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PRACTICE MANAGEMENT: OPPORTUNITIES AND CHALLENGES

Value-Based Insurance Design: Implications for Gastroenterology

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Despite the enactment of the Patient Protection and Affordable Care Act (PPACA), the tension between improved health care quality and escalating medical spending remains on public display. As the share of gross domestic product spent on health care passed 17% in 2009—the biggest 1-year jump in history—the fiscal impact of the new health care law is the critical bone of contention. That the goal of our system is to produce health, not save money, is barely an afterthought. There is little disagreement over the fact there is already enough money in the system, and that health improvements almost always require incremental expenditures. That said, clinicians and policy makers, therefore, need to focus on how—not simply how much—we spend on health care. Actuarial studies conclude that if US medical expenditures were allocated similarly to other G7 countries, Americans would be among the healthiest populations on the planet.[1]

One concept included in the PPACA holds the promise of bridging this divide between quality improvement and cost containment. Section 2713(c) of the PPACA states, "The Secretary may develop guidelines to permit a group health plan and a health insurance issuer . . . to utilize value-based insurance designs." Value-based insurance design (VBID)—whose basic premise is to reduce patient barriers and reward providers for pursuing high-value medical services—has the potential to simultaneously improve health and contain costs, while retaining clinician autonomy, maintaining the sanctity of the patient-provider relationship, and avoiding significant structural changes to the employer-based private insurance system.[2,3] In this article, we explore the motivation for VBID and its potential application to gastroenterology (GI).

From "One Size Fits All" to "Clinically Sensitive" Patient Cost-Sharing

One of the most common and effective cost containment mechanisms used today is cost sharing, where beneficiaries are required to pay a fixed amount (eg, copayments and deductibles) or a proportion (eg, coinsurance) of the cost of treatment at the point of service. In theory, higher patient copayments would discourage only the use of low-value care. However, because cost sharing is employed solely to control costs—not to address quality of care—the amount of the copayment is based on the cost—not the value—of the clinical service. Moreover, recent increases in cost sharing have been implemented in a "1 size fits all" way, in that patient copayments are often the same for all clinician visits, all diagnostic tests, and all prescription drugs within a given formulary tier. This approach is effective in reducing the consumption (and therefore cost) of medical services. However, research demonstrates that indiscriminate "one size fits all" cost sharing reduces not only unnecessary but also necessary care, and in some circumstances increases aggregate medical spending.[3] Thus, the net result of traditional cost sharing has been not only a reduction in the quantity of care consumed but also a reduction in the quality of care delivered.

Reduction in the consumption of high-value health care services is one of the key shortcomings with traditional cost sharing approaches. The lack of clinical nuance in these arrangements fails to account for heterogeneity in the value of different medical services. In addition, even when a specific intervention is considered to be of "high" (eg, colonoscopy) or "low" (eg, back surgery) value, it must be recognized that the clinical value of a specific service also depends on the patient who is using it. While cost sharing must be accepted as an essential component of benefit design, cost containment efforts should not inadvertently reduce the quality of care.

Examples of VBID in Gastroenterology

Under traditional "one size fits all" cost sharing, patient A, who is considering a first-time screening colonoscopy at age 50 with no family history of colorectal cancer (CRC), and patient B, who is considering a screening esophagogastroduodenoscopy (EGD) for occasional gastroesophageal reflux disease (GERD) at age 30, are likely to be charged the same copayment. Most would agree that the evidence supporting colonoscopy for patient A is stronger than the evidence supporting EGD for patient B. Recall, however, that most cost sharing arrangements

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Abbreviations used in this paper: CRC, colorectal cancer; EGD, esophagogastroduodenoscopy; GERD, gastroesophageal reflux disease; GI, gastroenterology; HIT, health information technology; PPACA, Patient Protection and Affordable Care Act; VBID, value-based insurance design.

