

ACG GI Practice Toolbox

ADDING A DIAGNOSTIC LAB TO YOUR PRACTICE: DOES IT MAKE SENSE FOR YOUR PRACTICE?

AUTHORS:

Abraham Khan, MD, FACG, Center for Esophageal Disease, NYU Langone Health, New York, NY

Craig Womeldorph, DO, FACG, Texas Digestive Disease Consultants Southwest, Ft Worth, TX

INTRODUCTION AND TOPIC OVERVIEW:

There have been significant advancements in gastrointestinal (GI) motility and function testing in the past two decades. The modern versions of these tests include high resolution esophageal manometry (HRM), anorectal manometry, wireless impedance-pH testing, breath testing, wireless video capsule, wireless pill motility (SMARTPILL) testing, and vibration-controlled liver elastography (Fibroscan).

Historically, these diagnostic studies were available only in high volume tertiary referral and academic settings. Recent improvements of the various technologies, often providing more standardized approaches to the performance and interpretation of the diagnostic examinations, have made it more feasible to provide these tests in many more clinical practices. This ACG Toolbox review provides a general guide for practices interested in acquiring GI motility and function testing technology.

PRACTICAL CONSIDERATIONS:

Universally, the tests reviewed in this article are performed on patients without sedation or intravenous access and the process of delivering the tests in a high quality and comfortable manner must be carefully planned beforehand. While this varies depending on each type of examination, these often require a dedicated space and trained technicians to carry out the diagnostic tests on a routine basis.

Initial start up costs for software and equipment as well as additional resources for training on the technician should be anticipated. The gastroenterologists should also plan on “refresher” training to accurately interpret the studies at a standard of care level. We recommend using a simple SWOT (A matrix of “strengths,” “weaknesses,” “opportunities” and “threats”) assessment or a return on investment (ROI) analysis as a starting point to determine if adding these services make sense for your practice.⁷

SPECIFIC CONSIDERATIONS FOR EACH SERVICE:

1. High Resolution Manometry (HRM) and Anorectal Manometry (ARM) are catheter based testing for conditions such as dysphagia, non-cardiac chest pain, and anorectal outlet disorders such as pelvic dyssynergia.⁸
 - Trained technician(s) for placement
 - Purchase of proprietary software from the equipment vendor
 - HRM probes
 - Rectal balloons for expulsion testing if anorectal manometry (ARM) is anticipated
 - Cleansing enema(s) are administered for ARM testing
 - Trained clinician for interpretation. This is usually a gastroenterologist.



- The dedicated private space for the placement of the probes can be any examination room or procedure room.
2. Esophageal Impedance-pH testing is a catheter based test for the evaluation of acid and non-acid exposure of the esophagus over a 24 hour period.¹⁰
 - Trained technician(s) for probe placement
 - Proprietary Computer software (Available as a bundle for other motility testing products by the same vender)
 - Trained clinician for interpretation
 - The dedicated private space for the placement of the probe can be any examination room or procedure room.
 3. Wireless video (VCE) and motility (SMARTPILL) studies are diagnostic tests involving the ingestion of a capsule which transmits data to a recording device. The data can be luminal imaging for VCE and pH, transit time, and temperature with the SMARTPILL.⁹
 - Trained technician(s)
 - Purchase of patency capsules (rule out obstruction in appropriate patients)
 - Purchase of proprietary software, recording devices, and video capsules are from the same vender. We recommend comparing products and software from more than one vender.
 - Dedicated time and training of the physician for interpretation
 - The dedicated private space for the placement of the probe can be any examination room or procedure room.
 4. Breath testing (Hpylori, Hydrogen) non-invasive tests for the detection of Helicobacter pylori to include confirmation of eradication and for the evaluation of small intestinal overgrowth (SIBO).¹¹
 - Trained technician(s). Most nurses and medical assistants in a gastroenterology can be easily trained to perform this test. We recommend training numerous staff members so that these tests may be performed without disruption during normal clinic hours.
 - The private space for this testing can be any examination room or procedure room in a clinic. Dedicated space is not recommended.
 - These tests may be performed routinely as part of any clinic. Patients usually must be NPO for 2 hours prior to breath collection.
 - Storage shelf space for test substrate with specific POCT requirements. We do not find these requirements burdensome for most clinics.
 - Physician interpretation for this testing is easily mastered and should be reviewed by all providers in the practice in order to provide the service effectively.
 5. Vibration-controlled, transient hepatic elastography (Fibroscan) is a non-invasive test for evaluation of liver fibrosis and fat content.¹²
 - Considerable capital is required for the purchase or lease of the fibroscan equipment. Practices with a high volume of hepatology patients may consider this technology even if the ROI is low. Most practices will need 2 years or longer for a positive ROI for this testing.
 - Trained technician(s) will be required and will not be able to perform other duties while performing these procedures. Most nurses can master the technique with appropriate training.

