

## Chapter 4

### Section 4.09

# Hospitals—Management and Use of Surgical Facilities

Follow-up on VFM Section 3.09, *2007 Annual Report*

## Background

Ontario's public hospitals are generally governed by a board of directors that is responsible for the hospital's operations and for determining the hospital's priorities in addressing patient needs in the community. In the 2008/09 fiscal year, the total operating costs of Ontario's more than 150 hospitals were about \$22 billion (\$19 billion in 2006/07), of which about 85% was funded by the Ministry of Health and Long-Term Care.

According to the Ministry, about 844,000 surgical procedures and 135,000 other diagnostic procedures (such as biopsies and imaging) were performed in hospital operating rooms across Ontario in 2006/07, at a cost of about \$1.2 billion. This cost includes nurses' salaries and medical supplies, but excludes most physicians' services, such as surgeons' services, which the Ministry pays for through the Ontario Health Insurance Plan.

In our *2007 Annual Report*, we noted that the Ministry had introduced several good initiatives to help hospitals improve surgical processes, including a pilot project to centralize patient referral and assessment, which provides patients with the

option of choosing a surgeon with the shortest wait list and assesses whether surgery is the most appropriate course of action. However, the Ministry did not have information available on the total number of operating rooms in Ontario, the hours operating rooms were in use, the total number of patients waiting for surgery, or the type of surgery they were waiting for.

Our audit focused on the management and use of surgical facilities with respect to meeting patient needs. We conducted work at three hospitals—Toronto East General Hospital, St. Joseph's Healthcare Hamilton, and Sudbury Regional Hospital—that performed about 44,000 surgical procedures in their 42 operating rooms during the 2006/07 fiscal year. We concluded that the hospitals were managing the use of their surgical facilities well in some areas, such as implementing procedures to prioritize urgent surgical cases and screen elective patients prior to surgery. However, the three hospitals needed to better utilize their surgical facilities to reduce patient wait times. Our observations also included the following:

- An average of 12% of operating rooms at the hospitals we visited were not used most weekdays in 2006, and generally were not used for elective surgeries on weekends or statutory

holidays. As well, for approximately nine weeks in summer 2006, only about 60% of operating rooms were used, owing primarily to planned vacation-time closures.

- At the hospitals we visited, each surgeon's operating room time was based primarily on the time allocated to that surgeon in prior years, rather than on other factors such as patients' needs and hospital priorities.
- Most urgent emergency cases had their surgery within hospital-established time frames at the two hospitals we visited that tracked this information, although about 13% of non-emergency but urgent (for example, acute appendicitis) patients did not.
- Despite clinical guidelines indicating that most medically stable patients undergoing low-risk surgeries do not require a pre-operative electrocardiogram (ECG) or chest x-ray, research indicated that the rate of ECGs and chest x-rays conducted in Ontario hospitals prior to surgery varied significantly for patients undergoing low-risk procedures.
- None of the hospitals we visited followed up with the applicable surgeon—as required by the Ministry—to ensure that patients waiting longer than the established 10-month benchmark were reassessed. At one hospital, 67% of low-priority hip-replacement patients waited longer than their targeted time frame for surgery, with some patients still not having had their surgery after three years.
- The timeliness of surgery varied significantly in some cases, depending on the hospital or Local Health Integration Network. For example, some hospitals were able to perform lower-priority cancer surgeries more quickly than other hospitals were able to perform more urgent cancer surgeries.
- At two of the hospitals we visited, about 13% of the in-patient beds were occupied by individuals no longer requiring hospital care but who were waiting for alternative accommodation. This reduced the number of post-

operative beds available, sometimes resulting in surgical patients having their surgeries delayed or cancelled.

- The Ministry's Provincial Infectious Diseases Advisory Committee indicates that "flash sterilization" (a quick sterilization process for surgical instruments) should be used only in emergency situations. However, we noted that this was not always the case, as flash sterilization was often used in non-emergency situations, such as when there was a shortage of instruments.

