## Providing mentorship support to general surgery residents: a model for structured group facilitation

Caitlin Champion, MD
Sean Bennett, MD
David Carver, MD
Karim El Tawil, MD
Sarah Fabbro, MD
Neil Howatt, MD
Farahnaz Noei, MD
Rachel Rae, MD
Fatima Haggar, MPH
Angel Arnaout, MD, MSc

Accepted for publication April 13, 2015

## Correspondence to:

A. Arnaout
Division of Surgery
The Ottawa Hospital, General Campus
Ottawa ON K1H 8L6
anarnout@toh.on.ca

DOI: 10.1503/cjs.004315

## SUMMARY

Mentorship is foundational to surgical training, with recognized benefits for both mentees and mentors. The University of Ottawa General Surgery Mentorship Program was developed as a module-based group facilitation program to support inclusive personal and professional development of junior general surgery residents. The group format provided an opportunity for both vertical and horizontal mentorship relationships between staff mentors and resident mentees. Perceived benefits of program participants were evaluated at the conclusion of the first year of the program. The program was well-received by staff and resident participants and may provide a time-efficient and inclusive mentorship structure with the additional benefit of peer support. We review the development and implementation of the program to date and share our mentorship experience to encourage the growth of formal mentorship opportunities within general surgery training programs.

entorship has been a cornerstone of surgical education since its inception and over the course of the past century has evolved beyond surgical role-modelling to a mutual relationship in which an individual draws on past experiences to promote the personal or professional growth of another.¹ Although mentorship is often thought of as occurring in a vertical, dyadic pairing between a senior staff physician and junior trainee, mentorship can also occur horizontally in a peer or group format.²

Mentorship within medicine has many recognized benefits, including increased career satisfaction, perceived academic success, networking, stress management, academic productivity and work–family balance for mentees.<sup>3</sup> Mentors report increased personal satisfaction, positive relationships with residents and faculty members and increased opportunities for career advancement.<sup>3</sup>

While informal vertical mentorship relationships are common within surgical training and have high levels of trainee satisfaction, they may not provide the same degree of structured outcomes and accessibility as formal mentorship programs.<sup>2</sup> Informal mentorship relationships may self-select for outgoing and socially dominant trainees and exclude those who may be more introverted or part of a marginalized group, often visible minorities and women.<sup>2</sup> Residents without mentors often identify the lack of a formal program as a major barrier to finding one.<sup>4</sup> Once established, mentorship relationships in surgery are often subject to scheduling and time pressures, which may limit their impact.<sup>1,2,4</sup>

The University of Ottawa General Surgery Mentorship Program was developed in recognition of the benefits of mentorship in surgical training with an understanding of the barriers to providing inclusive and meaningful mentorship opportunities, particularly among junior trainees. The themes explored in the 8-module program were identified as priority areas for junior surgical trainee development through a literature review and feedback from residents and staff surgeons within the general surgery

training program (Appendix 1, available at canjsurg.ca). Modules were completed throughout the first 2 years of residency training and were facilitated in an informal environment by a staff physician mentor following the same cohort of residents throughout the program. The module themes included a program introduction, health and wellness, study skills, leadership styles, conflict resolution, team management, career development and a wrap-up session. Each module was structured around a theme and included supplemental resources for discussion, including a TED talk and reading from the surgical literature. The program provided structured guidance for mentors and mentees with regards to module topics, but the way in which each topic was explored and the use of supplemental resources was determined by the mentor and mentee group. The creation of a longitudinal structured mentorship relationship within an informal environment was intended to promote the benefits of mentorship, while also promoting the development of a peer support network.

Participation in the program was voluntary for both mentors and mentees, with all residents choosing to participate. At the conclusion of its first year, the impact of the mentorship program was evaluated with anonymous participant program evaluations rating perceived benefits identified from the mentorship literature as well as participants' module-specific experiences and perceptions of the overall program structure on a 5-point Likert scale. At the time of evaluation all 8 program modules had been completed across the first- and second-year resident cohorts.

Residents across both groups rated the utility of the sessions, improvements in their understanding of the issues raised in the module and the supportive environment of their mentors and fellow mentees very highly. Residents rated all perceived mentorship benefits as neutral or higher as a result of the program, with the most benefit seen in the areas of positive impact on residency life, improved collegiality and the opportunity for reflection. Residents also identified the program as helping them to become stronger residents through improved motivation, improved work-life balance, increased confidence, improved creativity and goal setting. Residents felt encouraged to pursue independent one-on-one mentorship relationships at the conclusion of the program. Staff surgeon mentors also rated their perceived benefits highly, including increased collegiality with the residents, increased personal satisfaction and an opportunity to reflect on their own practices. They felt they had made a positive impact on their mentees and that the program had positively impacted their lives, and they would consider participating again.

Use of the supplemental resources varied between and among the first- and second-year mentorship groups, with some participants rating them very highly and others rating them neutrally. Beyond the variable response to the supplemental resources, all participants felt the program should continue to be offered in its current form to incoming resident cohorts over their first 2 years of training. With regards to mentorship in senior training years, the majority of participants recommended a transition to self-selected, one-on-one mentorship relationships, but some expressed interest in an ongoing group program.

Overall, our initial program evaluation indicates that the recognized benefits of mentorship may be achieved in a facilitated, structured group format with high mentor and mentee satisfaction. The program is perceived to be of benefit to general surgery trainees during their first 2 years of residency, promotes inclusive mentorship opportunities for residents and may support the formation of self-selected independent mentorship relationships at the completion of the structured program. The group format may also help alleviate time pressures on participants by providing an opportunity for longitudinal mentorship relationships among a cohort of residents developed across multiple brief sessions. Lack of mentorship opportunities and social supports within Canadian general surgery training programs have been identified as potential contributors to resident burnout and attrition.5 The access to mentorship combined with increased collegiality and peer support provided by a facilitated group program may improve the training experience of general surgery residents and support their overall career development.

Affiliations: From the Division of General Surgery, Department of Surgery, The Ottawa Hospital, Faculty of Medicine, University of Ottawa (Champion, Bennett, Carver, El Tawil, Fabbro, Howatt, Noei, Rae); the Department of Surgery, The Ottawa Hospital, The Ottawa Hospital Research Institute, University of Ottawa (Haggar); and the Division of General Surgery, Department of Surgery, Faculty of Medicine, University of Ottawa (Arnaout), Ottawa, Ont.

Competing interests: None declared.

**Contributors**: All authors contributed substantially to the conception, writing and revision of this commentary and approved the final version for publication.

## References

- Entezami P, Franzblau LE, Chung KC. Mentorship in surgical training: a systematic review. *Hand* (NY) 2012;7:30-6.
- Patel VM, Warren O, Ahmed K, et al. How can we build mentorship in surgeons of the future? ANZ J Surg 2011;81:418-24.
- Welch JL, Jiminez HL, Walthall J, et al. The Women in Emergency Medicine Mentoring Program: an innovative approach to mentoring. 7 Grad Med Educ 2012;4:362-6.
- Geltzeiler MN, Lighthall JG, Wax MK. Mentorship in otolaryngology: 10 years of experience. Otolaryngol Head Neck Surg 2013;148: 338-40.
- Tomlinson C, LeBossiere J, Rommens K, et al. The Canadian general surgery resident: defining current challenges for surgical leadership. Can J Surg 2012;55:S184-90.