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Complete Title: The role of private practice in general surgical training in Australia

Authors:

Jonathan Sivakumar ^{1, 2}, Gary Crosthwaite ^{1, 2}

¹ General Surgery and Gastroenterology Clinical Institute, Epworth Healthcare Richmond, Richmond VIC, Australia

Author Details:

Dr Jonathan Sivakumar

Degrees: MBBS, PGDipSurgAnat, MS

Email Addresses: sivakumar.jonathan@gmail.com

Affiliations: General Surgery and Gastroenterology Clinical Institute, Epworth

Healthcare Richmond

Associate Professor Gary Crosthwaite

Degrees: MBBS, FRACS

Email Addresses: glcrosthwaite@gmail.com

Affiliations: General Surgery and Gastroenterology Clinical Institute, Epworth

Healthcare Richmond

Corresponding Author Details:

Dr Jonathan Sivakumar

+61 413 103 472

sivakumar.jonathan@gmail.com

Mailing Address: 61 Medina Rd, Glen Waverley 3150, VIC

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² Department of Surgery, The University of Melbourne, Melbourne VIC, Australia

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The role of private practice in general surgical training in Australia

Jonathan Sivakumar 1, 2, Gary Crosthwaite 1, 2

¹ General Surgery and Gastroenterology Clinical Institute, Epworth Healthcare Richmond, Richmond VIC, Australia

Accredited general surgical training in Australia has predominantly occurred in public hospital posts recognised by the Royal Australian College of Surgeons (RACS) and General Surgeons Australia. The current Surgical Education and Training (SET) program was implemented in 2008 in response to the changing landscape of medical education and diminished opportunities for trainees to develop surgical skills (1, 2). This program underwent an expansion in 2009 with the establishment of the 'Specialist Training Program' (STP), a Government initiative to fund training positions in settings outside of public institutions (3).

The current discrepancy between the demand for surgical training positions and lack of accredited posts is expected to continue to widen. The need for more training positions is partly due to the increasing number of medical graduates and this is compounded by the upcoming transition from a

² Department of Surgery, The University of Melbourne, Melbourne VIC, Australia

four-year to a five-year SET program, requiring the development of at least 25% more accredited posts over the next five years. The aging and growing population of Australia reinforces the need for a greater number of surgeons to be trained to cope with the future surgical health climate. In the 2017-2018 fiscal period, 59% of surgical procedures in Australia were undertaken at private hospitals (4). With most elective surgery undertaken in private practice, there is a reduced volume of surgical cases available for registrars in public hospitals. The over-saturation of current trainees in tertiary centres is to the detriment of registrars' operative exposure and may sacrifice the quality of our future surgeons or result in lengthening of training. With these limitations, the private sector is an opportunity to explore further registrar posts to meet the demands of surgical training.

One of the challenges is balancing the role of the trainee with the patient's expectations of their involvement. However, general surgical units at Australian private institutions demonstrate that 88-90% of these patients are supportive of having trainees involved in their inpatient care, and 75-86% were supportive of having trainees specifically involved in their operation and performing part of it (5, 6). This is reasonable as operative care is not compromised through entrusting a registrar with either certain steps of a procedure or even the whole operation under supervision of the consultant (7-9). Training in private practice appears very achievable in modern day surgical practice given that patients understand they receive care from a team of individuals led by their specialist. The key to ongoing involvement of registrars in these operations is a pre-operative discussion between the surgeon and patient about how their care will not be adversely affected from the trainee's involvement in the procedure. Reassurance that the case will be closely supervised and framing this discussion in the context of the registrar's capabilities may allow privately-insured patients to be more accepting of the trainee's role. Establishing this rapport and obtaining consent regarding the registrar's involvement also mitigates the risk of potential legal issues. At Epworth Healthcare, where

two accredited posts exist, trainee involvement is addressed in the consent documentation and registrars are covered medicolegally, no different to public hospital trainees. Patients do have the right to refuse any involvement by the registrar in performing a part of the operation, but we have found this to be uncommon.

A notable advantage to training registrars within the private sector is their exposure to a more diverse case mix than available at public hospitals. Despite the massive growth in bariatric and robotic surgery within private hospitals for instance, registrars often lack any involvement with these cases under the traditional SET model. Private hospital posts allow trainees to have more exposure to these procedures and many other areas of general surgery. However, the registrar's perspective of training in the private sector is an obstacle to overcome as the preconceived notion is that there are limited opportunities for learning and operating. With the establishment of a competency-based program over the traditional time-based model for SET, developing operative skills through being a primary operator is crucial to the trainee's progress (2). Data from Australian private institutions have shown that previous registrars meet a respectable rate of primary operating in private hospitals (10, 11), and this should help allay concerns of prospective surgical trainees. It is also important to emphasise that the RACS training program revolves around nine competencies that make up a proficient surgeon (12). This framework is designed to ensure trainees develop skills outside technical ability, all of which can be developed in a private centre.

The support of surgical supervisors is paramount for the registrar's education and performance. An important step is establishing a defined teaching unit through recognising a group of surgeons who have an enthusiastic attitude and commitment towards training. This replicates the unit structure established at public hospitals and in turn ensures that the trainee's education is enhanced by

developing a sense of ownership and responsibility for a specific set of patients. A barrier to overcome is the surgeon's preference for performing the entirety of their own procedures due to pressures of time and quality, and so further support and appreciation is needed for these supervisors as they balance their service with the trainee's educational demands. The inefficiency that comes with teaching registrars during a case results in longer operating times, impacts the number of scheduled procedures and subsequently affects potential earnings from lost opportunity costs (13). In spite of this, training registrars should be perceived as a long-term investment for the general community.

Another factor to consider is cost to the hospital for employing registrars in the private sector. Private healthcare is firmly built upon maximising profit and efficiency, whilst limiting unnecessary costs. However, remunerating the hospital with revenue from trainees' assistant fees would largely offset these employment costs (14). The involvement of registrars has been linked with a higher quality of perioperative care and less complications (15, 16). This is potentially a result of supervising surgeons keeping abreast of the most recent evidence in healthcare, as well as the self-improvement of surgical practice with audits and multi-disciplinary meetings that are typically performed in teaching institutions. This may also reflect the importance of continuity of care provided by registrars, when attending surgeons with multiple professional commitments and hospital appointments may sometimes have difficulty reviewing their patients face-to-face (11). Through adopting registrars, improved patient outcomes may also carry secondary benefits such as reduced consumption of resources.

With the need for more general surgical training positions in Australia, the private healthcare system is a feasible avenue to develop more accredited posts. A successful model for incorporating the

private sector within the accredited training scheme has been previously described (11). Currently, 12 accredited general surgical posts have been effectively implemented within private hospitals in Australia. This framework of training is enhanced with proactive involvement from surgical supervisors. For prospective surgical supervisors interested in this framework of training, this involves an accreditation application to RACS and accessing funding through the STP scheme, as well as the nomination of a 'Supervisor of Training' from the unit.

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