In addition, we acknowledged that there would be challenges—for the hospitals, as well as for the Ministry and Local Health Integration Networks—in addressing the observations and recommendations in our report, especially those that would require the co-operation of all key stakeholders, including fee-for-service physicians who are paid by the Ontario Health Insurance Plan (OHIP), not the hospitals.

We made a number of recommendations for improvement and received commitments from the hospitals we visited and the Ministry that they would take action to address our concerns.

## Status of Recommendations

The three hospitals we conducted work at, as well as the Ministry, provided us with information in spring and summer 2009 on the status of our recommendations. According to this information, significant progress has been made in implementing most of the recommendations we made in our *2007 Annual Report*, although it will take several years for some to be fully implemented. For example, it will be a few years before some projects and initiatives—such as those relating to reducing the number of patients who no longer need hospital care but are occupying hospital beds—are completed. The status of the actions taken by the hospitals, and the

Ministry where applicable, is summarized following each recommendation.

## ACCESSING SURGERY

### Information on Operating Room Availability and Use

#### Recommendation 1

*To better ensure the efficient use of operating rooms to meet patient needs, the Ministry of Health and Long-Term Care, in conjunction with the Local Health Integration Networks and hospitals, should obtain and review information on the number of operating rooms across Ontario and the extent of their use.*

#### Status

The Ministry indicated that, as of March 2009, it was tracking the number of operating rooms for all hospitals through the Ontario Hospitals Reporting System/Management Information System. Furthermore, the Ministry indicated that it was providing the Local Health Integration Networks with training on the system and in how to interpret reports on hospitals' operating room utilization.

As well, the Surgical Efficiencies Target Program, a web-based tool designed to track and monitor predetermined performance indicators, including operating room availability and use, was implemented in all hospitals participating in the Ministry's Wait Time Strategy in 2007/08. Participating hospitals (including the three visited during our audit) enter operating room data into this system. This has enabled them, as of March 2009, to compare their results to provincial targets to identify areas for improvement.

### Allocation of Operating Room Time to Surgeons

#### Recommendation 2

*To better ensure the most effective use of surgical resources and that patient needs are met in as timely a manner as possible, hospitals should adopt the recommendations of the Ministry of Health and Long-Term*

*Care's Surgical Process Analysis and Improvement Expert Panel on allocating surgical operating room time to surgeons, which place more emphasis on patient needs than on the time that each surgeon has historically been allocated.*

#### Status

At the time of our follow-up, the Ministry indicated that it would continue to work with and encourage hospitals to implement the recommendations of the Surgical Process Analysis and Improvement Expert Panel.

One hospital noted that it was working toward allocating operating room time to surgeons on the basis of patient needs, and that its Operating Room Utilization Committee passed a motion in June 2009 to assign all surgeons one block per week of operating room time and allocate all other blocks on the basis of demand. The Committee will meet again in September 2009 to further determine the mechanism for redistributing operating room time on the basis of patient demand as evidenced by surgical wait lists.

Another hospital indicated that the availability of wait list data through the Wait Times Information System (WTIS) was helpful in determining the priority of surgeons' needs for operating room time. This hospital commented that the allocation of operating room time to surgeons is still not a hard science, but that data on patient wait times, as well as data on operating room and surgeon utilization, make objective decisions easier to achieve. Although the hospital noted that funding is still its primary determinant in surgeon access to operating room time, funding from the Local Health Integration Network has enabled the hospital to make more operating room time available for non-cancer general surgeries to surgeons whose patient wait times are longer than established WTIS benchmarks.

The third hospital stated that it was implementing an information management system, which is intended, among other things, to enable the hospital to measure the allocation of operating room time to surgeons, patient wait times, and

access to operating rooms on the basis of patient priority levels, by surgeon and service. The hospital expected to have the system fully implemented by February 2010 and planned to use information provided by this system to modify its operating room schedule on the basis of patient needs and hospital resources, such as instrument availability. The hospital also planned to allow surgeons to keep part of their operating room time unbooked up to 48 hours prior to surgery, which would allow the surgeons to keep a percentage of their scheduled time available for booking more urgent patients. The hospital anticipated that the results of these changes would provide the information required to determine the need for urgent time by service as well as the total overall distribution of operating room time by priority, need, and service.

