

# Toward late career transitioning: a proposal for academic surgeons

Robin Richards, MD  
Robin McLeod, MD  
David Latter, MD  
Shaf Keshavjee, MD  
Ori Rotstein, MD  
Michael G. Fehlings, MD, PhD  
Najma Ahmed, MD, PhD  
Avery Nathens, MD, PhD  
James Rutka, MD, PhD

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## Correspondence to:

J. Rutka  
Department of Surgery  
University of Toronto  
149 College St, 5th Floor  
Toronto ON M5T 1P5  
james.rutka@utoronto.ca

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## SUMMARY

In the absence of a defined retirement age, academic surgeons need to develop plans for transition as they approach the end of their academic surgical careers. The development of a plan for late career transition represents an opportunity for departments of surgery across Canada to initiate a constructive process in cooperation with the key stakeholders in the hospital or institution. The goal of the process is to develop an individual plan for each faculty member that is agreeable to the academic surgeon; informs the surgical leadership; and allows the late career surgeon, the hospital, the division and the department to make plans for the future. In this commentary, the literature on the science of aging is reviewed as it pertains to surgeons, and guidelines for late career transition planning are shared. It is hoped that these guidelines will be of some value to academic programs and surgeons across the country as late career transition models are developed and adopted.

The science of aging is becoming an important area of investigation, especially as professionals, such as surgeons, enter their seventh and eighth decades. In North America, demographic analyses have indicated that male and female longevity is increasing, and the workforce is now made up of a growing number of individuals who are older than 65 years. That said, with physiologic aging comes a distinct and well-studied decline in cognitive and physical function. Some signs of cognitive decline include personality change, confusion, tardiness and forgetfulness. In addition, it has been documented that visuospatial ability, inductive reasoning and verbal memory decline in most individuals older than 65 years.<sup>1</sup> As surgeons, we must recognize and accept this correlation between aging and the decline in our physiologic systems, as there is arguably a potential matter of patient safety at hand.<sup>2</sup>

What is the evidence that the aging surgeon performs less well than younger colleagues? Hartz and colleagues<sup>3</sup> reported that mortality rates of surgeons performing coronary artery bypass grafting increased with increasing years of practice; O'Neill and colleagues<sup>4</sup> showed that carotid endarterectomy mortality increased when performed by older surgeons; Neumayer and colleagues<sup>5</sup> showed that there were higher rates of recurrence of hernias when older surgeons were involved. These and other studies have helped to underscore the performance of the aging surgeon, and provide caution to all in this age category. It has been stated that surgeons' overall abilities may decline less quickly than those of physician counterparts, but they are still shown to decline.<sup>6,7</sup>

Despite evidence suggesting an effect of the aging process on cognition, there are numerous laws that prevent discrimination on the basis of age itself. These laws also bar against discrimination on the basis of race, religion, nationality and immutable physical characteristics. For example, in the United States, the Federal Age Discrimination in Employment Act (ADEA) prohibits discrimination on the basis of age for employment of medical practitioners, including surgeons.

In several professions where public safety is potentially an issue, specific retirement ages have been mandated, such as for airline pilots (65 yr), Federal Bureau of Investigation agents (57 yr), park rangers (57 yr), lighthouse operators (55 yr) and air traffic controllers (56 yr).<sup>7</sup> Given the roles that medical practitioners play in the lives of the public, it seems surprising that a specific retirement age is not enforced for these professionals. In fact, the increasing longevity of individuals in the developed world has led to an aging workforce in which surgeons well over age 65 continue to use their skills for patients. It is estimated, for example, that there are more than 20 000 actively practising surgeons in the United States who are older than age 70.<sup>8,9</sup> In defence against implementing a mandatory retirement age for surgeons is the well-accepted principle that for medical practitioners, including surgeons, the ability to conduct one's practice, although difficult to do, should ideally be based on functional age, not strictly on chronological age.<sup>7</sup> However, it is recognized that the assessment of functional status in this context is challenging.

It may come as no surprise that there are varying mandatory retirement ages for physicians across the globe. Many of these retirement stipulations apply to physicians and surgeons working in the public sector. For example, retirement in the public sector is set at 65 years in India; at 60 years in Russia and China, at 65 years in Ireland and at 62–66 years in Japan.<sup>7</sup> There is also great variation across the globe regarding the availability of a retirement pension to facilitate transition. For countries such as the United States, Canada, Germany, Italy and Australia, there are no set retirement policies for physicians or surgeons.

As practising surgeons in Canada, we should adhere to certain principles as espoused by our associative bodies. For example, in the Canadian Medical Association's Code of Ethics it is stated that the practice of the art and science of medicine must be performed competently with integrity, and without impairment. It is also stated that physicians and surgeons are duty-bound to participate in peer review processes and to undergo review by one's peers when required.<sup>10</sup>

Our practices as surgeons are protected in part by the Canadian Human Rights Act, the Canadian Charter of Rights and Freedoms and provincially by different Human Rights Codes. In these documents, it is stated that the practice of professional work, as performed by surgeons, should be considered independent of age. However, the Public Hospitals Act (PHA) states that the boards of directors are required on an annual basis to appoint and grant privileges to members of the medical staff. The most important aspect of the PHA is to ensure the safety of patients. In this regard, hospitals will not be liable if systems are in place to annually review and credential staff (see the case of *Yepremian et al. v. Scarborough General Hospital*, 1980).

What are some potential solutions to ensure that surgeons will transition out of surgical practice in a timely manner and with grace and dignity? The guideline from California Public Protection & Physician Health states that the establishment of a "well-being committee" can serve to review a surgeon's experience and practice and to perform periodic assessments of cognitive function.<sup>11</sup> This well-being committee could then report to the institutions' credentials committee to ensure that all medical staff are treated fairly. The American College of Surgeons 2016 Statement on Aging states that chart reviews, peer review of clinical decision-making, proctoring and videotaping in the operating room with a 360° evaluation may be sources of information that can be used to assess overall skill among aging surgeons. The College of Physicians and Surgeons of Ontario initiates a peer assessment process at age 70 years, and then every 5 years thereafter, to examine the practices of surgeons.<sup>12</sup>

With these concerns and issues relating to the aging surgeon in mind, the Department of Surgery at the University of Toronto has developed some principles to help guide surgeons in their transition out of practices involving operative procedures toward the end of their academic surgical careers. These principles provide an opportunity for surgeons to initiate a constructive dialogue in conjunction with the hospital surgical leadership, as represented by the surgeon-in-chief, the hospital division head, and the university division and department chairs. The goal of this process is the early development of an individual plan for each faculty member, as agreeable to the academic surgeon, to inform the relevant stakeholders and allow the late-career surgeon, the hospital division and the department to make plans for the future.

The Guidelines for Late Career Transitions in the Department of Surgery at the University of Toronto are presented in Box 1. Importantly, these guidelines are now written into the "Memorandum of Agreement" (MOA) that each faculty surgeon signs upon beginning her or his surgical career. It is our firm belief that the dialogue about late career transitioning and planning must begin early, as such transition planning can take years to crystallize. The topic should be broached at an early stage in each surgeon's career as part of an annual review by the surgeon-in-chief at the hospital. All full-time surgeons in the Department of Surgery at the University of Toronto undergo an annual assessment of academic and surgical activity and productivity. As can be seen from the guidelines, it was the intent of the Department of Surgery to link the surgeon's hospital resource allocation to on-call responsibilities, and that both should decrease in a planned and step-wise fashion as late career transition occurs.

The transitioning surgeon still has numerous academic opportunities to pursue, even when hospital and operating room resources are diminishing. For example, transitioning

surgeons can serve as mentors to new faculty recruits and embark on a planned program of shared resources with these new faculty members. As hospital resource packages are constrained and allocated to specified groups of surgeons, this gives an opportunity for job sharing. A recent example of such job sharing between a more senior and a more junior orthopedic surgeon was reported in the *National Post*.<sup>13</sup> This approach to late career transitioning is beneficial, as it allows the late-career surgeon to maintain her or his appointment and status in the hospital, it introduces newly recruited surgeons to the concept of practice sharing and mentoring by the senior surgeon, and it continues to provide financial support for the late-career surgeon until such time that the mentoring program is completed — usually a period of 1–3 years.

Greater levels of teaching, research and administration among late-career surgeons must also be encouraged. A common theme in our discussions with numerous surgeons who were approaching senior status is that they valued being treated with the respect, dignity and support commensurate with a life-long career in a demanding and challenging profession. Accordingly, a celebration of a surgeon's contributions and accomplishments throughout her

or his career is an appropriate way to acknowledge this next phase of their career.

At this time, surgical specialist underemployment across Canada is an additional valid reason for attempting to implement late career transition guidelines.<sup>14</sup> The Royal College of Physicians and Surgeons of Canada (RCPSC) has examined specialist underemployment in some detail.<sup>15</sup> In the RCPSC report from 2013, approximately one-third of resident graduates pursue further training to become more employable. Approximately 20% of graduates accept locum tenens or part-time positions as a default option to unemployment. Resource-intensive specialties have been hit the hardest by such underemployment risks. These included several surgical specialties, such as neurosurgery, general surgery, orthopedic surgery, vascular surgery,<sup>16</sup> cardiac surgery<sup>17</sup> and urology. As a result, more physicians and surgeons are competing for fewer academic positions. With slow growth in the economy, this means that fewer surgeons are leaving their practices at a customary age of retirement. It is fully appreciated, however, that workforce planning can be a highly complicated endeavour, and even at the best of times it is difficult to take into account all societal needs and available resources.

There are many other factors that must be considered when academic surgeons are considering transitioning, not the least of which is individual long-term financial stability. Accordingly, in the Department of Surgery, we have implemented biannual financial planning seminars for senior residents and junior faculty members. Led by senior faculty members, these seminars cover a number of important topics, such as incorporation, negotiating your first contract, disability insurance, tax planning and hiring personnel for your office. Unless late career transition is discussed at an early stage in an academic surgeon's career, preparation for financial stability may not begin in a timely manner, exacerbating the situation.

It is hoped that the guidelines that have been defined by the Department of Surgery at the University of Toronto will be of some value to academic programs and surgeons across the country. We recognize that leadership and reporting structures in departments of surgery vary among institutions, and that these guidelines will need to be modified accordingly to suit each institution's needs. As a living document, ours will undoubtedly change over time; however, these guidelines set a precedent for ongoing conversations and expectations for all stakeholders in university centres.

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**Affiliation:** From the Department of Surgery, University of Toronto, Toronto, Ont.

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### Box 1: Late Career Transition Guidelines

#### Preamble

In the absence of a defined retirement age, department members need to develop plans for transition as they approach the end of their academic surgical careers. The development of a plan for late career transition represents an opportunity for department members to initiate a constructive process in cooperation with the department, as represented by their surgeon-in-chief. The goal of the process is to develop an individual plan for each department member that is agreeable to the academic surgeon, informs the relevant stakeholders and allows the late-career surgeon, the hospital, the division and the department to make plans for the future. The following guidelines were developed to assist department members in the development of individual plans for late career transition.

#### Guidelines

1. All department members should develop an awareness of and a plan for their late career transition.
2. The development of a constructive plan for late career transition takes several years, and discussion of individual plans should be initiated as part of the annual review process by the surgeon-in-chief at the hospital.
3. University departmental and divisional policies and initiatives, such as the annual Assessment of Academic Performance, should be acknowledged and used to inform and guide the annual discussion regarding transition that occurs between the surgeon-in-chief and the late-career surgeons.
4. Hospital resource utilization by individual surgeons is linked to on-call responsibilities, and both should decrease in a planned and orderly fashion as late career transition occurs.
5. Academic opportunities for surgeons can continue or even increase as reduced hospital resource utilization occurs. The involvement of late-career surgeons, whose careers are transitioning, in mentoring and resource sharing with new recruits initiating their academic surgical practice is encouraged.
6. A marked diminution of surgical activity does not preclude ongoing meaningful participation in departmental activities, including teaching, research and administration.
7. The surgeon-in-chief, hospital division head, and university division chair should ensure that the contributions of late-career surgeons are recognized at an appropriate point in each department member's career.
8. The provision of optimum patient care is of paramount importance to all stakeholders, and plans for late career transition need to be developed with this in mind.

