

The Pivotal Role of Critical Care and Surgical Efficiencies in Supporting Ontario's Wait Time Strategy¹: Part 3

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Introduction

Ontario's Wait Time Strategy (Strategy) – launched in November 2004 – is designed to improve access to healthcare services in the public system by reducing the time that adult Ontarians wait for services in five areas by December 2006: cancer surgery, cardiac revascularization procedures, cataract surgery, hip and knee total joint replacements, and MRI and CT scans (Trypuc et al. 2006a). Since the Strategy began, the Ministry of Health and Long-Term Care (Ministry) has provided significant additional funding to perform more cases with the full understanding that improving access by reducing wait times is not simply a matter of providing more money to do more volumes.² Rather, fundamental system and practice changes are needed to sustain improvements over the long term.

The Ministry has launched a number of initiatives to sustain wait time improvements. Significant efforts have gone into developing effective surgical patient flow and critical care

systems as part of the Strategy. Although these areas are not one of the five service priorities, it was recognized that surgical efficiencies and critical care are absolutely pivotal to support and sustain improved access and reduced wait times. Surgeries that are delayed or cancelled due to inefficient and ineffective surgical and critical care practices

result in increased wait times, backups in emergency services, longer lengths of hospital stay, staff stress, increased patient anxiety and a decrease in the quality and safety of patient care.

Currently, surgical and critical care services account for a significant proportion of healthcare expenditures.



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1 For Part 1 of Ontario's Wait Time Strategy, see Trypuc, Hudson, MacLeod 2006a. For Part 2 of the Strategy, see Trypuc, Hudson, MacLeod 2006b. <http://www.longwoods.com/product>.

2 Since the Strategy was officially announced in November 2004 to March 31, 2006, healthcare providers and hospitals have performed 8% more CT scans, 11% more cancer surgeries, 16% more cataract surgeries, 17% more cardiac surgeries, 28% more hip and knee joint replacements and 42% more MRI scans.

- Canadian operating rooms accounted for about \$2 billion in healthcare expenditures in 2001/02 (Canadian Institute for Health Information 2005). If operating room-related services are taken into account (e.g., inpatient nursing, support services), this percentage is higher.
- Critical care is expensive due to the high staff/patient ratios and extensive use of technology. Although the cost of critical care to the Ontario economy is unclear, critical care cost the United States economy 4.2% of the national health expenditure or 0.56% of the gross domestic product in 2000 (Halpern et al. 2004). From 1985 to 2000, the daily cost of operating an ICU bed increased 126% (Halpern et al. 2004).

The best use of surgical and critical care resources needs to be made, especially since the demand for these services is increasing. The aging population uses disproportionately more surgical and critical care services, new drugs and life-support technologies are making more treatments possible and there are increasing public expectations to “fix or replace” parts of the body and “maintain life at any cost.” Improving surgical flow

and critical care systems will not only maximize the use of public funds, but will help improve access and reduce wait times for all surgeries.

