## **EDITORIAL**

Darren Beiko, MD, MBA, FRCSC;<sup>1</sup> Andrew E. MacNeily, MD, FRCSC, FAAP;<sup>2</sup> D. Robert Siemens, MD, FRCSC<sup>1</sup>

<sup>1</sup>Department of Urology, Queen's University, Kingston, ON, Canada; <sup>2</sup>Department of Urological Sciences, University of British Columbia, Vancouver, BC, Canada

Cite as: *Can Urol Assoc J* 2016;10(1-2):9-10. http://dx.doi.org/10.5489/cuaj.3592 Published online February 8, 2016.

The CUA exists to promote the highest standard of urologic care for Canadians and to advance the art and science of urology. r. Wong's article, published in a recent issue of *Canadian Urological Association Journal (CUAJ)* and entitled "The 10 000-hour rule" discusses expertise acquisition theory and its relevance to urology residency.<sup>1</sup> The article was quite prescient given the current and ongoing re-thinking of surgical education in North America.

K. Anders Ericsson first introduced and studied the role of deliberate practice in the acquisition and maintenance of expert performance in many domains, including music, chess, sports, and, more recently, medicine.<sup>2,3</sup> Dr. Ericsson's work led to the concept of the 10 000-hour rule, which was recently popularized by Malcolm Gladwell in his book "Outliers: The story of success."<sup>4</sup> As Dr. Wong explains in his *CUAJ* article, the premise of the 10 000-hour rule is that deliberate practice for at least 10 000 hours can facilitate the achievement of true expertise in virtually any skill.

In his article, Dr. Wong calculates the average urology resident spends 16 800 hours during his/her five-year residency, achieving expertise in urological surgery. Interestingly, Wong ends the article by asking, "Is 10 000 hours really enough?" This is a key question being wrestled with Herculean effort towards the implementation of competence by design (CBD); CBD is the Royal College of Physicians and Surgeons of Canada's multiyear initiative that introduces a competency-based medical education (CBME) model to residency programs across Canada.<sup>5</sup>

In 2014, the Royal College's first group of pioneering CBD specialties — medical oncology and otolaryngology/head and neck surgery — started the arduous process of tackling the major issues and addressing key barriers to the implementation of CBME-based residency programs. This process resulted in the development of a number of CBME tools and resources that are well-integrated with the new CanMEDS 2015 roles and framework.

This year, the second cohort of forward-looking CBD specialties — anesthesiology, forensic pathology, gastroenterology, internal medicine, surgical foundations, and urology — launched into the Royal College's CBD initiative. Yes, our specialty is right in the thick of the Royal College's CBD initiative! In fact, members of the Specialty Committee in Urology, clinician educators, urology program directors, invited guests, and Royal College staff met in November 2015 for a workshop to start the process of creating urology-specific milestones and competency-based training standards. Included in this process are the development of a draft pathway of competence requirements (PCR) and the definition of several entrustable professional activities (EPAs) that encompass the various urology-specific milestones. These EPAs are tasks or responsibilities to be entrusted to a trainee and usually require the integration of multiple competencies.<sup>6</sup> To be certain, CBME represents a new frontier in medical education.

The Royal College's CBD initiative and the new CanMEDS 2015 framework are heading straight for our 13 Canadian residency programs and will undoubtedly require a great deal of work by all those who train/educate residents in order to re-think our game plan. At the very least, there is a whole new vocabulary to understand! However, CBD does allow us an opportunity to try and figure out how to best assess the knowledge, skills, and attitudes we feel are key to becoming an expert genito-urinary surgeon. Perhaps it even gives us an opportunity to more accurately define what it is we expect a urologist to be capable of upon completion of residency now and in the near future. This process has and will continue to elicit spirited discussion from regional and subspecialty stakeholders at both academic- and community-based Canadian centres.

To answer Dr. Wong's question, we could look to CBD for some insight. CBD is theoretically able to impact the duration of training for some urology residents, depending on their ability to master certain skills. It is possible that some residents may not require the current minimum of a 60-month period of postgraduate training, whereas others may end up requiring quite a bit more to achieve expert performance.

So, is 10 000 hours enough? When considering the Royal College's CBD initiative, the answer can only be both yes (for some residents) and no (for others). In either case, CBD could allow us to better determine the right answer for any particular individual surgeon.

## References

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Correspondence: Dr. Darren Beiko, Department of Urology, Queen's University, Kingston, ON, Canada; beikod@kgh.kari.net



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