

# Safe Surgery Saves Lives

## Briefing Note

January 9, 2009

### *Issue*

Safe Surgery Saves Lives is a challenge established by the World Health Organization's (WHO) World Alliance for Patient Safety aimed at improving the safety of surgery around the world. In June 2008, several Canadian organizations endorsed the WHO initiative, including:

- Accreditation Canada
- Canadian Anesthesiologist's Society
- Canadian Association of General Surgeons
- Canadian Medical Association
- Canadian Nurses Association
- Canadian Patient Safety Institute
- Operating Room Nurses Association of Canada
- Patients for Patient Safety Canada
- Royal College of Physicians and Surgeons of Canada

The Canadian Patient Safety Institute (CPSI) has led the adaptation of the campaign to the Canadian context, in collaboration with a Working Group representing fifteen Canadian organizations. The overall strategy has been to define a simple set of minimum standards for surgical care in the form of a list, create practical tools to assist teams with implementation, and develop a voluntary measurement system to monitor improved surgical safety.

### *Background*

Even though exact numbers to demonstrate the risks associated with operations are not yet available, the existing data show that 4%-16% of hospitalized patients suffer harm and surgery is involved in half of the cases.<sup>1,2,3,4,5</sup> The significant improvements in the safety of anesthesia made over the past three decades have contributed to the overall safety of surgery.<sup>6</sup> However, concern remains about the frequency of surgically-related complications. Several factors recognized as contributing to these complications include the increase in the population and the demand for surgery,<sup>7</sup> the shortage and diversity of healthcare human resources, and the continuously changing technologies and standards that add complexity to already intricate procedures. These factors cannot be considered excuses for less than optimal surgical safety.

The goal of the Safe Surgery Saves Lives campaign is to create a challenge for organizations to improve surgical safety. The World Health Organization lists ten objectives that safe surgery should achieve - objectives fully accepted by the Canadian Working Group.

1. The team will operate on the correct patient at the correct site.
2. The team will use methods known to avoid harm from the administration of anesthesia, while protecting the patient from pain.
3. The team will recognize and effectively prepare for life-threatening loss of the patient's airway or respiratory function.
4. The team will recognize and effectively prepare for the possibility of high blood loss.

5. The team will avoid inducing any allergic or adverse drug reaction known to be a significant risk for the patient.
6. The team will consistently use methods known to minimize the possibility of surgical site infection.
7. The team will work to avoid the inadvertent retention of instruments or sponges in surgical wounds.
8. The team will secure and accurately identify all surgical specimens.
9. The team will effectively communicate and exchange critical patient information for the safe conduct of the operation.
10. Hospitals and public health systems will establish routine surveillance of surgical capacity, volume, and results.

CPSI, in collaboration with the University Health Network in Toronto, one of the eight global pilot sites for the WHO checklist, has partnered with the following organizations to adapt and implement the Safe Surgery Checklist to the Canadian context:

Accreditation Canada  
Canadian Anesthesiologists Society  
Canadian Association of Pediatric Health Centres  
Canadian Medical Association  
Canadian Nurses Association  
GreenDot Global  
Nova Scotia Department of Health  
Operating Room Nurses Association of Canada  
Ottawa Heart Institute  
Patients for Patient Safety Canada  
Regina Qu'Appelle Health Region  
Royal College of Physicians and Surgeons of Canada  
Society of Obstetricians and Gynecologists  
Suresurgery  
University of Calgary

Individuals from the above organizations formed the Canadian Working Group and represent those involved in the provision of surgical services in Canada and experts from industries outside healthcare that could provide important transferable knowledge, for example, aviation and human factors. By the end of December 2008, the Working Group finished the first phase of the Canadian campaign – the adaptation of the WHO checklist. This tool will soon be available for download from [www.safesurgerysaveslives.ca](http://www.safesurgerysaveslives.ca). Any organization interested in using the tool may freely adapt the content to its specific needs.

### ***Next Steps***

During 2009, we will more formally launch the checklist at a workshop in Toronto, tentatively planned for March 4th. We will finalize the design of an implementation plan and tools that will help organizations to use the checklist. The Working Group, with the assistance of the Central Measurement Team at the University of Toronto, is also in the process of developing some standardized measurements for organizations to adapt and use, to help evaluate the success of the checklist at both the organizational and pan-Canadian level. We hope ultimately to show that we have been able to improve the safety of surgery for all Canadians.

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- <sup>1</sup> Brennan TA, Leape LL, Laird NM, et al. Incidence of adverse events and negligence in hospitalized patients: results of the Harvard Medical Practice study I. *New England Journal of Medicine*. 1991; 324 (6): 370-376.
- <sup>2</sup> Leape LL, Brennan TA, Laird N, et al. Incidence of adverse events in hospitalized patients: results of the Harvard Medical Practice Study II. *New England Journal of Medicine*. 1991; 324 (6): 377-384.
- <sup>3</sup> United Kingdom Department of Health. *An organization with a memory: report of an expert group on learning from adverse events in the NHS*. London: The Stationery Office; 2000. Retrieved January 9, 2009 from: [http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_4065086.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4065086.pdf)
- <sup>4</sup> Wilson RM, Runciman WB, Gibberd RW, et al. The quality in Australian health care study. *Medical Journal of Australia*. 1995; 163 (9): 458-471.
- <sup>5</sup> Baker GR, Norton PG, Flintoft V, et al. The Canadian adverse events study: the incidence of adverse events among hospital patients in Canada. *CMAJ*. 2004; 170 (11): 1678-1686. Retrieved January 9, 2009 from: <http://www.cmaj.ca/cgi/content/abstract/170/11/1678>
- <sup>6</sup> Leape LL. Error in medicine. *JAMA*. 1994; 272 (23):1851-1857.
- <sup>7</sup> Canadian Institute for Health Information. *Canadian Joint Replacement Registry (CJRR) 2006 Annual Report: hip and knee replacements in Canada*. Ottawa, ON: 2006. Retrieved January 9, 2009 from: [http://secure.cihi.ca/cihiweb/dispPage.jsp?cw\\_page=PG\\_387\\_E&cw\\_topic=387&cw\\_rel=AR\\_30\\_E](http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=PG_387_E&cw_topic=387&cw_rel=AR_30_E)