

Hospital Report



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A C U T E C A R E



A joint initiative of the Ontario Hospital Association
and the Government of Ontario



Canadian Institute
for Health Information

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d'information sur la santé

FOREWORD

Ontario hospitals are pillars of support, delivering quality and timely health services to communities. Few Ontarians can say they haven't been touched by a hospital experience at some time in their lives.

Hospitals, regardless of size and type of type of health services provided, are all strongly committed to the patients they serve. The Ontario government and the Ontario Hospital Association share that commitment and are working together to demonstrate leadership in accountability to Ontarians.

To that end, *Hospital Report 2005: Acute Care*, a comprehensive information resource about hospital performance, provides a better understanding of how acute care services can be improved across the province. The report shows where progress is being made in patient care and services and pinpoints areas for improvement.

In addition to this acute care report, the 2005 *Hospital Report* series includes reports on emergency department care, complex continuing care, and rehabilitation. Over the years, the *Hospital Report* initiative has evolved to incorporate new services and tools to enhance hospital performance. This year, a Women's Health Perspective has been included, and hospitals have gained access to a Web-based database and analysis tool—the e-Scorecard—that will help them better understand their performance results.

We would like to thank the Canadian Institute for Health Information and the University of Toronto-based Hospital Report Research Collaborative for their dedication, expertise and professionalism in the development of this report, as well as the many other individuals who contributed to our common goal of improved patient care.

We commend Ontario's hospitals for their leadership and continued support of the Hospital Report series. Their voluntary participation demonstrates dedication to patients and commitment to continuous quality improvement initiatives that will build a stronger health care system to respond to the needs of Ontarians today and for generations to come.

Acknowledgement

The Hospital Report Research Collaborative would like to acknowledge the funding support and leadership of the Ontario Women's Health Council (OWHC) as they continue to promote and sponsor the integration of the women's health perspective into all sectors of the Hospital Report series.



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A ONE-DAY SNAPSHOT

of Ontario's Acute Care hospitals

On February 5, 2004:

While the size, role and range of services offered by acute care hospitals vary across the province, the overall priority for all hospitals is to provide the best possible patient care to every patient, every day. To get an idea of what occurs in an average day across the province, a combined summary of activity for Ontario's acute care hospitals was compiled for a randomly selected day.

- 7,766 people were admitted and 402 babies were born; 8,116 people were discharged over the course of the day:
 - 4,537 people were admitted for day surgery¹
 - The remaining 3,229 people were admitted to an inpatient bed: 1,276 were admitted for elective, or previously planned care (of these, 748 were admitted for elective surgery); and 1,953 people were admitted for urgent/emergent care (of these, 386 were admitted for urgent/emergent surgery).
- Of those admitted to an inpatient bed:
 - 376 were admitted for cardiac conditions, including cardiac arrest
 - 240 were admitted due to cancer
 - 171 were admitted due to respiratory conditions such as bronchitis, asthma, pneumonia and influenza
 - 59 were admitted due to stroke
 - 57 were admitted for a total hip replacement; and 47 for a knee replacement.
- There were 11,951 people treated in a hospital emergency department (ED); 1,468 people were admitted for inpatient care via a hospital ED.
- While 180 people were discharged to a long term care facility, 1,337 people were designated as waiting for an alternate level of care (for example, long term care or rehabilitation).
- 111 people died in a hospital.
- At midnight on February 5, 2004, there were a total of 19,340 patients in acute care beds.

1. These represent "qualifying day surgery"—see the "Same Day Surgery Data in Ontario and Use of a Qualifying Day Procedure Screen" sidebar in the Clinical Utilization and Outcomes section of the Acute Care Technical Report for more information.

SCORECARD OVERVIEW

Hospital Report 2005: Acute Care is the fifth in a series of hospital-specific reports that use a balanced scorecard approach to report on the performance of hospitals that provide acute inpatient and ambulatory care services in Ontario.



The objectives of this report are to facilitate local quality improvement programs and to support hospitals' accountability to the communities they serve. The primary audiences for this report are boards of directors and senior managers. Results should be shared broadly among hospital staff, patients, families and the public at large.

Using a balanced scorecard format, the report provides a summary of performance scores for 25 indicators across four areas of performance: Clinical Utilization and Outcomes (CUO), System Integration and Change (SIC), Financial Performance and Condition (Finance) and Patient Satisfaction. In addition to these four balanced scorecard quadrants, a Women's Health Perspective is included to provide a better understanding of performance specific to women and related to equity of access and outcomes for women and men.

Hospital-specific results are provided for 98 hospital corporations that voluntarily participated in the data submission processes for Patient Satisfaction and SIC. This represents 95% of acute care hospitalizations for 2003–2004.

The hospitals included in the report vary considerably by size, populations served and overall patient volumes. In recognition of this variability, hospitals have been grouped into peer groups for comparisons. Performance measures are presented at the hospital-specific level, along with summary provincial, Local Health Integration Network (LHIN) and peer group values.

E-Scorecard

Where can you find further information?

Further information is available in the e-Scorecard and technical summaries.

The e-Scorecard is a Web-based, password-protected electronic application incorporating annual Hospital Report indicators and underlying components.

The prime objective of the e-Scorecard is to allow interactive comparative analyses by providing predefined and customized reports and graphs.

The e-Scorecard and Technical Reports can be accessed through the Hospital Report Research Collaborative Web site, at www.hospitalreport.ca.

WHAT DO THE SCORECARD RESULTS ILLUSTRATE?



- Results from the SIC quadrant illustrate that many hospitals are doing well with respect to the Use of Data for Decision-Making, Management and Support of Human Resources, and Healthy Workplace Environment indicators. However, considerable variation exists for all of the SIC indicators, which suggests that there is potential for improvement for many hospitals in these areas. Hospital results for the Use of Standardized Protocols have the lowest provincial mean of all of the SIC indicators. Coordination among health care organizations in the development of care pathways will become increasingly important in the LHIN environment.
- In the Patient Satisfaction quadrant, hospitals generally achieve the highest average scores on the Overall Impressions indicator and report the lowest scores on the Communication indicator. This suggests that patients feel positive about their overall hospital experience and have confidence in the doctors and nurses who care for them. However, hospitals have room for improvement when it comes to communicating with and educating patients and family members about the circumstances of their treatment, and ensuring that they have relevant information to manage their condition after being discharged from the hospital. This finding is consistent with other reports in the *Hospital Report* series, namely *Hospital Report 2003: Acute Care* and *Hospital Report 2005: Rehabilitation*.
- For the CUO quadrant, the majority of hospitals are performing at an average level for both the surgical and medical readmissions indicators, with no hospitals performing below-average. This may be a positive reflection of low rates of complications or adverse events during hospitalization for the medical conditions and surgical procedures included in the analysis. This result should be considered in relation to other outcome and process indicators, such as length of stay, and other measures of adverse events.
- With respect to Financial Performance and Condition, the measure of the amount of administrative service expenses relative to total operating expenses was 9.87% in 2003–2004—the highest value this indicator has assumed in the past six years and more than one percentage point higher than the 2002–2003 value. This increase can be largely attributed to a rise in expenses reported under risk management functional centres, and is an indication of hospitals' response to SARS and an enhanced focus on patient safety.
- The Women's Health analysis demonstrates that women reported lower satisfaction with the care and services they received in acute care hospitals than men, and were particularly less satisfied than men with the amount and quality of information and communications they received about their condition, treatment and preparation for discharge and care at home. Hospitals perform more abdominal than vaginal hysterectomies; vaginal hysterectomies are generally preferable to abdominal hysterectomies because they are associated with improved secondary outcomes. The provincial and peer group rates of adverse events following labour and/or delivery were lower in 2003–2004 (as in previous *Hospital Reports*) than in the previous year. In 2003–2004, women admitted to hospital with an acute myocardial infarction (AMI) continued to have a significantly lower level of access to coronary angiography within the episode of hospital care than men. Overall, women with acute coronary syndrome also had significantly higher readmissions rates than men, and this difference increased over two years.

AREAS FOR FUTURE STUDY

Results suggest that hospital size and community served may impact Patient Satisfaction results. Similar to previous years, many Toronto (and Greater Toronto Area) hospitals scored below-average in the Patient Satisfaction quadrant, while 50% of small hospitals met the criteria for high performing hospitals. Across all indicators, and in both fiscal years, on average, small hospitals scored higher than community and teaching hospitals. This poses a potential area for further study.

One of the benefits of the balanced scorecard is the ability to present indicators that reflect multiple dimensions of an organization's performance and to identify relationships among these dimensions of performance. It will be useful for future versions of the *Hospital Report: Acute Care* series to include analysis on inter-quadrant relationships—relationships between the measures in different quadrants. This will help to determine which indicators are most significantly impacting overall quality of care, overall patient experience and overall outcomes.

In the LHIN environment, it is anticipated that transition from acute care to other levels of care, including home, will be improved from both a coordination and information sharing perspective. This suggests potential new measures to determine improvements in these areas from both the hospital and patient perspective.

The Women's Health perspective stratifies and compares results for women and men to start to examine issues of equity in hospital care. Because of the limited availability of other socioeconomic and demographic variables (beyond sex) in routinely collected hospital data, the analysis of issues of equity is incomplete. Pursuing further gender and subgroup analyses, using linked databases, is an important area for further study.



IMPACT OF SARS

Severe Acute Respiratory Syndrome (SARS) presented unique operational challenges for hospitals during 2003–2004. It is impossible to determine the exact impact of SARS on performance values across all quadrants; however, the following is observed and may be attributed to SARS:

- Patient Satisfaction scores for all indicators dropped sharply at the beginning of the SARS period (March 2003), and remained low, rising only after the SARS crisis had passed (June 2003).
- An increase in nursing benefit hours (this includes paid absence for things such as vacation, statutory holidays, sick leave and education hours) may be attributed to the inability to share nursing resources across hospitals. Hospitals that previously made use of the same pool of agency nurses found themselves unable to share these resources because staff were restricted from working in multiple hospitals during the SARS period. In addition, more stringent infection control policies limited the ability of direct care providers to report for work.
- Expenses reported in risk management functional centres increased from 0.09% of total operating expenses to 0.84%. This translates to a rise in spending from \$9.2 million in 2002–2003 to \$90.7 million in 2003–2004—a rise that is largely due to Ontario hospitals' implementation of infection control and isolation measures as a response to SARS.

To avoid penalizing hospitals that were most significantly affected by SARS, adjustments were made within the Patient Satisfaction indicator analysis to compensate for the sudden drop in patient satisfaction scores. The extent of the impact of SARS on hospital-level performance as measured by clinical indicators is not known and, therefore, no adjustments were made to the indicators in the CUO quadrant. SIC data were collected in January 2004 and reflect practices in operation post-SARS. Some data used to generate indicators of Financial Performance and Condition were affected by SARS in 2003–2004; however, it is impossible to determine the exact impact of SARS on the indicator values. Accordingly, no SARS adjustments were made to financial indicators for 2003–2004.

DO THE SYSTEM-LEVEL RESULTS RELATE TO KEY STRATEGIC PRIORITIES?



A survey on hospitals' key strategic priorities, completed by hospital CEOs in the winter of 2004, highlights the following important strategic priorities:²

- Optimizing staff recruitment and retention
- Enhancing patient safety
- Implementing decision support systems
- Improving integration

Overall results from the four quadrants illustrate variation across the province and room for improvement in a number of these areas.

Hospital scores related to the Recruitment and Retention component of the Management and Support of Human Resources indicator ranged from 0 to 22 (out of a possible 25); however, the provincial mean was only 13. Results for the Healthy Workplace indicator reflect considerable variation across facilities in relation to creating a positive work culture. This reinforces the need for improvements in this area to address the priority of staff recruitment and retention.

Results of SIC indicators illustrate that there is room for improvement with implementation of decision support systems and use of data arising from these systems. There is wide variation related to the degree to which clinical information is available electronically to care providers within and outside of the hospitals, and the degree to which organizations disseminate and use clinical and administrative data. Significant investments may be required in some organizations in order to meet coordination expectations related to ease of access of patient information among organizations in the LHIN environment.

With respect to improving integration, SIC survey results illustrate that some hospitals continue to create care paths and admission and discharge criteria in isolation, and some hospitals share clinical or administrative data only to a limited extent with external organizations. In addition, the patient satisfaction data stratified by sex show that women are significantly less satisfied with the amount and quality of information and communication they received in preparation for discharge and care at home. Future measures of appropriate and timely discharge of patients home or into an appropriate level of care (from both the hospital and patient perspectives) will help to assess the extent to which hospitals are achieving this strategic priority.

SIC and CUO indicator results suggest that hospitals are enhancing patient safety practices: 100% of hospitals reported using an incident reporting system for identifying and managing adverse events, 83% reported that there was a clinical committee to review incidents and 80% stated that education on reporting incidents was a formal strategy in place at their hospital.

A hospital board can increase the likelihood that the organization will achieve its strategic goals if the board attempts to ensure that the organization's culture supports an enduring commitment to quality. The relationship between key strategic priorities and the results presented in this report may also provide some support to board members as they set priorities for the coming year.

2. A. D. Brown, L. M. Alikhan, G. A. Sandoval, N. Seeman, G. R. Baker and G. H. Pink, "Acute Care Hospital Strategic Priorities: Perceptions of Challenge, Control, Competition and Collaboration in Ontario's Evolving Healthcare System," *Healthcare Quarterly* 8, 3 (2005): pp. 36-47.

“HIGH-PERFORMING” HOSPITALS

HIGH-PERFORMING HOSPITALS ACROSS QUADRANTS

For quality improvement purposes, the *Hospital Report* series has developed methodologies to identify “high performing” hospitals within and across quadrants.

It is of interest to note that no hospitals were high performing across all four quadrants, or any three quadrants. It is also of interest to note that several high performing hospitals do not have any statistically significant differences between women and men on indicators within the CUO and Patient Satisfaction quadrants.

The purpose of identifying high-performing hospitals across quadrants using a balanced scorecard framework is to identify hospitals that appear to excel in certain areas without compromising performance in another area. These hospitals may be able to share useful ideas and practices with other hospitals.

	System Integration and Change	Patient Satisfaction	Clinical Utilization and Outcomes	Financial Performance and Condition
Criteria for High Performer Across Quadrants	Above-average on at least 3 of 5 indicators and did not score below-average on any indicator	Above-average on all 4 indicators (community and small hospitals) or Above-average on at least 2 of 4 indicators (teaching hospitals) and did not score Below-average on any indicator	Above-average on at least 1 of 3 indicators and did not score below-average on any indicators	Above-average on at least 9 of 12 indicators for fiscal year 2003–2004
High Performing Hospitals	Hospital met criteria for High Performer in 2 or more quadrants and did not score below-average on any indicator in any quadrant.			
Kingston General Hospital** • a 403-bed teaching hospital located in LHIN10 (South East)	Above-average in: • Use of Data for Decision-Making • Community Involvement and Coordination of Care • Management and Support of Human Resources		Above-average in: • Readmissions—medical	
Guelph General Hospital** • a 193-bed community hospital located in LHIN 3 (Waterloo Wellington)			Above-average in: • Appropriate—lap versus open cholecystectomy	Above-average on 10 of 12 indicators
St. Mary's General Hospital • a 140-bed community hospital located in LHIN 3 (Waterloo Wellington)			Above-average in: • Readmissions—medical	Above-average on 9 of 12 indicators
Headwaters Health Care Centre Orangeville site • a 108-bed community hospital located in LHIN 5 (Central West)			Above-average in: • Appropriate—lap versus open Cholecystectomy	Above-average on 9 of 12 indicators

** Hospital had no statistically significant differences between women and men across any clinical indicators.

HIGH PERFORMING HOSPITALS WITHIN QUADRANTS

It is useful to highlight hospitals that performed very well in particular quadrants or the Women's Health perspective when compared to their peers, because these hospitals may be able to share useful ideas and practices to contribute to improved performance in other hospitals.

	System Integration and Change	Patient Satisfaction	Clinical Utilization and Outcomes	Financial Performance and Condition	Women's Health Perspective New CUO Indicators
Criteria for High Performer Within Quadrants	Above-average on at least 3 of 5 indicators and did not score Below-average on any indicator in the quadrant	Above-average on all 4 indicators (community and small hospitals) or Above-average on at least 2 of 4 indicators (teaching hospitals) and did not score below-average on any indicator in the quadrant	Above-average on at least 2 of 3 indicators and did not score below-average on any indicator in the quadrant	Above-average on at least 9 of 12 indicators for fiscal year 2003–2004	Above-average on at least one labour and delivery and/or gynecological conditions indicator and did not score below-average on any of these indicators and no statistically significant sex differences on any cardiac indicators
Definition	Hospital met criteria for high performer for the quadrant and did not score below-average on any indicator in the quadrant/perspective.				
	Kingston General Hospital (only hospital to meet criteria)	Almonte General Hospital* Arnprior & District Memorial* Englehart & District Hospital* Groves Memorial Community Hospital* Grey Bruce Health Services Huron Perth Health Alliance Perth and Smiths Falls District Hospital* St. Francis Memorial Temiskaming Hospital Winchester District Memorial* London Health Sciences Centre (only high performing non-pediatric Teaching hospital) Pediatric The Hospital for Sick Children (Above-average on 4 of 4 indicators) Children's Hospital of Eastern Ontario (Above-average on 3 of 4 indicators)	University Health Network* (only hospital to meet criteria)	Guelph General Hospital Headwaters Health Care Centre Markham Stouville Hospital Renfrew Victoria Hospital St. Joseph's Health Centre (Toronto) St. Mary's General Hospital The Credit Valley Hospital Trillium Health Centre Brantford General Hospital	Humber River Regional Hospital North York General Hospital Quinte Healthcare Corporation Windsor Regional Hospital York Central Hospital

* Hospitals had no statistically significant differences between women and men for all indicators in quadrant.

INTERPRETATION OF THE RESULTS

The indicator results in this report should be viewed as screening tests that can identify potential opportunities for quality improvement. Hospitals should “drill down” using their own data to better understand the factors underlying their results.

There are many factors that can cause indicator values to vary from hospital to hospital. Some of these factors, such as the diversity of hospital characteristics and the populations served are beyond a hospital's control. To reflect this, adjustment factors have been applied as appropriate in order to ensure meaningful comparisons within the balanced scorecard quadrants. Adjustment factors are described in more detail in each section and in the Technical Reports.

While commonly accepted statistical techniques were used to reduce the impact of uncontrollable factors on indicator results, these techniques do not entirely eliminate their impact. For these reasons, caution should be exercised when making comparisons across hospitals, across patient groups and over time. In addition, no single indicator or quadrant should be used to judge a hospital. Each aspect of performance is important. Ranking hospitals based on just one quadrant, or one indicator, on its own will provide an incomplete picture of performance.

To ensure optimal use of the scorecard results, board members should identify indicators for which their hospital's performance is lower than average or for which sex differences are significantly different and ensure that sufficient resources are allocated to facilitate quality improvement in these areas.

INTERPRETING PROVINCIAL INDICATOR RESULTS

The provincial summary results are based on data from 123 acute care hospital corporations. For each of the quadrants, the distribution of scores is displayed using box and whisker plots.

The left and right outlines of the box represent the 25th and 75th percentile scores, respectively. Excluding the outliers, the whiskers extending from both ends of the box display the minimum and maximum hospital scores for the indicators. Outliers are represented by the circles beyond the box and whisker plots (with the exception of the box plots for Financial Performance and Condition).

Medians, which are the black lines in the centre of the box-plots, are the central values indicating that 50% of hospitals scored higher and 50% of hospitals scored lower.

Means are the weighted average of the hospital values. Unlike medians, means are influenced by extreme values. Mean values that are substantially higher or lower than median values for the same indicator reflect data with a distribution that is highly skewed.

To the right of the box plot, the provincial mean score for each indicator is displayed. For the SIC quadrant, (where means are not weighted) the plus sign' (+) inside the box represents the mean.

Note: Provincial results for SIC are based on survey results from 108 acute care hospital corporations



HOSPITAL-SPECIFIC SCORES

The tables in this report show the numeric scores for indicator values on a hospital-by-hospital basis for the hospitals that voluntarily submitted data for each of the quadrants and the Women's Health Perspective.

The tables include a shaded background that indicates whether the hospital's score on that indicator reflected above-average, average, or below-average performance. A score of above-average performance or below-average performance means that the hospital's score was statistically different than the average score for all participating hospitals.

Coloured shading for performance is assigned as follows:

- the hospital's score reflected above-average performance
(or no statistically significant difference between women and men in the Women's Health Perspective)
- the hospital's score reflected average performance
- the hospital's score reflected below-average performance
(or a statistically significant difference between women and men in the Women's Health Perspective)

For some indicators, lower values suggest better performance. In these cases, lower values are labeled as above-average.

Some results are not shown, or non-reportable, because there were incomplete data, survey results did not achieve a volume screen, or the number of events was too low to obtain a reliable estimate.

LOCAL HEALTH INTEGRATION NETWORKS

As part of the transformation agenda of the Ministry of Health and Long Term Care's (MOHLTC), LHINs were created to reflect local areas where people naturally seek health care. These newly formed, community-based organizations have a unique mandate to plan, coordinate, integrate, manage and fund care at the local level within their defined geographic areas.

In tables that follow, hospital indicator values have been grouped into the 14 LHIN boundaries. A complete listing of hospitals located within each LHIN can be found on the Web site, at www.hospitalreport.ca. A provincial map showing LHIN boundaries can be found at www.health.gov.on.ca.

Note: Two hospital sites of two different hospital corporations cross LHIN boundaries. For these hospitals, the mean is calculated based on the LHIN location of the main hospital corporation site. The mean for the Uxbridge site of Markham Stouffville Hospital is added to the LHIN 8 value; and the mean for the Georgetown site of William Osler Health Centre is added to the LHIN 5 value.

