

Generic guide to the acquisition of new surgical skills outside a residency or fellowship program: a position paper (Feb. 2, 2008)

Innovation, research and technological advances add to and modify surgical techniques.^{1,2} To provide accepted standards of care, practising surgeons will have to upgrade their skills from time to time and may be expected to acquire some completely new skills over the course of their career.

The safe acquisition of new skills is an emerging challenge in continuing professional development. This guide aims to help individuals and institutions functioning in an environment of evolving surgical procedures by outlining a reasonable framework for the acquisition of new skills. Four conditions will usually need to be met when a new surgical skill is applied to patient care.

First, surgeons must be or become knowledgeable about the condition for which the skill is to be applied. They should know appropriate indications and potential complications and have technical and safety knowledge pertaining to any specialized equipment required for the procedure. This may be acquired by taking accredited courses or through self-

directed study, ideally documented in the Royal College Maintenance of Certification Program.³

Second, surgeons should initially become familiar with technology and technique by observing experienced operators. This experience can be obtained through accredited courses with “live surgery” or video link-up. It may also be obtained by formally assisting experienced colleagues or mentors as they perform the procedure.

Third, surgeons should initially perform the procedure in a proctored environment. The proctor may be an experienced local colleague or an outside expert. This person will help guide the surgeon through the procedure and will also be available if questions or difficulties arise. The number of procedures carried out in a proctored setting will vary with the procedure and experience of the surgeon. The medical literature offers suggested numbers of performed procedures required to competently exercise such new skills as sentinel node biopsies and advanced laparoscopic surgery.

Fourth, once a surgeon begins to independently practise a new procedure, an outcome assessment should be undertaken to ensure that its quality is in line with accepted practice. Ideally, this might be done within, or just after, a year's experience or after a predefined number of completed procedures. This assessment could be documented in the Royal College Maintenance of Certification Program as Category 5 credits (practice review and appraisal).

Competing interests: None declared.

References

1. American College of Surgeons Committee on Emerging Technology and Education (CESTE) [website of the CESTE]. Available: www.facs.org/education/ceste/index.html (accessed 2008 Apr 3).
2. Statement on Emerging Surgical Technology and the Evaluation of Credentials. American College of Surgeons. *Bull Am Coll Surg* 1994;79:40-1.
3. The Royal College of Physicians and Surgeons of Canada. *Maintenance of certification program guide*. Available: http://rcpsc.medical.org/opd/moc-program/infoguide_e.pdf (accessed 2008 Apr 3).

Correspondence to: Dr. Ralph George, Chair, CAGS CPD Committee, Kingston Regional Cancer Centre, 25 King St. W, Kingston ON K7L 5P9; fax 613 546-8221; ralph.george@krcc.on.ca