

Endoscopy training in Canadian general surgery residency programs

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SUMMARY

Currently, general surgeons provide about 50% of endoscopy services across Canada and an even greater proportion outside large urban centres. It is essential that endoscopy remain a core component of general surgery practice and a core competency of general surgery residency training. The Canadian Association of General Surgeons Residents Committee supports the position that quality endoscopy training for all Canadian general surgery residents is in the best interest of the Canadian public. However, the means by which quality endoscopy training is achieved has not been defined at a national level. Endoscopy training in Canadian general surgery residency programs requires standardization across the country and improved measurement to ensure that competency and basic credentialing requirements are met.

The scope of practice in general surgery is evolving.¹ The Canadian Association of General Surgeons (CAGS) feels it is essential that endoscopy remain a core component of general surgery practice and a core competency of general surgery residency training in order to meet the health care needs of the Canadian public.² The Royal College of Physicians and Surgeons of Canada includes endoscopy in the objectives of training for the discipline of general surgery.³ Currently, general surgeons provide approximately 50% of endoscopy services across Canada and an even greater proportion outside large urban centres.^{1,4}

Various provincial bodies, such as the BC Cancer Agency and Cancer Care Ontario, and national organizations, such as the Canadian Association of Gastroenterologists (CAG), are calling for more rigorous standards and measurement of endoscopy procedures to improve and maintain quality.⁵⁻⁷ This includes minimum procedure volumes and demonstration of competency as part of credentialing requirements. In addition, the Royal College has confirmed a transition to competency-based residency training in Canada, beginning in 2017.⁸

Transition to required higher procedure volumes, stricter credentialing requirements and competency-based training directly impacts general surgery residents. As a first step in addressing these issues, the CAGS Residents Committee recently conducted a survey of general surgery residents in English-language residency programs. At the time the survey was conducted, the CAGS Residents Committee did not have representation from the 3 francophone residency programs; with minimal resources to develop, pilot and distribute a survey in French, our sampling in the province of Quebec was restricted to residents at McGill University. Our goal was to characterize the current status of endoscopy training and assess readiness for clinical practice in endoscopy. The results, presented at the Canadian Surgery Forum in 2013, revealed a variable approach to endoscopy training for general surgery residents across the country. Variability existed in the number of endoscopy blocks, type of endoscopy curriculum (e.g.,

formal educational objectives, volume of scoping objectives), location of training (e.g., academic, community hospital setting), type of supervision (e.g., general surgeon, gastroenterologist), access to/use of endoscopy simulators and volume of procedures completed. Graduating residents also showed variability in subjective level of comfort for performing procedures independently. Responses from graduating residents indicated they felt least comfortable performing specialized upper-gastrointestinal (GI) and emergency endoscopy procedures.

The CAGS Residents Committee supports the CAGS position statement that "...quality endoscopy training for all Canadian general surgery residents is in the best interest of the Canadian public."² However, the means by which "quality endoscopy training" is achieved has not been defined at a national level. The CAGS Residents Committee feels strongly that endoscopy training in Canadian general surgery residency programs requires standardization across the country and improved measurement to ensure that competency and basic credentialing requirements are met.

We suggest that the Royal College define specific objectives for endoscopy training within residency programs, taking the training pattern of general surgery residents into account. To meet these objectives, the Royal College, in collaboration with CAGS and CAG, should create an evidence-based curriculum for acquisition of knowledge and technical skills required for endoscopy with the capability for implementation at the individual residency program level. Where applicable evidence is lacking, expert consensus should guide curriculum development, in recognition of the current endoscopy climate and anticipated practice requirements.

An endoscopy curriculum for general surgery residency should include educational resources (including simulation), a pattern of training to ensure skill acquisition and maintenance with access to emergency procedures, adequate procedure volume with objective evaluation and competency assessment, and quality assurance.

Acquisition of knowledge and skills for endoscopy requires provision of educational resources, including both reading material and expert technical training. Residents should have access to endoscopy simulator systems with defined goals and objectives to prepare for core endoscopy training.⁹ Residency programs without simulators can provide access by system purchase or partnership with other residency programs for shared use.

Exposure to basic endoscopy skills should occur early in residency training with a core rotation in endoscopy of 2–3 months. Skill maintenance and refinement should be achieved through dedicated longitudinal endoscopic training throughout the senior years. Training in emergency endoscopy procedures must be prioritized. Residents require participation in acute GI bleed on-call schedules, with gastroenterology

or general surgery as available. If local access is limited, electives or courses should be sought to ensure adequate training.

Requirements for volume of procedures currently vary among national organizations. Current residents may not meet evolving Canadian credentialing requirements for endoscopy privileges.^{6,7} Achieving volume requirements does not equate with competence, but provides a baseline level for competency assessment.⁵ Recommendations for volume of procedures in training should be based on thresholds for evaluation of competency while accounting for local, provincial and national benchmarks required to secure endoscopy privileges.

Evaluation of training and assessment of competency must rely on objective measurement to ensure that general surgery residents are held to the same standard as other endoscopists (once consensus standards are implemented). Standardized testing and validated performance tools should be implemented to assess knowledge and procedure-based competency. Several tools are already available and in widespread use elsewhere.^{10,11} Procedure logging programs can also be modified to capture performance and quality indicators.

Training in quality assurance for endoscopy should be part of an overall endoscopy curriculum and include synoptic reporting for endoscopy, methods of self-assessment and CAG recommendations for endoscopy quality indicators.⁵

National governing and educational bodies should facilitate leadership, quality improvement and research in endoscopy training specific to general surgeons and general surgery residents. More general surgeon participation in stakeholder panels and organizations addressing endoscopy standards and training is needed. Further, academic general surgery programs should strive to develop a leadership position to ensure that training in basic, emergency and advanced endoscopy skills can continue to be provided by general surgeons for general surgery trainees.

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