## Scheduling of Patients for Surgery

### Elective Surgery

#### Recommendation 3

*Hospitals should periodically compare the actual time taken for surgeries—including operating room set-up and cleanup—with the time estimated for completing those surgeries (as indicated by the time booked for the operating room) and identify any recurring significant deviations, so that adjustments can be made to improve operating room utilization.*

#### Status

The Ministry indicated that, since July 2007, hospitals participating in the wait time initiative have been tracking the accuracy of operating room scheduling by comparing the estimated duration of each surgery with the actual time required to complete the surgery. This enables hospitals to identify any recurring significant deviations so that adjustments can be made to improve operating room utilization.

At the time of our follow-up, one hospital indicated that its operating room committee regularly reviewed information on the estimated versus actual time for surgeries, and adjusted operating room scheduling when indicated. The hospital

noted that, although operating room utilization had improved, there were still some scheduling gaps, because adjustments are not made until 10 of the same surgeries show a mismatch between the estimated and actual time required to complete the surgery.

Another hospital stated that it established a Surgical Utilization Committee in January 2009, whose terms of reference include monitoring whether surgeries start on time; identifying barriers to start times; monitoring time required to complete surgeries; and providing recommendations to improve operating room utilization and access. This hospital uses an automated procedure that calculates the average time taken by each surgeon to complete his or her last 10 cases. This average time is used to book the operating room but can be manually adjusted (for example, for a complex case that requires more time).

The third hospital indicated that it reviews and uses data for determining the appropriate total time for each surgical procedure by surgeon. This information is discussed at its Perioperative Executive meetings. Once the hospital has fully implemented its new information management system, it anticipates that it will be able to base each surgeon's operating room time per surgical case on the actual average time it took the surgeon to complete the past seven similar cases. This will include time to set up and clean the operating room. The hospital anticipates that this will improve the accuracy of its case duration data. In addition, this hospital is reviewing the processes used by its scheduling office and will develop new policies and guidelines as required to enhance the accuracy of its case duration data.

### Emergency Surgery

#### Recommendation 4

*To better ensure the equitable and timely treatment of patients requiring urgent surgery, hospitals should:*

- *in conjunction with the Ministry of Health and Long-Term Care (Ministry) and Local Health Integration Networks, and considering any*

*recommendations from the Ministry’s Surgical Process Analysis and Improvement Expert Panel, complete the development of and implement a consistent patient priority classification system across Ontario hospitals for emergency and other urgent surgical cases;*

- *review whether urgent patients are being prioritized by all surgeons in accordance with hospital policy, as well as whether these patients are receiving surgery within the established time frames, and take corrective action where necessary; and*
- *review the costs and benefits of dedicating operating room time each day for urgent surgical cases as part of their regular planned activity, in accordance with recommendations from the Ministry’s Surgical Process Analysis and Improvement Expert Panel.*

#### Status

At the time of our follow-up, the Ministry indicated that a consistent patient priority classification system had been implemented for emergency and urgent surgical cases by hospitals participating in its Wait Time Strategy. The finalized patient priority codes and their definitions, as well as examples of procedures that fall under each code, were made available to all hospitals in May 2008. The over 80 hospitals participating in the Ministry’s Wait Time Strategy are to use the Surgical Efficiencies Target Program to review whether or not patients are receiving care within these time frames.

All three hospitals confirmed that they had adopted the Ministry’s patient priority classification system for emergency and urgent surgical cases, and indicated that they regularly review whether surgeons are complying with the patient prioritization classification system. As well, one hospital implemented a process to address any instances of surgeons who do not adhere to the classification system.

The three hospitals all indicated that they monitored wait lists to ensure that patients received their surgery within the established time frames for each

priority level. One hospital commented that lower-priority cases would be bumped to a higher category if they exceeded the initially targeted wait time.

