

Treatment of Gastroesophageal Reflux Disease in a Managed Care Environment

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Presentation Summary

Acid-related diseases, such as gastroesophageal reflux disease (GERD), have a significant impact on healthcare costs. As a result, healthcare providers must devise ways to limit expenditures while providing high-quality patient care. Although the goals of therapy are the same in both traditional fee-for-service and managed care environments, optimal cost-containment strategies depend heavily on the specifics of payment and risk arrangements involved. Cost-saving strategies involving drug therapy are often based on the assumption that

treatments with lower acquisition costs are the most cost effective. In the case of GERD treatment, the respective efficacies of acid-suppression therapies should also be considered. In addition, efficacy should be a major consideration in therapy choice because GERD recurrence and complications as a result of ineffective therapies can negatively affect patients' quality of life and increase the overall cost of healthcare. The advantages and limitations of endoscopy as a prognostic tool should also be considered in an assessment of cost-effective GERD treatment.

Gastroesophageal reflux disease (GERD) and other acid-related diseases (ARDs) account for a significant portion of healthcare costs. For example, a recent study revealed that a health maintenance organization (HMO) with 2.4 million members spends approximately \$59.4 million per year for the treatment of ARDs. This accounts for almost 1.5% of all program expenditures for that HMO.¹ Costs for treating GERD, which is the most prevalent ARD, account for approximately 41% of the \$59.4 million. These data emphasize the need

for cost-effective acid-suppression therapy for HMO members.¹

Identifying Need

In both traditional fee-for-service and managed care settings, it is important to correctly identify patients with GERD. It is not uncommon to find that upon patient chart review, 20% to 30% of patients receiving long-term acid-suppression therapy have no identifiable history of GERD. This does not necessarily mean that such patients are given medication inappropriately. However, the lack of documentation calls into

Any discussion of off-label uses are identified by asterisk within the text.

question the reasons for treatment. For instance, histamine₂ receptor antagonists (H₂RAs) are frequently inappropriately prescribed to treat excessive flatulence or irritable bowel syndrome. The gastroenterologists must educate the medical community about appropriate indications for acid-suppression therapy, which should in theory decrease the expenditures for drugs that treat GERD.

Assessing symptom severity can often determine the degree of acid suppression necessary. Patients who experience reflux symptoms once or twice weekly may be treated effectively with over-the-counter (OTC) H₂RAs, but patients with severe, frequent symptoms may require proton pump inhibitor (PPI) therapy regardless of the degree of mucosal damage. Suggesting an OTC preparation to treat mild cases of GERD can be difficult because patients expect their physician to prescribe medication for treatment. With the advent of direct-to-consumer marketing, some patients demand specific antisecretories. Such scenarios challenge the physician to educate the patient and to gain that patient's trust.

Drug Costs

The effort to control the cost of acid-suppression therapy is centered around 2 strategies: "step-up" and "step-down" approaches to GERD treatment. In step-up therapy, medication of increasing dosage and/or potency is used to relieve symptoms.

For example, an initial therapy of 150 mg ranitidine (an H₂RA) twice a day would be increased to 300 mg twice a day. Poor responders would then be given a prescription for a PPI. The basis for this approach is that H₂RAs have lower acquisition costs than do PPIs. However, this rationale is not practical for several reasons. First, brand-name H₂RAs can be far more expensive than PPIs if

multiple doses per day are required to control GERD symptoms.^{2,3} Secondly, the step-up regimen may require several office visits to establish an effective drug regimen.

