Methods of Privileging for New Technology in Gastrointestinal Endoscopy

GUIDELINES for Clinical Application

Guidelines for the practice of endoscopy are developed by the American Society of Gastrointestinal Endoscopy using evidence-based methodologies. A literature search is performed to identify relevant studies on the topic. Each study is then reviewed for both methodology and results. Controlled clinical trials are emphasized, but information is also obtained from other study designs and clinical reports. In the absence of data, expert opinion is considered. When appropriate, the guidelines are submitted to other professional organizations for review and endorsement. As new information becomes available revision of these guidelines may be necessary.

These guidelines are intended to equally apply to all who perform gastrointestinal endoscopic procedures, regardless of specialty or location of service. Practice guidelines are meant to address general issues of endoscopic practice. By their nature, they cannot encompass all clinical situations. Clinical situations may justify a course of action at variance to these recommendations.

The practice of gastrointestinal endoscopy is dynamic and continues to evolve. Standard endoscopic procedures continually undergo refinement and new major techniques are introduced. In some instances, the acquisition of competence with new technological developments requires little effort because of the endoscopist's prerequisite training, skill and experience. In other cases, however, the acquisition of competency represents a major addition to the endoscopist's skills and knowledge base. In such instances, a vehicle for formal training will be required with documentation of competency. In the initial phases of dissemination of a new technology, few centers of expertise will be available to provide instruction. It is incumbent upon these centers to offer training in new technology in the appropriate setting of fellowship training and advanced fellowship training. Training centers may also consider offering instruction to established endoscopists, based on the complexity of the procedure and the perceived need and applicability of the procedure to general endoscopic practice.

PURPOSE

The purpose of these guidelines is to provide a suitable framework for attaining competency and eventual privileging involving new and emerging technologies in gastrointestinal endoscopy. These guidelines apply to newly developed technologies that have left the experimental and developmental stages with demonstrated clinical efficacy and are ready to be adopted into clinical practice.

DEFINITIONS

"Major skill" describes a new technique or procedure which by its nature involves a high level of complexity, interpretative ability, and/or new type of technology (e.g., endoscopic ultrasound). In their initial phases of dissemination, acquisition of competency would likely be confined to teaching centers and would require formal training.

"Minor skill" describes a new non-experimental development which is a minor extension of an accepted and widely available technique or procedure (e.g., endoscopic variceal band ligation). For the majority of gastrointestinal endoscopists, obtaining competency in a minor skill would involve limited education and practical exposure such as that obtained from short courses, training videos, CD-ROM, and interactive computer programs.

NEW TECHNOLOGY REQUIRING THE DEVELOPMENT OF MAJOR SKILLS

A preceptorship or other vehicle of formal instruction is mandatory for the acquisition of major new skills. The completion of a short course or workshop
that offers limited exposure to cognitive background data or technical skills will not by itself, result in clinical competency and therefore should not be the sole mechanism for the acquisition of new major skills.\(^{(2)}\) Persons wishing to learn a new procedure should do so under the supervision of a preceptor, a recognized authority in the new procedure on the basis of extensive clinical experience and/or publications. The preceptor's responsibilities include: setting objectives, developing a curriculum, demonstrating procedural techniques, overseeing the instruction and practice of skills, evaluating the preceptee, and documenting competency of the preceptee for future credentialing.\(^{(3)}\) Competency is defined as the minimum level of knowledge, skills and expertise, derived through training required to perform a procedure safely and proficiently. Components of competency include technical, interpretative, and cognitive aspects as previously outlined by the ASGE. The preceptor has primary patient care responsibility and should be involved appropriately in the periprocedural care. Informed consent should document the roles of both the preceptor and preceptee to the patient.

A preceptee is an endoscopist who possesses the sufficient experience to be able to master the new procedure cognitively and technically. Goals of the preceptee include attaining the ability to:\(^{(4)}\):

1. understand the indications, contraindications, and alternatives of the procedure
2. perform the procedure proficiently
3. interpret findings correctly
4. integrate findings into therapy or management plans
5. avoid, recognize and manage complications
6. assess preprocedural and plan post-procedural follow-up care

The preceptorship is completed when the preceptee has achieved an acceptable level of competency that will allow for the fully independent performance of the major skill in question, while meeting the six aforementioned goals. The preceptor should supply written documentation of the successful completion of the preceptorship for future credentialing purposes.

**NEW TECHNOLOGY REQUIRING THE DEVELOPMENT OF MINOR SKILL**

In some instances, new technological developments represent minor extensions or refinements of established endoscopic skills. Utilizing instructive resources such as videotapes, interactive computer programs, CD-ROM and attendance at short courses may be appropriate for attaining competency in these techniques.\(^{(4)}\) The duration of training should not be fixed, but should reflect the time needed for the participant to master the requisite skill. It should be emphasized that short courses do not supply adequate training in endoscopic procedures. Properly designed courses can introduce new techniques to the endoscopist who already has a background and experience in basic endoscopic skills. Technological refinements in equipment, including improvements in commonly used equipment such as endoscopes, biopsy forceps, and snares do not require formal training, and skill in these techniques can usually be mastered with the aid of videotapes, package inserts, and demonstration of the technique by other endoscopists.

In summary, emerging technologies can be stratified according to their complexity and general applicability. The avenues for attaining competency and privileges in emerging technologies are varied and will depend upon the individual endoscopist's skill, prior training and the complexity of new technology. Some new procedures may require formal hands-on training under supervision followed by written documentation of competency. Other technological developments represent minor extensions of demonstrated skills. Reading, viewing video tapes, or attending short courses may be sufficient training in these technologies.

**REFERENCES**