One hospital stated that it now sets aside operating room time for patients requiring urgent access in order to meet the guidelines for maximum patient waits based on patient priority. For example, the orthopaedic service has urgent and emergency access time built into its daily operating room time, because statistics demonstrate there is a constant demand for emergency orthopaedic surgery. Another hospital allocates operating room time for urgent cases on a daily basis, and the third hospital continues to schedule “trauma blocks” of operating room time.

### Pre-operative Patient Screening and Testing

#### Recommendation 5

*To increase the efficiency and cost-effectiveness of pre-operative patient screening, hospitals should:*

- *establish policies, based on the patient’s needs, on whether the patient’s screening prior to surgery should be completed at the hospital or by other means, particularly for healthy, ambulatory patients undergoing elective surgery;*
- *determine specifically which patients, based on their condition, should be required to see an anaesthesiologist as part of the screening process, rather than requiring all such patients to be seen by an anaesthesiologist where this is the current practice of the hospital; and*
- *incorporate into their screening policies guidelines on pre-operative patient tests endorsed by the Guidelines Advisory Committee of the Ontario Ministry of Health and Long-Term Care and Ontario Medical Association.*

#### Status

At the time of our follow-up, the Ministry indicated that it would continue to work with and encourage hospitals to implement the characteristics of an effective pre-operative patient screening

program as noted by the Surgical Process Analysis and Improvement Expert Panel in its report. For instance, patients who have similar clinical conditions and are scheduled for similar procedures should be screened and tested in a like manner regardless of surgeon, anaesthesiologist, or the surgeon's preferred approach to the procedure. In this regard, the Ministry noted that the patient screening process is one area reviewed by the perioperative coaching teams, which were established by the Ministry and are made up of hospital peers with experience in the effective management of pre-operative resources. Between December 2006 and April 2009, the teams visited 56 hospitals.

One hospital indicated that most pre-admission screening is completed at the hospital, but that it can also be done over the phone for patients living more than a two-hour drive away. As well, the hospital's anaesthesiologists have established clinical criteria to indicate if a patient needs to be screened by an anaesthesiologist prior to surgery. The hospital also noted that it has incorporated the screening policies guidelines on pre-operative patient testing into its practices.

Another hospital indicated that it continues to follow the guidelines endorsed by the Guidelines Advisory Committee and that its Department of Anaesthesia also continues to ensure that pre-operative testing ordered by attending surgeons is performed in accordance with guidelines from the Canadian Society of Anaesthesiologists.

The third hospital indicated that it compared its pre-operative assessment and screening with those of other teaching hospitals and hospitals within its Local Health Integration Network. The results showed that this hospital's practice of having close to 100% of the patients screened by an anaesthesiologist prior to surgery was not consistent with what other hospitals did. However, the hospital's anaesthesiologists stated that their practice ensures a higher standard of care and patient safety. Therefore, the hospital decided not to change its current practice. The hospital also noted that, once it has fully implemented its new information manage-

ment system (targeted for February 2010), it plans to work with its surgeons and anaesthesiologists to streamline and standardize its pre-operative testing requirements.

## WAIT TIMES

### Recommendation 6

*To enable both patients and health-care providers to make informed decisions and to help ensure that patients receive the surgery that meets their needs within an appropriate length of time, the Ministry of Health and Long-Term Care—in conjunction with Local Health Integration Networks, hospitals, and surgeons—should monitor patient wait times by each priority level and by surgeon for all types of surgery. As well, the Ministry should make information on patient wait times by priority level available to the public and reconsider its decision not to report at a future time wait times by surgeon or, as a minimum, make this information available to referring physicians.*