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Financial design – cost reduction	Value based insurance design – health creation
Cost sharing used to reduce utilization of essential and non-essential services	Focus on long-term outcome of improved health
Each cost center [e.g., drug, medical, disability] managed separately	Assess total cost picture including medical spending and productivity
Cost sharing based solely on acquisition cost of service or product	The more beneficial the therapy, the lower the patient's cost share
Plan design applied equally to all members	Adjust out-of-pocket costs for specific services based on patient characteristics

Figure 1. VBID: from cost reduction to health creation.

are based on the cost of a test or treatment rather than evidence of effectiveness. Similarly, in most benefit plans, patient A—the average risk 50-year-old mentioned above with no CRC history—is charged the same copayment for screening colonoscopy as patient C—also 50 years of age with a diagnosis of hereditary familial polyposis and several first degree relatives with CRC. Most would agree that patient C is at substantially higher risk for colon cancer than patient A, but traditional cost sharing approaches do not distinguish between these patients. In other words, the value of the care provided to patient A is greater than that provided to patient B, and the value of care to provided to patient C is greater than both patients A and B even though most would pay the same out-of-pocket payment for their care. The first comparison—patients A and B—illustrates the VBID principle that medical services differ in the clinical benefit provided. The second—patients B and C—demonstrates the principle that the clinical benefit derived from a specific service depends on the patient using it. VBID programs aim to restructure traditional cost sharing arrangements to acknowledge such differences in the value of medical services for different patients (Figure 1). It should be noted that Sec. 2713 of the PPACA provides for value-based cost sharing for evidence-based preventive services endorsed by the United States Preventive Services Task Force will be provided at no cost to patients. As a result, the copayment currently faced by patients A and C under many insurance plans will be eliminated. While this provision is a significant move forward, it does not acknowledge the well-established difference in benefits of CRC screening between these 2 populations.

Under VBID, patients are provided incentives to utilize high-value services (patient C could be paid to undergo colonoscopy). Furthermore, barriers are created (through higher copayments or other disincentives) to decrease use of low-value services (such as repeat upper endoscopy in a low risk patient with infrequent GERD, or a screening colonoscopy in a low risk 35-year-old). Thus, value-based health care, and its implementation in a private insurance market through VBID, promotes more efficient use of health care resources based on the expected clinical benefit (or value) of health care for individual patients. It is important to note that while VBID nudges patients toward appropriate evidence-based therapies via evidence-based incentives, it does not ration care, nor does it direct patients or providers toward specific medical decisions, respecting patient autonomy and the professionalism of the provider.

VBID programs have been implemented in numerous public and private settings. Early adoption focused on high value prescription drug classes (eg, treatments for diabetes, heart disease, and asthma). More recent interventions have included preventive care, such as wellness programs and screening tests.[2] A recent survey reported that up to 30% of large employers are using VBID in some form, and the assessments of these early implementation efforts suggest that VBID is feasible, effective, and financially sound.[4] Notable VBID programs include initiatives implemented by the State of Maine, the cities of Asheville, North Carolina, and Springfield, Oregon, and by Pitney Bowes, Caterpillar, and Marriott International.[2,3] Removal of barriers to evidence-based care has yielded improvements in outcome measures such as drug adherence rates, clinical process measures, hospitalizations, and employee disability days; the success of these early initiatives resulted in expansion of value-based programs nationwide.[2,3] Using VBID principles, United HealthCare has created a "Diabetes Health Plan" for its self-insured clients; many other payers and benefit consultants have followed suit with their own VBID offerings.[3]

Although there is only modest experience with the use of VBID in GI disorders, several potential high-yield targets are readily apparent. The implementation of VBID is dependent on the availability of clinical evidence and predictive risk models to determine the value of various medical services for specific patient groups. Furthermore, the magnitude of quality improvement and cost containment resulting from VBID program is directly a function of the morbidity of the disorder, the effectiveness of the intervention targeted, the cost of care, and the magnitude of changes in utilization that occur with alignment of incentives. Based on these factors, the highest yield of VBID in GI disorders is likely to result after a careful assessment of existing quality gaps (eg, low colonoscopy utilization by individuals over age 50, suboptimal adherence with medications for inflammatory bowel disease and viral hepatitis) and more judicious study of highly reimbursed and/or potentially risky interventions performed in the absence of robust evidence.