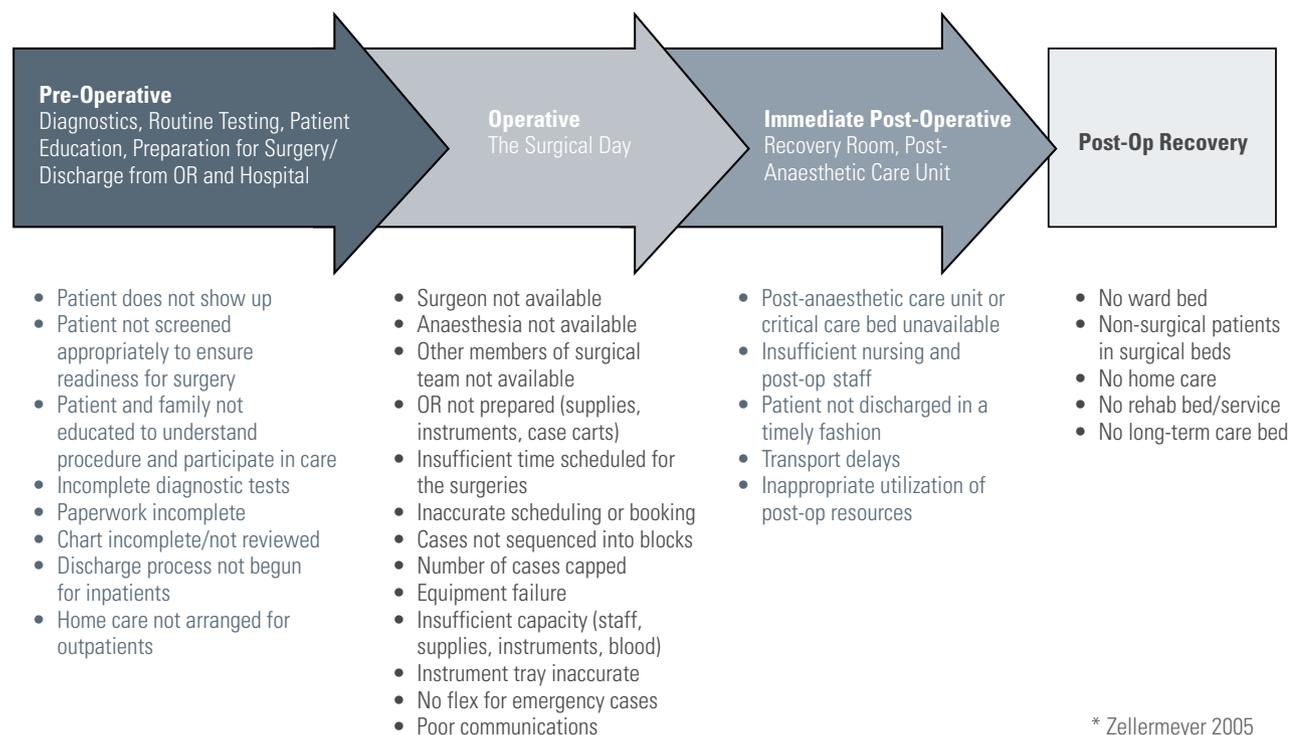
This paper examines Ontario’s efforts to develop effective surgical patient flow and critical care systems to help sustain wait time improvements over the long term. The article begins by summarizing the major findings of two recent reviews of surgical processes and critical care in Ontario, followed by an overview of the government and healthcare community’s subsequent action on critical care and surgical efficiencies.

Major Review Findings on Surgical Efficiencies and Critical Care in Ontario

The Surgical Process Analysis and Improvement Expert Panel³

The Ministry created the Surgical Process Analysis and Improvement Expert Panel (Panel) as part of Ontario’s Wait Time Strategy to identify best practices in the peri-operative stage (i.e., pre-operative, operative and immediate post-operative care).⁴ The Panel – made up of leaders in healthcare administra-

Figure 1. Potential blockages along the peri-operative stage*



3 See Zellermeier 2005 for the complete report of the Surgical Process Analysis and Improvement Expert Panel (www.ontariowaittimes.com).

4 See Trypuc et al. 2006b for an overview of Ontario’s Wait Time Strategy’s expert panels.

tion, peri-operative processes, surgery, materials management and academe – identified potential blockages that can lead to surgical delays, cancellations and inefficiencies (Figure 1). In addition, the Panel conducted a hospital survey to assess the use of best surgical practices in Ontario. The survey found that 30% of hospitals do not have a system for sequencing patients for the surgical day, 19% do not track start times, 27% do not track cancellations, 29% do not track delays and 44% do not coordinate post-operative rehabilitation prior to surgery.

The Panel recognized that surgical efficiencies will be maximized if there is sufficient capacity, the capacity is used effectively and efficiently, and processes are in place to address temporary imbalances of supply and demand that could overwhelm the surgical system. The Panel identified nine components of a provincial peri-operative plan.

1. An Accountability Framework

Clear accountabilities are needed to manage valuable peri-operative resources at the individual hospital and Local Health Integration Network (LHIN) levels.

- Individual hospitals need: (1) clear accountability frameworks in which hospital boards and Chief Executive Officers are accountable for governing and managing the efficient and safe use of the organization's peri-operative resources; (2) an interdisciplinary Peri-Operative Leadership Team responsible for the ongoing functioning of an effective peri-operative service; and (3) a larger inter-disciplinary group that supports and advises the Team.
- Ontario's 14 LHINs need to measure the surgical performance of their hospitals using agreed-upon benchmark targets, report a minimum data set of quality and efficiency indicators to the public, and plan and allocate resources accordingly.

2. Peri-Operative Process Mapping

Many hospitals do not appear to understand their peri-operative processes and, as a result, are using ineffective processes, wasting precious resources and contributing to long waits for surgery. Hospitals need to map their peri-operative processes to help predict the maximum patient flow throughout the day, identify bottlenecks under various assumptions and systematically identify opportunities for improvement.

3. Benchmark and Best Practice Targets

Surgical targets need to be used to evaluate how a hospital is performing compared to its peers, and to identify areas for surgical improvements. The Panel noted that since Ontario's hospitals do not collect and assess surgical benchmark targets provincially, it is difficult to make surgical efficiency improvements and link funding with performance.