The SIC quadrant focuses on indicators that assess the changes and investments that hospitals have made in information technology, human resources support and promotion of hospital-community relationships. A new indicator for 2005 gauges hospital support and promotion of healthy work environments.

Data presented are based on results from a survey completed by hospital managers in January 2004. In total, 108 of 123 hospital corporations completed the SIC survey. Results for 98 of the 108 hospitals that participated at the hospital-specific level are shown in the SIC performance table.

The SIC survey for *Hospital Report 2005: Acute Care* was modified significantly from the SIC survey used for the *Hospital Report 2003: Acute Care* report (referred to as *Acute Care 2003*). As such, year-over-year comparisons for the overall indicators cannot be made. However, comparisons in some specific measures have been made to highlight changes in performance for the indicators in this quadrant.

For each of the indicators, higher scores and above-average performance classifications indicate better performance. The maximum score for each indicator is 100.

Indicator Definitions

Use of Clinical Information Technology

The degree to which clinical information is available electronically to care providers inside and outside the hospital.

Use of Data for Decision-Making

The degree to which organizations are disseminating and utilizing both clinical and administrative data.

Use of Standardized Protocols

The degree to which hospitals are developing and using standardized protocols for the diagnosis and treatment of a broad range of relatively common clinical conditions and procedures.

Community Involvement and Coordination of Care

The degree of coordination, both internally and externally, with other care providers and the community.

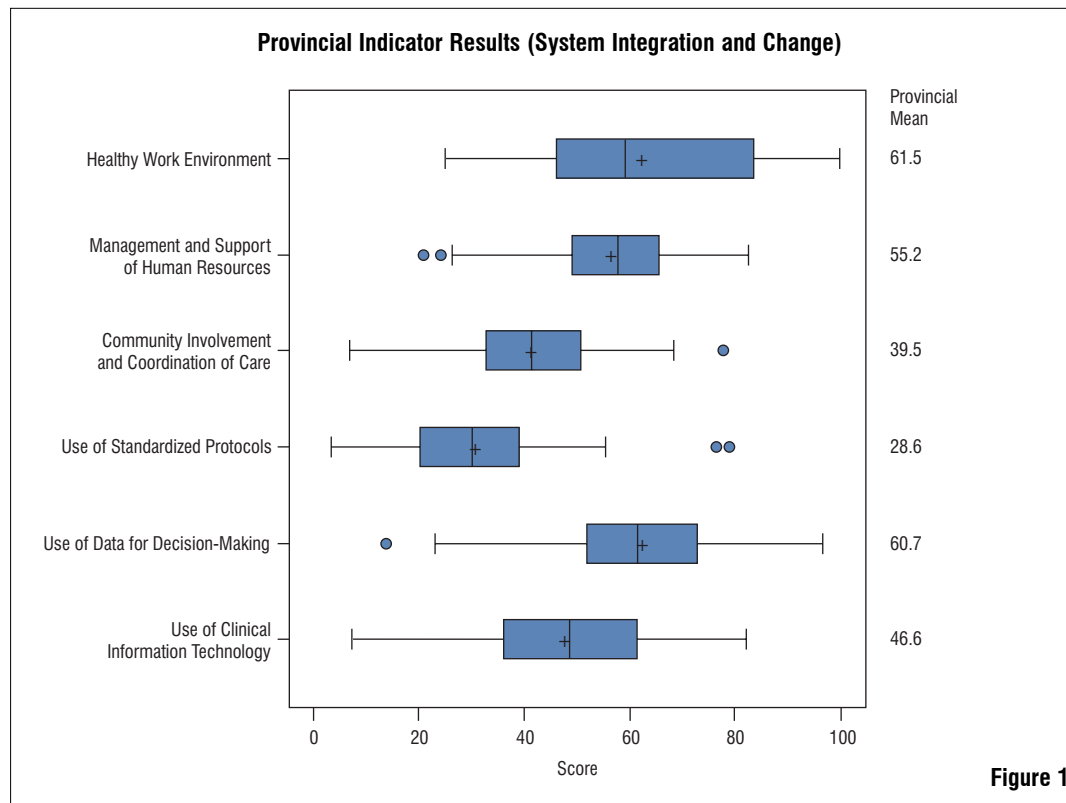
Management and Support of Human Resources

The extent to which hospitals have implemented staff training programs, retention and recruitment strategies and innovative hospital staff practices.

Healthy Work Environment

The extent to which hospitals have mechanisms in place to support and promote a healthy work environment, thereby contributing to employees' physical, social, mental and emotional well-being.

PROVINCIAL INDICATOR RESULTS



SUMMARY OF RESULTS

Many hospitals are performing well on indicators in the areas of Use of Data for Decision-Making, Management and Support of Human Resources and Healthy Work Environment. There is, however, considerable variation in performance for these indicators, which shows that for some facilities, there is opportunity for improvement. For example, only 33% of hospitals reported that they compare their in-hospital mortality data with other organizations (similar to 34% in *Acute Care 2003*).

There is considerable variation in performance for the Use of Clinical Information Technology, Healthy Work Environment and Community Involvement and Coordination of Care indicators. However, some improvement has been made in various components of these measures. For example, with respect to the Use of Clinical Information Technology, there was an overall increase from *Acute Care 2003* of 54% to 66% in the percentage of hospitals reporting that patient-care staff were able to access “online” clinical data from previous patient visits; however, only 32% of small hospitals reported that this was possible in the past year.

The Use of Standardized Protocols indicator showed considerable variation in performance and achieved the lowest provincial mean (28.6) of the six indicators in this quadrant. Although there have been some improvements with regard to Use of Standardized Protocols (see sidebar), some components of the indicator have experienced no improvement from *Acute Care 2003*. For example, in *Acute Care 2003*, 55% and 29% of hospitals reported that at least a few patients were treated using a standardized protocol for stroke and heart failure, respectively. In *Acute Care 2005* the rates were 54% and 28%, respectively. This suggests there is potential for hospitals to improve considerably in terms of implementing standardized protocols within the hospital and developing standardized protocols with external organizations.

Use of Standardized Protocols

As reported in *Hospital Report 2003: Acute Care*, standardized clinical protocols (also known as care plans) can lead to better identification of patient needs and better coordination of activities among members of the care team. As hospitals begin to function within the LHIN environment, coordination with health care providers from other organizations in the LHIN will become even more important. In *Acute Care 2003*, 30% of hospitals reported working with other acute care hospitals in the development of acute myocardial infarction standardized protocols, and 23% of hospitals reported working with rehabilitation hospitals in the development of standardized stroke protocols. In *Acute Care 2005*, these numbers increased to 37% and 29%, respectively.

Hospital	Community Served	LHIN	Use of Clinical Information Technology	Use of Data for Decision-Making	Use of Standardized Protocols	Community Involvement and Coordination of Care	Management and Support of Human Resources	Healthy Work Environment
PROVINCIAL AVERAGE			46.6	60.7	28.6	39.5	55.2	61.5
TEACHING HOSPITALS AVERAGE			58.2	70.2	34.4	50.7	66.6	67.9
TEACHING/COMMUNITY HOSPITAL PERFORMANCE ALLOCATION AVERAGE*			52.8	66.2	29.0	44.7	60.4	66.0
Children's Hospital of Eastern Ontario	Ottawa	11	45.8	39.0	16.7	30.3	59.9	29.2
Hamilton Health Sciences Corporation	Hamilton	4	62.7	61.3	15.8	39.7	66.3	89.1
Kingston General Hospital	Kingston	10	57.4	96.8	54.0	77.5	78.7	NS
London Health Sciences Centre	London	2	63.7	61.2	36.5	55.6	66.9	73.1
Mount Sinai Hospital	Toronto	7	43.0	57.1	33.3	42.6	56.6	45.1
St. Joseph's Health Care London	London	2	67.2	83.3	36.9	53.5	72.0	62.4
St. Joseph's Healthcare Hamilton	Hamilton	4	48.6	54.3	37.4	53.5	64.5	60.0
St. Michael's Hospital	Toronto	7	43.8	90.2	46.9	60.8	78.1	68.8
Sunnybrook and Women's College Health Sciences Centre	Toronto	7	65.7	60.4	13.7	37.1	62.4	95.0
The Hospital for Sick Children	Toronto	7	71.2	87.6	41.1	52.5	73.5	100.0
The Ottawa Hospital	Ottawa	11	64.1	80.6	49.6	65.7	60.2	39.2
University Health Network	Toronto	7	75.9	84.1	43.9	61.4	67.4	70.0

SMALL HOSPITALS AVERAGE			30.5	46.9	22.8	27.0	44.1	46.1
SMALL HOSPITAL PERFORMANCE ALLOCATION AVERAGE*			32.3	51.2	24.7	30.0	45.8	46.3
Alexandra Hospital	Ingersoll	2	27.3	44.4	31.1	32.3	34.5	NS
Alexandra Marine and General Hospital	Goderich	2	49.1	50.5	36.4	42.4	37.2	NS
Almonte General Hospital	Almonte	11	25.9	50.1	44.8	40.8	48.3	27.9
Arnprior & District Memorial Hospital	Arnprior	11	29.1	51.9	28.5	34.6	57.5	25.4
Carleton Place & District Memorial Hospital	Carleton Place	11	25.2	58.6	21.4	45.4	56.4	52.5
Deep River and District Hospital	Deep River	11	35.7	92.4	24.3	34.4	69.0	29.8
Dryden Regional Health Centre	Dryden	14	39.6	59.7	39.9	44.7	37.4	86.2
Englehart & District Hospital	Englehart	13	71.8	47.5	16.7	27.6	38.4	44.3
Four Counties Health Services	Newbury	2	30.9	61.8	15.6	24.8	58.5	54.5
Glengarry Memorial Hospital	Alexandria	11	30.6	22.7	0.0	10.3	41.3	40.2
Haldimand War Memorial Hospital	Dunnville	4	24.9	60.3	10.2	29.0	37.3	57.9
Haliburton Highlands Health Services Corporation	Haliburton	9	4.4	49.4	41.0	37.1	40.5	58.6
Hanover & District Hospital	Hanover	2	49.9	56.4	21.6	34.2	63.4	58.6
Kemptville District Hospital	Kemptville	11	12.8	40.8	19.6	17.1	46.1	22.2
Listowel & Wingham Hospitals Alliance	Listowel	2	28.2	40.1	27.3	18.2	42.5	33.4
MICs Group of Health Services	Cochrane	13	36.4	59.2	19.4	26.2	25.5	73.2
North Wellington Health Care Corporation	Mount Forest	3	30.5	53.8	29.5	26.8	59.2	48.7
Services de santé de Chapleau Health Services	Chapleau	13	29.1	20.5	NA	24.8	21.3	30.7
South Huron Hospital	Exeter	2	45.4	51.6	22.7	14.1	52.1	42.5
St. Francis Memorial Hospital	Barry's Bay	11	20.4	50.5	12.5	33.7	48.2	49.0
Stevenson Memorial Hospital	Alliston	8	24.0	66.3	41.1	46.8	45.4	NS
The West Nipissing General Hospital	Sturgeon Falls	13	38.9	37.9	15.3	14.8	47.5	44.5

Hospital	Community Served	LHIN	Use of Clinical Information Technology	Use of Data for Decision-Making	Use of Standardized Protocols	Community Involvement and Coordination of Care	Management and Support of Human Resources	Healthy Work Environment
COMMUNITY HOSPITALS AVERAGE			51.4	64.9	29.6	42.9	57.8	66.1
TEACHING/COMMUNITY HOSPITAL PERFORMANCE ALLOCATION AVERAGE*			52.8	66.2	29.0	44.7	60.4	66.0
Algonquin Health Services	Huntsville	12	40.4	42.9	16.3	34.1	43.4	87.2
Bluewater Health	Sarnia	1	69.1	48.0	50.6	39.4	58.1	31.3
Brantford General Hospital	Brantford	4	52.6	59.6	32.4	49.4	64.5	85.0
Brockville General Hospital	Brockville	10	45.9	55.9	78.6	56.8	48.6	42.1
Cambridge Memorial Hospital	Cambridge	3	58.7	46.4	19.9	33.5	45.0	88.7
Chatham-Kent Health Alliance	Chatham	1	77.8	66.0	33.8	43.2	60.3	47.6
Collingwood General & Marine Hospital	Collingwood	12	58.3	47.2	30.6	31.0	47.6	35.4
Grand River Hospital	Kitchener	3	61.7	56.6	46.4	56.8	55.7	95.6
Grey Bruce Health Services	Owen Sound	2	59.2	77.4	17.3	38.8	65.5	44.3
Groves Memorial Community Hospital	Fergus	3	21.7	62.7	30.7	44.5	65.0	53.5
Guelph General Hospital	Guelph	3	53.3	78.1	29.0	40.4	64.6	54.1
Halton Healthcare Services	Oakville	6	56.5	94.3	41.7	58.1	61.5	48.6
Hawkesbury & District General Hospital	Hawkesbury	11	47.1	48.7	25.3	25.5	30.5	33.5
Headwaters Health Care Centre	Orangeville	5	67.8	65.1	52.7	56.4	68.5	81.4
Hôpital Montfort	Ottawa	11	47.4	69.4	13.6	40.8	53.3	80.7
Hôpital régional de Sudbury Regional Hospital	Sudbury	13	46.9	55.5	48.4	52.7	55.0	53.1
Hotel Dieu Health Sciences Hospital (Niagara)	St. Catharines	4	38.2	80.2	11.7	37.6	53.8	98.4
Hôtel-Dieu Grace Hospital (Windsor)	Windsor	1	45.6	59.5	33.3	51.8	55.3	55.3
Humber River Regional Hospital	Toronto	8	59.9	87.3	31.7	44.4	64.3	44.9
Huron Perth Healthcare Alliance	Seaforth	2	82.1	70.8	49.0	48.4	52.0	60.5
Huron District Hospital (North Simcoe Hospital Alliance)	Midland	12	47.9	60.1	33.3	26.1	51.5	60.9
Joseph Brant Memorial Hospital	Burlington	4	36.2	81.9	34.1	46.1	66.1	62.4
Kirkland and District Hospital	Kirkland Lake	13	70.0	57.6	11.2	32.0	55.1	88.3
Lake of the Woods District Hospital	Kenora	14	62.3	62.4	21.1	38.8	53.8	35.0
Lakeridge Health Corporation	Durham	9	77.5	79.0	27.4	47.7	64.2	84.0
Leamington District Memorial Hospital	Leamington	1	48.4	64.9	28.1	48.3	82.3	75.4
Markham Stouffville Hospital	Markham	8	53.5	46.0	11.8	35.4	61.0	54.1
Niagara Health System	Niagara	4	45.1	81.4	75.9	67.4	56.2	99.0
Norfolk General Hospital	Simcoe	4	62.3	83.0	20.5	26.8	51.0	94.2
North Bay General Hospital	North Bay	13	54.4	37.8	27.8	43.4	23.5	26.8
North York General Hospital	Toronto	8	46.3	61.2	19.0	34.1	47.6	67.3
Northumberland Hills Hospital	Cobourg	9	72.3	77.3	16.1	36.7	65.0	98.3
Orillia Soldiers' Memorial Hospital	Orillia	12	39.7	59.5	35.4	33.8	60.8	26.2
Pembroke General Hospital	Pembroke	11	57.2	53.5	13.7	37.9	64.4	69.7
Perth and Smiths Falls District Hospital	Smiths Falls	10	63.4	83.6	52.5	55.3	52.9	NS
Peterborough Regional Health Centre	Peterborough	9	35.9	69.1	29.2	47.6	64.0	67.2
Queensway Carleton Hospital	Nepean	11	29.9	69.4	38.4	43.7	55.5	75.9
Quinte Healthcare Corporation	Hastings and Prince Edward	10	49.5	60.1	16.8	31.9	53.7	68.3

■ Above-average performance

■ Average performance

■ Below-average performance

Renfrew Victoria Hospital	Renfrew	11	38.9	86.1	27.9	52.3	64.2	92.3
Ross Memorial Hospital	Lindsay	9	35.2	74.2	14.0	35.4	53.0	85.2
Rouge Valley Health System	Toronto	9	47.9	65.9	26.0	42.5	57.9	55.0
Sault Area Hospitals	Sault Ste. Marie	13	40.4	63.2	20.2	39.1	53.8	87.0
South Bruce Grey Health Centre	Kincardine	2	38.7	48.2	21.1	16.4	50.6	95.2
South Muskoka Memorial Hospital	Bracebridge	12	35.5	52.1	6.3	19.8	54.3	53.5
Southlake Regional Health Centre	Newmarket	8	49.5	76.0	25.3	48.4	66.1	53.4
St. Joseph's Health Centre (Toronto)	Toronto	7	52.2	76.4	23.1	43.1	70.1	70.7
St. Mary's General Hospital	Kitchener	3	60.4	76.0	46.8	47.4	62.1	99.0
St. Thomas Elgin General Hospital	St. Thomas	2	50.0	72.7	37.6	55.1	61.7	58.8
Strathroy Middlesex Hospital Alliance	Strathroy	2	28.5	68.7	7.3	21.5	62.2	49.1
Temiskaming Hospital	New Liskeard	13	52.7	60.6	29.2	39.3	50.0	NS
The Credit Valley Hospital	Mississauga	6	74.4	71.2	40.5	55.0	67.9	96.6
The Scarborough Hospital	Toronto	9	47.3	63.7	42.1	48.7	65.7	NS
Thunder Bay Regional Hospital	Thunder Bay	14	79.5	64.4	11.8	46.5	62.0	82.9
Tillsonburg District Memorial Hospital	Tillsonburg	2	39.6	60.0	36.5	34.1	59.1	55.8
Timmins and District Hospital	Timmins	13	62.9	57.3	27.2	39.0	57.0	58.8
Toronto East General Hospital	Toronto	7	62.1	88.4	25.3	54.4	74.2	56.6
Trillium Health Centre	Mississauga	6	67.7	83.9	32.3	49.7	78.1	91.5
West Lincoln Memorial Hospital	Grimsby	4	20.0	61.6	18.9	36.6	55.5	98.3
West Parry Sound Health Centre	Parry Sound	13	25.9	51.1	17.9	49.9	42.8	43.8
William Osler Health Centre	Brampton	5	68.3	66.1	51.0	62.5	63.4	53.5
Winchester District Memorial Hospital	Winchester	11	21.2	44.4	10.2	27.7	44.9	47.7
Windsor Regional Hospital	Windsor	1	65.4	51.9	18.2	62.2	71.4	87.9
Woodstock General Hospital	Woodstock	2	49.1	64.9	53.7	63.0	66.5	42.2
York Central Hospital	Richmond Hill	8	46.5	64.9	36.0	59.0	67.1	29.6

MEAN HOSPITAL RESULTS BY LOCAL HEALTH INTEGRATION NETWORK (LHIN)

1 (Erie—St. Clair)	61.3	58.1	32.8	49.0	65.5	59.5
2 (South West)	46.6	62.1	30.3	37.4	56.9	56.6
3 (Waterloo Wellington)	47.7	62.3	33.7	41.6	58.6	73.2
4 (Hamilton Niagara Haldimand Brant)	44.3	67.7	27.8	42.5	56.2	85.2
5 (Central West)	68.0	65.6	51.9	59.5	66.0	67.5
6 (Mississauga Halton)	66.2	83.1	38.1	54.2	69.2	78.9
7 (Toronto Central)	59.1	77.8	32.5	50.3	68.9	72.3
8 (Central)	46.6	67.0	27.5	44.7	58.6	49.9
9 (Central East)	44.2	66.8	26.9	40.6	56.0	72.0
10 (South East)	52.7	70.6	44.6	50.0	58.5	64.5
11 (Champlain)	35.4	57.2	23.1	36.0	53.3	47.7
12 (North Simcoe Muskoka)	45.0	56.0	25.8	31.8	51.7	59.0
13 (North East)	41.4	43.8	20.3	30.1	41.7	53.8
14 (North West)	45.8	48.5	20.5	29.8	44.7	55.4

* The performance allocation average includes only those hospitals participating in the hospital-specific portion of the report. These averages were used when determining performance allocation.

Note that small hospitals were considered separately when assigning performance allocation. The other averages in this report (for example, provincial, small, teaching and community) contain all hospitals within the designated peer group.

NA = not applicable NS = no healthy workplace survey was completed

■ Above-average performance

■ Average performance

■ Below-average performance

This quadrant shows the extent to which patients are satisfied with the care they received. Results are generated from the National Research Corporation (NRC) + Picker survey of patients who had an acute inpatient stay, during two different time periods: 2003–2004, and several months of 2004–2005, (with the number of months varying by hospital).

Ninety-five (95) hospitals voluntarily participated in the patient satisfaction survey process in 2003–2004 and 94 participated in 2004–2005.

For 2003–2004, approximately 138,000 individuals from participating hospitals in Ontario were mailed questionnaires. The overall response rate for patients was 48.6%. Males and females had similar response rates of 48.4% and 48.8%, respectively. The mean (average) hospital response rate was 50.1%, and the median response rate was 49.6%. The lowest response rate for a given hospital corporation was 35.7%.

In previous years' *Hospital Report: Acute Care* reports, the patient satisfaction quadrant results have included scores from patients of all ages. For this report, results for patients 0 to 17 years old have been excluded from the overall analysis and used for a pediatric-only analysis. Those hospitals that met a volume screen for pediatric responses (or pediatric proxy responses) are included in the pediatric analysis.

It is not possible to directly compare this year's results with those of previous years, because the questionnaire used for this analysis is different than the one used for past reports. The questionnaire results in data that reflect a mix of event-based (did something happen?) and perception-based (how would you rate something?) items. Specifically, the questionnaire focuses on the patient experience and allows patients to evaluate the services they received and their interaction with hospital staff, including nurses and doctors.

The four indicators for this quadrant are made up of a varying number of individual questionnaire items. For each of the indicators, a higher score and an above-average performance allocation is desired. The maximum score for each indicator is 100.

