

Anesthesia-Assisted Sedation Getting Notice by Medicare

To the Editor: In their article “Preprocedural Considerations in Gastrointestinal Endoscopy” published in the September 2013 issue of *Mayo Clinic Proceedings*, Gorospe and Oxentenko¹ make note of data indicating an increasing percentage of “indiscriminate use of anesthesia-assisted sedation,” also known as monitored anesthesia care (MAC), for endoscopic procedures, referring to data that suggest that 60% of the anesthesia-assisted procedures are performed in low-risk patients. The issue of the added costs of anesthesia-assisted sedation was also highlighted by an article in *The New York Times*² discussing a patient who was faced with a \$2800 bill for anesthesia-assisted sedation services that were not covered by her insurance because, even though the gastroenterologist and facility were in the approved provider network, the anesthesiologist was not.

As defined in the Social Security Act, “no [Medicare] payment may be made for...items or services... [which] are not reasonable and necessary for the diagnosis or treatment of illness or injury....”³ When the Centers for Medicare & Medicaid Services or one of the Medicare Administrative Contractors notes an increasing use of services that are inappropriately used, which they define as overused, underused, or misused, they often develop a National Coverage Determination or Local Coverage Determination (LCD) to better define medical necessity.

Novitas Solutions, Inc, one of the Medicare Administrative Contractors, has developed such an LCD for MAC.⁴ They note in the discussion section of the LCD that anesthesia services are included in the global fee paid to the attending physician and are not generally separately reimbursable, and

therefore anesthesia-assisted sedation service rendered must be reasonable, appropriate, and medically necessary. Furthermore, the LCD specifies, “The medical condition must be significant enough to impact on the need to provide MAC such as the patient being on medication or being symptomatic, etc. The presence of a stable, treated condition, of itself, is not necessarily sufficient.” While it is common for the physician to note the indication for the endoscopy, it is rare to see discussion about the stability of the patient’s medical conditions and the indications for the type of anesthesia support planned.

Articles such as the one by Gorospe and Oxentenko,¹ the articles cited by the authors, the increasing expenditures by an already financially stressed health care system, and the media attention to this issue, along with the safety issues cited by the authors, are sure to get the Centers for Medicare & Medicaid Services’ attention. I would not be surprised to see a reduction in payment to the physician performing the endoscopy when anesthesia is administered by another physician, at which point we may see the pendulum swing back in favor of conscious sedation.

Ronald L. Hirsch, MD

Accretive Health
Chicago, IL

1. Gorospe EC, Oxentenko AS. Preprocedural considerations in gastrointestinal endoscopy. *Mayo Clin Proc.* 2013;88(9):1010-1016.
2. Rabin RC. Waking up to major colonoscopy bills. *The New York Times* website. http://well.blogs.nytimes.com/2012/05/28/waking-up-to-major-colonoscopy-bills/?_r=0. Published May 28, 2012. Accessed October 13, 2013.
3. Social Security Act, 42 USC 1395y §1862 (a) (1)(A).
4. Local Coverage Determination (LCD): Monitored Anesthesia Care (L32628). Centers for Medicare & Medicaid Services website. <http://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=32628&ContriD=255&ver=27&ContrVer=1&Date=03%2f18%2f2013&DocID=L32628&bc=AAAAAaGAAAAAA%3d%3d&>. Updated March 17, 2013. Accessed October 13, 2013.

<http://dx.doi.org/10.1016/j.mayocp.2013.12.010>

In reply—Anesthesia-Assisted Sedation Getting Notice by Medicare

We thank Dr Hirsch for his letter in response to our article on preprocedural considerations in gastrointestinal endoscopy. We are delighted in his interest to encourage further discussion about the current state of anesthesia-assisted sedation in routine endoscopy. These are timely and controversial issues given the media’s increasing scrutiny of the economics of endoscopy and other preventive services in health care.¹

We fully agree with Dr Hirsch’s observation that the need and indication for anesthesia-assisted sedation are rarely documented in patients’ medical records. Dr Hirsch accurately states that “while it is common for the physician to note the indication for the endoscopy, it is rare to see discussion about the stability of the patient’s medical conditions and the indications for the type of anesthesia support planned.”

In our article, we went further in stating that the preoperative evaluation of patients for any endoscopic procedure should be a shared responsibility between the referring clinician and the endoscopist, especially in open-access endoscopy practices. We believe that a conscious effort in assessing perioperative medical issues and sedation requirements may decrease the inappropriate use of anesthesia-assisted sedation. We recognize that anesthesia services can be costly, but they are essential in the provision of safe and effective endoscopic services for selected patients. Inappropriate use of anesthesia-assisted sedation includes both indiscriminate use in low-risk patients and underutilization in high-risk patients undergoing complicated endoscopic procedures.