Peri-operative best practice targets can improve efficiencies and patient safety. The Panel identified 11 targets for pre-screening,

... surgical efficiencies will be maximized if there is sufficient capacity, the capacity is used effectively and efficiently, and processes are in place to address temporary imbalances of supply and demand

education and discharge planning before surgery; same day admissions and outpatient surgery; similar scheduled and actual OR times; similar scheduled and actual surgery times; surgical start time as scheduled; emergency surgeries reflecting "true emergencies"; block booking of similar cases; and surgeons working in consolidated blocks of time.

Supply chain best practice targets focus on organized and effective processes that manage how products are selected and purchased. The Panel identified eight targets for sufficient instrumentation and supplies to support the OR schedule; separate dedicated physical supports for clean and soiled instrumentation and supplies; systems to manage instrumentation, and cleaning and sterilization processes; management of an inventory supply replenishment process; limited but sufficient range of instrumentation and vendors to enable good choice and minimize inefficiencies and confusion; access management policies for vendors; standardization of custom packs, case carts and pick lists by procedure or program rather than by individual physician; and value analysis of new peri-operative technologies.

Best practice targets for scheduling focus on allocating operating resources effectively. Hospitals need to allocate resources by considering patient need (wait time and patient urgency), community priorities as determined by the LHINs, the strategic priorities of the organization, and sufficient operating time for physicians. Hospitals also need to schedule urgent surgical cases as part of their planned activity to help avoid unnecessary patient waits, ensure that instruments are ready and support prompt discharges of in-patients from the surgical floor.

4. Information Technology and Management

The Panel recommended

- *operating room scheduling systems* to schedule and manage all the resources needed to complete a surgical case
- *a peri-operative electronic patient record system* that links to, or is part of, the hospital's electronic patient record
- *a peri-operative supply chain management system* to make better use of resources by managing the supply chain
- *a peri-operative simulation system* to enable the peri-operative manager to model the impact of potential changes on OR operations and patient flow
- a minimum data set to monitor and improve peri-operative performance

5. Human Resources

Peri-operative services are being impacted by health human resource shortages in healthcare. The Panel recommended expanding *surgical resources* by supporting

- roles that complement the surgical specialties (e.g., Registered Nurse First Assistants)
- a standardized Peri-operative Technician role open to Registered Practical Nurses and other healthcare personnel, with appropriate training
- interdisciplinary peri-operative teams that include other healthcare providers in addition to surgeons, anaesthesiologists and nurses

The Panel also recommended expanding *anaesthesia resources* by supporting

- advanced practice roles that complement anaesthesiologists (e.g., GP Anaesthetists, Anaesthesia Assistants and Acute Care Nurse Practitioners with special training in anaesthesia)
- teams that provide anaesthesia services (e.g., combination of anaesthesiologists, anaesthesia assistants, advanced care nurse practitioners, respiratory therapists and others, depending on the hospital and surgery)

6. Education

The Panel recommended a provincial standardized operating room nursing education program that uses innovative teaching methods, hospital-based peri-operative education resources to help nurses maintain surgical clinical knowledge and skills, and support for technical skills laboratories and high-fidelity simulators at all Academic Health Science Centres.

7. Funding

Some funding arrangements do not support efficiencies and, in fact, promote surgical inefficiencies. For example, fee for service discourages the use of innovative team models and the use of other care providers who must be paid out of hospital global budgets. In addition, inadequate funding for instrumentation and supplies can lead to supply chain inefficiencies. Furthermore, complex surgical patients require more time and resources than the “average” patient. The Panel recommended a funding review to support the efficient and effective use of OR resources.

8. The Organization of Regional Surgical Services to Increase Efficiencies

Ontario's LHINs need to develop regional surgical systems that

promote efficiencies, safety and meet local needs. Options for regional systems include surgical centres of excellence, specialized surgeries in a few hospitals and less complex, higher-volume surgeries in a wider range of hospitals.

9. Peri-Operative Improvement Coaching Teams

The Panel recommended support for Peri-Operative Improvement Coaching Teams to help hospitals improve peri-operative efficiencies. Made up of peers with experience in effective management of peri-operative resources, teams would assist hospitals to plan, map their processes, analyze the results and identify areas for improvement, as well as determine optimal human resources and scheduling.