### Status

At the time of our follow-up, the Ministry was collecting wait time information on certain surgical procedures from hospitals participating in the Wait Time Strategy, through its Wait Time Information System (WTIS). The Ministry noted that hospitals have the capability to generate priority-level and surgeon-level reports from the WTIS, and that public reporting on wait times by each priority level began in April 2008. As well, in October 2008, the Ministry began publicly reporting wait times for all general surgery, ophthalmology, and orthopaedics, which the Ministry indicated represent over 50% of all surgeries in the province. The Ministry anticipated that by fall 2009, the wait times for all surgical procedures at hospitals participating in the Wait Time Strategy would be captured and reported publicly. The Ministry also commented that, at present, there are no plans to report publicly on wait times by surgeon or make this information available to referring physicians because the health

system is moving away from surgeon-specific wait lists. In this regard, the Ministry anticipated that it would have nine pilot projects—primarily for joint replacements—implemented by the end of the 2009/10 fiscal year. These projects centralize patient referral and assessment, which provides patients with the option of choosing a surgeon with the shortest wait list or choosing another surgeon knowing what the wait time will be for that surgeon.

One hospital commented that it publicly reports wait times for certain surgeries on its website. Another hospital indicated that it tracks patients whose waits exceed recommended times for each priority level by individual surgeon, and ensures that alternative options are provided for these patients, such as having the surgery performed by a different surgeon. The third hospital noted that it had made a number of changes to better manage its wait times. For example, patient priority classifications and wait times are now used by the surgeon to schedule patients for surgery, and monthly reports are now provided to each surgeon on his or her wait times and sent to the head of each surgical specialty for review.

## Use of the Wait Time Information System by Surgeons and Hospitals

### Recommendation 7

*To monitor and manage patient wait lists more efficiently, the Ministry of Health and Long-Term Care and hospitals should continue to jointly develop more standardized reports, utilizing data from the new Wait Time Information System, that would readily provide hospitals and surgeons with useful and comparative information on patient wait times. As well, hospitals should periodically test the accuracy of their key data elements in the System.*

### Status

At the time of our follow-up, the Ministry indicated that many standardized reports are now available on the Wait Time Information System (WTIS),

including reports on patient wait times by priority level and by surgeon, as well as number of surgical cases cancelled. In May 2008, a web-based tool was implemented that enables hospitals to more easily access this information. As well, the Ministry indicated that it had provided all hospitals with training on the WTIS. Furthermore, the Ministry stated that more standardized reports are being developed for the WTIS as users learn how the available information can be used.

One hospital indicated that it reviews all data that appear to be outside of the benchmark wait times or where wait times are increasing to determine the reason and take appropriate follow-up action. Any inaccurate data identified are communicated to the Ministry's Wait Time Information Office. Another hospital indicated that it verifies monthly with the surgeons' offices the accuracy of its patient waiting list. The third hospital commented that it cross-references WTIS data with its operating room data on a daily basis, and contacts surgeons' offices to clarify any discrepancies. As well, two of the hospitals noted that they participate annually in the Wait Time Information Office's data quality validation program, which involves validating a sample of data elements to identify any data quality issues.

## OPERATING ROOM EFFICIENCY

### Monitoring of Performance Indicators for Operating Room Use

#### Recommendation 8

*To determine if surgical resources are being utilized efficiently and effectively, hospitals should utilize the information provided by the new Surgical Efficiencies Target Program to monitor key performance measures against performance targets (once the targets are established by the Ministry of Health and Long-Term Care), as well as against internal benchmarks and the performance of comparable hospitals.*

### Status

According to the Ministry, at the time of our follow-up, key performance targets and best practices had

been developed for the Surgical Efficiencies Target Program (Program). These included performance targets for start time accuracy and operating room utilization, as well as best practices for cancellations of surgery, operating room closures, and surgical volumes.

One hospital noted that, at the time of our follow-up, it was monitoring five key items against the Program's benchmarks. The hospital anticipates that monitoring these key indicators will allow a more proactive look at its challenges, as well as enable it to determine the changes required to improve throughput, reduce overtime, improve operating room utilization, and prevent bottlenecks. As well, the hospital completed a review of its patient flow processes in spring 2009 and is developing strategies to improve these processes.

Another hospital informed us that it uses the information provided by the Program to monitor performance by operating room and surgical service. As well, its surgery governance council reviews the indicators quarterly and has policies to address variations. However, the hospital noted that there are occasional bottlenecks that lead to the cancellation of scheduled cases owing to lack of beds, especially critical care beds. Furthermore, additional efforts to reduce emergency room wait times can cause scheduled surgical cases to be cancelled owing to a lack of available beds.

