Establishing a CT Colonography Service

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Computed tomographic colonography (CTC) has been recommended by the American Cancer Society, the Multi-Society Task Force on Colorectal Cancer (MSTF), and the American College of Radiology as an appropriate first-line preventative screening test for people at average risk of developing colorectal cancer (CRC).[1] However, the debate regarding the merits of this form of CRC screening continues to rage, pitting several of the gastroenterological professional societies at odds with various radiological societies and with different recommendations from various guideline issuers such as the MSTF and the United States Preventive Services Task Force (USPSTF). In their entirety, the clinical trial data comparing CTC to colonoscopy in patients undergoing CRC screening are mixed, but the most recent and methodologically rigorous trials have concluded that CTC is comparable to colonoscopy for the detection of polyps 10 mm in diameter or larger.[2–5] Proponents of CTC point to these trials as well as national CRC screening adherence rates that hover around 50%, as reasons to promote screening with CTC as an equivalent option to existing modalities. Opponents of CTC cite the more variable performance characteristics of CTC compared with colonoscopy for the detection of polyps of less than 10 mm and a myriad of other unknowns that are inherent to CTC, such as the potential impact of extracolonic findings, radiation exposure, and cost-effectiveness, to bolster their argument that CTC is not ready for widespread adoption as a first-line CRC screening option.[6]

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Over the past 12 months several decisions pertaining to the practice of CTC were made that promise to have wide-ranging effects on the practice of CTC in the future. The first was the decision of the Centers for Medicare and Medicaid (CMS) to deny coverage for screening CTC under Medicare rules.[7] The rationale for this decision was the relative lack of outcomes data for Medicare aged patients undergoing screening CTC as well as many of the unknowns cited above.[8] Efforts are currently underway to provide this evidence in the hope that this decision will ultimately be reversed. During 2009, the American Gastroenterological Association (AGA) and the American College of Radiology (ACR) jointly submitted a request to the American Medical Association (AMA) current procedural terminology (CPT) Editorial Panel to establish category I CPT codes for screening and diagnostic CTC, and provided physician work and practice expense recommendations to CMS through the AMA/Specialty Society RBRVS Update Committee (AMA RUC). The details of this decision were released in November 2009. CTC was assigned 3 category I CPT codes, 2 for diagnostic CTC and 1 for screening CTC. Diagnostic CTC without contrast (74261) was assigned 2.4 relative value units (RVU), diagnostic CTC with contrast (74262) was assigned 2.5 RVU, and screening CTC (74263) was assigned 2.28 RVU. It should be noted that CMS disagrees with the AMA RUC–recommended values and believes the diagnostic CTC code without contrast should be comparable to the CTC screening code. CMS notes that the image post processing virtually has the same description of work-, pre-, intra-, and postservice time for which the AMA RUC recommended 2.28 work RVUs. Therefore CMS has assigned 2.28 work RVUs to CPT code 74261. CMS also notes that screening CTC is a noncovered service because it does not have the statutory authority that has been provided for mammography, diabetes, and CRC screening; this means that legislative action will be necessary to get the status of CTC screening changed to a covered service.

Finally, an updated version of the Blue Cross/Blue Shield Technology Evaluation Center (TEC) analysis of CTC was recently issued.[9] In the previous analysis from 2004, the TEC concluded that CTC did not meet their criteria to determine that there was adequate evidence to demonstrate that CTC screening is effective in reducing mortality from CRC. In the current analysis, bolstered by the data from several additional studies of screening and diagnostic CTC, the TEC concluded that CTC meets the criteria for a CRC screening test. The components of the TEC criteria are: (1) the technology must have final approval from the appropriate governmental regulatory bodies; (2) the scientific evidence must permit conclusions concerning the effect of the technology on health outcomes; (3) the technology must improve the net health outcome; (4) the technology must be as beneficial as any established alternatives; and (5) the improvement must be attainable outside investigational settings. Based on current evidence, it appears clear that the question is no longer if or when CTC is ready for prime time, but rather how CTC will be deployed into routine clinical practice in the United States. This article discusses the issues surrounding the intricacies of setting up a CTC practice.

ESTABLISHING A CTC PRACTICE: THE NNMC EXPERIENCE

The Colon Health Initiative (CHI) at the National Naval Medical Center (NNMC) was created in 2004 on the heels of the seminal article on CRC screening with CTC by Pickhardt and colleagues.[2] This study of more than 1200 patients compared