The Ontario Critical Care Steering Committee⁵

The Ontario Critical Care Steering Committee – made up of critical care specialists, physicians, nurses, respiratory therapists, hospital managers, ethicists, researchers and others – highlighted the fact that an effective critical care system is necessary to support Ontario's Wait Time Strategy (as well as other important initiatives and services). Hospital surveys conducted for the Committee found wide variations in how critical care is defined, managed and staffed, and how critical care quality and costs are determined. It was estimated that if Ontario maintained current critical care patterns of practice, it would need an unsustainable 25–50 more critical care beds annually to meet growing demands. The Committee concluded that any additional critical care funding needs to be strategically invested and linked with more efficient and effective use of critical care resources. Recommendations focused on the three phases of the adult critical care patient's journey and a number of systemic elements of adult critical care services (Figure 2).

The Adult Critical Care Patient's Journey

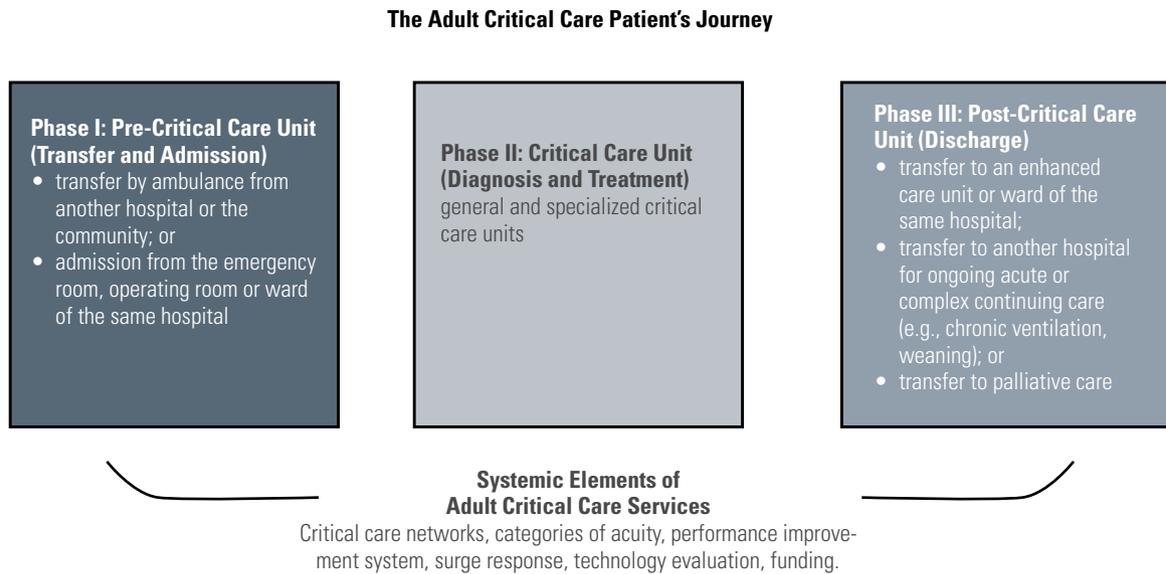
Phase I: Pre-Critical Care Unit (Transfer and Admission)

Before patients enter critical care, they are either transferred by ambulance from another hospital or the community, or they are admitted from the emergency room, operating room or ward room of the same hospital. In addition to recommending that the province develop an inter-facility patient transfer plan, the Committee recommended two other initiatives to improve transfer and admission to critical care.

- *Critical Care Response Teams* – also known as medical emergency, rapid response or outreach teams – are made up of experienced healthcare professionals who provide critical care expertise outside the traditional intensive care unit. Teams can be called at any time in the hospital to help care for

⁵ See Bell, R. and L. Robinson (co-chairs) 2005 for the complete report of the Ontario Critical Care Steering Committee and supporting literature references (www.health.gov.on.ca/critical_care).

Figure 2. Focus of the Ontario Critical Care Steering Committee's recommendations*



* Bell and Robinson 2005

a patient located anywhere in the facility who appears acutely ill and in danger of an adverse event. Teams can effectively reduce demand for critical care units by increasing hospital-wide awareness of critical incidents that need rapid response, providing preventive measures before patients become critically ill, minimizing inappropriate utilization and preventing readmission by following up with patients discharged from intensive care.

- *Ethical issues* in critical care need to be formally addressed. Considerable anecdotal evidence suggests that critical care in Ontario is often provided to patients who do not, or can no longer, benefit from this level of care. The Committee recommended that a process be initiated to obtain a common understanding of the purpose of critical care, who decides who gets critical care, the criteria that should be used to guide this decision and how best to communicate this information to the public and patients.

Phase II: Critical Care Unit (Diagnosis and Treatment)

A large body of literature indicates that management of critical care areas impacts on access, patient outcomes, mortality rates, costs, lengths of stay and effective and efficient resource use. This is especially important when units are filled to capacity

and access is limited. In addition to improving access through electronic ICU technology in remote hospitals, the Committee recommended three major improvements.

