

Surgical Education

International assessment practices along the continuum of surgical training



Marisa Louridas, M.D.^{a,*},¹, Peter Szasz, M.D.^{a,1},
Sandra de Montbrun, M.D., M.Ed., F.R.C.S.C.^a,
Kenneth A. Harris, M.D., F.R.C.S.C., F.A.C.S.^b,
Teodor P. Grantcharov, M.D., Ph.D., F.A.C.S.^a

^aDepartment of Surgery, University of Toronto, 30 Bond Street, 16CC-056, Toronto, ON, M5B 1W8, Canada; ^bRoyal College of Physicians and Surgeons of Canada, Ottawa, ON, Canada

KEYWORDS:

Technical performance;
Assessment;
Surgical training;
Evaluation;
Competence

Abstract

BACKGROUND: The objectives of this study were to assemble an international perspective on (1) current, and (2) ideal technical performance assessment methods, and (3) barriers to their adoption during: selection, in-training, and certification.

METHODS: A questionnaire was distributed to international educational directorates.

RESULTS: Eight of 10 jurisdictions responded. Currently, aptitude tests or simulated tasks are used during selection, observational rating scales during training and nothing is used at certification. Ideally, innate ability should be determined during selection, in-training evaluation reports, and global rating scales used during training, whereas global and procedure-specific rating scales used at the time of certification. Barriers include lack of predictive evidence for use in selection, financial limitations during training, and a combination with respect to certification.

CONCLUSIONS: Identifying current and ideal evaluation methods will prove beneficial to ensure the best assessments of technical performance are chosen for each training time point.

© 2016 Elsevier Inc. All rights reserved.

There are several differences in the structure, duration, and specific-training guidelines between surgical programs internationally.¹⁻³ Despite these differences, for the first

time in history surgical training has seen an international shift toward a common training paradigm, namely competency-based education.⁴⁻⁶

Competency-based education places less emphasis on the duration of training and more on the acquisition and demonstration by trainees of specific competencies, “observable abilities of a health professional.”⁷ These competencies span a variety of domains and can broadly be categorized into: medical expertise, technical performance (on its own or as a subheading under medical expertise), scholarship, professionalism, communication, collaboration within a team setting, patient advocacy, and health care management.^{1-3,8} Although each of these competencies are extremely important and methods on how best to assess

The Royal College of Physicians and Surgeons of Canada (RCPSC) through the H.S. Morton Exchange Fellowship Fund provided support through all phases of the study.

The authors declare no conflicts of interest.

Presented at the 2014 Canadian Association of General Surgeons, Canadian Surgical Forum (CAGS-CSF) in Vancouver, Canada.

* Corresponding author. Tel.: +1-416-570-3998; fax: +1-416-864-5343.

E-mail address: marisa.louridas@mail.utoronto.ca

Manuscript received August 17, 2015; revised manuscript October 25, 2015

¹ These authors contributed equally and share first coauthorship.

each one are required to implement an all encompassing competency-based assessment framework. The one that differentiates a surgical specialty from a medical specialty and underpins all surgical training programs internationally is technical performance.^{1-3,8} Therefore, this was determined to be a good starting point to begin an international collaboration on competency-based education.^{1-3,8} Surgical trainees regardless of specialty are required to attain, and then demonstrate, appropriate, and safe operative techniques and acceptable overall technical performance within the operating room, before independent practice.^{1-3,8,9}

The importance of evaluating technical performance within the competency-based education paradigm is essential to ensuring trainees progress through training at the pace that best suits their abilities and needs; however, assessments focusing on technical performance are not well done.¹⁰ Furthermore, the current assessment practices used internationally are not well documented within the literature, and consequently remain unfamiliar to other stakeholders attempting to implement similar initiatives.

In an era where information dissemination is more feasible than ever, a collaborative effort should allow for the sharing of best practice protocols, to further surgical assessment during technical performance. The purpose of this study was to assemble an international education directorates' (EDs) perspective on¹ the current technical performance assessment practices² ideal technical performance assessment methods and³ barriers to the adoption of these assessments, at 3 training stages: selection into training, in-training progression, and certification.

Methods

Generation and administration of the questionnaire

An online questionnaire was distributed to EDs internationally using Survey Monkey (Palo Alto, CA). Each question was either formatted as an open-ended response or on a Likert scale from 1 to 5 (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, and 5-strongly agree). For each question, the EDs had an opportunity to comment and/or clarify their answers. Each jurisdiction's responses were weighted equally for each question in the survey therefore contributing to one-eighth of the results.

EDs (or their equivalent) were deemed most appropriate to participate in the study. EDs are surgeons with major leadership roles in their jurisdictional certifying colleges or official surgical recognition bodies.

Therefore, all of the EDs hold positions of knowledge and authority, having oversight for the certification and/or examination process for their jurisdiction and the understanding that processes do differ for surgical training, assessment, and board recognition internationally. The EDs are all members of the Research, Education, and Innovation for Better Outcomes group, an international

consortium for the improvement of surgical training. They are surgeons from diverse fields with expertise in surgical education, and they are responsible for all surgical specialties within their jurisdiction during all stages of training.

Selection

EDs were asked to outline the components of the current surgical selection process in their jurisdictions and their opinions as to whether it is important to test technical aptitude at the selection process. Additional questions were asked to understand how and when the assessment of technical aptitude or skill is being used and furthermore, what type of technical assessment(s) would be appropriate for in-coming trainees in their respective jurisdictions. For the purpose of this study, the aptitude was defined as "a natural capacity or ability" to do something.¹¹

In-training and certification

The questions for in-training and certification focused on the assessment of technical competence. At these 2 time points, the study solicited the opinions of EDs as to whether it is important to assess the technical competence of surgical trainees and if there are current assessment practices in place. Moreover, ideal technical performance assessment methods were also sought, (ie, "when" and "where" these assessments should be completed). Finally, EDs opinions were sought on which assessment methods were most appropriate to determine technical competence. For the purpose of this study, competence was defined as "sufficiency of qualification; capacity to deal adequately with a subject."¹¹

Barriers to technical assessment

Barriers to the implementation of technical performance assessments at all 3 training stages were also investigated.

Results

Eight responses were received from a possible 10 EDs, with representation from Canada, the United Kingdom, Ireland, Denmark, Hong Kong, Sweden, the Netherlands, and Australia & New Zealand.

Selection

Currently, selection processes use a curriculum vitae, portfolio or application, references, interviews, internship performance scores, and technical aptitude. EDs expressed a divided response as to whether technical performance should be assessed during selection with 50% neutral and 50% stating either agree or strongly agree. Similar responses were reported even if an objective measure to assess technical ability before entry into training were available (50% neutral and 50% agreeing or strongly

Download English Version:

<https://daneshyari.com/en/article/6250319>

Download Persian Version:

<https://daneshyari.com/article/6250319>

[Daneshyari.com](https://daneshyari.com)