In the step-down approach, patients initially receive acid-suppression therapy of high potency (eg, a PPI). As GERD symptoms decrease in frequency and severity, the patients are stepped down to a therapy of lower potency (eg, an H₂RA) for maintenance. Cost effectiveness is the rationale behind this approach; by initially treating the patient with a PPI, healing and symptom relief will occur more quickly, which reduces the number of patients returning to their physician because of complications or a poor response to initial therapy. Later, stepping down from the PPI to an H₂RA may result in cost savings. However, there are some drawbacks to this approach. First, some patients may experience tachyphylaxis to H₂RAs with continued use. In addition, in many patients, the step-down approach results in the recurrence of erosive disease, which increases the overall cost of GERD management.^{4,5}

Guidelines formulated by the American College of Gastroenterology suggest that neither step-up nor step-down treatment is superior in terms of cost effectiveness or efficacy. The proceedings of the Second Canadian GERD Consensus Conference suggest that a patient undergoing GERD maintenance therapy should be given the agent that has induced symptom relief or the healing of erosive disease.^{4,5} For many patients, this means treatment with a PPI.

Regardless of which approach is used, several strategies may help to decrease overall treatment expenditure. If H₂RAs are prescribed, the use of generics instead of brand-name counterparts can markedly reduce drug costs. Also, a thorough explanation of the treatment approach during

the patient's initial office visit may preclude a subsequent visit for treatment failure. For example, if a patient for whom an H₂RA was prescribed initially does not respond to therapy, the physician may prescribe a PPI over the phone, to save the cost of an office visit.

The Prognostic Value of Endoscopy

Endoscopy has significant financial implications in GERD treatment algorithms. This cost is of concern to the managed care organization (MCO) if the gastroenterologist is paid on a fee-for-service basis, as well as to the physician if he or she is reimbursed on a capitation basis. Endoscopy is the best method of assessing mucosal damage and of ruling out Barrett's esophagus and esophageal cancer. However, some basic assumptions about the role of endoscopy in the treatment of GERD merit consideration. The first assumption is that by assessing the degree of mucosal damage, the prognosis of the disease can be determined. Thus, the more severe the esophagitis, the higher the likelihood of recurrence and the more likely the need for long-term therapy. Although an endoscopic finding of grade 3 or 4 erosive esophagitis would almost certainly lead a physician to prescribe long-term PPI therapy, the lack of esophageal erosion does not exclude the presence of significant GERD. *Some patients with nonerosive reflux have severe symptoms that can be treated only with 1 or 2 daily doses of a PPI. Thus the treatment strategy cannot be based only on endoscopic findings.

The length of time between the patient's initial presentation and endoscopy also affects the extent of endoscopic findings. HMO patients may face significant waiting periods before they can undergo the procedure, partially as a result of authorization requirements. During this time, which may last several weeks,

these patients typically receive acid-suppression therapy. As a result, the endoscopy performed after drug therapy may not accurately reflect the degree of erosive disease initially present.

Factors Involved in Cost Assessment

Cost savings in the management of GERD are not uniformly shared by all parties involved. Exactly who saves money depends on payment and risk arrangements. If the MCO bears the pharmacy cost and capitates the individual physician or medical group, then prescribing a PPI instead of an H₂RA is a significant expense for the MCO. In such cases, it may benefit the treating physician to place a patient on PPI therapy at the time of diagnosis and maintain that patient on PPI therapy long term. If the individual physician or physician group assumes the pharmacy capitation risks, then the cost savings for the treating physician may be generated by titrating the acid-suppression needs of the individual patient. Under this arrangement, it may be of benefit to the MCO if the patient adheres to a PPI acid-suppression regimen.

Very often, HMO's economic analyses of GERD treatment regimens do not adequately consider the consequences of failed therapy and the patient's diminished quality of life. Failed acid-suppression therapy can result in severe health and financial consequences, which include the exacerbation of erosive disease, the development of other GERD complications, increased days of hospitalization as a result of gastrointestinal bleeds, increased numbers of office visits to the physician, and an increased number of endoscopies. The quality of life of a GERD patient translates into patient satisfaction with both the MCO and the treating physician, and as such it has important financial and health implications. These 2 factors should be

carefully considered in any meaningful cost analysis of GERD treatment strategies. Recently, pharmaceutical companies have begun to partner with medical groups and MCOs to produce cost-effectiveness evaluations. Such evaluations can be very useful if the profile of the practice and the costs it incurs are specific for the medical group involved.

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