- There is compelling research evidence to show that an *intensivist-led management model* – in which an intensivist directs the care of all patients admitted to the ICU and is responsible for all ICU admission and discharge decisions – improves access, quality, patient safety and the effective and efficient use of critical care resources. For hospitals that have a lower level of intensive care capability, one person – ideally an intensivist or a specialist with intensivist training or experience – should coordinate access to and be the most responsible physician for intensive care units. At the time of the Committee's report, an intensivist-led management model was not widely used in Ontario. Appropriate and sufficient funding and professional issues have hampered widespread implementation of this model in this province and elsewhere to the detriment of patient care.
- Each hospital needs to establish a *single point of accountability* for its critical care areas regardless of acuity level. The Committee noted that critical care resources – ranging from high-intensity beds to enhanced care/intermediate care beds

6 The committee's report noted that Severe Acute Respiratory Syndrome (SARS) highlighted the weaknesses of Ontario's critical care services, and the inability of the system and individual hospitals to respond appropriately to surges or sudden demands for care.

– may not be perceived as a hospitalwide resource. Anecdotal evidence suggests that this impacts on the ability of a hospital to use all its critical care resources as efficiently and effectively as possible, and may compromise patient access to critical care.

- Critical care is a highly intensive, team-based, *human resource* specialty. Although advances in technology have transformed many aspects of healthcare, technology cannot substitute for competent, experienced and appropriately trained critical care staff. The Committee recommended adopting core staffing ratios, establishing provincially recognized critical care human resource standards and core competencies, developing recruitment and retention strategies (e.g., critical care internships, enhanced mentorship and team/leadership training), developing an appropriate compensation system for critical care physicians, evaluating new critical care roles and supporting regulatory changes in the scopes of practice for healthcare professionals working in critical care to maximize their knowledge and skills.

Phase III: Post-Critical Care Unit (Discharge)

Discharge from critical care can include transfer to an enhanced care unit or ward of the same hospital, to another hospital for ongoing acute or complex continuing care (e.g., chronic ventilation, weaning), or to palliative care. The Committee's recommendations to develop critical care response teams and a provincial inter-facility patient transfer plan will improve post-critical care. Furthermore, the Committee recommended the expansion of chronic ventilated beds and innovative ventilation services such as home ventilation to meet the needs of these patients.

Systemic Elements of Adult Critical Care Services

The Committee made recommendations on a number of systemic elements including response to minor, moderate and major surges,⁶ technology evaluation, and critical care costing. The Committee also recommended the following points.

- *Critical care networks* need to be established using LHIN boundaries. Guided by a clinician lead, each network should provide a defined level of service either on its own or in partnership with another LHIN. Roles and responsibilities of providers need to be outlined in accountability agreements, along with standards and protocols for patient transfers between hospitals and LHINs.
- *Critical care services* and patients need to be *categorized by level of acuity*. This will establish expectations for the level of care each hospital is to provide and the requisite skills and resources.
- *A provincial critical care performance improvement system* needs to be developed and used by LHINs, hospitals and clinicians. This will help support greater integration and coordination of

critical care services across the system, promote best practice standards in critical care units, identify areas where hospitals can make more effective and efficient use of their critical care resources, help promote best clinical practice standards and identify potential clinical "problem" areas that need to be addressed.

Action on Critical Care and Surgical Efficiencies

The advice provided by the Surgical Process Analysis and Improvement Expert Panel and the Ontario Critical Care Steering Committee has resulted in tangible change that is influencing both policy-makers, decision-makers and practitioners in the province. The surgical expert panel continues to provide advice on operationalizing its original recommendations, and the Ministry established the Critical Care Expert Panel to further the work of the Critical Care Steering Committee.

Based on the advice of these two expert panels, the Ministry has taken action and is implementing a number of major initiatives to improve surgical efficiencies and critical care in Ontario. On the advice of the Critical Care Expert Advisory Panel, the Minister of Health and Long-Term Care announced Ontario's Critical Care Strategy on January 30, 2006 with \$90 million in funding to support a wide range of initiatives. Furthermore, by the end of the fiscal year 2005–2006, the Ministry had already invested \$10.7 million to support surgical efficiencies and innovation based on the advice of the Surgical Process Analysis and Improvement Expert Panel.

Targeted Action Common to Surgical Efficiencies and Critical Care

Targeted action common to both surgical efficiencies and critical care include a performance management information system, performance improvement coaching teams, and human resource initiatives.