Indicator Definitions

Overall Impressions

Patients' views of their overall hospital experience, including the overall quality of care and services they received at the hospital, and their confidence in the doctors and nurses who cared for them.

Communication

Patients' views about the amount and quality of the information and communications they received about their condition, treatment and preparation for discharge and care at home, and whether they felt family and friends were given sufficient information.

Consideration

Patients' views about whether they are treated with respect, dignity and courtesy.

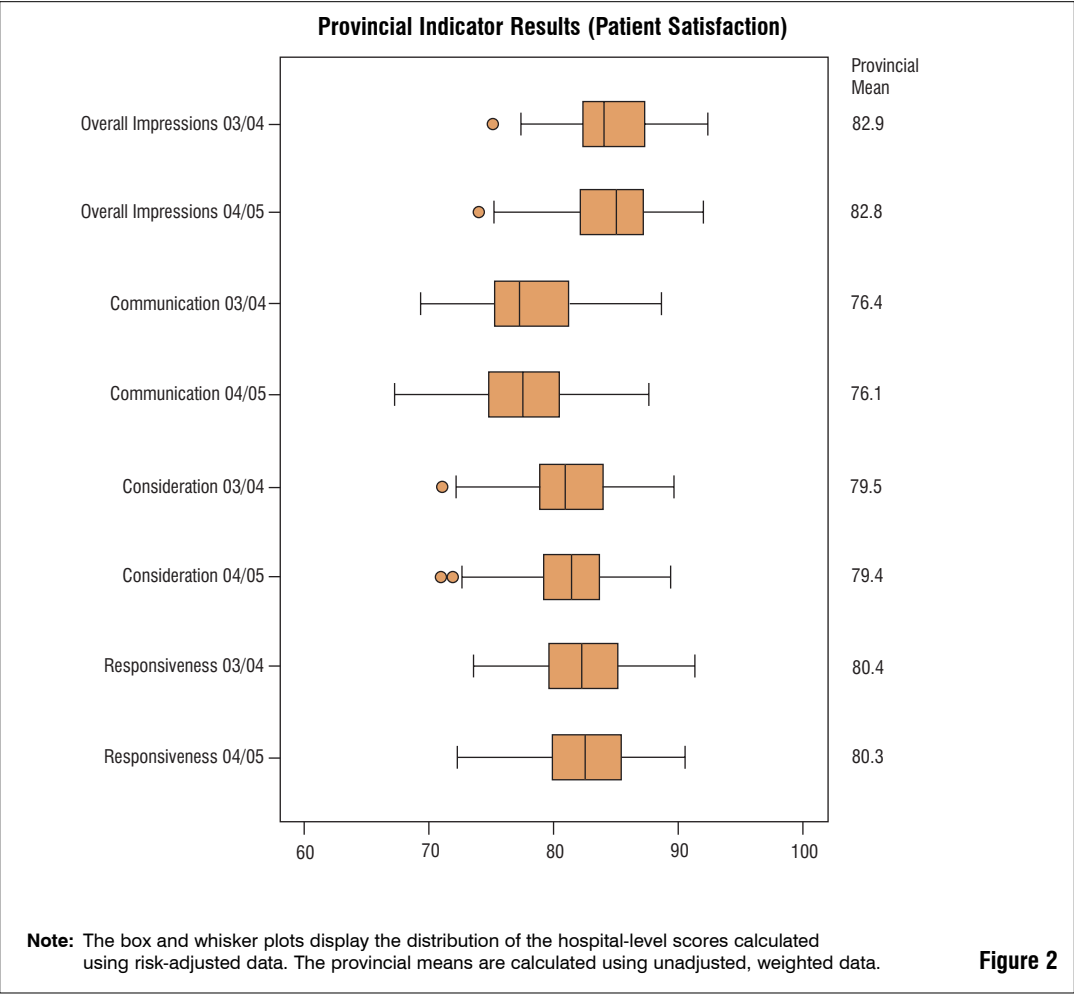
Responsiveness

Patients' assessments of the extent to which they got the care they needed in hospital and how coordinated and integrated that care was when it was delivered.

Note:

Patient satisfaction data for several months of 2003 were adjusted to correct for the negative impact of SARS. In addition, data were also adjusted using common risk-adjustment techniques. A number of variables were used to adjust indicator scores for factors considered to be beyond a hospital's control that were observed to impact scores. These included age and sex, as well as the following questions from the survey: In general, how would you rate your health? Including this hospital stay, how many times in the last six months have you been in a hospital overnight or longer? Who completed this survey?

PROVINCIAL INDICATOR RESULTS



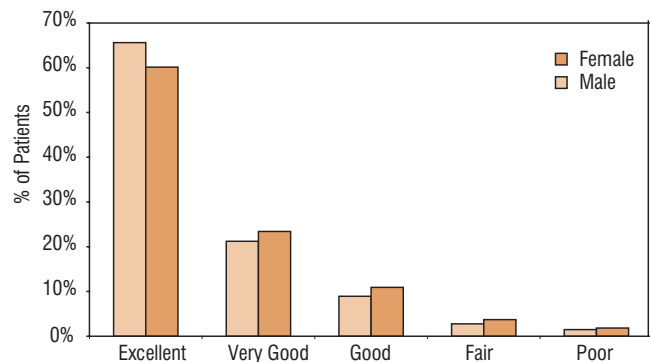
SUMMARY OF RESULTS

Approximately 66% of men and 60% of women had “excellent” Overall Impressions, while only 4.2% of men and 5.5% of women had “fair” or “poor” Overall Impressions.

Hospitals scored substantially higher on the Overall Impressions indicator than the three other patient satisfaction indicators. Hospitals scores were lowest for the communication indicator. These results hold across both fiscal years.

Across all indicators, and for both fiscal years, LHIN boundary number 2 (South West) reported the highest mean scores.

Patients' Overall Impressions 2003–2004 & 2004–2005



Note: This figure is built using the combined 2003–2004 and 2004–2005 raw patient satisfaction data (including pediatric records).

Figure 3

Hospital	Community Served	LHIN	Overall Impressions 2003–2004	Overall Impressions 2004–2005	Communication 2003–2004	Communication 2004–2005	Consideration 2003–2004	Consideration 2004–2005	Responsiveness 2003–2004	Responsiveness 2004–2005
PROVINCIAL AVERAGE			82.9	82.8	76.4	76.1	79.5	79.4	80.4	80.3
TEACHING HOSPITALS AVERAGE			85.1	85.1	78.3	78.6	81.0	81.2	81.3	81.5
Hamilton Health Sciences Corporation	Hamilton	4	84.1	84.3	77.2	77.8	80.4	81.1	80.5	81.1
Kingston General Hospital	Kingston	10	85.2	85.2	78.3	76.8	82.1	81.9	81.7	81.3
London Health Sciences Centre	London	2	88.7	87.7	81.3	81.8	84.3	84.1	84.4	84.6
Mount Sinai Hospital	Toronto	7	81.2	86.2	75.3	80.6	75.5	80.6	76.4	81.7
St. Joseph's Health Care London	London	2	86.7	87.7	80.4	83.3	82.9	83.8	84.2	85.7
St. Joseph's Healthcare Hamilton	Hamilton	4	85.0	83.0	78.2	74.2	80.7	79.5	81.1	79.5
St. Michael's Hospital	Toronto	7	84.8	84.6	77.3	76.3	80.6	80.5	81.3	80.2
Sunnybrook and Women's College Health Sciences Centre	Toronto	7	83.9	83.7	76.1	76.3	79.3	79.1	80.2	79.4
The Ottawa Hospital	Ottawa	11	85.6	85.5	78.5	79.2	82.5	82.1	81.9	82.0
University Health Network	Toronto	7	84.0	84.5	79.0	79.4	79.5	79.7	80.1	80.5
SMALL HOSPITALS AVERAGE			89.6	88.2	83.7	81.6	87.0	85.9	88.3	87.3
Alexandra Hospital	Ingersoll	2	87.4	NR	78.0	NR	84.4	NR	85.1	NR
Alexandra Marine and General Hospital	Goderich	2	87.0	87.1	82.5	77.4	86.4	85.6	86.1	86.2
Almonte General Hospital	Almonte	11	91.3	91.7	88.7	85.2	89.7	88.1	91.1	90.9
Arnprior & District Memorial Hospital	Arnprior	11	92.7	90.5	87.7	84.7	90.4	88.5	91.4	89.7
Carleton Place & District Memorial Hospital	Carleton Place	11	NR	89.7	NR	82.5	NR	85.0	NR	87.9
Deep River and District Hospital	Deep River	11	NR	91.5	NR	88.5	NR	87.9	NR	90.7
Dryden Regional Health Centre	Dryden	14	87.4	82.9	82.0	79.7	83.6	81.1	84.6	82.9
Englehart & District Hospital	Englehart	13	92.9	NR	90.4	NR	92.0	NR	93.7	NR
Four Counties Health Services	Newbury	2	89.4	89.4	85.2	83.4	86.6	83.6	88.5	87.4
Glengarry Memorial Hospital	Alexandria	11	90.8	88.7	83.6	82.8	86.8	85.2	88.9	88.5
Haldimand War Memorial Hospital	Dunnville	4	94.6	DNP	85.1	DNP	90.8	DNP	90.9	DNP
Haliburton Highlands Health Services Corporation	Haliburton	9	DNP	93.0	DNP	84.6	DNP	89.9	DNP	90.3
Hanover & District Hospital	Hanover	2	88.8	NR	84.9	NR	85.5	NR	86.8	NR
Kemptville District Hospital	Kemptville	11	91.6	89.2	84.9	81.3	89.1	86.3	90.2	87.2
Listowel & Wingham Hospitals Alliance	Listowel	2	90.2	90.7	83.3	84.0	87.6	86.8	88.8	88.4
MHCs Group of Health Services	Cochrane	13	DNP	90.3	DNP	85.6	DNP	90.9	DNP	89.5
North Wellington Health Care Corporation	Mount Forest	3	91.0	90.7	83.5	84.0	88.5	87.7	90.3	89.5
Services de santé de Chapleau Health Services	Chapleau	13	89.1	88.9	84.0	81.7	87.2	85.7	89.6	89.2
South Huron Hospital	Exeter	2	NR	NR	NR	NR	NR	NR	NR	NR
St. Francis Memorial Hospital	Barry's Bay	11	94.0	92.5	90.3	84.2	89.8	87.5	90.5	90.0
Stevenson Memorial Hospital	Alliston	8	84.1	83.4	76.8	76.0	82.2	82.1	83.4	84.7
The West Nipissing General Hospital	Sturgeon Falls	13	88.9	87.4	85.0	79.4	86.5	84.0	88.6	86.7

■ Above-average performance

■ Average performance

■ Below-average performance

Hospital	Community Served	LHIN	Overall Impressions 2003–2004	Overall Impressions 2004–2005	Communication 2003–2004	Communication 2004–2005	Consideration 2003–2004	Consideration 2004–2005	Responsiveness 2003–2004	Responsiveness 2004–2005
COMMUNITY HOSPITALS AVERAGE			83.5	83.3	76.8	76.4	80.4	80.2	81.6	81.5
Algonquin Health Services	Huntsville	12	DNP	90.5	DNP	84.9	DNP	86.8	DNP	87.7
Bluewater Health	Sarnia	1	81.9	82.6	76.2	76.5	80.0	81.5	82.6	83.2
Brantford General Hospital	Brantford	4	NR	83.0	NR	78.1	NR	81.7	NR	83.1
Brockville General Hospital	Brockville	10	83.1	84.7	75.5	77.9	80.2	81.2	82.7	84.9
Cambridge Memorial Hospital	Cambridge	3	83.2	85.1	78.9	81.6	80.8	82.6	81.4	81.5
Chatham–Kent Health Alliance	Chatham	1	86.6	88.4	81.5	80.5	83.3	85.0	85.2	86.4
Collingwood General & Marine Hospital	Collingwood	12	87.4	86.8	83.4	80.8	84.3	83.7	85.2	85.4
Grand River Hospital	Kitchener	3	84.1	DNP	78.1	DNP	80.3	DNP	81.9	DNP
Grey Bruce Health Services	Owen Sound	2	88.7	88.4	78.9	79.9	86.1	85.6	88.1	87.3
Groves Memorial Community Hospital	Fergus	3	91.7	87.8	84.2	78.6	88.1	83.9	89.6	86.5
Guelph General Hospital	Guelph	3	86.3	84.5	77.7	75.0	84.3	81.1	83.2	82.1
Halton Healthcare Services	Oakville	6	84.1	83.6	77.0	74.9	80.7	80.4	80.5	79.2
Hawkesbury & District General Hospital	Hawkesbury	11	90.2	88.4	83.5	80.7	84.6	86.0	86.8	86.7
Headwaters Health Care Centre	Orangeville	5	87.3	86.4	76.8	77.6	82.8	83.7	85.4	84.4
Hôpital Montfort	Ottawa	11	87.5	87.0	80.6	80.0	84.3	82.6	83.8	82.8
Hôpital régional de Sudbury Regional Hospital	Sudbury	13	82.6	83.3	75.8	77.5	79.8	79.9	80.0	80.7
Hotel Dieu Health Science Hospital (Niagara)	St. Catharines	4	NR	DNP	NR	DNP	NR	DNP	NR	DNP
Hôtel-Dieu Grace Hospital (Windsor)	Windsor	1	83.6	82.0	76.6	74.2	79.9	79.8	80.9	80.4
Humber River Regional Hospital	Toronto	8	77.0	77.4	71.7	72.7	73.2	74.4	76.3	77.1
Huron Perth Healthcare Alliance	Seaforth	2	91.0	90.1	83.7	81.6	87.4	86.1	89.4	88.1
Huron District Hospital (North Simcoe Hospital Alliance)	Midland	12	NR	85.2	NR	79.2	NR	83.2	NR	84.7
Joseph Brant Memorial Hospital	Burlington	4	83.2	82.0	73.3	71.7	79.8	78.9	81.5	80.1
Kirkland and District Hospital	Kirkland Lake	13	82.5	84.3	75.8	80.2	81.8	84.1	82.3	84.6
Lake of the Woods District Hospital	Kenora	14	NR	89.4	NR	83.9	NR	85.0	NR	87.4
Lakeridge Health Corporation	Durham	9	83.3	84.4	75.5	75.9	81.2	82.3	81.4	82.2
Leamington District Memorial Hospital	Leamington	1	85.8	87.5	79.4	80.3	81.5	83.3	85.3	85.5
Markham Stouffville Hospital	Markham	8	84.9	84.7	78.4	78.1	80.7	80.8	80.9	80.6
Niagara Health System	Niagara	4	81.6	82.1	77.1	75.6	79.8	79.9	81.3	82.2
Norfolk General Hospital	Simcoe	4	82.8	81.7	75.9	79.1	80.0	79.3	81.9	81.5
North Bay General Hospital	North Bay	13	83.3	84.3	75.8	74.6	80.6	82.2	83.1	82.5
North York General Hospital	Toronto	8	81.0	80.7	72.9	72.1	76.0	76.1	77.2	77.6
Northumberland Hills Hospital	Cobourg	9	84.4	89.9	77.3	77.4	81.6	84.8	83.2	85.2
Orillia Soldiers' Memorial Hospital	Orillia	12	84.2	85.4	74.0	74.3	82.0	81.5	81.2	83.0
Pembroke General Hospital	Pembroke	11	81.3	82.2	75.4	76.3	79.2	79.4	81.4	83.2
Perth and Smiths Falls District Hospital	Smiths Falls	10	88.9	89.9	84.0	81.3	86.1	86.4	86.8	87.5
Peterborough Regional Health Centre	Peterborough	9	83.6	83.7	77.3	81.1	80.9	79.6	82.2	82.6
Queensway Carleton Hospital	Nepean	11	85.1	85.5	78.0	76.9	82.7	82.3	82.8	83.3
Quinte Healthcare Corporation	Hastings and Prince Edward	10	86.3	86.5	79.2	79.9	84.1	83.3	84.8	84.8

■ Above-average performance

■ Average performance

■ Below-average performance

Renfrew Victoria Hospital	Renfrew	11	90.9	DNP	81.7	DNP	88.4	DNP	88.7	DNP
Ross Memorial Hospital	Lindsay	9	85.2	88.9	77.1	80.1	82.7	83.9	85.3	87.6
Rouge Valley Health System	Toronto	9	83.9	84.1	75.8	75.8	80.4	79.9	81.7	82.0
Sault Area Hospital	Sault Ste. Marie	13	80.7	84.0	75.5	78.2	79.5	81.6	80.5	83.9
South Bruce Grey Health Centre	Kincardine	2	87.6	87.1	81.3	82.5	86.2	85.5	86.9	87.1
South Muskoka Memorial Hospital	Bracebridge	12	87.9	86.7	79.6	81.3	85.9	85.7	85.7	87.0
Southlake Regional Health Centre	Newmarket	8	87.6	85.7	78.8	77.1	83.7	81.7	83.9	82.8
St. Joseph's Health Centre (Toronto)	Toronto	7	84.9	83.1	79.5	74.8	80.4	78.9	82.8	80.2
St. Mary's General Hospital	Kitchener	3	84.5	86.2	78.0	80.5	80.4	83.7	81.4	83.6
St. Thomas Elgin General Hospital	St. Thomas	2	85.5	87.8	78.8	81.1	82.1	84.5	85.0	85.7
Strathroy Middlesex General Hospital	Strathroy	2	89.3	87.3	81.3	78.2	85.6	83.7	88.1	86.1
Temiskaming Hospital	New Liskeard	13	90.7	87.5	86.2	84.4	88.5	85.8	89.4	86.7
The Credit Valley Hospital	Mississauga	6	82.9	78.0	78.5	76.4	78.6	74.6	78.2	75.5
The Scarborough Hospital	Toronto	9	78.9	80.8	72.2	72.2	75.4	76.6	77.6	79.0
Thunder Bay Regional Hospital	Thunder Bay	14	82.0	81.6	76.2	74.8	79.2	78.9	80.4	79.4
Tillsonburg District Memorial Hospital	Tillsonburg	2	86.7	85.5	78.0	78.4	83.4	83.0	85.6	85.4
Timmins and District Hospital	Timmins	13	88.5	84.5	82.5	79.4	84.8	81.9	85.1	82.3
Toronto East General Hospital	Toronto	7	79.5	77.7	75.1	74.5	75.4	74.5	77.4	75.4
Trillium Health Centre	Mississauga	6	82.2	81.4	75.6	74.4	77.8	77.2	79.5	78.3
West Lincoln Memorial Hospital	Grimsby	4	90.2	89.9	81.8	75.3	85.6	84.0	86.5	87.7
West Parry Sound Health Centre	Parry Sound	13	84.7	87.2	78.8	78.3	82.4	83.2	84.7	86.0
William Osler Health Centre	Brampton	5	80.7	78.3	76.3	72.8	77.7	75.6	79.6	76.3
Winchester District Memorial Hospital	Winchester	11	90.9	92.6	85.7	84.5	87.0	90.3	88.5	90.9
Windsor Regional Hospital	Windsor	1	84.9	81.8	76.5	73.9	81.6	79.2	82.9	80.2
Woodstock General Hospital	Woodstock	2	85.0	85.7	76.8	77.5	82.6	83.8	85.1	86.1
York Central Hospital	Richmond Hill	8	76.7	75.7	70.6	69.0	73.9	73.0	75.3	74.2

PEDIATRIC PATIENT SATISFACTION AVERAGE*			82.9	83.4	82.0	81.9	80.2	79.7	77.9	78.1
Cambridge Memorial Hospital	Cambridge	3	76.5	77.9	74.2	74.2	75.0	75.8	74.0	74.9
Children's Hospital of Eastern Ontario	Ottawa	11	86.7	85.4	85.2	82.1	84.8	81.0	79.4	77.5
Grand River Hospital	Kitchener	3	80.8	NR	81.0	NR	78.7	NR	77.1	NR
Halton Healthcare Services	Oakville	6	78.3	81.0	75.6	79.5	76.1	78.0	72.4	77.2
Hôtel-Dieu Grace Hospital (Windsor)	Windsor	1	77.0	78.0	74.6	76.1	75.3	76.3	76.0	77.0
Kingston General Hospital	Kingston	10	77.5	NR	77.8	NR	77.4	NR	74.6	NR
London Health Sciences Centre	London	2	83.8	82.8	84.1	82.9	81.4	78.6	78.8	77.2
Markham Stouffville Hospital	Markham	8	79.2	83.3	79.9	81.5	75.5	78.7	75.6	78.6
Orillia Soldiers' Memorial Hospital	Orillia	12	NR	85.2	NR	85.4	NR	82.6	NR	83.1
Rouge Valley Health System	Toronto	9	83.0	81.8	82.6	82.0	79.7	77.5	79.8	78.7
The Hospital for Sick Children	Toronto	7	89.0	87.9	87.5	85.6	84.7	83.4	81.4	80.1
Thunder Bay Regional Hospital	Thunder Bay	14	77.6	75.9	75.7	75.9	75.1	75.9	73.2	72.7

*Includes hospitals with >= 100 pediatric survey respondents

DNP: did not participate in patient satisfaction surveying during fiscal period

NR: participated in patient satisfaction surveying, but did not pass the volume screen to have data displayed

■ Above-average performance

■ Average performance

■ Below-average performance

LHIN	Overall Impressions 2003–2004	Overall Impressions 2004–2005	Communication 2003–2004	Communication 2004–2005	Consideration 2003–2004	Consideration 2004–2005	Responsiveness 2003–2004	Responsiveness 2004–2005
MEAN HOSPITAL RESULTS BY LOCAL HEALTH INTEGRATION NETWORK (LHIN)								
1 (Erie–St. Clair)	84.3	83.7	77.6	76.3	81.1	81.3	82.9	82.4
2 (South West)	87.6	87.2	79.9	80.2	84.0	83.8	85.3	85.2
3 (Waterloo Wellington)	85.2	85.7	78.6	79.1	82.1	82.8	82.7	83.1
4 (Hamilton Niagara Haldimand Brant)	83.7	83.4	77.5	76.7	80.5	80.6	81.2	81.5
5 (Central West)	81.7	79.4	76.4	73.5	78.4	76.7	80.4	77.4
6 (Mississauga Halton)	82.8	81.2	76.6	75.1	78.7	77.4	79.5	77.9
7 (Toronto Central)	83.5	83.6	77.4	77.3	79.0	79.2	80.0	79.8
8 (Central)	80.2	79.7	73.5	73.0	76.5	76.3	78.2	78.2
9 (Central East)	82.6	83.9	75.4	76.3	79.6	80.2	80.9	81.8
10 (South East)	85.7	86.0	78.8	78.4	82.9	82.7	83.3	83.5
11 (Champlain)	86.3	86.1	79.4	79.4	83.3	82.7	83.3	83.3
12 (North Simcoe Muskoka)	85.9	86.4	77.8	78.9	83.5	83.5	83.3	85.0
13 (North East)	83.5	84.4	77.2	78.0	81.1	81.7	82.1	82.8
14 (North West)	82.7	82.6	77.0	76.3	79.9	79.8	81.1	80.6

CLINICAL UTILIZATION AND OUTCOMES

This quadrant focuses on clinical performance from acute care hospitals. The quadrant has been completely redeveloped from *Hospital Report 2003: Acute Care*. Quadrant analysis is based on 11 new measures, as well as aggregated results for indicators used in previous years.

