EDITORIAL We can't afford to be laggards

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It seems unlikely that a month can go by without an insightful article or commentary in the specialty or lay press focused on robots and the subsequent costs, benefits and potential harm in urological surgery. Those interested in diffusion of innovation theory will continue to have a field day dissecting the characteristics of the early adopters, the early and late majority as well as the laggards (which likely will include most of us in Canada). The enablers for the early adopters of robotic-assisted surgery are obvious given the impressive technology and, particularly, the market forces. The barriers are arguably more complex, including the knowledge gap around perceived benefit, the compatibility with attaining and maintaining competing skill sets and, of course, the reality of fiscal responsibility.

Global dissemination and reinvention of robotic-assisted surgery seem destined to creep along given the vagaries in cost of quality issues surrounding its flagship, robotic assisted laparoscopic prostatectomy (RALP). Multiple prospective observational studies, as well as population-based evaluations of outcomes across surgical approaches, hint at superior perioperative outcomes for RALP.[1] However, the questionable evidence from these studies has raised a call for higher research standards and a re-focusing on quality and comparative efficacy of all treatment approaches for prostate cancer.[2,3] Still, the issues facing us around this technology adoption are not going away soon: most of us will recall that the Third Law of Robotics is that "a robot must protect its own existence" (with all due credit to those who have first alluded to Isaac Asimov in this discussion).

Dramatic changes in technology have inspired educational innovation as well as debate in urological surgery. One could argue that a certain "learning curve" had been attained in most academic programs addressing the conversion and balance of open and pure laparoscopic surgery to suit the needs of residents. The introduction of robotic-assisted surgery will be more difficult to juggle. These educational concerns will have been naturally addressed in the United States due to more rapid adoption of robots outside of training centres with an unintended, although perhaps fortuitous, centralization of surgical care.[3] The substantially slower adoption of robotic technology in other countries, particularly in Canada, will not facilitate this transition as easily.

These issues are highlighted by two articles in this issue of the *CUAJ* which survey both trainees and educators in Canadian programs.[4,5] The respondents of these relatively small studies confirm a perceived variability in teaching and evaluation of technical skills in general, and intimate at misgivings around robotic experiences specifically. Although these observations are limited in scope and time, it would seem apparent that these issues need to be proactively addressed with a national dialogue. The Royal College of Physicians and Surgeons of Canada Objectives in Training (the benchmark for our educational standards) lists open prostatectomy as an "A" procedure, one that the trainee should be expert at completing independently, as compared to a laparoscopic prostatectomy which is listed as a "C" procedure. To be fair, these have been last updated in 2009 (an eternity it seems in technology advances) and undoubtedly the specialty committee in urology has been struggling with these training issues involving minimally invasive surgery in Canadian programs. However, given the rapidly moving target that is prostate cancer and the real need to improve the quality of our collective care, we need clear direction from our surgical and educational leaders. How do we best construct apposite and consistent guidelines for technical training, simulation and credentialing in a way that ensures trainees can attain, and maintain, their skills for the realities of practice now and in the future landscape of operative urology? In this, we can ill afford to be laggards.

References

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