clinical Performance Improvement

CHE hospitals have taken the first steps toward integrated medical management through a process called Clinical Performance Improvement (CPI). With CPI, physicians become consultants to the hospital, advising on how to achieve certain goals and outcomes, and holding themselves accountable for producing the results they envision. Examples include eliminating unnecessary care; implementing appropriate and timely use of tests; making medication decisions based on efficacy and cost; appropriately using new technology and therapies; and developing better ways to utilize staff and facilities. The keys to success in CPI are as follows:

- Physician engagement = physicians are paid as consultants.
- Peer interaction = physicians hold each other accountable for results.
- Data = readily available; always in aggregate, never doctor-specific or punitive.
- Results driven = outcomes, not processes, are the measures of success.
- Accountability = physicians hold themselves responsible for results as the “deliverables” of their engagements.

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<tr>
<th>Goal</th>
<th>Result</th>
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<td>Reduce LOS</td>
<td>LOS for CHF reduced by 1.2 days through more timely reporting of echocardiograph test results; physicians put cardiology service “on notice” to read and report studies on the same day of service.</td>
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<td>Appropriate antibiotics and timing for community-acquired pneumonia (CAP)</td>
<td>Physicians directed emergency department to administer IV ceftrioxone and oral macrolides immediately based on suspicion of CAP. This is done prior to attending communication and/or intervention by house staff. Compliance with guidelines (antibiotic given within four hours) increased from 40% to 80% of patients.</td>
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<td>Increased use of ACE-inhibitor (or equivalent) in CHF</td>
<td>Standard order set was developed in which physicians must “cross out” orders for an ACE-inhibitor. ACE-inhibitor use increases from 64% to almost 100% in three months.</td>
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<td>Appropriate testing for evaluation of patients with syncope</td>
<td>Physician-driven education process on the appropriate use of tests for syncope reduced the number of inappropriate tests (EEGs, carotid ultrasound, MRI) by almost two-thirds.</td>
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<td>Cost per case</td>
<td>Physician-led integrated medical management reduced non-reimbursed expenses for Medicare cases by almost $1.3 million in six months.</td>
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By using CPI, CHE hospitals have been able to achieve meaningful results in less time than was required for previous projects and reduced use of outside consultants and scarce resources (Table 1).

THE CHALLENGE OF LEADERSHIP
The best-laid plans do not come to fruition without effective leadership. Integrated medical management distributes leadership among treating physicians as well as the hospital staff. Physicians participating as formal leaders in integrated medical management are often salaried medical directors, with the title of Vice President of Medical Affairs (VPMA) or similar positions, either part-time or full-time. The key for these individuals is dedicating the time to provide credible leadership in an expert, unbiased way. These leaders often have knowledge and education beyond that of the typical clinician, including knowledge of hospital operations, finance, information systems, and organizational behavior. Informal leadership from participating physicians is also of critical importance, and occurs implicitly in the successful integrated process. The ability to nurture this informal leadership among the participating physicians is a key requirement of the successful medical director or chief medical officer.

CONCLUSION
Hospitals must look to new ways to meet the financial and operational challenges of a changing health care environment. Traditional cost-cutting techniques are failing to create the margins that health care systems need to operate fully and to provide capital for new technology and future growth. Effective medical management can create cost savings while improving the quality of care. The primary barrier to effective medical management, however, is the lack of physician participation; therefore, engagement and participation through a process of integration is essential. Integrated medical management makes the needs and intentions of hospital and doctors explicit and aligns their efforts to meet respective and communal goals, both clinical and financial. Early results from integrated, physician-led medical management have been encouraging. Further development and experience will provide the added information and feedback needed to determine the true value of this new form of hospital operation.

REFERENCES