For each of the indicators, a lower score is desirable, as is an above-average performance allocation.

The three indicators listed below are calculated for each of the 98 hospital corporations that agreed to be included in this report at the hospital-specific level. These indicators are similar to the measures that were reported in *Hospital Report 2003: Acute Care* at the hospital-specific level. For *Hospital Report 2005: Acute Care*, the measures have been grouped in a slightly different way. Risk-adjustment models have been applied for these indicators; however, it should be noted that there are complex risk-adjustment issues that have challenged the data analysis (for example, small sample size). Refer to the Risk-Adjustment section in the Technical Summary for further details. In the future, further investigation of different risk-adjustment models will be explored to help address these challenges.

Indicator Definitions—Hospital-Specific Level

Readmissions—Medical

Sum of readmission rates for acute myocardial infarction (AMI), heart failure, asthma, gastrointestinal (GI) bleed and stroke.

Readmissions—Surgical

Sum of readmission rates for cholecystectomy, hysterectomy and prostatectomy.

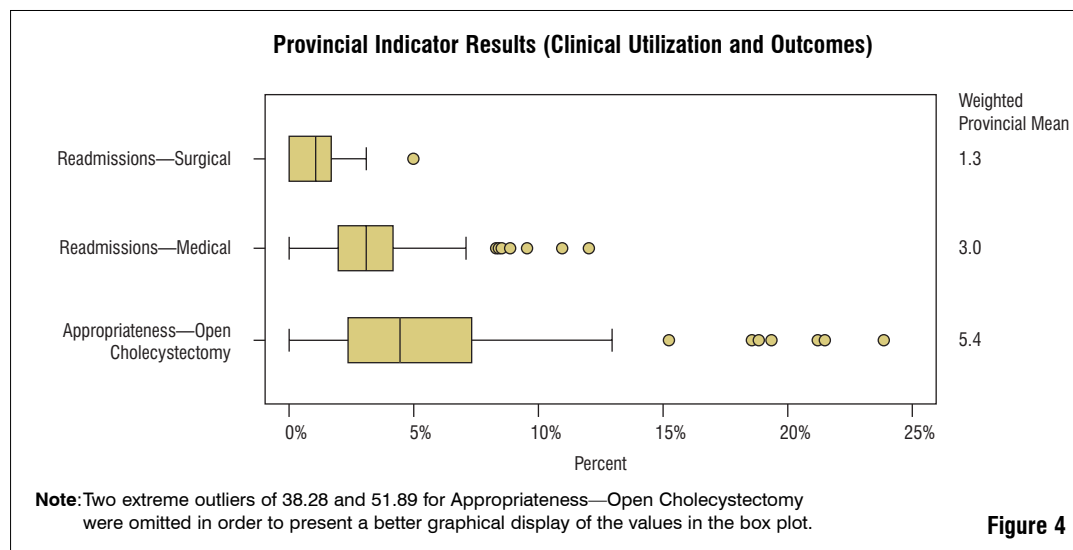
Appropriateness—Surgical

Percentage of cholecystectomies performed “open” versus laparoscopically.

Note: The number of cases of laparoscopic versus open approaches is a complement; as such, only “open” cholecystectomy values are being reported to avoid redundancy.

For the 2002–2003 fiscal year, data presented for this quadrant include inpatient and day surgery data from the Discharge Abstract Database (DAD). For the 2003–2004 fiscal year, inpatient data comes from the DAD, while same-day surgery data comes from the National Ambulatory Care Reporting System (NACRS). The structure and content of the NACRS database is substantially different than the DAD; however, comprehensive analysis and re-formatting of the NACRS data was performed by CIHI to enable consistent analysis based on the two databases.

PROVINCIAL INDICATOR RESULTS



This box and whisker plot displays the distribution of risk-adjusted rates. The box plot is unweighted; however, the provincial means are weighted. Since risk-adjusted rates were used for the box plots, a mean was not calculated within the box plots. The unadjusted, weighted provincial means were calculated by dividing the sum of the numerators of all the hospitals in the province by the sum of the denominators.

SUMMARY OF RESULTS

For both the medical and surgical readmissions indicators, the majority of hospitals are performing at an average level with very few performing above average. There were no hospitals that fell below average (that is, no hospitals' observed rate was above their own expected value).

- Results indicate an average readmission rate in 2003–2004 of 1.3% for surgical cases. This may be a positive reflection of low rates of complications or adverse events during hospitalization for the medical conditions and surgical procedures in question. This result should be considered in relation to other outcome and process indicators, such as length of stay, and other measures of adverse events.
- Many hospitals are performing at an average or above-average level for the Appropriateness indicator, as measured this year by Open Cholecystectomy. The older measure of appropriateness has been modified from percent day surgery cholecystectomy to percentage Open Cholecystectomy. An above-average performance allocation indicates **fewer** cases receiving an open cholecystectomy than was expected. This is based on the premise that laparoscopic cholecystectomies are less invasive, use fewer resources and often provide better patient outcomes (for example, less pain, faster recovery) than the “open” approach.³ However, it should be noted that there are circumstances under which some patients are not appropriate candidates for a laparoscopic cholecystectomy. Therefore, the target rate for this indicator should not be 100%. It should also be noted that these results indicate that rates of open cholecystectomy are diminishing and thus it would be useful to consider other types of minimally invasive surgery, such as laparoscopic oophorectomy, as a measure for appropriateness.

Three indicators in the CUO quadrant are adjusted for risk factors such as age, sex and relevant comorbidities. However, due to very low volumes in the numerators of the Adverse Events indicators, no risk-adjustment models were applied.

3 L. Khaitan and M.D. Holzman, “Laparoscopic Advances in General Surgery,” *Journal of the American Medical Association* 287, 12 (March 27, 2002): pp. 1502-1505, [online], cited July 28, 2005 from <<http://jama.ama-assn.org/cgi/content/full/287/12/1502>>

Indicators Reported at a Provincial Level

The eight new indicators of Adverse Events (Medical), Readmissions (Medical, Major and All Surgical) and Appropriateness (Surgical) listed below are presented at a provincial level because this is the first time they are being presented. No risk-adjustment models have been applied.

Indicator Definitions

Adverse Events—Nurse-Sensitive (Medical and Surgical)

- i. Medical (acute myocardial infarction [AMI], heart failure, asthma, gastrointestinal bleeding and stroke)
 - Post-admission pressure ulcers
 - Post-admission fractures from falls
- ii. Surgical (cholecystectomy, hysterectomy and prostatectomy)
 - Post-admission urinary tract infection
 - Post-admission pressure ulcers
 - Post-admission fractures from falls

These five evidence-based indicators focus on outcomes related to nursing care. They were identified through a critical appraisal of the literature and consultation with key stakeholders.⁴ These indicators consist of central activities performed by nurses and have been frequently used for measuring nursing quality.⁵⁻⁹

Adverse Events (Medical)

- i. Proportion of non-surgical patients who experience the following adverse events:
 - Drug- or anesthetic-related in-hospital adverse events (for example, related to KCI or anticoagulation therapy)
 - Patient falls (in-hospital hip and limb fractures)
 - Pressure ulcers
 - Catheter placement problems and urinary tract infections

4. L. McGillis Hall, D. Doran, H. Spence Laschinger, C. Mallette, L. O'Brien-Pallas and C. Pedersen, *Nursing Report 2001: Preliminary Study for Hospital Report* (2001).
5. American Nurses Association, *Nursing Care Report Card for Acute Care* (Washington, D.C.: American Nurses Publishing, 1995).
6. J. Needleman, P. Buerhaus, S. Mattke, M. Stewart and K. Zelevinsky, *Nurse Staffing and Patient Outcomes in Hospitals* (final report), (Boston: Harvard School of Public Health, 2002).
7. Registered Nurses Association of Ontario, *Nursing Best practice Guideline Shaping the Future of Nursing: Risk Assessment & Prevention of Falls* (Toronto: RNAO, 2002).
8. S. J. Majesky, M. H. Brester and K. T. Nishio, "Development of a Research Tool: Patient Indicators of Nursing Care," *Nursing Research* 27, 6 (1978): pp. 365-371.
9. M. A. Blegan, T. E. Vaughn and C. J. Goode, "Nurse Experience and Education: Effect on Quality of Care," *Journal of Nursing Administration* 31 (2001): pp. 33-39.

- Paralytic ileus
- Post-admission development of MR staphylococcus aureus or vancomycin-resistant enterococci
- Post-admission bacteremia
- Post-admission phlebitis and venous thromboembolism (for example, deep vein thrombosis or pulmonary embolism)
- Post-admission AMI, congestive heart failure, stroke, transient ischemic attack (TIA) or shock
- Post-admission delirium

Readmissions (Medical, Major Surgical and All Surgical)

- i. Medical
Rate of all-cause readmissions within 72 hours of discharge (not including transfers, but including readmissions to other hospitals).
- ii. Major surgical/all surgical
Rate of unplanned readmissions within seven days of surgical discharges with the following indications:
 - Gastrointestinal hemorrhage or ulceration following non-gastrointestinal surgery
 - Decubitus ulcer
 - Reopening of surgical site/wound dehiscence
 - Mechanical complications due to device, implant or graft other than from organ transplantation
 - Procedure-related perforations or lacerations
 - Foreign body left in during procedure
 - Pneumothorax

Appropriateness (Surgical)

- i. % of partial and total oophorectomy done laparoscopically versus open
- ii. Length of operative time for cholecystectomy, partial and total oophorectomy

The following tables illustrate the provincial rate for the province-wide indicators of Adverse Events for Medical Cases and Readmission Rates for Medical Cases.

**Table 1.0: Adverse Events for Medical Cases
Province Wide—Proportion of Non-Surgical Patients Who Experience Adverse Effects**

Year	Provincial Rate
2002–2003	2.9
2003–2004	2.6

**Table 2.0: Readmissions for Medical Cases
Province Wide—Rate of All-Cause Readmissions Within 72 Hours of Discharge**

Year	Provincial Rate
2002–2003	2.2
2003–2004	2.2

Adverse Events for Medical and Surgical Patient Groups

Adverse events have decreased in the two reported years. The graph shows the percentage of episodes of care for medical and surgical patients who experienced adverse events (selected adverse events of interest or nurse-sensitive adverse events).

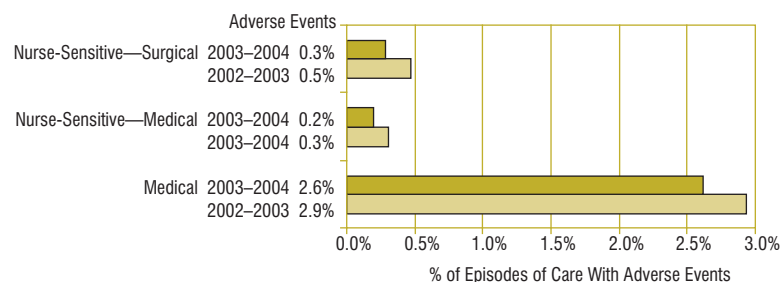


Figure 5

Sources: Discharge Abstract Database, 2002–2003 and 2003–2004 and National Ambulatory Care Reporting System, 2003–2004.

Readmission Rates Across Patient Groups

Readmission rates slightly improved for the two reported years. The graph shows the readmission rates for medical patients with an all-cause readmission, as well as major and all surgical patients with selected diagnoses of interest as the cause for readmission.

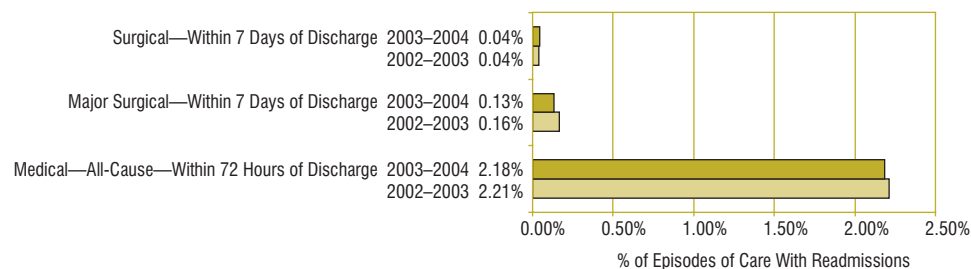


Figure 6

Sources: Discharge Abstract Database, 2002-2003 and 2003-2004 and National Ambulatory Care Reporting System, 2003-2004.

Percent of Selected Elective Procedures Performed Laparoscopic Versus Open

From the reported two years, the laparoscopic approach increased for total oophorectomy, whereas for partial oophorectomy, the rates for open approach slightly increased.

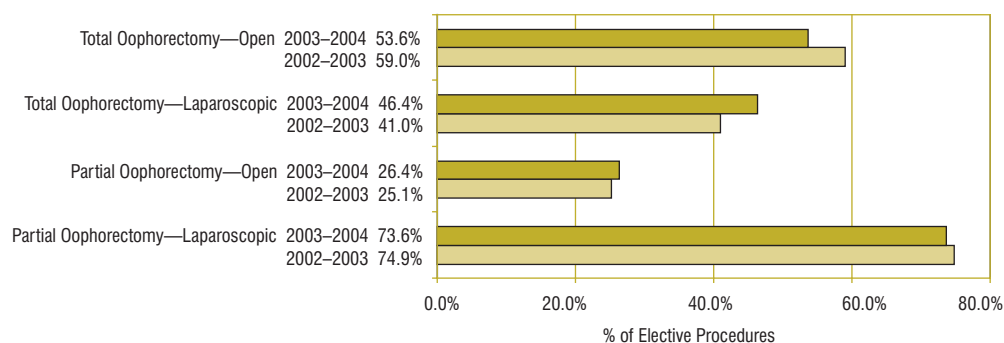


Figure 7

Sources: Discharge Abstract Database, 2002-2003 and 2003-2004 and National Ambulatory Care Reporting System, 2003-2004.

Average Length of Operative Time for Selected Elective Procedures

The graph shows the average length of operative time for selected elective procedures that can be performed either laparoscopically or open. From the reported two years, the open approach usually took longer than the laparoscopic approach.

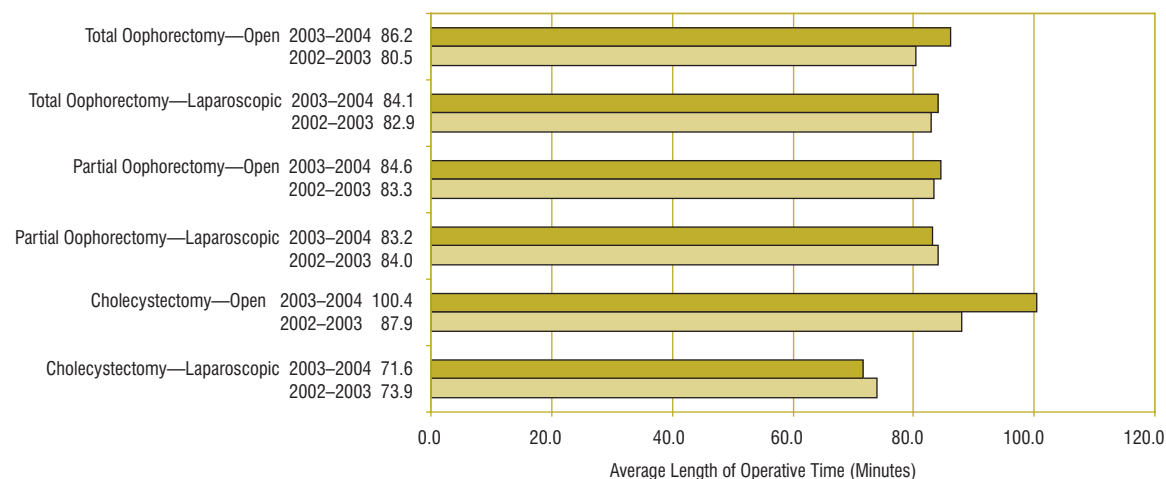


Figure 8

Sources: Discharge Abstract Database, 2002–2003 and 2003–2004 and National Ambulatory Care Reporting System, 2003–2004.

It should be noted that Average Length of Operative Time for Selected Elective Procedures as measured by intervention time is not a mandatory field in DAD or NACRS. The definition of intervention time in NACRS may also vary for each hospital. The recording of this field across hospitals is inconsistent. Results suggest that this data field is either recorded the majority of the time or not recorded at all. This indicator is being reported at a province-wide level for this year's report, and it is anticipated that this may generate more interest in these results and encourage more hospitals to record this field in DAD and NACRS in the future.

It is generally more desirable to have a shorter operative time, as a longer operative time may imply that an adverse event occurred. However, a too short operative time may not necessarily be desirable and could be reflected by a hospital's higher readmission rate.

Hospital	Community Served	LHIN	Appropriateness—Open Cholecystectomy	Readmissions—Medical	Readmissions —Surgical
PROVINCIAL AVERAGE			5.4	3.0	1.3
TEACHING HOSPITALS AVERAGE			5.0	2.2	1.7
Children's Hospital of Eastern Ontario	Ottawa	11	NR	5.7	0.0
Hamilton Health Sciences Corporation	Hamilton	4	4.1	2.9	1.9
Kingston General Hospital**	Kingston	10	5.4	1.3	2.0
London Health Sciences Centre	London	2	12.0	2.2	1.8
Mount Sinai Hospital	Toronto	7	15.3	2.3	2.0
St. Joseph's Health Care London	London	2	3.9	1.6	2.0
St. Joseph's Healthcare Hamilton	Hamilton	4	1.2	2.5	1.2
St. Michael's Hospital	Toronto	7	3.7	2.9	1.8
Sunnybrook and Women's College Health Sciences Centre	Toronto	7	4.6	1.7	1.8
The Hospital for Sick Children	Toronto	7	NR	12.1	0.0
The Ottawa Hospital	Ottawa	11	4.5	2.0	1.8
University Health Network	Toronto	7	2.3	2.0	1.4

** The values for the Clinical Utilization and Outcomes indicators for Kingston General Hospital are based on a combination of data from both Kingston General Hospital and Hotel Dieu Hospital, Kingston.