The third hospital compares its information from the Program to its peers' in terms of performance and benchmark thresholds, and indicated that results are reported monthly to its operating room committee.

## Surgical Bottlenecks

### Availability of Hospital Beds

#### Recommendation 9

*To help ensure that patients receive the care they need and to reduce the cancellation of elective patient surgeries, the Ministry of Health and Long-Term Care, in conjunction with hospitals and Local Health Integration Networks, should develop and implement strat-*

*egies to reduce the number of patients who no longer require hospital care but are occupying hospital beds.*

#### Status

At the time of our follow-up, the Ministry stated that the complex issue of patients who no longer require hospital care but are occupying hospital beds needs to be addressed systematically. This requires the involvement of various groups such as hospitals and long-term-care homes.

The Ministry indicated that it is working with the Local Health Integration Networks (LHINs) on a number of initiatives to address this issue, including:

- increasing home care and community support services;
- placing additional Community Care Access Centre staff in hospitals to allow for faster access to community services for hospital patients;
- funding temporary transitional beds in select communities for patients who are awaiting placement in long-term-care homes or other community-based settings; and
- providing funding for the LHINs to invest in local solutions to address patients requiring an alternative level of care.

As well, the Ministry noted that its Ontario Health Performance Initiative is co-ordinating a quality improvement project focused on improving patient flow in a group of 90 hospitals. The project focuses on a number of areas, including improvements in the discharge planning process, to enable more effective and timely discharge of patients from hospital. The project is expected to be completed by summer 2011. The Ministry also stated that it is developing a system that will, among other things, provide information on how long those patients who no longer require hospital care wait for access to the appropriate level of care, such as a long-term-care home. As well, the Ministry indicated that by winter 2012 it expected to have almost 2,000 new beds in long-term-care homes.

All three hospitals indicated that they have ongoing challenges regarding patients occupying hospital beds who no longer require hospital care.

One hospital stated that this issue has not yet been adequately addressed by its LHIN and the Ministry, which impacts its patients' access to surgery, because the beds are not available for surgical patients. However, the hospital indicated that it was working extensively with its LHIN and community partners to address this issue.

Another hospital stated that it is experiencing an increased risk of cancellation of surgeries resulting from the Ministry's emergency room wait time strategy, which gives emergency patients preferred access to intensive care units. This compounds its persistent issue of decreased bed access that results from patients occupying hospital beds when they require an alternative level of care. Although this hospital indicated that there is a collaborative plan within its LHIN that has decreased historically long waits for patient placements in long-term-care homes, it also stated that the problem of patients waiting for an alternative level of care remains significant and is affecting access to post-operative care for scheduled patients.

The third hospital also noted the challenges that directly related to the flow of patients through its emergency room, but that it had changed its daily bed management structure in November 2008 to ensure that forecasting of the need for surgical beds occurs more proactively, so as to prevent surgical cancellations.

### Availability of Anaesthesiologists

#### Recommendation 10

*To help ensure the best utilization of anaesthesiology services, while still ensuring that patients requiring anaesthesia receive it in a safe and efficient manner:*

- *the Ministry of Health and Long-Term Care should analyze the results of the anaesthesiology care teams pilot projects and, if warranted, encourage the expansion of this concept to other Ontario hospitals while reviewing current fund-*

*ing mechanisms to ensure that they support this initiative; and*

- *hospitals, in conjunction with the College of Physicians and Surgeons of Ontario, should determine under what circumstances an anaesthesiologist needs to be present for cataract surgeries.*

#### Status

The Ministry indicated at the time of our follow-up that the final report from phase one of the anaesthesiology care teams pilot projects was received in spring 2009. The Ministry anticipated that the report evaluation would be completed by the end of 2009. Depending on the results of the evaluation, the Ministry stated that it will consider expanding anaesthesia care teams to other surgical areas at hospitals participating in its Wait Time Strategy.

