

Endoscopy for Gastroesophageal Reflux Disease: Choose Wisely

In 2012, a healthy, normal-weight, 61-year-old woman presented to my gastroenterology clinic. She requested endoscopy because she was worried about cancer of the esophagus. Four years earlier, her primary care physician had diagnosed gastroesophageal reflux disease (GERD), prescribed once-daily acid-reduction therapy, and noted complete resolution of symptoms. As a precaution, the primary care physician referred the patient to a gastroenterologist for consultative advice. The gastroenterologist performed endoscopy and noted slight irregularity at the squamocolumnar junction, did a biopsy of the area, and found no intestinal metaplasia in the esophagus. Despite these essentially normal findings, the gastroenterologist told the patient that she had “impending Barrett’s” and, if it progressed, so would her risk for esophageal adenocarcinoma (EAC). The patient was advised to have another endoscopy in 2 years. Two years later, without a primary care physician’s input, the patient saw a gastroenterologist in another state, brought her medical records, and told the specialist that she needed endoscopy. Despite another set of normal results, she once again received advice to have another endoscopy in 2 years. Two years later, she presented to me. After reviewing her records, I told her that there was no reason for her to have another endoscopy and she was not at increased risk for EAC.

Although this patient’s experience is a single anecdote, her GERD story sheds light on our macroeconomic environment and the economic conflicts that characterize American medicine. Adam Smith, a Scottish economist (1723–1790), published *An Inquiry into the Nature and Causes of the Wealth of Nations* in 1776. In book IV (chapter 2), he writes an oft-quoted paragraph pertaining to a person’s economic interest in the context of a larger society. He states, “By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an *invisible hand* to promote an end which was no part of his intention” (1). The philosophy reflected in Smith’s words has been used to justify actions that maximize an individual’s personal gain because such actions, if justified by a market need, could cumulatively support a larger societal benefit.

Closer examination of my patient highlights the difficulties we face as we try to alter our current health delivery system, where volume drives payment, reimbursements occur in independent silos, decisions are often made without informed patient input, and health outcomes are dissociated economically from specific services rendered.

During her 4-year episode of GERD care, the patient had input from a primary care physician only at the time of initial referral. The first of her 2 endoscopies was done at a

hospital outpatient department (the most expensive location to have an outpatient endoscopy). Her second examination was done at a gastroenterology practice–owned ambulatory surgery center where she was administered propofol by a practice-employed anesthesiologist, and her biopsies were processed in a practice-owned pathology laboratory. My personal review of her records identified that 6 special stains were used to analyze her biopsies, including 1 to determine whether *Helicobacter pylori* was present in her esophagus. A rough cost estimate for her care would be approximately \$8500. Was this money well-spent?

In this issue, the American College of Physicians Clinical Guidelines Committee provide best practice advice for using endoscopy to help manage GERD (2). The committee recommends that endoscopy be reserved for patients with symptom-defined heartburn plus either alarm symptoms, persistent symptoms despite a trial of maximum acid-reducing medical therapy, severe erosive esophagitis after 2 months of medical treatment, or a history of symptomatic esophageal stricture. Evidence is less clear in 2 additional situations so the committee concludes that endoscopy *may* be considered as a screen for Barrett or EAC in *men* with GERD aged 50 years or older and for Barrett surveillance (at appropriate intervals defined in the article).

The importance of this guidance is underscored by the cumulative financial and clinical burden of endoscopy in 2012. Gastroesophageal reflux disease afflicts more than 100 million U.S. adults and costs our health system more than \$9 billion annually (3). It is related distantly to EAC, a rare but deadly cancer that is increasing in annual incidence (4). Primary care physicians must decide how best to manage patients in a manner that provides an excellent experience but balances attention to the improvement of population health and one that uses resources efficiently.

As these new recommendations make clear, endoscopy often is not needed. This is especially true in women because 80% of all EAC cases occur in men. Statistically, the risk for a woman with GERD for developing EAC is equal to the risk for a man developing breast cancer (2). Women with GERD and no alarm symptoms (dysphagia, bleeding, anemia, weight loss, or recurrent vomiting) do not need endoscopy to manage or treat GERD that responds symptomatically to medical therapy. In addition, if endoscopy is done and Barrett is not present on that initial examination, repeated endoscopy is not required for “impending Barrett’s” (5). Yet, data from a large payer quoted in the article indicate that nearly 1% of the insurer’s covered population had endoscopy for GERD each year (2). Published studies suggest that 10% to 40% of endoscopies are not helpful to improve patients’ health (these studies did not analyze by sex, so this is probably a low estimate); therefore, the potential to save both cost and patient comfort is substantial (6).

This best practice advice adds to the armamentarium that physicians can use if they wish to be responsible stewards of our finite health care resources. These efforts have been supported by a coalition of professional and consumer organizations that have combined to develop a campaign called Choosing Wisely (www.choosingwisely.org), which grew from an initiative of the National Physicians Alliance called Promoting Good Stewardship in Medicine. The National Physicians Alliance was inspired by the *Physician Charter on Professionalism* written by the American Board of Internal Medicine Foundation (7). The National Physicians Alliance's original intent was "to identify five steps primary care physicians could take in their daily practices to achieve the highest goals of doctors and patients alike: *excellent care that we can afford together*" (8). Although the original top 5 lists focused on primary care (9, 10), 9 specialty societies, including the American College of Physicians and American Gastroenterological Association, accepted the challenge and developed an expanded list in 2011. The American Gastroenterological Association's top 5 list includes 2 interventions related to management of GERD as follows: "For pharmacologic treatment of patients with GERD, long-term acid suppression therapy (proton-pump inhibitors or histamine-2 receptor antagonists) should be titrated to the lowest effective dose needed to achieve therapeutic goals," and "For a patient who is diagnosed with Barrett's esophagus, who has undergone a second endoscopy that confirms the absence of dysplasia on biopsy, a follow-up surveillance examination should not be performed in less than three years as per published guidelines."

Although the first recommendation does not relate directly to the current ACP recommendations, the second recommendation is consistent with that of the ACP and both follow a similar theme of avoiding interventions that do not improve a patient's overall health.

If our health care system is to remain dedicated to both quality and economic viability, physicians must work to avoid low-value care that generates unnecessary costs, even if that means sacrificing individual gain. For my patient with GERD, virtually all money that would be saved by following ACP's best practice advice would come directly out of the practice revenue of 2 gastroenterologists plus their respective endoscopy facilities. This dynamic will define one of our most difficult challenges. Saving \$8500 on 1 patient is laudable, but Kale and colleagues estimated

potential cost savings for the entire top 5 lists in excess of \$5 billion annually (11). That begins to look like real money and may change Adam Smith's "invisible hand" to one that is a bit more confrontational.

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