SMALL HOSPITALS AVERAGE			7.7	3.5	0.3
Alexandra Hospital	Ingersoll	2	NR	0.0	NR
Alexandra Marine and General Hospital	Goderich	2	NR	2.6	1.1
Almonte General Hospital	Almonte	11	NR	5.4	0.0
Arnprior & District Memorial Hospital	Arnprior	11	7.9	1.8	0.0
Carleton Place & District Memorial Hospital	Carleton Place	11	NR	7.1	NR
Deep River and District Hospital	Deep River	11	NR	4.0	NR
Dryden Regional Health Centre	Dryden	14	NR	6.0	0.0
Englehart & District Hospital	Englehart	13	NR	0.0	NR
Four Counties Health Services	Newbury	2	NR	8.5	NR
Glengarry Memorial Hospital	Alexandria	11	NR	2.7	NR
Haldimand War Memorial Hospital	Dunnville	4	NR	0.0	0.0
Haliburton Highlands Health Services Corporation	Haliburton	9	NR	NR	NR
Hanover & District Hospital	Hanover	2	NR	1.3	NR
Kemptville District Hospital	Kemptville	11	NR	0.0	NR
Listowel & Wingham Hospitals Alliance	Listowel	2	10.0	2.5	0.0
MICs Group of Health Services	Cochrane	13	NR	NR	NR
North Wellington Health Care Corporation	Mount Forest	3	NR	3.1	0.0
Services de santé de Chapleau Health Services	Chapleau	13	NR	6.6	NR
South Huron Hospital	Exeter	2	NR	1.7	NR
St. Francis Memorial Hospital	Barry's Bay	11	NR	3.7	NR
Stevenson Memorial Hospital	Alliston	8	NR	4.7	0.0
The West Nipissing General Hospital	Sturgeon Falls	13	NR	5.2	NR

Hospital	Community Served	LHIN	Appropriateness—Open Cholecystectomy	Readmissions—Medical	Readmissions —Surgical
COMMUNITY HOSPITALS AVERAGE			5.5	3.3	1.3
Algonquin Health Services	Huntsville	12	2.4	1.2	NR
Bluewater Health	Sarnia	1	9.0	4.1	0.7
Brantford General Hospital	Brantford	4	4.3	3.6	1.4
Brockville General Hospital	Brockville	10	4.6	6.8	2.4
Cambridge Memorial Hospital	Cambridge	3	4.1	1.6	1.0
Chatham—Kent Health Alliance	Chatham	1	5.2	4.0	0.2
Collingwood General & Marine Hospital	Collingwood	12	24.0	3.6	0.0
Grand River Hospital	Kitchener	3	6.6	1.6	1.4
Grey Bruce Health Services	Owen Sound	2	2.7	2.0	1.9
Groves Memorial Community Hospital	Fergus	3	18.6	5.8	0.0
Guelph General Hospital	Guelph	3	2.1	2.5	0.9
Halton Healthcare Services	Oakville	6	4.6	1.9	1.3
Hawkesbury & District General Hospital	Hawkesbury	11	10.8	3.8	0.0
Headwaters Health Care Centre	Orangeville	5	0.9	2.1	0.5
Hôpital Montfort	Ottawa	11	4.6	3.9	1.2
Hôpital régional de Sudbury Regional Hospital	Sudbury	13	5.5	3.5	1.2
Hotel Dieu Health Science Hospital (Niagara)	St. Catharines	4	NR	4.2	1.7
Hôtel-Dieu Grace Hospital (Windsor)	Windsor	1	38.3	3.5	1.6
Humber River Regional Hospital	Toronto	8	3.1	3.5	1.0
Huron Perth Healthcare Alliance	Seaforth	2	5.7	2.4	1.0
Huronion District Hospital (North Simcoe Hospital Alliance)	Midland	12	2.5	5.3	3.0
Joseph Brant Memorial Hospital	Burlington	4	1.6	3.1	1.2
Kirkland and District Hospital	Kirkland Lake	13	NR	2.0	0.0
Lake of the Woods District Hospital	Kenora	14	11.4	2.5	1.9
Lakeridge Health Corporation	Durham	9	4.1	3.3	1.9
Leamington District Memorial Hospital	Leamington	1	1.3	3.7	1.2
Markham Stouffville Hospital	Markham	8	1.5	2.6	2.6
Niagara Health System	Niagara	4	5.3	3.2	1.9
Norfolk General Hospital	Simcoe	4	4.5	2.2	1.9
North Bay General Hospital	North Bay	13	9.2	4.3	1.6
North York General Hospital	Toronto	8	2.4	3.3	1.2
Northumberland Hills Hospital	Cobourg	9	NR	4.2	0.0
Orillia Soldiers' Memorial Hospital	Orillia	12	5.1	2.9	2.2
Pembroke General Hospital	Pembroke	11	5.7	4.7	1.4
Perth and Smiths Falls District Hospital	Smiths Falls	10	NR	4.1	1.3
Peterborough Regional Health Centre	Peterborough	9	0.7	3.6	0.8
Queensway Carleton Hospital	Nepean	11	4.2	3.5	0.6
Quinte Healthcare Corporation	Hastings and Prince Edward	10	2.2	5.0	1.6

■ Above-average performance

■ Average performance

■ Below-average performance

Renfrew Victoria Hospital	Renfrew	11	NR	8.6	NR
Ross Memorial Hospital	Lindsay	9	5.1	5.3	1.5
Rouge Valley Health System	Toronto	9	2.7	2.8	1.3
Sault Area Hospitals	Sault Ste. Marie	13	5.2	3.6	1.7
South Bruce Grey Health Centre	Kincardine	2	NR	5.0	0.0
South Muskoka Memorial Hospital	Bracebridge	12	8.9	3.0	0.0
Southlake Regional Health Centre	Newmarket	8	3.9	3.0	0.9
St. Joseph's Health Centre (Toronto)	Toronto	7	8.0	2.8	2.0
St. Mary's General Hospital	Kitchener	3	4.4	1.1	1.5
St. Thomas Elgin General Hospital	St. Thomas	2	7.4	3.5	1.8
Strathroy Middlesex General Hospital	Strathroy	2	13.0	0.6	1.9
Temiskaming Hospital	New Liskeard	13	9.6	2.4	0.0
The Credit Valley Hospital	Mississauga	6	0.3	1.9	1.6
The Scarborough Hospital	Toronto	9	4.5	3.5	0.5
Thunder Bay Regional Hospital	Thunder Bay	14	21.6	4.9	1.2
Tillsonburg District Memorial Hospital	Tillsonburg	2	5.7	4.6	1.0
Timmins and District Hospital	Timmins	13	3.0	3.8	1.1
Toronto East General Hospital	Toronto	7	3.0	2.5	1.0
Trillium Health Centre	Mississauga	6	1.8	2.4	0.8
West Lincoln Memorial Hospital	Grimsby	4	NR	3.0	2.2
West Parry Sound Health Centre	Parry Sound	13	NR	1.4	0.0
William Osler Health Centre	Brampton	5	3.2	3.3	1.1
Winchester District Memorial Hospital	Winchester	11	1.0	1.7	0.5
Windsor Regional Hospital	Windsor	1	4.2	3.6	1.0
Woodstock General Hospital	Woodstock	2	8.7	3.5	0.9
York Central Hospital	Richmond Hill	8	5.9	2.3	1.5

MEAN HOSPITAL RESULTS BY LOCAL HEALTH INTEGRATION NETWORK (LHIN)

1 (Erie–St. Clair)	16.2	3.8	1.0
2 (South West)	6.4	2.6	1.5
3 (Waterloo Wellington)	5.1	1.9	1.2
4 (Hamilton Niagara Haldimand Brant)	4.5	3.0	1.7
5 (Central West)	3.0	3.2	1.0
6 (Mississauga Halton)	2.0	2.1	1.1
7 (Toronto Central)	4.6	2.3	1.6
8 (Central)	3.3	3.1	1.3
9 (Central East)	3.7	3.4	1.1
10 (South East)	3.7	3.3	1.8
11 (Champlain)	5.1	2.8	1.3
12 (North Simcoe Muskoka)	5.3	3.9	1.6
13 (North East)	6.3	3.6	1.2
14 (North West)	15.7	4.5	1.1

* Non-reportable (NR)—results are not shown due to either <5 cases; expected numerator is <2 cases; and/or physician confidentiality rules.

■ Above-average performance

■ Average performance

■ Below-average performance

This quadrant focuses on indicators of financial performance and condition specific to hospitals that provide acute inpatient services. The 12 indicators used in *Hospital Report 2005: Acute Care* measure the viability, liquidity, efficiency, and human resource use of Ontario acute care hospitals.

Nine of the indicators were initially developed for *Hospital Report 1999: Acute Care*. Working groups consisting of senior hospital and ministry executives, as well as experts familiar with hospital finances and Ontario reporting requirements, assisted the Financial Quadrant Research Team in the selection and development of these indicators. The remaining three indicators, focusing on nursing financial performance, were identified and selected from a wider pool of potential indicators using a similar process, and were reported for the first time in *Hospital Report 2003: Acute Care*.

The financial data included in this report are for the 2002–2003 and 2003–2004 fiscal years, the most recent data available. The data are submitted annually to the Ontario Ministry of Health and Long-Term Care using formats specified by the Ontario Hospital Reporting System (OHRS). Each year, the Financial Quadrant Research Team reviews the indicator definitions with respect to additions and modifications to the OHRS to ensure that the essence of the indicators remain consistent and relevant year over year. This year, the introduction of hospital sector codes to the OHRS has allowed a clearer picture of hospital activity to be reflected in the indicator definitions and values. The recent addition of nursing practitioner data to the OHRS has also impacted several indicators and has been incorporated into several indicator definitions, specifically those focusing on the utilization of health human resources.

Data from 123 hospital corporations with acute care services were used to calculate provincial means shown in this summary; hospital-specific data are shown for 98 hospital corporations that voluntarily agreed to participate in this report.

Indicator Definitions

Total Margin

Measures the percent by which a hospital's total revenues differs from its total expenses, excluding the impact of facility amortization (land, building and building service equipment).

Unit Cost Performance

Measures the extent to which a hospital's actual cost per equivalent weighted case differs from its expected cost.

Corporate Services

Measures how much a hospital spends in areas of administrative services relative to its total operating expenses.

Days in Inventory

Measures the average number of days hospital supplies are held in inventory before being used.

Current Ratio

Measures the number of times a hospital's short-term obligations can be paid using the hospital's short-term assets.

Working Capital to Revenue

Measures how much working capital (current assets less current liabilities) a hospital has compared to total revenues.

Equipment Expenditure

Measures how much a hospital spends in a given year to operate and maintain its computer systems, x-ray machines, and other capital equipment, and compares this amount to its total expenses.

Nursing Care Hours

Measures how much time inpatient nursing personnel spend engaged in patient care activities as a percentage of their total earned hours.

Patient Care Hours

Measures the number of worked hours for patient care staff as a percent of a hospital's total worked hours.

Nursing Hours per Weighted Case

Measures the number of acute inpatient and surgical day-care nursing hours (including purchased service hours) consumed per acute inpatient and surgical day-care weighted case.

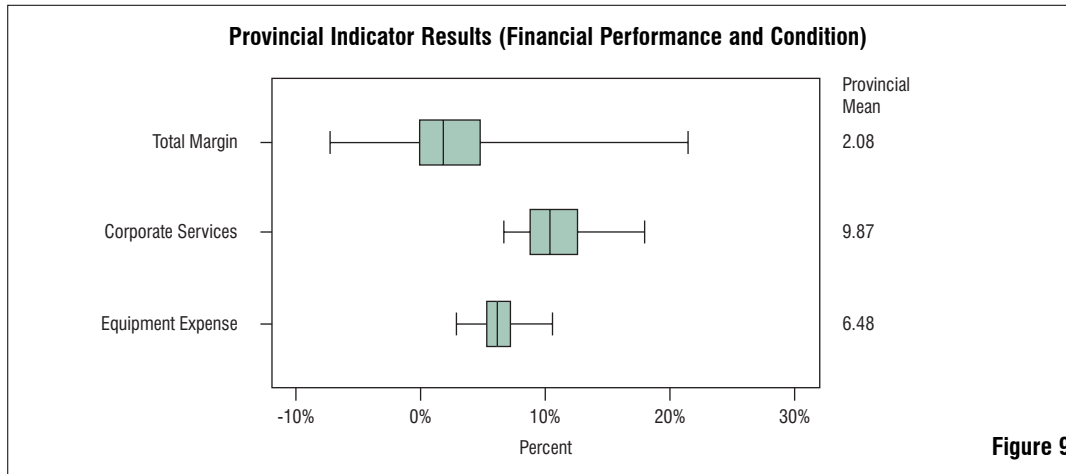
Registered Nursing Staff Hours

Measures the proportion of nursing care hours that were provided by registered nurses.

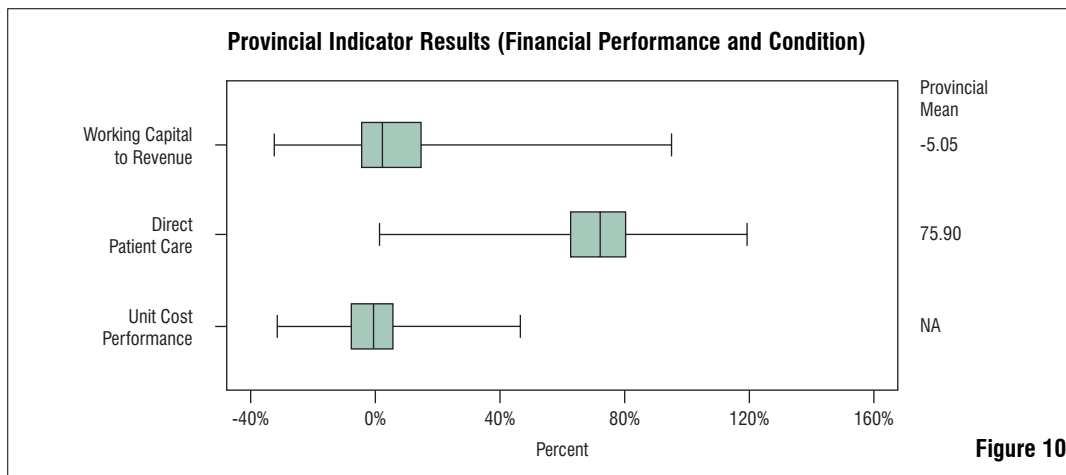
Direct Patient Care

Measures the proportion of nursing worked hours (including purchased service hours) for direct patient care using nursing workload data.

PROVINCIAL INDICATOR RESULTS



Figures 9, 10, 11, 12 and 13 depict box and whisker plots for indicators of financial performance and condition, using data from fiscal year 2003–2004.



PROVINCIAL INDICATOR RESULTS (CONT'D)

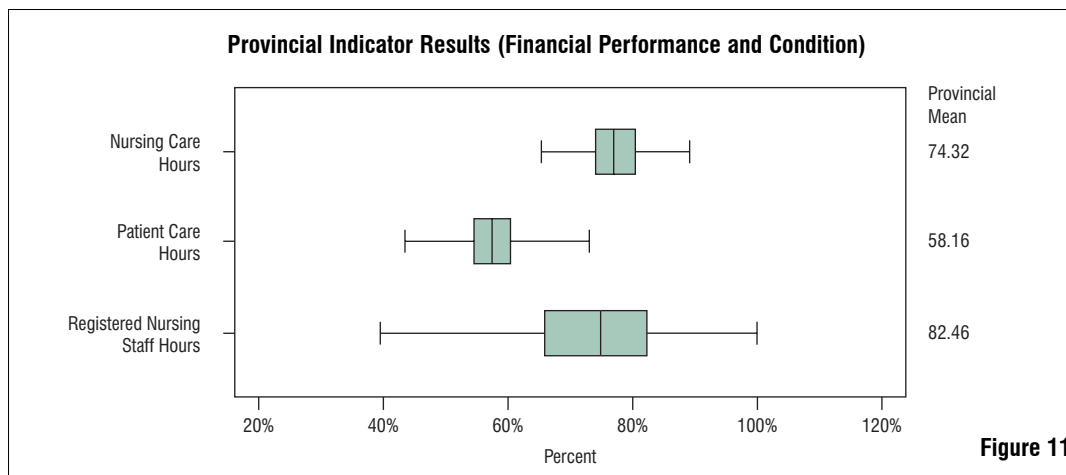


Figure 11

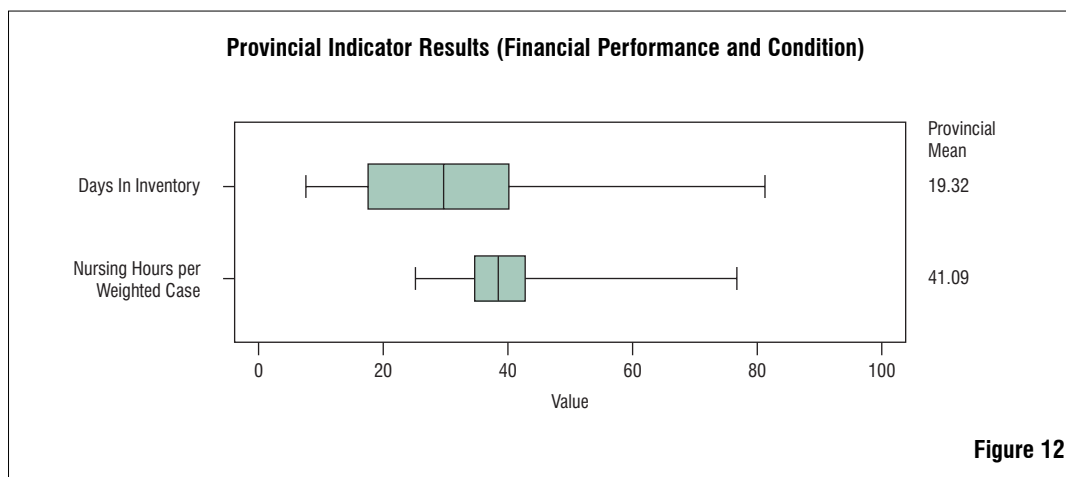


Figure 12

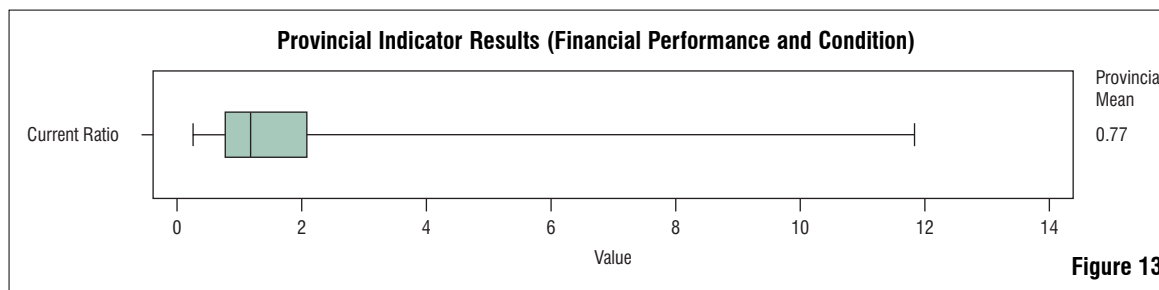


Figure 13

Benchmarks for two indicators in the Financial Performance and Condition quadrant are introduced in this year's e-Scorecard. Benchmarks were developed for the Total Margin and Current Ratio indicators, which are among the most widely used and accepted financial indicators. Benchmarks were determined by surveying the chief financial officers of 137 acute and complex continuing care hospitals, 100 of whom responded. Among other questions, they were asked "How low would the indicator value have to be for you to be concerned about your hospital's financial performance on this indicator?" and "How high would the value have to be for you to be concerned about your hospital's financial performance on this indicator?" Median values of the answers to these two questions were established as the high and low benchmark values. Actual indicator values between the low and high benchmark values are considered to be good financial performance. Actual indicator values not between the low and high benchmark values are considered to be poor financial performance and/or to require investigation.

SUMMARY OF RESULTS

In 2003–2004, Ontario acute care hospitals reported revenues in excess of expenses of \$255 million dollars. The provincial **Total Margin** was 2.08%, the highest provincial average for this indicator for the six years that it has been calculated in *Hospital Report: Acute Care* (Figure 14). Only 34 hospitals reported a Total Margin value less than 0 (expenses greater than revenues). All of the teaching hospitals reported revenues greater than expenses.

Sixty-six of the 123 acute care hospitals reported a negative **Unit Cost Performance** in 2003–2004, which indicates that services at these hospitals, on average, cost less than expected. Results varied across peer groups. For teaching hospitals, four reported a negative Unit Cost Performance, and seven reported a positive Unit Cost Performance. Among small hospitals, 23 reported a negative Unit Cost Performance and 20 reported a positive Unit Cost Performance. For community hospitals, 39 reported a negative Unit Cost Performance and 29 reported a positive Unit Cost Performance.

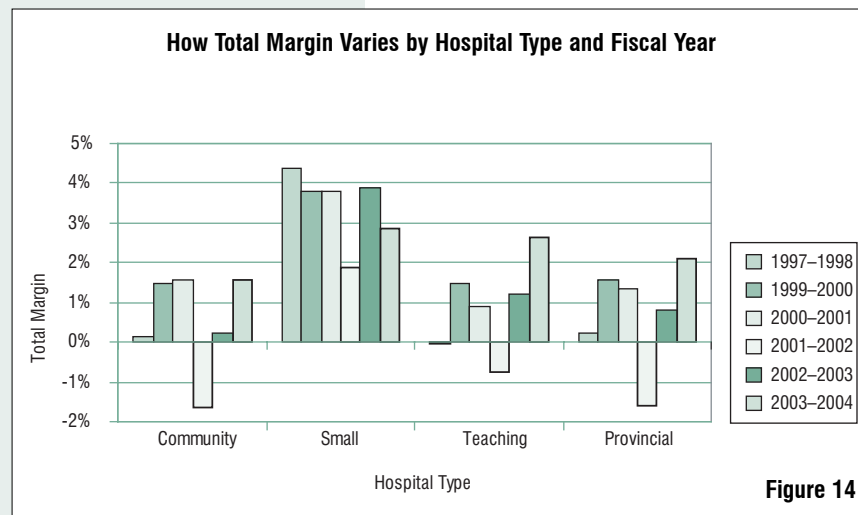


Figure 14

Source: Ontario Hospital Reporting System, 1997–1998, 1999–2000, 2000–2001, 2001–2002, 2002–2003, 2003–2004.

In 2003–2004, the provincial average for the **Corporate Services** indicator was 9.87%; a full percentage point higher than the 2002–2003 value (8.82%) and the highest value this indicator has assumed in the six years that this indicator has been used in *Hospital Report: Acute Care* (Figure 15). The majority of this increase was caused by a rise in expenses reported under Risk Management services, which was largely due to the effect of SARS. Expenses belonging in this functional area increased from 0.09% of total operating expenses to 0.84% of total operating expenses. This translates to a rise in spending from \$9.2 million in 2002–2003 to \$90.7 million in 2003–2004.

In 2003–2004, the provincial average for the **Days in Inventory** indicator was 19.32, a slight increase in this value after four consecutive years of decline. This increase occurred in the teaching hospital peer group average, while the averages for small and community hospital peer groups continued to decrease. Significant variation is observed in peer group averages for this indicator, ranging from 17.38 for teaching hospitals, to 20.34 for community hospitals, to 40.06 days for small hospitals.

The provincial average for the **Current Ratio** in 2003–2004 was 0.77—the lowest value in the six years of tracking this indicator in *Hospital Report: Acute Care* (Figure 16), implying that hospitals, on average, did not have sufficient short-term funds to pay their short-term obligations in 2003–2004. Meaningful differences were observed among types of hospitals, with small hospitals having a peer group average of 2.24 and teaching hospitals having a peer group average of 0.65. Community hospitals had a peer group average of 0.85.