- Physician interpretation for this testing is easily mastered and should be reviewed by all providers in the practice in order to provide the service effectively.

REIMBURSEMENT IS CRITICAL TO SUSTAINABILITY:

Specific training and guidance on appropriate indications, coding options and billing considerations should be anticipated when providing these services in your practice. We find a relative lack of guidance in the literature on the practical aspects required to ensure proper reimbursement for some of these tests. In 2003, the formerly named American Motility Society provided comprehensive billing and coding guidelines for GI motility and function testing available at that time.¹ The ASGE provided a reimbursement review on wireless pH testing in 2005² as well as esophageal manometry and impedance-pH testing in 2012.³ More recently, the American Society for Neurogastroenterology and Motility (ANMS) commissioned a billing and coding update on current esophageal function testing.⁴ The common procedural terminology (CPT) codes for diagnostic services are available online.¹³ Information regarding relative value unit (RVU) levels and average national reimbursements are easily available on the Centers for Medicare and Medicaid Services (CMS) website.⁵

There are several other important factors to consider. The site of service (location) of the testing will impact the reimbursement. Whether this is the 'Physician Office,' 'Hospital Outpatient' or an 'Ambulatory Surgical Center' will substantially alter the financial outcomes. Furthermore, if the physicians are interpreting the test results but not actually performing it, then billing will be for the professional interpretation component only. These considerations may lead a practice to suggest the equipment for use in a hospital setting and reduce the cost of acquisition.

GENERAL BUSINESS CONSIDERATIONS:

1. Return on Investment analysis should be done independently of the vendor. This will include capital expenditures, maintenance costs, staff costs, reimbursement strategies and conservative projections of testing volume.
2. Ensuring appropriate training for the staff
3. Ensuring physician expertise
4. Service agreements and maintenance contracts should be studied and negotiated. These should ensure your devices are replaced or repaired in a timely fashion to minimize prolonged disruptions in service.
5. Marketing strategies for new services should be considered. However, it is highly recommended that new patient education materials and high quality updates are added to your website or social media platforms.

CONCLUSIONS:

Providing new services and testing technologies is an important part of growing your gastroenterology practice. A diagnostic testing lab that provides motility testing, pH and impedance testing, breath testing and capsule studies makes excellent sense for many gastroenterology practices. While technologies to provide these valuable diagnostic services to your patients have advanced significantly in recent years, there are nevertheless important factors to consider before undertaking an acquisition. This article aims to outline several of these relevant considerations. We also recommend that practices go beyond information from vendors to seek professional advice concerning state regulations, reimbursement



strategies and site of service considerations before making a decision to provide a new diagnostic service.

REFERENCES:

1. Botoman VA, Rao S, Dunlap P, Abell T, Falk GW. Motility and GI function studies billing and coding guidelines: a position paper of the American Motility Society. *Am J Gastroenterol*. 2003;98:1228-1236.
2. Chotiprashidi P, Liu J, Carpenter S, et al. ASGE technology status evaluation report: wireless esophageal pH monitoring system. *Gastrointest Endosc*. 2005;62:485-487.
3. Wang A, Pleskow DK, Banerjee S, et al. Esophageal function testing. *Gastrointest Endosc*. 2012;76:231-243.
4. Khan A, Massey B, Rao S, Pandolfino J. Esophageal function testing: billing and coding update. *Neurogastroenterol Motil*. 2018;30(1).
5. CMS Fee Schedule Search. <https://www.cms.gov/apps/physician-fee-schedule/search/search-criteria.aspx>
6. National Correct Coding Initiative Edits. <https://www.cms.gov/Medicare/Coding/NationalCorrectCodInitEd/index.html>
7. <https://mms.mckesson.com/content/business-resources/reducing-costs/roi-adding-diagnostic-equipment/>
8. <http://www.medtronic.com/covidien/en-us/products/motility-testing/manoscan-eso-high-resolution-manometry-system.html>
9. <http://www.medtronic.com/covidien/en-us/products/capsule-endoscopy.html>
10. <http://www.medtronic.com/covidien/en-us/products/reflux-testing/digitrapper-ph-z-testing-system.html>
11. <https://www.labcorp.com/help/patient-test-info/lactose-tolerance-tests>
12. <http://www.fibroscan.com/en/products>
13. <https://www.aapc.com/resources/medical-coding/cpt.aspx>