For upper endoscopy, a VBID model could be put forward. Common indications for EGD across age groups include GERD and dysphagia. Screening for Barrett's esophagus in patients

with GERD is a controversial but widespread practice. Patient cost sharing for a GERD-based screening strategy could be linked to demographic characteristics (eg, age) and clinical data (eg, duration of symptoms) to better reflect the evidence underlying GERD as a risk factor for premalignant findings and esophageal adenocarcinoma. While in most health plans, a patient with dysphagia pays the same out-of pocket cost for an EGD as a patient with typical GERD, a VBID program would argue that patient cost-sharing for an EGD for a patient with dysphagia or other "alarm" symptoms suggestive of malignancy should be lower (if not eliminated) than the out-of pocket expense for a typical GERD patient. Similar approaches for VBID implementation could be theorized, implemented, and rigorously evaluated for several common GI clinical conditions.

Future Implementation of VBID

Although VBID is a promising strategy for containing costs, enhancing quality, and preserving patient/provider choice, better evidence is needed to support which GI diagnostic tests and treatments are most effective in specific patients. Such evidence is likely to be drawn from comparative effectiveness research, which compares existing treatments to better guide clinical management. Gastroenterologists should embrace comparative effectiveness research initiatives to expand knowledge of how widely used GI therapies can be most effectively applied in different patient populations, or decreased/abandoned when evidence of benefit is lacking. Similarly, once the necessary evidence is acquired to better target our diagnostics and therapies to the right patients, health information technology (HIT) will be an essential component to provide real-time decision support to clinicians, make available quality-related data to information-seeking patients, and monitor the financial and clinical impact of health care services.

The Veterans Affairs Healthcare System, which has made widespread use of HIT since the mid-1990s, is an example of how such technology can be used to both monitor and improve quality of care. Despite a limited budget, Veterans Affairs has leveraged its HIT infrastructure to enhance quality of care, surpassing the results seen in many private insurance markets. In GI, the implementation of endoscopic databases remains suboptimal in clinical practice, an area for future improvement. Finally, while VBID focuses on the patient as the ultimate consumer of health care, providers likely play an even more important role in how health care is consumed. Provider-focused payment reform initiatives, such as the pay-for-performance and the patient-centered medical home (PCMH), are complementary to VBID.[5] The objectives of VBID and patient-centered medical homes are clearly aligned toward the critical, yet elusive, goals of quality improvement and cost containment, and are reinforced by incentives for patients and clinicians.

In summary, VBID provides a "fiscally responsible, clinically sensitive" framework for improving the quality of health care while containing costs. It is congruent with the values of American patients and its providers, minimizing encroachment on the physician-patient relationship and medical decision-making. Given the well-documented underuse of potentially life-saving and quality-of-life-enhancing GI interventions, the GI community should embrace VBID principles. Providing evidence-based incentives to patients and providers to encourage the use of health care services based on value—rather than cost alone—would ultimately produce better health at any level of health expenditure.

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Conflicts of interest

The authors disclose the following: Dr Fendrick is a consultant for Abbott, ActiveHealth Management/Aetna, AstraZeneca, Avalere Health, BlueCross BlueShield Association, Center for Medicare and Medicaid Services [CMS], GlaxoSmithKline, Hewitt Associates, MedImpact HealthCare Systems Inc, National Business Coalition on Health, National Pharmaceutical Council, Perrigo, Pfizer Inc, Sanofi-Aventis Pharmaceuticals, and WebMD, is on the speaker's bureau of Merck and Co, Pfizer Inc, and Sanofi-Aventis Pharmaceuticals, and received research support from Abbott, AstraZeneca, Eli Lilly, GlaxoSmithKline, Merck and Co, Novartis, Pfizer Inc, and Sanofi-Aventis Pharmaceuticals. Dr Saini discloses no conflicts.