Dr Hirsch raises concern about the possible reduction in reimbursement for endoscopy that may result from

the increasing awareness of the cost of anesthesia-assisted sedation. Although there is a general perception that reimbursement for health care services in the United States will imminently decline, it is difficult to predict the exact impact of these ever-changing reimbursement policies on endoscopy and the provision of anesthesia. The only certainty is that the utilization and reimbursement of anesthesia in endoscopy is heavily influenced by economics and regulatory issues.²

Several studies have reported the safety of propofol sedation as administered by endoscopists.³⁻⁵ In a review of 569,220 cases of propofol sedation administered by endoscopists, only 0.09% (489 cases) required mask ventilation as a result of oversedation.⁶ In the analysis by Rex et al,⁶ substituting anesthesia professional services with endoscopist-administered propofol saved \$5.3 million per patient-year saved. Despite the published evidence, the Centers for Medicare & Medicaid Services still considers the use of propofol for colonoscopy to be equivalent to deep sedation. This reaffirms propofol's black box warning to limit its administration to anesthesia professionals who are qualified to provide general anesthesia. As such, the price of anesthesia-assisted sedation is strongly tied to the cost of having an anesthesia professional provide sedation and not on the actual advantages of propofol over opiates and benzodiazepines.²

The objective of our article was to provide evidence-based and practical recommendations for requesting anesthesia-assisted sedation in endoscopy. As gastroenterologists, we share Dr Hirsch's sentiments about making sure that patients undergoing routine endoscopy will continue to have comfortable, safe, and effective endoscopic procedures regardless of the current pressures from cost containment and endless politics of determining reimbursements for health care services.

Emmanuel C. Gorospe, MD, MPH
Amy S. Oxentenko, MD

Mayo Clinic
Rochester, MN

1. The weird world of colonoscopy costs. *The New York Times*. June 9, 2013:SR10.
2. Brill JV. Endoscopic sedation: legislative update and implications for reimbursement. *Gastrointest Endosc Clin N Am*. 2008;18(4):665-678:viii.
3. Sáenz-López S, Rodríguez Muñoz S, Rodríguez-Alcalde D, et al. Endoscopist controlled administration of propofol: an effective and safe method of sedation in endoscopic procedures. *Rev Esp Enferm Dig*. 2006;98(1):25-35.
4. Rex DK, Overley C, Kinsler K, et al. Safety of propofol administered by registered nurses with gastroenterologist supervision in 2000 endoscopic cases. *Am J Gastroenterol*. 2002;97(5):1159-1163.
5. Yusoff IF, Raymond G, Sahai AV. Endoscopist administered propofol for upper-GI EUS is safe and effective: a prospective study in 500 patients. *Gastrointest Endosc*. 2004;60(3):356-360.
6. Rex DK, Deenadayalu VP, Eid E, et al. Endoscopist-directed administration of propofol: a worldwide safety experience. *Gastroenterology*. 2009;137(4):1229-1237.

<http://dx.doi.org/10.1016/j.mayocp.2013.12.011>

Population-wide Sodium Reduction: Reasons to Resist

To the Editor: In their review article in the September 2013 issue of *Mayo Clinic Proceedings*, Aaron and Sanders¹ stated that “high salt intake not only increases blood pressure but also plays a role in endothelial dysfunction, cardiovascular structure and function, albuminuria and kidney disease progression, and cardiovascular morbidity and mortality in the general population” and that “the body of evidence supports population-wide sodium intake reduction.” What the authors neglect to mention is that reducing sodium intake has been associated with increases in renin, aldosterone, adrenaline, noradrenaline, cholesterol, and triglyceride levels.² It is uncertain that the net result of sodium restriction would be positive for health given these potential adverse effects. Moreover, reducing sodium intake may worsen insulin resistance,³ increasing the prevalence of diabetes and prediabetes (already affecting approximately one-third

of the entire US population⁴). Low-sodium diets could also exacerbate thyroid disease by reducing individuals' intake of iodine (obtained in most cases through ingestion of iodized salt).⁵ Additionally, sodium avoidance could lead to hyponatremia, for which much of the population may be at risk due to (1) life behaviors (eg, manual labor/strenuous exercise, when replacing sweat with free water), (2) commonly used medications (eg, selective serotonin reuptake inhibitors, tricyclic antidepressants, nonsteroidal anti-inflammatory agents, antipsychotics, and thiazide diuretics), or (3) prevalent disease states (eg, liver disease, cancer, and congestive heart failure).⁶ Regarding congestive heart failure in particular, what is even more worrisome is that randomized clinical trials have repeatedly suggested that restricting sodium intake to 1800 mg daily, compared with 2800 mg daily, is associated with increased rates of hospitalizations and mortality.⁷⁻¹⁰

Even if it were physiologically possible for individuals to sustainably reduce sodium intake—a proposition that science calls into question¹¹—it is entirely possible that attempting to reduce population sodium consumption would do more harm than good. There are certainly many compelling reasons to resist the idea of population-wide sodium reduction. Moreover, recent literature suggests that markedly cutting back on sodium consumption may be much less important than increasing one's dietary potassium intake.¹²

James J. DiNicolantonio, PharmD

James H. O'Keefe, MD

Mid America Heart Institute
Saint Luke's Hospital
Kansas City, MO

Sean C. Lucan, MD, MPH, MS

Albert Einstein College of Medicine
Montefiore Medical Center
Bronx, NY

1. Aaron KJ, Sanders PW. Role of dietary salt and potassium intake in cardiovascular health and disease: