A new era for resident duty hours in surgery calls for greater emphasis on resident wellness

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In Canada, physicians and surgeons in training have dual roles as learners and care providers. While they have graded responsibility for the provision of patient care, they are also training for independent practice. Over the last several decades and against the backdrop of rapid changes in patient care and surgical practice, there has been ongoing discussion and evolution in the residency education system and in residents' schedules. Historically, residents literally resided within the hospitals in which they provided care and received training. Today's health care and medical education systems are marked by shifts and broader changes in the characteristics of patient care, workflow and scheduling of residents and by an increasing professional diversity in the health care team. While residents of the 21st century do not live in the hospitals in which they work and train, they are nevertheless key members of health care delivery teams in our busiest hospitals, and it is in these hospitals that faculty members and training programs are tasked with ensuring the safe maturation of residents into independent physicians and surgeons.

The ongoing dialogue surrounding resident duty hours has led to an important debate in residency education worldwide. Until recently, there has been no cohesive approach, inclusive of multiple stakeholders, toward issues surrounding the regulation of resident duty hours in Canada. However, over the last 16 months, a new era of the resident duty hours debate has begun. Since March 2012, supported with funding from Health Canada, concerted efforts have been made to arrive at a pan-Canadian consensus on this important topic. This work has resulted in an unprecedented report, entitled *Fatigue, Risk and Excellence: Towards a Pan-Canadian Consensus on Resident Duty Hours*, launched earlier this month.[1]

The project was directed by a senior consortium, the National Steering Committee on Resident Duty Hours, comprising stakeholders from Canadian postgraduate medical education and representatives from collaborating partner organizations, including the Association of Canadian Academic Healthcare Organizations; the Association of Faculties of Medicine of Canada; the Canadian Association of Internes and Residents; the Canadian Medical Association; the Collège des Médecins du Québec; the Federal, Provincial, and Territorial Committee on Health Workforce; the Fédération des Médecins Résidents du Québec; and the Royal College of Physicians and Surgeons of Canada.

From the time of the project's inception, the National Steering Committee recognized the importance of identifying and addressing the challenges posed by resident duty hour regulations for training in surgical and procedural disciplines. To do so, the committee established a working group to review and compile the evidence related to the unique issues and challenges faced in surgical and procedural disciplines and the training of residents within such specialties. Chaired by a trauma and acute care surgeon who is the program director of the general surgery residency training program at the University of Toronto (N.A.), the group reviewed a large volume of research related to the effect of resident duty hour restrictions on the inter-related domains of patient safety, resident wellness and training and educational outcomes, as well as the

varying educational needs of surgeons who provide patient care across the large and diverse landscape of Canada. In addition to the Special Considerations for Procedural Disciplines working group, 5 other expert working groups (Patient Safety, Medical Education, Resident and Faculty Health and Wellness, Professionalism, and Health Systems Performance and Health Economics) were created to explore themes across all medical disciplines.

One of the key findings articulated in the project's final report pertains to the unique challenges faced by the surgical and procedural disciplines in an environment of strictly regulated resident duty hours. The literature reviewed by the Special Considerations for Procedural Disciplines working group highlighted a body of evidence suggesting suboptimal outcomes in surgical care delivery and surgical training when total or consecutive hours of resident duty are rigidly restricted, such as they have been in the United States and the European Union. Recent studies suggest increased complications in high-acuity surgical patients and declining performance on some certification examinations as a result of rigidly controlled resident duty hours.[2–9] The working group's analysis of the literature led to their conclusion that there is a vital need for more research on the effect of duty hours on surgical and procedural skills acquisition and performance and for the development of training and care delivery paradigms appropriate for higher-acuity patient care areas, where such research findings more frequently emerge. It would seem appropriate that procedural and surgical training programs work collaboratively with all stakeholder organizations to develop strategies that support excellent training outcomes, resident wellness and patient safety among these disciplines.

The final project report outlines a series of 5 principles and 5 recommendations for the future direction of resident duty hours in Canada with implications for all disciplines and residency programs. Rather than outlining specific restrictions regarding a set number of hours or shift length, chief in the National Steering Committee proposal is the need for a comprehensive, rigorous and tailored approach to the management and mitigation of physician and surgeon fatigue and burnout. Neither role — learner or health care provider — is well served if unchecked fatigue impairs cognitive functions or threatens professional satisfaction or health.

The Royal College of Physicians and Surgeons of Canada is dedicated to facilitating the implementation and supporting the launch of all recommendations proposed by the National Steering Committee across all residency programs and all disciplines. Such changes focus on fatigue mitigation and stress management during residency and highlight strategies that could involve new models of scheduling; greater protection for sleep at night; adjustments to resident workload; and broader, educational innovations, such as competency-based training and evaluation, that echo changes across the continuum of medical education. Also included as a key recommendation is the proposed development of a national consortium to study and disseminate new knowledge related to resident duty hour regulation. These and other innovations will support a transition to a new era of resident duty hours that maximizes education and patient care outcomes in the 21st century.

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