How Corporate Services Varies by Hospital Type and Fiscal Year

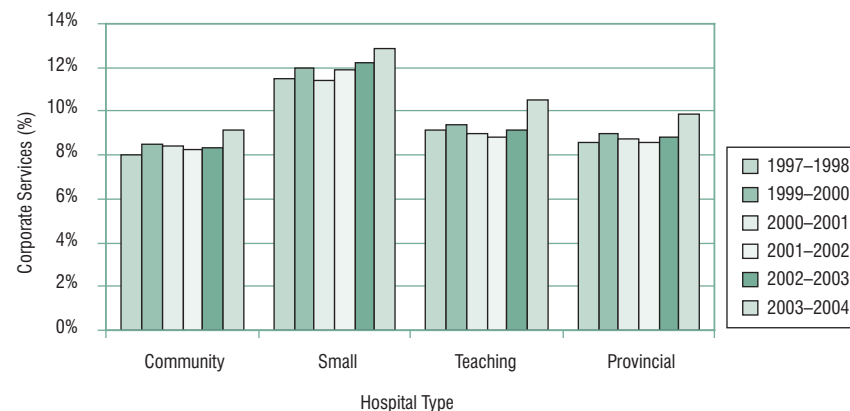


Figure 15

Source: Ontario Hospital Reporting System, 1997–1998, 1999–2000, 2000–2001, 2001–2002, 2002–2003, 2003–2004.

How Current Ratio Varies by Hospital Type and Fiscal Year

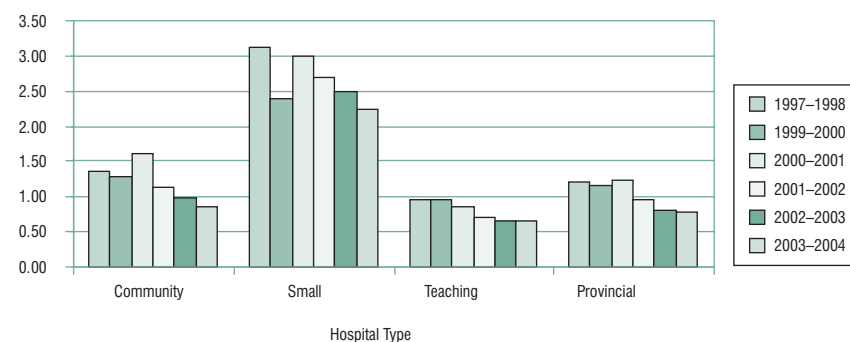


Figure 16

Source: Ontario Hospital Reporting System, 1997–1998, 1999–2000, 2000–2001, 2001–2002, 2002–2003, 2003–2004.

Another measure of liquidity, the **Working Capital to Revenue** indicator, also showed a decrease in its provincial average in 2003–2004, dropping almost a full percentage point to -5.05%.

The provincial average for the **Equipment Expenditure** indicator remained relatively constant in 2003–2004. The provincial average was 6.48%, up slightly from 6.33% in 2002–2003.

In 2003–2004, the provincial average for **Nursing Care Hours** (as a percent of total nursing earned hours) decreased for the fourth consecutive year to 74.32%. This indicator has decreased by 3.29 percentage points over this five-year period. A number of factors can affect this indicator, including staff mix, collective agreements, the supply of nurses and management practices.

The provincial average for **Patient Care Hours** (as a percentage of total staff hours) decreased from 59.29% in 2002–2003 to 58.16% in 2003–2004. The same factors that affect the Nursing Care Hours ratio can impact this ratio as well.

In 2003–2004, the provincial average for **Nursing Hours per Weighted Case** was 41.09 hours per weighted case, an increase from 37.3 hours in 2002–2003. This indicator captures the utilization of nursing staff most directly involved in the delivery of patient care in relation to patient complexity. A higher figure indicates a greater number of nursing worked hours per weighted case; a lower figure the reverse.

The provincial average for **Registered Nursing Staff Hours** remained relatively constant in 2003–2004. The provincial average was 82.46%, up slightly from 81.57% in 2002–2003. Meaningful differences were observed among types of hospitals, with peer group averages of 87.37% for teaching hospitals, 80.06% for community hospitals and 64.69% for small hospitals. This indicator is affected by nurse staffing models and methods for the allocation of nursing resources for inpatient health services, some of which may be driven by patient case mix and diagnosis.

In 2003–2004, the provincial average for **Direct Patient Care** was 75.90%, a decrease from 77.25% in 2002–2003. Variations in this indicator among teaching, community and small hospitals can occur because of different models of patient care delivery, changes to programs and services (that is, restructuring), staffing cuts, composition of the nursing staff mix and reporting variations.

Hospital	Community Served	LHIN	Total Margin (%)	Unit Cost Performance (%)	Corporate Services (%)	Days in Inventory	Current Ratio	Working Capital to Revenue (%)	Equipment Expenditure (%)	Nursing Care Hours (%)	Patient Care Hours (%)	Nursing Hours per Weighted Case	Registered Nursing Staff Hours (%)	Direct Patient Care (%)
PROVINCIAL AVERAGE			2.1	NA	9.9	19.3	0.8	-5.0	6.5	74.3	58.2	41.1	82.5	75.9
TEACHING HOSPITALS AVERAGE			2.7	NA	10.5	17.4	0.6	-9.2	6.7	72.7	56.5	45.5	87.4	79.1
Children's Hospital of Eastern Ontario	Ottawa	11	2.2	NA	9.7	26.3	1.0	-0.5	4.6	69.5	59.3	76.8	86.8	74.3
Hamilton Health Sciences Corporation	Hamilton	4	0.3	0.0	10.2	17.5	0.8	-5.9	5.7	71.8	58.0	42.3	85.7	79.3
Kingston General Hospital	Kingston	10	1.7	-7.5	10.6	32.9	1.4	11.8	5.7	72.4	57.5	40.7	85.3	69.9
London Health Sciences Centre	London	2	0.0	1.4	7.9	8.1	0.3	-18.0	7.2	74.2	55.9	41.4	88.8	81.8
Mount Sinai Hospital	Toronto	7	1.5	5.4	12.5	8.9	0.4	-14.5	9.1	69.2	57.4	51.7	95.8	73.1
St. Joseph's Health Care London	London	2	6.6	10.6	8.0	17.1	1.1	1.4	3.9	74.5	59.2	51.8	76.6	73.2
St. Joseph's Healthcare Hamilton	Hamilton	4	2.7	-6.3	7.2	17.7	0.3	-19.8	6.0	73.7	58.9	43.8	85.9	78.6
St. Michael's Hospital	Toronto	7	6.0	1.5	12.9	9.8	2.0	14.8	8.0	72.7	56.5	47.5	78.7	80.8
Sunnybrook and Women's College Health Sciences Centre	Toronto	7	1.6	2.4	12.7	17.0	0.5	-12.0	5.6	68.3	53.8	43.0	90.5	86.6
The Hospital for Sick Children	Toronto	7	1.8	NA	14.3	20.9	0.5	-24.6	9.8	79.3	57.7	73.1	100.0	85.0
The Ottawa Hospital	Ottawa	11	1.9	-8.3	8.3	19.9	0.4	-19.9	5.3	72.1	56.1	40.2	89.8	85.4
University Health Network	Toronto	7	5.4	-2.3	12.2	20.9	0.7	-6.2	7.5	73.3	54.3	45.2	83.1	69.9
SMALL HOSPITALS AVERAGE			2.9	NA	12.9	40.1	2.2	16.3	6.4	79.6	55.1	39.4	64.7	67.2
Alexandra Hospital	Ingersoll	2	-0.9	27.6	12.5	34.7	1.1	0.9	5.4	78.3	55.4	48.5	68.0	101.9
Alexandra Marine and General Hospital	Goderich	2	1.1	9.4	11.3	55.8	4.0	54.0	5.3	76.7	60.0	44.1	60.2	60.1
Almonte General Hospital	Almonte	11	14.0	-28.2	14.2	24.4	3.7	51.4	2.9	85.3	59.8	31.6	74.2	64.2
Arnprior & District Memorial Hospital	Arnprior	11	0.6	-8.1	9.3	40.2	0.8	-3.6	4.6	74.3	52.5	34.4	61.7	75.9
Carleton Place & District Memorial Hospital	Carleton Place	11	3.2	-31.5	14.4	39.8	1.1	0.8	4.9	79.3	53.1	27.2	67.2	68.9
Deep River and District Hospital	Deep River	11	-0.2	-0.3	14.6	23.6	1.4	3.6	6.5	79.3	53.4	48.2	61.2	27.5
Dryden Regional Health Centre	Dryden	14	7.3	-9.2	11.4	30.0	1.7	9.6	5.8	75.5	50.3	39.0	69.3	62.2
Englehart & District Hospital	Englehart	13	0.6	-5.8	12.8	54.0	3.2	22.1	8.3	80.3	53.4	27.5	56.0	111.8
Four Counties Health Services	Newbury	2	-3.5	19.4	15.8	39.4	2.7	17.0	7.8	76.6	43.5	33.9	52.4	53.8
Glengarry Memorial Hospital	Alexandria	11	6.5	-22.6	12.5	35.6	1.8	14.4	5.8	85.3	58.6	40.9	44.9	70.0
Haldimand War Memorial Hospital	Dunnville	4	9.4	-5.2	9.7	64.3	11.8	87.1	6.6	80.7	54.4	34.3	81.0	81.7
Haliburton Highlands Health Services Corporation	Haliburton	9	14.9	3.5	16.1	38.9	1.0	-0.3	5.1	75.8	61.0	46.4	45.9	86.7
Hanover & District Hospital	Hanover	2	2.2	14.7	12.6	17.4	2.8	15.6	6.8	84.9	62.3	47.3	74.9	54.7
Kemptville District Hospital	Kemptville	11	1.4	-4.0	13.0	18.8	1.4	5.1	6.3	72.8	53.7	35.7	57.8	59.0
Listowel & Wingham Hospitals Alliance	Listowel	2	6.9	-12.5	11.1	30.8	4.7	30.3	7.0	83.4	58.4	37.3	68.5	62.7
MICs Group of Health Services	Cochrane	13	2.3	4.8	11.2	17.5	1.4	3.2	6.8	86.9	55.2	38.5	61.8	49.5
North Wellington Health Care Corporation	Mount Forest	3	-0.1	11.5	11.0	12.2	2.9	19.1	8.6	83.2	61.2	48.7	62.5	84.3
Services de santé de Chapleau Health Services	Chapleau	13	5.4	1.4	17.0	63.6	0.9	-0.9	8.4	77.0	50.7	39.4	70.0	46.4
South Huron Hospital	Exeter	2	8.8	-7.8	11.8	38.9	2.6	21.9	4.6	78.8	52.3	34.4	42.2	91.4
St. Francis Memorial Hospital	Barry's Bay	11	2.4	-10.8	8.8	66.4	1.7	8.0	5.3	88.2	60.6	51.9	40.4	46.2
Stevenson Memorial Hospital	Alliston	8	-4.4	13.0	17.8	47.6	1.1	1.1	7.8	79.2	51.6	40.2	79.5	76.4
The West Nipissing General Hospital	Sturgeon Falls	13	0.2	-2.4	12.8	60.1	0.8	-2.5	5.9	79.1	62.3	41.1	71.5	82.2

Hospital	Community Served	LHIN	Total Margin (%)	Unit Cost Performance (%)	Corporate Services (%)	Days in Inventory	Current Ratio	Working Capital to Revenue (%)	Equipment Expenditure (%)	Nursing Care Hours (%)	Patient Care Hours (%)	Nursing Hours per Weighted Case	Registered Nursing Staff Hours (%)	Direct Patient Care (%)
COMMUNITY HOSPITALS AVERAGE			1.6	NA	9.2	20.3	0.9	-2.8	6.3	75.1	59.6	38.7	80.1	74.2
Algonquin Health Services	Huntsville	12	-0.2	-0.7	7.0	29.7	1.3	2.4	4.4	74.7	58.7	34.8	77.4	62.7
Bluewater Health	Sarnia	1	0.3	13.2	7.9	35.3	0.6	-6.1	6.8	70.0	57.5	44.8	81.5	70.9
Brantford General Hospital	Brantford	4	1.1	-1.9	8.2	37.1	0.8	-2.9	7.1	77.5	58.8	36.7	83.0	80.8
Brockville General Hospital	Brockville	10	2.4	-8.5	9.6	38.8	1.0	-0.1	6.3	78.8	54.2	37.7	70.1	54.1
Cambridge Memorial Hospital	Cambridge	3	-2.6	4.6	9.8	17.1	0.4	-9.0	5.4	73.0	54.7	31.5	78.8	75.1
Chatham—Kent Health Alliance	Chatham	1	0.6	8.6	10.8	15.7	0.5	-19.0	8.6	74.2	58.3	43.9	79.0	72.1
Collingwood General & Marine Hospital	Collingwood	12	0.7	-13.6	9.7	10.6	0.7	-4.3	9.1	76.1	56.7	33.1	98.5	75.7
Grand River Hospital	Kitchener	3	4.1	3.3	7.9	20.4	1.2	3.3	6.7	73.6	61.9	42.7	75.0	80.0
Grey Bruce Health Services	Owen Sound	2	1.5	-3.2	9.8	49.4	1.2	2.8	6.6	77.4	60.9	37.3	78.7	70.1
Groves Memorial Community Hospital	Fergus	3	2.7	-8.0	11.2	45.9	1.6	10.5	5.4	80.5	54.3	35.4	70.5	58.3
Guelph General Hospital	Guelph	3	5.3	-1.1	8.3	18.5	1.1	0.9	7.3	77.0	59.6	36.3	82.4	80.5
Halton Healthcare Services	Oakville	6	2.5	0.6	9.1	17.9	1.3	3.0	6.3	73.7	61.3	37.8	80.0	84.6
Hawkesbury & District General Hospital	Hawkesbury	11	7.0	0.8	11.5	19.8	2.3	20.6	5.2	80.5	55.3	32.8	76.8	69.7
Headwaters Health Care Centre	Orangeville	5	5.1	-12.5	9.1	15.0	0.7	-3.6	7.5	85.7	64.1	37.2	65.4	81.7
Hôpital Montfort	Ottawa	11	11.3	-12.4	12.4	25.9	1.3	4.1	5.8	79.0	57.4	34.7	67.9	69.2
Hôpital régional de Sudbury Regional Hospital	Sudbury	13	1.2	0.0	7.5	24.8	0.3	-21.3	4.9	74.8	59.8	34.8	85.3	79.3
Hotel Dieu Health Science Hospital (Niagara)	St. Catharines	4	-2.9	7.8	7.6	16.6	0.2	-28.0	3.8	74.6	61.9	37.3	65.5	66.4
Hôtel-Dieu Grace Hospital (Windsor)	Windsor	1	1.1	11.0	7.4	8.0	0.4	-14.1	7.6	73.0	55.6	37.0	85.8	79.9
Humber River Regional Hospital	Toronto	8	2.7	-0.8	8.8	12.9	0.9	-1.2	6.4	73.5	61.8	38.0	82.1	83.8
Huron Perth Healthcare Alliance	Seaforth	2	-1.0	-6.3	8.8	55.5	1.2	3.5	5.6	79.5	58.0	36.6	73.2	62.0
Huron District Hospital (North Simcoe Hospital Alliance)	Midland	12	-3.5	-14.6	7.8	39.1	0.5	-14.1	4.8	76.2	61.9	34.1	61.9	45.4
Joseph Brant Memorial Hospital	Burlington	4	1.1	-8.1	6.6	13.6	1.1	0.9	5.2	71.9	62.1	33.7	83.4	86.6
Kirkland and District Hospital	Kirkland Lake	13	-3.9	9.7	10.8	39.9	1.1	2.0	9.1	80.8	48.4	34.8	60.3	88.9
Lake of the Woods District Hospital	Kenora	14	6.3	14.5	8.0	46.2	1.2	3.3	5.7	75.7	56.8	54.9	72.8	64.0
Lakeridge Health Corporation	Durham	9	-0.2	1.1	8.7	19.1	0.8	-4.5	7.2	73.6	56.5	36.5	80.0	73.6
Leamington District Memorial Hospital	Leamington	1	7.5	-3.6	11.4	36.0	3.4	10.2	9.4	79.7	66.5	33.2	65.4	67.0
Markham Stouffville Hospital	Markham	8	2.2	-2.8	12.6	11.0	2.0	16.4	8.0	74.2	62.9	41.9	87.4	81.4
Niagara Health System	Niagara	4	-3.2	-1.7	10.5	24.0	0.5	-11.6	6.5	76.8	59.6	38.0	71.2	67.1
Norfolk General Hospital	Simcoe	4	0.9	-8.0	8.6	23.2	1.5	6.2	6.6	78.6	57.0	34.6	73.9	69.4
North Bay General Hospital	North Bay	13	-4.7	4.5	9.5	32.6	0.4	-14.7	5.3	76.5	55.3	38.1	72.6	74.9
North York General Hospital	Toronto	8	8.5	-4.0	13.6	15.6	0.6	-10.4	9.0	72.2	56.1	49.9	73.5	72.9
Northumberland Hills Hospital	Cobourg	9	1.3	21.7	8.8	64.5	0.3	-25.0	10.5	75.5	59.7	40.6	76.8	69.1
Orillia Soldiers' Memorial Hospital	Orillia	12	-3.6	-5.6	6.6	29.0	1.1	3.7	5.1	81.6	73.1	36.0	73.6	65.5
Pembroke General Hospital	Pembroke	11	3.9	-15.1	8.4	30.6	0.5	-18.0	4.9	80.2	61.1	38.4	65.5	74.5
Perth and Smiths Falls District Hospital	Smiths Falls	10	-2.2	-6.7	8.7	35.3	0.6	-6.9	4.6	82.5	59.5	35.2	66.1	58.2
Peterborough Regional Health Centre	Peterborough	9	0.3	-1.7	8.8	20.8	0.6	-5.8	5.9	75.7	63.8	38.1	76.5	77.0
Queensway Carleton Hospital	Nepean	11	2.5	-4.6	7.4	14.1	0.8	-2.0	4.7	81.1	60.1	38.7	71.8	75.0
Quinte Healthcare Corporation	Hastings and Prince Edward	10	2.1	-3.3	9.1	30.4	1.6	8.0	7.9	79.5	57.7	32.5	84.5	68.7

Renfrew Victoria Hospital	Renfrew	11	8.5	-16.8	9.1	12.7	2.5	15.7	5.2	87.8	69.7	30.5	65.5	79.7
Ross Memorial Hospital	Lindsay	9	-1.9	-8.1	9.9	29.8	1.2	4.0	6.5	79.2	57.9	35.7	76.0	54.5
Rouge Valley Health System	Toronto	9	2.1	7.6	8.5	21.6	0.7	-5.5	6.0	73.0	57.3	42.1	90.4	77.9
Sault Area Hospital	Sault Ste. Marie	13	-4.0	0.0	8.3	15.2	0.4	-10.0	4.8	76.5	61.6	42.7	68.1	76.2
South Bruce Grey Health Centre	Kincardine	2	4.0	4.8	7.7	21.4	2.5	20.2	7.2	78.8	56.9	39.8	76.4	72.4
South Muskoka Memorial Hospital	Bracebridge	12	-4.0	2.6	8.7	36.6	0.4	-19.6	7.4	89.3	64.2	36.2	73.2	79.3
Southlake Regional Health Centre	Newmarket	8	-1.0	3.1	11.0	14.2	0.8	-3.7	6.6	78.7	65.0	41.0	82.0	88.0
St. Joseph's Health Centre (Toronto)	Toronto	7	5.4	-4.5	9.7	19.8	1.5	6.1	6.7	75.8	62.4	39.7	81.4	88.2
St. Mary's General Hospital (Kitchener)	Kitchener	3	4.1	-1.3	7.2	31.1	1.7	11.2	6.8	75.7	58.2	35.0	80.2	78.7
St. Thomas Elgin General Hospital	St. Thomas	2	-3.8	4.6	10.4	19.9	0.4	-19.1	5.6	72.8	58.6	39.2	73.8	74.9
Strathroy Middlesex General Hospital	Strathroy	2	6.0	-21.4	7.5	27.1	2.9	14.6	6.8	74.3	56.3	35.9	71.9	78.0
Temiskaming Hospital	New Liskeard	13	-2.6	4.3	10.3	38.9	5.1	47.1	5.5	86.0	55.7	31.8	72.0	48.8
The Credit Valley Hospital	Mississauga	6	2.4	0.1	8.5	12.9	0.8	-2.8	6.3	76.7	62.5	36.3	99.4	82.4
The Scarborough Hospital	Toronto	9	2.1	7.4	6.9	10.7	0.8	-2.9	6.1	65.5	62.4	49.3	82.7	64.7
Thunder Bay Regional Hospital	Thunder Bay	14	-3.8	7.7	9.3	16.3	1.0	0.8	6.3	77.6	56.5	38.0	87.2	85.5
Tillsonburg District Memorial Hospital	Tillsonburg	2	1.8	3.7	8.9	34.3	5.8	71.5	5.1	72.1	53.4	33.3	68.2	56.2
Timmins and District Hospital	Timmins	13	1.3	3.8	10.9	26.0	0.9	-1.7	6.0	77.6	61.0	32.2	78.8	72.0
Toronto East General Hospital	Toronto	7	4.0	0.2	12.9	13.2	0.9	-1.8	6.1	73.2	55.9	39.1	80.5	62.7
Trillium Health Centre	Mississauga	6	7.4	-5.5	9.2	8.8	1.8	10.5	6.9	78.4	62.0	34.2	90.2	64.5
West Lincoln Memorial Hospital	Grimsby	4	21.5	-19.8	10.0	26.9	3.4	16.6	6.0	84.2	56.8	35.0	70.0	81.2
West Parry Sound Health Centre	Parry Sound	13	10.0	-13.9	11.5	31.6	1.7	27.1	4.7	86.0	59.0	36.6	73.8	107.6
William Osler Health Centre	Brampton	5	-1.2	12.5	8.8	12.0	0.7	-5.1	4.7	74.4	61.0	41.8	80.0	66.1
Winchester District Memorial Hospital	Winchester	11	4.6	-0.7	9.5	29.3	3.5	17.3	5.5	76.7	57.0	30.3	87.4	71.6
Windsor Regional Hospital	Windsor	1	-5.0	15.8	9.2	30.8	0.2	-32.8	5.5	70.4	52.4	42.8	93.2	81.0
Woodstock General Hospital	Woodstock	2	-0.9	-9.2	8.0	11.7	1.7	9.5	5.5	75.5	58.1	34.3	81.7	72.2
York Central Hospital	Richmond Hill	8	-0.3	10.7	9.9	7.5	1.2	1.7	5.3	77.4	65.7	39.7	78.8	79.3

MEAN HOSPITAL RESULTS BY LOCAL HEALTH INTEGRATION NETWORK (LHIN)

1 (Erie—St. Clair)			-0.6	NA	8.8	21.4	0.4	-17.2	7.1	72.0	56.0	41.0	84.9	76.4
2 (South West)			2.1	NA	8.4	17.1	0.8	-3.7	6.0	75.0	58.0	40.5	81.4	76.7
3 (Waterloo Wellington)			3.0	NA	8.4	22.5	1.2	3.0	6.6	75.0	59.2	37.5	77.7	78.5
4 (Hamilton Niagara Haldimand Brant)			0.5	NA	9.3	19.3	0.7	-8.9	5.9	74.3	58.6	40.5	81.2	76.0
5 (Central West)			-0.5	NA	8.9	12.3	0.7	-4.9	5.0	75.4	61.3	41.3	78.5	67.7
6 (Mississauga Halton)			4.9	NA	9.0	11.9	1.4	4.9	6.6	76.8	62.0	35.6	90.4	74.1
7 (Toronto Central)			3.7	NA	12.6	16.9	0.7	-7.2	7.7	72.6	56.0	47.3	87.4	78.1
8 (Central)			3.1	NA	11.2	13.1	0.9	-1.8	7.2	74.9	61.4	41.7	80.0	81.0
9 (Central East)			1.1	NA	8.3	19.6	0.7	-4.7	6.5	71.5	59.4	41.9	82.0	71.0
10 (South East)			1.8	NA	10.5	33.5	1.3	7.1	6.3	76.3	56.3	38.2	80.7	66.7
11 (Champlain)			2.9	NA	8.9	21.8	0.6	-10.8	5.2	74.5	57.2	41.4	83.1	79.2
12 (North Simcoe Muskoka)			-0.9	NA	8.6	29.5	0.9	-2.8	6.1	76.4	62.2	34.7	76.4	67.3
13 (North East)			0.1	NA	9.4	28.7	0.8	-3.9	5.4	77.5	58.0	37.0	74.8	76.1
14 (North West)			-0.3	NA	10.3	25.1	1.2	5.2	6.2	77.0	55.2	39.3	80.5	77.7

Notes: NA = not applicable (Results are not shown because the indicator does not apply to the hospital, or because the indicator cannot be used to calculate an average.)