Performance Management Information System

The development of surgical and critical care performance management information systems are part of a standardized Provincial Health IM/IT Strategy, that includes the Wait Time Information System and the provincial client registry or Enterprise Master Patient Index (Figure 3). For surgical and critical care data, the focus is to simplify collecting and submitting data by interfacing with existing systems, where possible (e.g., hospital systems, Canadian Institute for Health Information, Critical Care Research Network or CCR-Net).

The provincial *Surgical Information System* will track hospital peri-operative flow and productivity, help identify bottlenecks that lead to longer wait times and focus efforts on areas that need to be improved. The actual information system is part of a broader *Surgical Efficiencies Program* that includes selecting performance indicators, generating site-specific, peer group,

LHIN and provincial reports on surgical activity and performance, and developing standard provincial performance benchmarks to assess all surgical programs in Ontario. Data elements that are being considered include surgery start time accuracy, hours scheduled for surgery versus hours actually used, turnover time between surgeries, operating room downtime, length of surgery, surgical drug costs and patient outcomes. Hospitals receiving wait time funding will be required to participate in the program, with all hospitals eventually being required to do so. A vendor has been selected to develop the program. System development and data collection will begin in a small group of hospitals in the fall of 2006 with provincial roll-out in 2007.

The *Critical Care Information System* (CCIS) will be used to track critical care activity across Ontario as well as assess the performance and delivery of quality services. Site-specific, peer group, LHIN and provincial reports will be developed. The initial core data set that is being considered focuses on facilitating administrative decisions on managing access and allocating resources appropriately to meet patient need. Data elements that are being considered include the source of ICU admissions, admitting diagnosis, critical care beds available to accept patients and life-support interventions. CCIS is being integrated with the provincial CritiCall system used by hospitals to locate critical care beds for patients being transferred by ambulance. A vendor has been selected to develop the program.

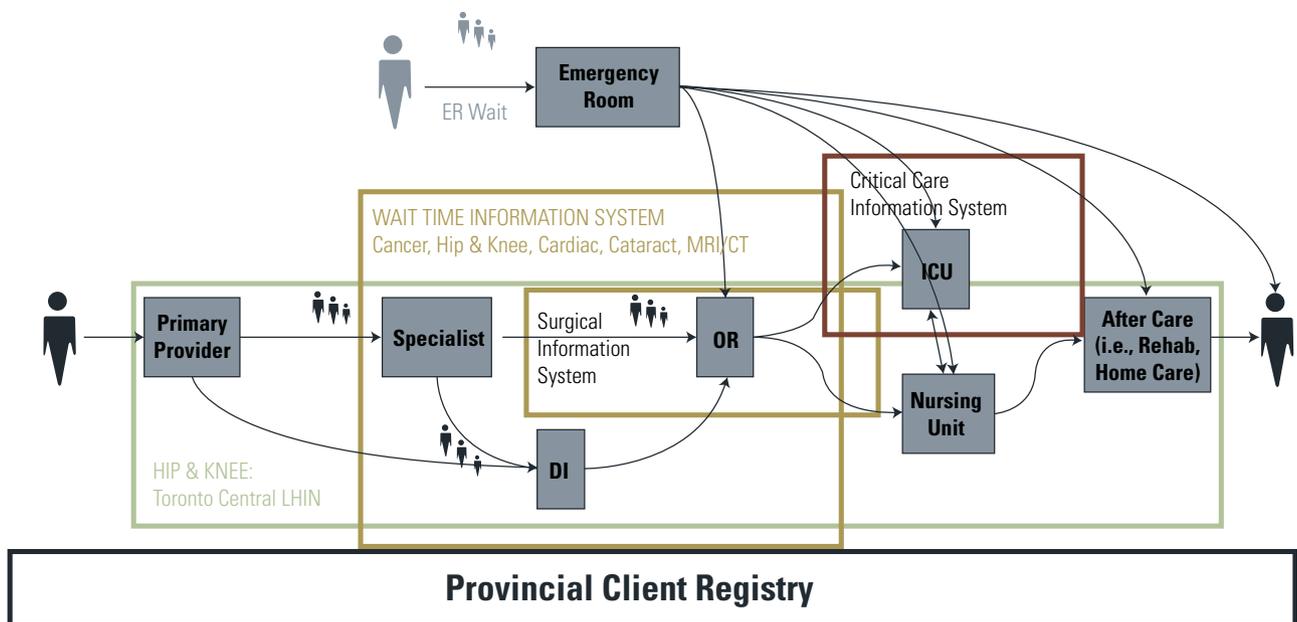
The system will track hospital peri-operative flow and productivity, help identify bottlenecks that lead to longer wait times and focus efforts on areas that need to be improved.