Two of the hospitals indicated that they are fully staffed with anaesthetists, and the third stated that its anaesthesia human resources has remained stable and has had minimal effect on its ability to offer surgical services.

One hospital further commented that it is participating in the anaesthesiology care teams pilot project, which has been very successful in enabling the hospital to extend the availability of anaesthetists for other surgeries. However, it expressed concerns that, unless there is funding for the program that trains anaesthesia assistants, the expansion of this project would be curtailed. This hospital also stated that hospitals would need financial support to pay anaesthesia assistants, as anaesthesiologists are paid through OHIP, but the assistants must be paid directly by the hospital.

Another hospital indicated that it uses anaesthesia assistants for cataract surgery and is expanding their use to support the hospital's obstetrical practice and its emergency/urgent operating room activity, as well as for other procedures.

The third hospital noted that its practice is to assign an anaesthetist for all cataract procedures unless there is not one readily available.

No additional work has been completed by the hospitals or the Ministry, such as in conjunction with the College of Physicians and Surgeons of Ontario, to determine under what circumstances an anaesthesiologist needs to be present for cataract surgeries.

## SURGICAL INSTRUMENTS

### Recommendation 11

*To better ensure that cleaned and sterilized surgical instruments are available when needed for surgeries, hospitals should:*

- *in light of the Provincial Infectious Diseases Advisory Committee's (PIDAC's) best practices guidance, re-examine the practice of using flash sterilization in non-emergency situations;*
- *where flash sterilization is used, ensure that a record is maintained of the instruments that are flash sterilized, including the name of the surgeon who subsequently used the instrument and the name of the patient it was used on, in accordance with PIDAC's recommendations; and*
- *review the costs and benefits of implementing an instrument-management system to track instrument location and status.*

### Status

In November 2007, the Ministry, in conjunction with the Ontario Hospital Association, forwarded a letter to all hospitals asking them to review their sterilization procedures in relation to the Provincial Infectious Diseases Advisory Committee (PIDAC) guidelines. Later that month, the Ontario Hospital Association convened a videoconference to discuss the issue of flash sterilization with hospitals, which PIDAC chaired. Furthermore, in January 2008, the Ontario Hospital Association distributed to all hospitals a two-page fact sheet on flash sterilization, which was developed in association with PIDAC and also posted on the Ministry's website. The fact sheet provided further guidance to hospitals on when it is acceptable to use flash sterilization and on the information that must be documented when it is used.

At the time of our follow-up, one hospital noted that it had undertaken an extensive replacement of instruments over the last two years and that duplicate instruments have been purchased to prevent the need to flash sterilize one-of-a-kind instruments. The hospital also indicated that flash sterilization is now used sparingly, and that all instances of use are recorded and tracked, and the data retained in accordance with PIDAC's recommendations. Further, the hospital stated that monthly audits are completed to ensure compliance with PIDAC's recommendations. The hospital also included an instrument tracking system in its capital plan for 2010.

Another hospital stated that it now meets PIDAC's recommendations on the use of flash sterilization. As well, this hospital indicated that it monitors its use of flash sterilization and has reduced its use by 31% from 2007/08 to 2008/09. The hospital also noted that new surgical equipment have been purchased, with a primary focus on reducing flash sterilization. As well, the hospital stated that its new instrument management system will be implemented by February 2010.

The third hospital indicated that it is using flash sterilization strictly in accordance with PIDAC guidelines. To do this, the hospital implemented a policy that reflects the PIDAC standard for the use of flash sterilization, purchased more instruments, improved its documentation, and improved its instrument-tracking methods to consistently monitor flash sterilization. The hospital stated that all instances of flash sterilization are reviewed monthly, and any use outside the PIDAC guidelines is addressed. Furthermore, the hospital noted that since December 2008, it averaged only four instances per month of flash sterilization and that they were in accordance with PIDAC-approved reasons. With respect to an instrument management system, the hospital indicated that it was investigating the cost/benefit of outsourcing instrument reprocessing with a company that has a system that tracks the surgical instruments' tray location and instrument status.