Understanding how women use, benefit from, experience and assess the quality of care they receive in acute care hospitals in Ontario, and how this differs from men, is important. Equity remains one of the issues that Canadians value, and is a goal we should continue to strive to achieve for our health care system. The unique contexts of women's lives, including their reproductive and caregiving roles and their propensity to live alone, at lower socioeconomic levels and with more chronic disease at an older age, reinforce the need to pay attention to women's health in evaluating acute care.

Moreover, the study of women's health-specific conditions, as well as differences between women and men and equity⁺ in the context of performance in healthcare has shown that good performance in women's health or equity, may be associated with good performance overall.¹⁰

Due to the limited availability of gender-related⁺⁺ variables in routinely collected hospital data, the analysis in this section is limited to sex⁺⁺⁺. Pursuing gender-based analysis is an important long-term goal. Hospitals should have systems for collecting, disaggregating, monitoring and understanding data by sex in the short term, and by gender in the long term.

This section of the report highlights, at a system level, the degree and significance of the sex differences in acute care across two quadrants: Clinical Utilization and Outcomes (CUO) and Patient Satisfaction (PS), as well as performance on women's health-specific indicators. Specifically, for the CUO quadrant, this summary includes two types of indicators (and analyses):

1. The three core hospital-specific CUO indicators stratified by sex and presented at a system level.
2. A subset of women's health indicators that are grouped into three clinical areas: Gynecological Conditions, Labour and Delivery and Cardiac Care. These women's health indicators include indicators that have been featured in previous reports at a system level and have been reviewed and redeveloped through a panel process (for example, readmissions following hysterectomy, access to coronary angiography by sex), as well as women's health indicators that are being featured for the first time (for example, readmissions following labour and delivery, congestive heart failure readmissions by sex). All indicators are presented at a hospital level for 98 participating hospitals, and their interpretation is supported by a system-level analysis of findings from the Women's Health Structures and Services survey. This is a survey that 97% of acute care hospitals participating in the report completed about the availability of services, and clinical processes and practices in these three clinical areas. In early fall 2005, all hospitals will receive a summary of their own and other hospitals' responses to the survey to help stimulate information sharing and quality improvement.

Note: The Women's Health perspective was authored by Christina Porcellato, Carey Levinton, and Adalsteinn D. Brown.

+ Equity means equal opportunity for use of and/or benefit from health services for equal need and/or potential.

10. A. L. Magistretti, D. E. Steward and A. D. Brown, "Performance Measurement in Women's Health: The Women's Health Report 2001 Series, A Canadian Experience," *Women's Health Issues* 12, 6 (2002): pp. 327–337.

++ Gender is made up of multiple dimensions, and reflects the interaction of sex with other economic, cultural, environmental and social characteristics and roles ascribed to and relations between the sexes (for example, income, ethnicity, social support).

+++ Sex is biological maleness and femaleness.

PATIENT SATISFACTION BY SEX IN ACUTE CARE

Exploring sex differences in patient satisfaction acknowledges that women and men may have different health care experiences, and helps to highlight which aspects of care may require the most immediate attention to enhance sex equity in acute care.

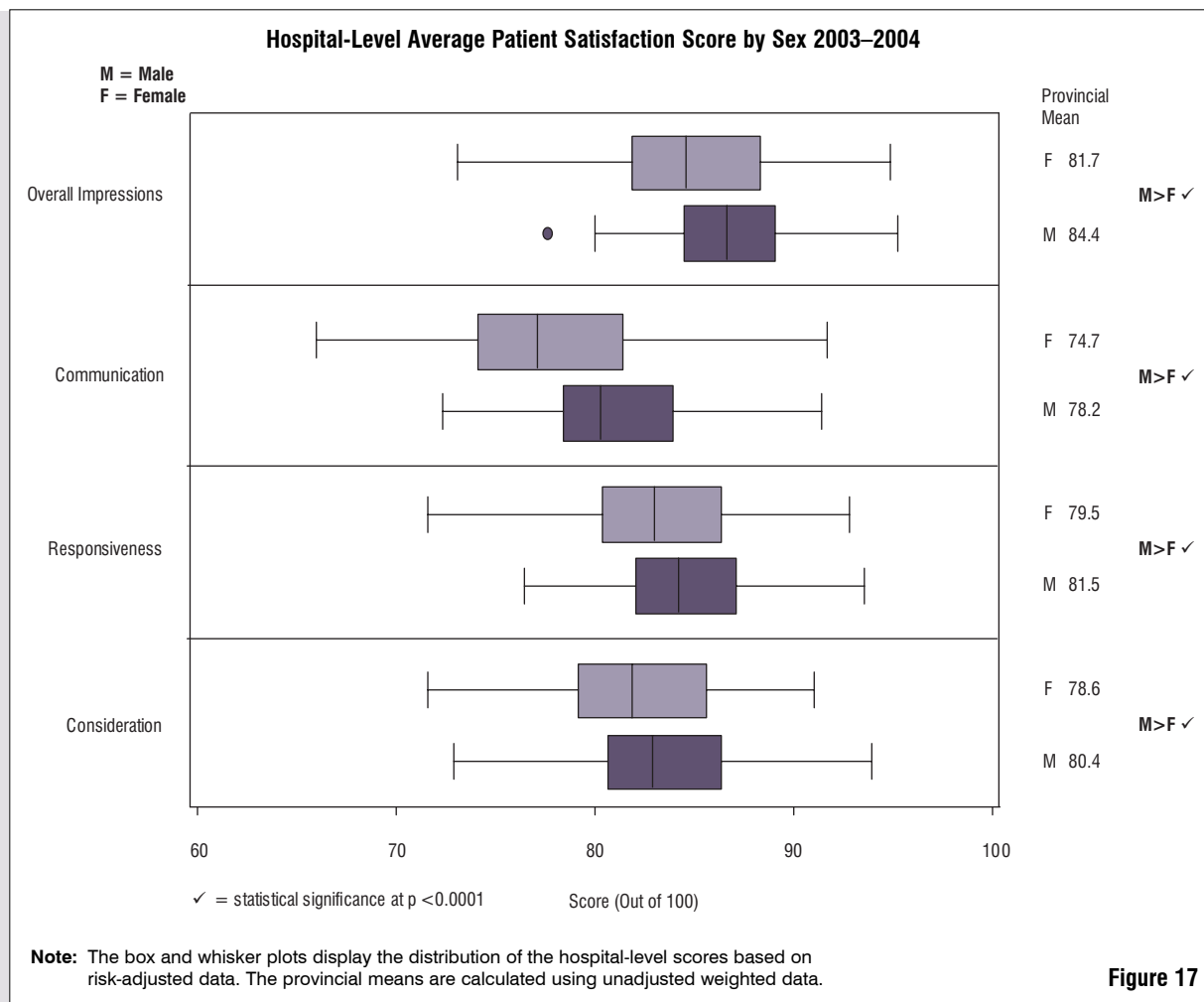


Figure 17

Overall, women reported lower satisfaction with the care and services they received in Ontario's acute care hospitals than men; this difference was found when adjusting for factors such as age. As shown in Figure 17, at the provincial level in 2003–2004, scores based on responses provided by women were slightly lower than those based on responses provided by men on all four indicators of overall impressions, communication, responsiveness and consideration. These differences were also seen in 2004–2005 based on several months of surveys. Although consistently small, these differences were all statistically significant ($p < 0.0001$), as expected given the large samples of women and men compared at a provincial level. Not only did patients (both women and men) report the

lowest level of satisfaction with communication (that is, the amount and quality of information and communications they received about their condition, treatment and preparation for discharge and care at home), but the differences between women and men were also greatest on this indicator. This finding is consistent across both years, and across other sectors in the *Hospital Report* series (for example, Rehabilitation), and should prompt hospitals to review their processes for information sharing and exchange with patients and their families and discharge planning. Such processes should meet the unique needs of women who are frequently discharged from acute care to situations in which they live alone, and/or where they fulfill several roles, notably the primary provider of childcare and eldercare.

Figure 18 shows that based on satisfaction with the amount and quality of information and communications they received during their visit, there were over five times more acute care hospitals in which women were less satisfied than men (that is, 75 versus 14). In 30 of these acute care hospitals—indicated by red circles that represent a range of hospital sizes and survey samples—the difference between women and men was statistically significant ($p < 0.05$).

Questions about why women are consistently less satisfied with the care and services they receive, and whether sex is a proxy for other patient, gender or care-related factors that may influence perceptions of the care experience (for example, sociodemographic characteristics, expectations, actual quality of care received) are the subjects of continued study.

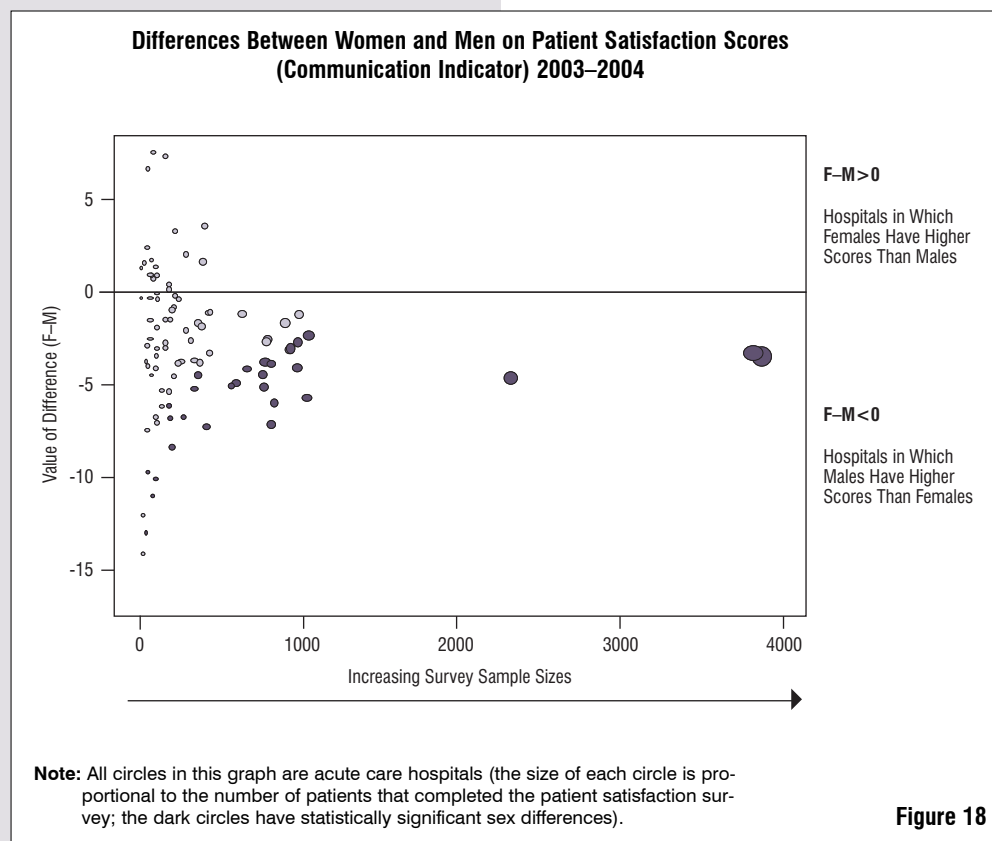


Figure 18

An important next step that we can undertake to better understand and identify reasons for such differences is to investigate whether specific survey questions drive differences between women and men at the indicator level. For example, logistic regression analyses⁺⁺ show that for all four indicators, and for the majority of acute care hospitals, differences between the sexes can be attributed to responses to specific questions. Table 3.0 presents a summary these findings.

In other words, hospitals that wish to target significant differences between women and men for these indicators might start by better understanding and focusing on strategies relevant to specific issues that are identified by question-level patient satisfaction scores.

⁺⁺ Although individual questions were not risk-adjusted, the unadjusted questions and overall adjusted indicators were highly correlated ($r = 0.90$ or higher, $p < 0.0001$).

Table 3.0 Question-Level Analysis of Differences Between Women and Men on Indicators of Patient Satisfaction

Indicator	Number of Hospitals in Which Specific Questions Determine Indicator-Level Sex Differences	Specific Questions That Determine Indicator-Level Sex Differences
Overall Impressions	20 of 26 hospitals with statistically significant indicator-level differences	Did you have confidence and trust in the nurses treating you? Overall, how would you rate the care you received from your doctors?
Communication	17 of 21 hospitals with statistically significant indicator-level differences	Overall, how would you rate the care you received at the hospital? Did the doctors and nurses give your family or someone close to you all the information they needed to help you recover?
Responsiveness	13 of 19 hospitals with statistically significant indicator-level differences	How would you rate the availability of your doctors? While you were in the hospital, were you able to get all the services you needed?
Consideration	12 of 18 hospitals with statistically significant indicator-level differences	How would you rate the courtesy of your nurses? Did you feel like you were treated with respect and dignity while you were in the hospital?

CLINICAL UTILIZATION AND OUTCOMES

BY SEX IN ACUTE CARE—CORE CUO INDICATORS

In the CUO summary in this report, three indicators are featured at the hospital level: Readmissions for Medical Patients, Readmissions for Surgical Patients, Appropriateness of Open Cholecystectomy.

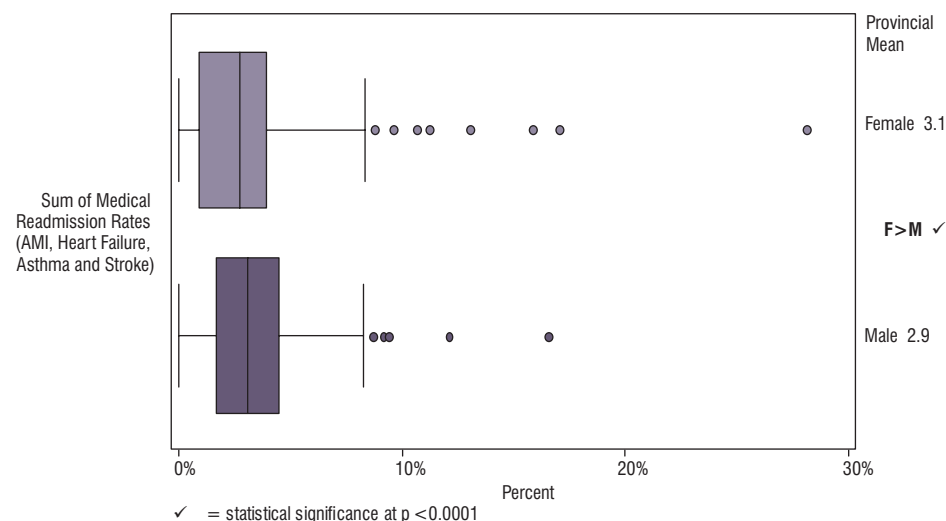
The result of stratifying these indicators for women and men show that, at a system-level, in 2003–2004:

- Women experienced a slightly higher rate of medical readmissions than men (female: 3.1; male: 2.9);
- The rates of surgical readmissions are similar for women and men (female: 1.3; male 1.3); and
- Men have a substantially higher rate of the open method of cholecystectomy, which is generally considered more invasive than the laparoscopic method (female: 4.7; male: 7.4).

Although the magnitude of these system-level differences varies, all of these differences are statistically significant ($p < 0.0001$), as expected, given the large samples of women and men that are compared. The direction of these differences between women and men is similar to results in the previous year (2002–2003), and the differences between women and men for all three indicators are slightly lower than they were in the previous year (2002–2003).

Four hospitals in Ontario have statistically significant differences in which women have higher medical readmission rates than men, compared to one hospital that has a significant difference in which men have higher rates than women. Given that this indicator combines several clinical groups—AMI, heart failure, asthma, GI bleed and stroke—an important next step would be to understand the direction, magnitude and significance of differences within specific clinical groups. In addition, it is important to understand whether differences in outcomes (and notably readmissions) are linked to differences in other socioeconomic variables and in hospitals' processes or practices, and in access to or use of services in the community.

Hospital-Level Average Medical Readmission Rates (Percent) by Sex 2003–2004



Note: The box and whisker plots display the distribution of the hospital-level scores based on risk-adjusted data. The provincial means are calculated using unadjusted weighted data.

Figure 19

CLINICAL UTILIZATION AND OUTCOMES

—Revised and New Women's Health Indicators and Definitions (Hospital Level)

GYNECOLOGICAL CONDITIONS AND HYSTERECTOMY

Difference Between Vaginal and Abdominal Hysterectomies

The within-hospital risk-adjusted difference between the numbers of vaginal (or laparoscopically assisted vaginal) and abdominal hysterectomies. The values for this indicator fall between 1 and -1: a value of 1 means that hospitals perform all vaginal hysterectomies; a value of -1 means that hospitals perform all abdominal hysterectomies; a value of 0 means that hospitals perform equal numbers of vaginal and abdominal hysterectomies.

Adverse Events (Procedures to Treat Abnormal Uterine Bleeding and Fibroids)

The risk-adjusted rate (percent) of adverse events in patients undergoing procedures for the treatment of abnormal uterine bleeding and/or fibroids. Procedures include all types of hysterectomy, uterine artery embolization and endometrial ablation. Adverse events for this clinical group include sepsis, pelvic infections, hemorrhage and injuries to urinary tract or gastrointestinal tract. Refer to the Technical Notes for all adverse events included in this indicator.

Readmissions (Procedures to Treat Abnormal Uterine Bleeding and Fibroids)

The risk-adjusted rate (percent) of unplanned readmissions for patients within 30 days following hospitalization for procedures to treat abnormal uterine bleeding and/or fibroids. Refer to the Technical Notes for all readmission diagnoses included in this indicator.

LABOUR AND DELIVERY

Adverse Events

The risk-adjusted rate (percent) of adverse events in patients undergoing labour and/or delivery. Adverse events for labour and/or delivery include for example uterine rupture, pulmonary or cardiac events, wound infection and hemorrhage. Refer to the Technical Notes for all adverse events included in this indicator.

Readmissions

The risk-adjusted rate (percent) of unplanned readmissions of patients within 14 days following hospitalization for labour and/or delivery. Hospitals are evaluated based on their rates of total readmissions (that is, both type of deliveries). Readmission rates are stratified by type of delivery (vaginal, c-section) at a system-level in this report, and at a hospital-level in the e-Scorecard. Refer to the Technical Notes for all readmission diagnoses included in this indicator.

CARDIAC CARE

All cardiac indicators are presented for women (F) and men (M), and the value of the difference between women and men $-(F-M)/F$. This difference value estimates the direction and magnitude of the difference in rates attributable to sex. A positive value for this difference means that women have higher rates, and a negative value for this difference means that men have higher rates. A value of zero means that the rates are similar (or equal). Note that rounding may have changed a small value to zero.