CCIS will be implemented in seven lead hospitals to begin with (in January 2007) with provincial roll-out in 2007 in all hospitals that receive funding for critical care services.

Performance Improvement Coaching Teams

The Ministry has supported the creation of peri-operative and critical care coaching teams whose overall objective is to improve access to quality care by making systems more efficient and supporting providers to use standardized processes and best practices. Coaching teams are made up of peers with experience in effective management of a particular area who work collaboratively with a group to improve its performance. This includes clearly defining performance and quality improvement objectives, assessing the current state, identifying and targeting areas for improvement, providing support and guidance on how to achieve improvements, evaluating outcomes and identifying additional actions that may be required.

Figure 3. IM/IT strategy to support access and productivity improvement *



* Two initiatives that are part of the overall IM/IT Strategy but are not addressed in this paper include information systems to: (1) measure emergency room waits and (2) track patient access and flow in a Toronto Central LHIN hip and knee joint health and disease management model.

Similar processes are being used to develop the peri-operative and critical care coaching initiatives. Committees in each area have developed team objectives, determined the criteria for team members, selected coaches and developed coach training (curriculum, tools, templates) and evaluation processes. Hospital CEOs were asked to submit letters of interest for a peri-operative or critical care coaching team visit. In the future, hospitals will be selected based on their performance and the need for improvement.

Specific progress on each coaching team initiative is noted below.

- *Peri-operative Coaching Teams* are generally made up of four people, depending on the hospital: a physician (surgeon or anaesthesiologist with leadership experience), one-to-two senior administrators responsible for peri-operative program and one-to-two operating room leaders or managers. Coaches spend a day and a half observing the peri-operative staff and processes, and interviewing key individuals. Another day and a half is taken to coach the peri-operative team to develop an action plan with timelines and accountabilities. The action plan focuses on the best practices identified by the Surgical Process Analysis and Improvement Expert Panel. An evaluation report is provided to the hospital, LHIN and Ministry. Within nine months, at least one of the coaches will evaluate the hospital's success in implementing the action plan. As of June 2006, 23 peri-operative coaches have been trained, 13 hospitals have received peri-operative coaching and 18 additional hospitals have expressed interest.
- Six *Critical Care Coaching Teams* are being developed in the areas of: (1) critical care service appraisal; (2) improving end-of-life decision-making; (3) establishing an intensivists-led ICU management model; (4) critical care surge capacity planning; (5) inter-unit coordination and improving patient flow; and (6) leadership and team building. Team leads have been identified and the teams are being selected and trained. A total of 41 hospitals applied to have a critical care coaching team work with them to improve their critical care services. All 41 hospitals have been scheduled for team visits.

Human Resource Initiatives

The Ministry has supported a number of human resource initiatives to improve access to surgery and critical care resources, and recruit and retain healthcare providers in these areas.

In surgery, innovative roles in anaesthesia are being promoted in partnership with the government's Health Human Resources Strategy. Expanded practice roles with anaesthesia skills are being explored along with the use of anaesthesia teams and anaesthesia assistants. For example, The Michener Institute for Applied Health Sciences (based in Toronto) is now offering education towards basic and advanced graduate certificates as an

anaesthesia assistant. In addition, the Kensington Eye Institute – a not-for-profit cataract surgery centre established in January 2006 as an independent health facility and affiliated with the University of Toronto – has a full-time anaesthesiologist who supervises advanced practice nurses with anaesthesia skills in the operating rooms.

In critical care, the Ministry has provided significant support for physicians and nursing.

- Intensivist training spots in Ontario were increased from 8 to 18 per year. The first class of 18 physicians began their training in July 2006.
- In 2006/07, over 100 physicians in community hospitals will receive advanced resuscitation training to help improve patient outcomes and avoid unnecessary patient transfers (in partnership with the Canadian Resuscitation Institute).
- A \$4.5 million annual Critical Care Nursing Fund will be initiated in September 2006. This funding will cover training for over 200 critical care nurses each year.
- The Critical Care Expert Panel struck a Critical Care Nurse Training Standards Task Group to identify adult critical care nurse core competencies and training standards for Ontario. The task group's final report was submitted to the Ministry in June 2006 for consideration.
- In June 2006, the Ministry's Critical Care Secretariat and Nursing Secretariat issued a Call for Applications to educational institutions to become a hub of excellence for critical care nursing education in Ontario. The successful applicant will manage a critical care nursing e-learning program that will include interactive, Web-based teaching modules and hands-on training sessions delivered at local community colleges and hospitals.