### References

1. Waljee JF, Greenfield LJ. Aging and surgeon performance. *Adv Surg* 2007;41:189-98.
2. Drag LL, Bieliauskas LA, Langenecker SA, et al. Cognitive functioning, retirement status, and age: results from the Cognitive Changes and Retirement among Senior Surgeons study. *J Am Coll Surg* 2010; 211:303-7.
3. Hartz AJ, Kuhn EM, Pulido J. Prestige of training programs and experience of bypass surgeons as factors in adjusted patient mortality rates. *Med Care* 1999;37:93-103.
4. O'Neill L, Lanska DJ, Hartz A. Surgeon characteristics associated with mortality and morbidity following carotid endarterectomy. *Neurology* 2000;55:773-81.
5. Neumayer LA, Gawande AA, Wang J, et al. Proficiency of surgeons in inguinal hernia repair: effect of experience and age. *Ann Surg* 2005;242:344-8, discussion 348-52.
6. Bieliauskas LA, Langenecker S, Graver C, et al. Cognitive changes and retirement among senior surgeons (CCRASS): results from the CCRASS Study. *J Am Coll Surg* 2008;207:69-78.
7. Bhatt NR, Morris M, O'Neil A, et al. When should surgeons retire? *Br J Surg* 2016;103:35-42.
8. Katlic MR, Coleman J. The aging surgeon. *Ann Surg* 2014;260:199-201.
9. Katlic MR, Coleman J. The Aging Surgeon. *Adv Surg* 2016; 50:93-103.
10. Canadian Medical Association. *CMA code of ethics*. Ottawa (ON): CMA; 2004. Available: [www.cma.ca/Assets/assets-library/document/en/PD04-06-e.pdf#search=code%20of%20ethics](http://www.cma.ca/Assets/assets-library/document/en/PD04-06-e.pdf#search=code%20of%20ethics) (accessed 2017 Jul. 12).
11. California Public Protection & Physician Health. Assessing late career practitioners: policies and procedures for age-based screening. Sacramento (CA): CPPPH; 2015. Available: [www.cppph.org/cppph-guidelines/](http://www.cppph.org/cppph-guidelines/) (accessed 2017 Jul. 12).
12. Peer and practice assessment. Toronto (ON): College of Physicians and Surgeons of Ontario. Available: [www.cpso.on.ca/CPSO-Members/Peer-and-Practice-Assessment](http://www.cpso.on.ca/CPSO-Members/Peer-and-Practice-Assessment) (accessed 2017 Jul. 12).
13. Blackwell T. Operation job share: Surgeons split work to tackle 'unrelenting' problem of unemployment. *National Post* 2016 Feb. 9. Available: <http://news.nationalpost.com/news/operation-job-share-surgeons-split-work-to-tackle-unrelenting-problem-of-unemployment> (accessed 2017 Jul. 12).
14. Feindel CM, Ouzounian M, Latham TB, et al. The Canadian Society of Cardiac Surgeons perspective on the cardiac surgery workforce in Canada. *Can J Cardiol* 2012;28:602-6.
15. Fréchette D, Hollenberg D, Shrichand A, et al. *What's really behind Canada's unemployed specialists? Too many, too few doctors? Findings from the Royal College's employment study — 2013*. Ottawa (ON): The Royal College of Physicians and Surgeons of Canada; 2013. Available: [www.royalcollege.ca/rcsite/documents/health-policy/employment-report-2013-e.pdf](http://www.royalcollege.ca/rcsite/documents/health-policy/employment-report-2013-e.pdf) (accessed 2017 Jul. 12).
16. Lotfi S, Jetty P, Petrcich W, et al. Predicting the need for vascular surgeons in Canada. *J Vasc Surg* 2017;65:812-8.
17. Mewhort HE, Quantz MA, Hassan A, et al. Trainee perceptions of the Canadian Cardiac Surgery Workforce: a survey of Canadian cardiac surgery trainees. *Can J Cardiol* 2017;33:535-9.

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