Targeted Actions Unique to Surgical Efficiencies

A number of recommendations made by the Surgical Process Analysis and Improvement Expert Panel focused on improving how hospitals organized their peri-operative services. Some of these improvements have been included in hospital purchase service agreements as conditions of receiving wait time funding.

- Hospitals will have a group responsible and accountable for planning and managing operating theatre performance and collect data to improve OR efficiency.
- Hospitals will capture information on surgical cancellations, delays, unplanned OR closures and surgical pre-assessment.
- Hospitals will collaborate with surgeons to develop a surgical access management process that provides patients with equitable access to surgeons, regardless of which surgeon the patient may have been referred to originally.
- Hospitals will work with the Wait Time Strategy to improve surgical efficiencies.

Targeted Actions Unique to Critical Care

In addition to the critical care initiatives outlined above, the strategy includes funding to support the following initiatives:

- Over 30 additional intensive care unit beds, four step-down beds and six chronic assisted ventilatory beds will be opened by the end of 2006/07.
- A total of 26 Critical Care Response Teams (or Medical Emergency Teams) made of intensive care physicians, nurses and respiratory therapists will be trained and available 24/7 to provide critical care skills and expertise throughout the hospital. Funding has also been provided for a four-site demonstration project to test the effectiveness of these teams in paediatric settings.
- The Ministry and the LHINs have appointed critical care LHIN leaders to oversee the delivery of critical care services within and across LHINs. Key deliverables for LHIN leaders in 2006/07 include a detailed inventory of critical care resources and surge planning in each LHIN, and a critical care surge leadership plan at the hospital, LHIN and provincial levels.
- A green paper is being prepared analyzing legal and ethical issues in critical care. Provincial critical care admission and discharge guidelines will also be prepared early in 2007.
- The Critical Care Expert Panel struck a Chronic Ventilation Strategy Task Group to: (1) identify short-term strategies to facilitate the transfer of medically stable, chronically ventilated patients out of ICUs into more appropriate care settings and (2) prepare a detailed chronic ventilation care strategy. The task group's final report was submitted to the Ministry in June 2006 for consideration.

Concluding remarks

Although surgical efficiencies and critical care are not one of the top five service priorities in Ontario's Wait Time Strategy, they are absolutely pivotal to support and sustain improved access and reduced wait times. Data submitted by Ontario's hospitals indicates that wait times for cancer surgery, cardiac surgery, cataract surgery, hip and knee joint replacements, and MRI and CT scans have decreased since the Wait Time Strategy was officially launched in November 2004.⁷ We hypothesize that improvements in surgical and critical care processes to date have contributed to these reduced wait times. For example, hospitals that have had peri-operative coaching team visits have unanimously reported the experience to be very useful and a positive catalyst for change. Hospitals have found it valuable to participate in identifying solutions, setting targets, developing action plans and working with peer coaches who face similar challenges in their working lives.

In the next few years, the surgical and critical care performance management information systems will provide tangible

evidence on whether the initiatives presented in this paper are changing inefficient and ineffective patterns of practice, making better use of resources and improving patient care. At this point, we are predicting that the significant amount of activity will have a fundamental impact on the system in the long term. This wide range of initiatives – including performance management information systems that incorporate the use of provincial best practice standards, peer coaching teams focused on improving hospital operations and patient access, investments to educate and support valuable health human resources, surgical improvements as a condition of wait time funding, critical care response teams that provide critical care skills and expertise throughout the hospital and LHIN-based leadership and accountability – will play a pivotal role in improving access and sustaining Ontario's wait time gains into the future.

References

- Bell, R. and I. Robinson (co-chairs). 2005 (March). *Report of the Ontario Critical Care Steering Committee*. Submitted to the Ontario Minister of Health and Long-Term Care.
- Canadian Institute for Health Information. 2005. *Health Care in Canada* 5.
- Halpern, N.A., S.M. Pastores and R.J. Greenstein. 2004. "Critical Care Medicine in the United States 1985–2000: An Analysis of Bed Numbers, Use and Costs." *Critical Care Medicine* 32(6): 1254–59.
- Trypuc, J., A. Hudson and H. MacLeod. 2006a. "Ontario's Wait Time Strategy: Part 1." *Healthcare Quarterly* 9(2): 44–51.
- Trypuc, J., A. Hudson and H. MacLeod. 2006b. "Expert Panels and Ontario's Wait Time Strategy: Part 2." *Healthcare Quarterly* 9(3): 43–49.
- Zellermeier, V. (chair). 2005 (June). *Report of the Surgical Process Analysis and Improvement Expert Panel*. Submitted to the Ontario Minister of Health and Long-Term Care.

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⁷ See www.ontariowaittimes.com.