Access to Coronary Angiography (AMI)

The risk-adjusted rate (percent) of access to coronary angiography for patients with acute myocardial infarction within the episode of hospital care by sex. Providing access to coronary angiography is attributed to the first hospital in this episode, and thus does not depend on the hospitals' availability of cardiac catheterization facilities.

Readmissions (Acute Coronary Syndrome)

The risk-adjusted rate (percent) of unplanned readmissions for patients within 30 days following hospitalization for acute coronary syndrome (ACS). Acute coronary syndrome includes unstable angina, acute myocardial infarction and cardiogenic shock. Refer to the Technical Notes for all readmission diagnoses included in this indicator.

Readmissions (Congestive Heart Failure)

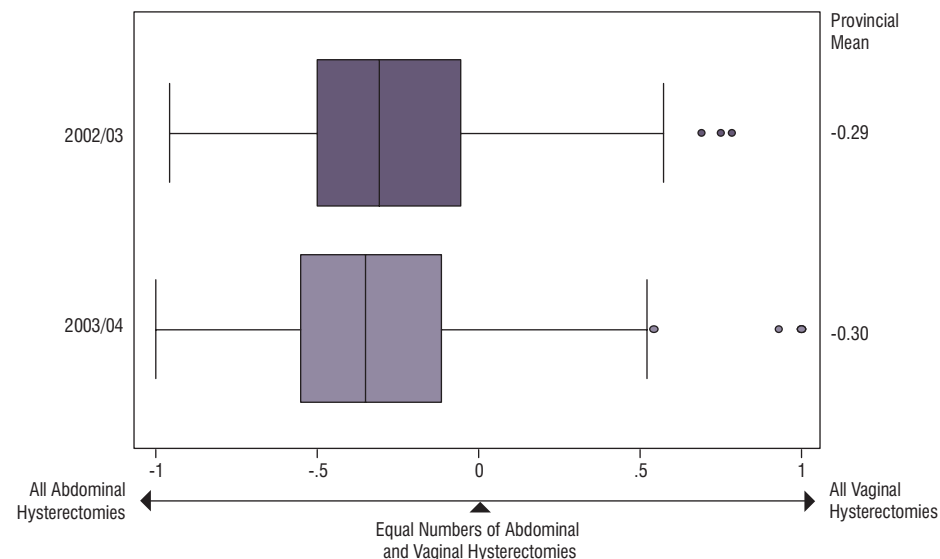
The risk-adjusted rate (percent) of all-cause, unplanned readmissions for patients within 30 days following hospitalization for congestive heart failure.

GYNECOLOGICAL CONDITIONS AND HYSTERECTOMY

—SUMMARY OF RESULTS

As in previous *Hospital Reports*, this report includes an indicator that assesses the difference between the numbers of vaginal (including laparoscopically assisted vaginal) and abdominal hysterectomies performed in Ontario hospitals for (non-cancerous) abnormal uterine bleeding and/or fibroids. This is the first year that this indicator is being risk-adjusted for such factors as age and comorbidities and is presented at a hospital-specific level (see pages 59–62). As shown in Figure 20, over two years, hospitals continue to perform more abdominal than vaginal hysterectomies. The mean and median of this (normalized) difference value for all hospitals over 2002–2003 and 2003–2004 are shifting closer to -1 (value for all abdominal hysterectomies) as opposed to 1 (value for all vaginal hysterectomies).

Hospital-Level Difference (Normalized) Between Numbers of Vaginal and Abdominal Hysterectomies

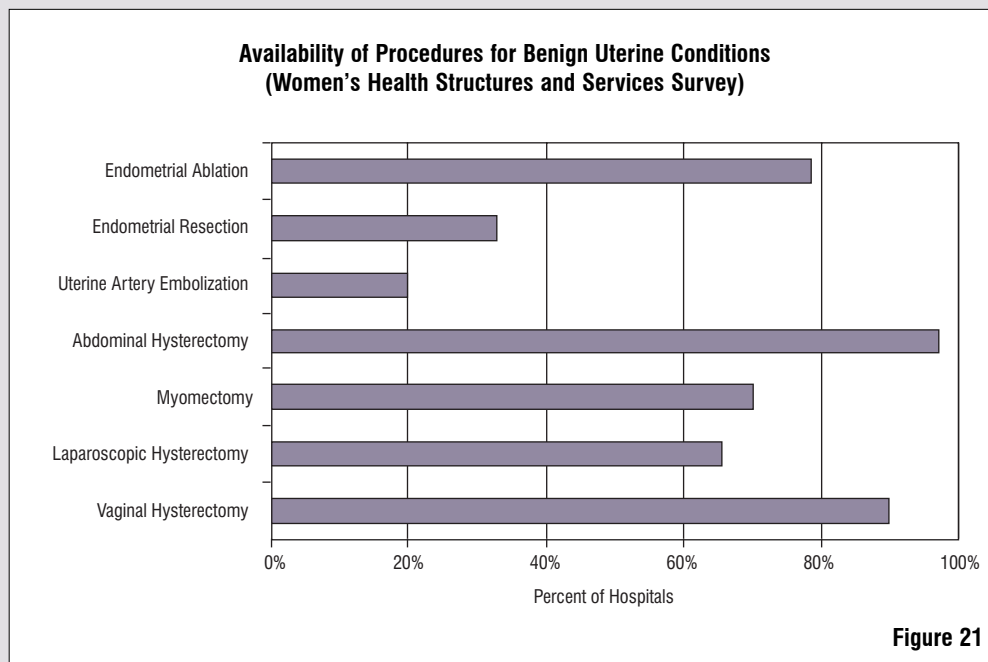


Note: The box and whisker plots display the distribution of the hospital-level scores based on risk-adjusted data. The provincial means are calculated using unadjusted weighted data.

Figure 20

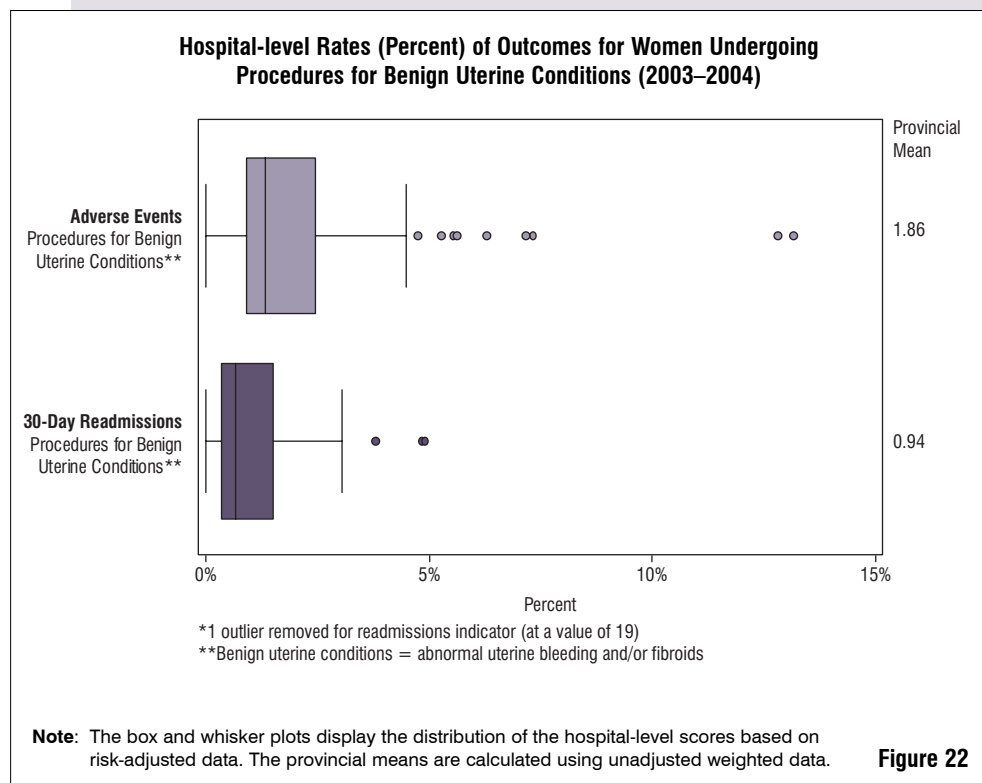
Although performance allocations are not provided for this indicator, this is an important value to monitor at a hospital-level. A recent literature review on the route and methods for hysterectomy reinforced that vaginal hysterectomies are, where possible (for example, for non-cancerous uterine conditions), generally preferable to abdominal hysterectomies, because they are associated with improved secondary outcomes, including a lower risk of complications and a shorter operative time, and a faster recovery time.¹¹ Note that in Ontario most community and teaching hospitals perform more abdominal than vaginal hysterectomies. The Women's Health Structures and Services Survey asked hospitals about their structures, processes and practices for care of women with benign uterine conditions. Based on survey responses, only half of the hospitals reported using a clinical practice guideline to inform decision-making about the appropriate route and method of hysterectomy.

11. N. Johnson, D. Barlow, A. Lethaby, E. Tavender, L. Curr and R. Garry, "Methods of Hysterectomy: Systematic Review and Meta-Analysis of Randomized Controlled Trials," *British Medical Journal* 330 (2005): pp. 1478–1487.



In addition to the type of hysterectomy, there are increasingly available alternatives to hysterectomy for patients with benign uterine conditions. These alternatives, including myomectomy, endometrial ablation and uterine artery embolization, are generally less invasive and preserve fertility. As shown in Figure 21, the survey found that although approximately 70% of responding hospitals performed myomectomy and 79% performed endometrial ablation as a hysterectomy alternative, only 20% performed embolization.

Offering women a genuine choice of treatment options, and developing policies and programs, such as training and incentives to effectively support these options, is an important priority for Ontario. A project led by the Hospital Report Research Collaborative, the College of Physicians and Surgeons in Ontario, in partnership with the Society for Obstetrics and Gynecology is conducting a needs assessment with practitioners from across Ontario to help inform how the system might start to address this priority. In addition, the Ontario Women's Health Council is funding the Ontario College of Family Physicians to develop and deliver training to family physicians, nurses and community-based specialists to better utilize alternatives to hysterectomy for benign uterine conditions.



The majority of small, community and teaching hospitals had average performance on the indicator measuring the rates of adverse events experienced by women undergoing procedures for abnormal uterine bleeding and/or fibroids.

For the readmissions indicator for this patient group, about half of the teaching hospitals had average performance, and half had below-average performance. No hospital had above-average performance on this indicator.

As shown in Figure 22, there is substantial variation in the rates of adverse events and readmissions for this patient group across all hospitals (including non-reportable hospitals). Notably, for the adverse events indicator, several hospitals were outliers with rates substantially higher than the provincial mean.

Table 4.0 shows the change in indicators by peer group over two years. The rates of adverse events for 2003–2004 are lower than in the previous year; the rates of readmissions for 2003–2004 are higher than in the previous year.

In addition to these adverse events and readmissions indicators, hospitals will have access to additional *Hospital Report* indicators for evaluating access and appropriateness of care for patients with (benign) abnormal uterine bleeding and/or fibroids in 2005–2006, including:

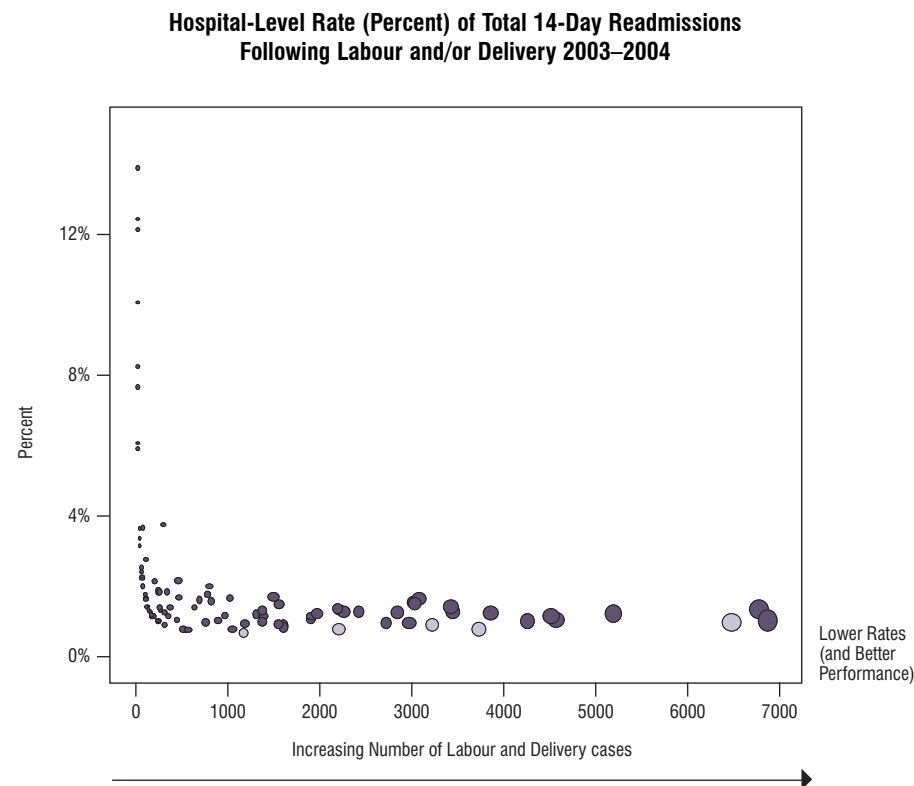
- Rate of select alternatives to hysterectomy versus rate of hysterectomy
- Rate of hysterectomy with concurrent oophorectomy or salpingo-oophorectomy

Table 4.0 Comparison of Gynecological Indicators Over Two Years (Provincial and Peer Group Means)		
	2002–2003	2003–2004
Gynecological Conditions—Adverse Events (Percent)		
Provincial	2.32	1.86
Teaching Hospitals	2.84	2.30
Community Hospitals	2.14	1.73
Small Hospitals	1.67	0.53
Gynecological Conditions—Readmissions (Percent)		
Provincial	0.55	0.94
Teaching Hospitals	0.57	1.24
Community Hospitals	0.56	0.85
Small Hospitals	0.00	0.43

LABOUR AND DELIVERY—SUMMARY OF RESULTS

This is the first time that the *Hospital Report* includes outcomes for labour and delivery.

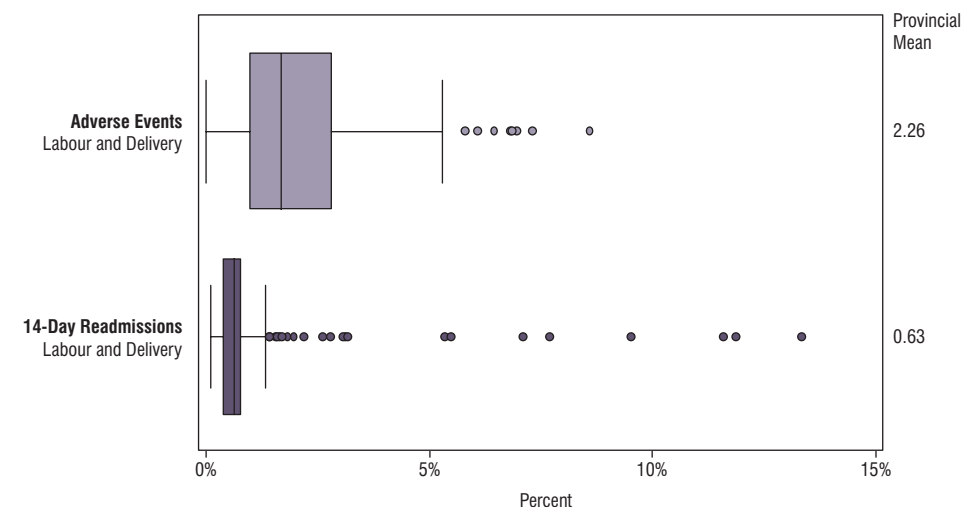
For the adverse events and readmissions indicators for patients undergoing labour and/or delivery, the large majority of hospitals with reportable performance had average performance on both indicators, and fewer hospitals had “below-average” performance on these indicators. Nine hospitals—all in the community or teaching peer groups—had above-average performance on the adverse events indicator, and five hospitals—again all community and teaching—had above-average performance on the readmissions indicator. Figure 23 shows that those hospitals that achieved above-average performance on the readmissions indicator had a range of patient volumes (1000–7000) for labour and delivery.



Note: All circles in this graph are acute care hospitals (the size of each circle is proportional to the total number patients or cases; the red circles have “above-average” performance).

Figure 23

Hospital-Level Rates (Percent) of Outcomes for Women Undergoing Labour and/or Delivery (2003–2004)



Note: The box and whisker plots display the distribution of the hospital-level scores based on risk-adjusted data. The provincial means are calculated using unadjusted weighted data.

Figure 24

Overall, the rate of readmissions following labour and delivery is low; it is less than 1% at a provincial level and for most hospitals with reportable performance; this rate is risk-adjusted for such factors as age and comorbidities. Overall, the readmissions rate for c-section deliveries (1.06% in 2003–2004) is higher than that for vaginal deliveries (0.45% in 2003–2004). As shown in Figure 24, there is substantial variation in the rates of adverse events and readmissions for the labour and/or delivery group across all hospitals (including those with non-reportable performance). For both indicators, several hospitals were outliers and had a mean rate that substantially exceeded the provincial mean. The provincial and peer group rates of adverse events following labour and/or delivery were slightly lower in 2003–2004 than in the previous year (2002–2003) demonstrating improved performance overall (as shown in Table 5.0).

Table 5.0 Comparison of Labour and Delivery Indicators Over Two Years (Provincial and Peer Group Means)

	2002–2003	2003–2004
Labour and Delivery—Adverse Events (Percent)		
Provincial	2.64	2.26
Teaching Hospitals	4.29	4.10
Community Hospitals	1.99	1.59
Small Hospitals	4.01	3.27
Labour and Delivery—Readmissions (Percent)		
Provincial	0.67	0.63
Teaching Hospitals	0.81	0.70
Community Hospitals	0.61	0.58
Small Hospitals	1.21	2.06

An important next step to understanding and addressing issues of clinical quality in labour and/or delivery is to understand how these indicators may be associated with hospitals' structures, processes and practices. The Women's Health Structures and Services Survey asked hospitals about their labour and delivery structures, processes and practices. The survey demonstrated for example, that the majority of hospitals (80.7%) use a discharge planning protocol, focused on breastfeeding. Only half of hospitals included other key elements on their discharge protocol, such as screening for postpartum depression.

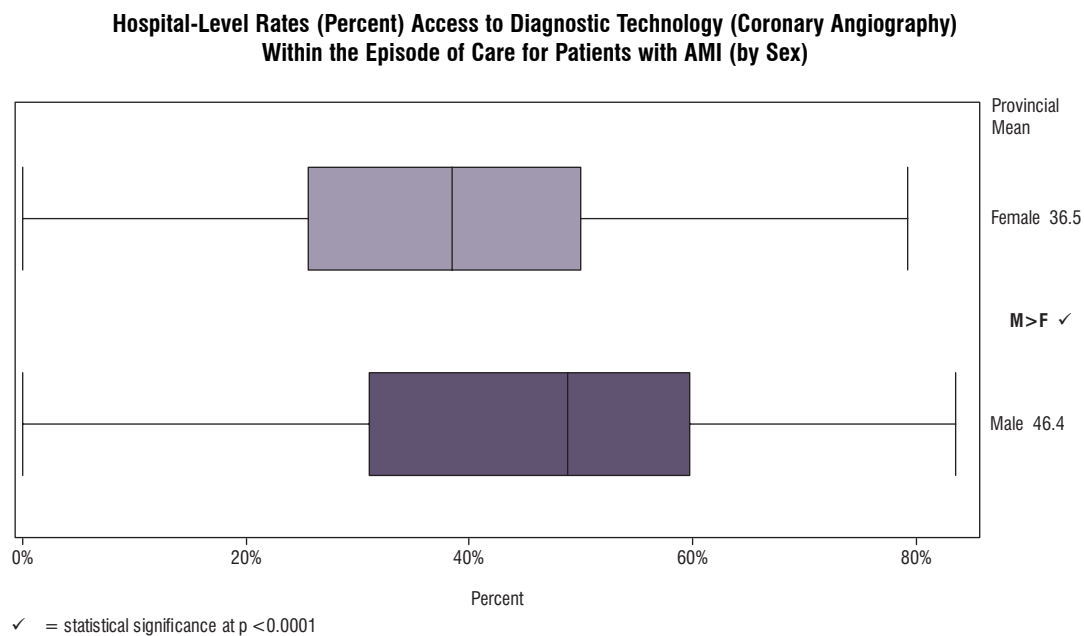
An analysis of the relationship between these survey responses and hospital performance on indicators found that hospitals that reported providing some level of one-to-one nursing care had lower rates of adverse events than those hospitals without one-to-one nursing care (at least until the completion of the fourth stage of labour) ($p = 0.01$). According to Canada's National Guidelines for Family-Centered Maternity and Newborn Care (www.phac-aspc.gc.ca/dca-dea/publications/fcm05_e.html), one-to-one nursing care is a critical component of effective maternity care. Achieving and sustaining one-to-one nursing may be facilitated by changes in documentation to allow in-room charting, to the physical environment of the unit, in on-call and stand-by part-time policies and in the approach and content for educating nurses and the multidisciplinary team.

In addition to these adverse events and readmissions indicators, hospitals will have access to additional *Hospital Report* indicators for evaluating the utilization and quality of clinical care in labour and/or delivery in 2005–2006, including:

- Rate of episiotomy
- Rate of third and fourth degree vaginal tears
- Rates of c-section (elective, non-elective) and operative vaginal delivery
- Rates of vaginal birth after c-section (elective, non-elective; successful, failed)

DIFFERENCES BETWEEN WOMEN AND MEN IN CARDIAC CARE —SUMMARY OF RESULTS

Three indicators of access and outcome for cardiac care patients are stratified for women and men, and a value of the difference and significance of the differences are provided at a hospital-level.

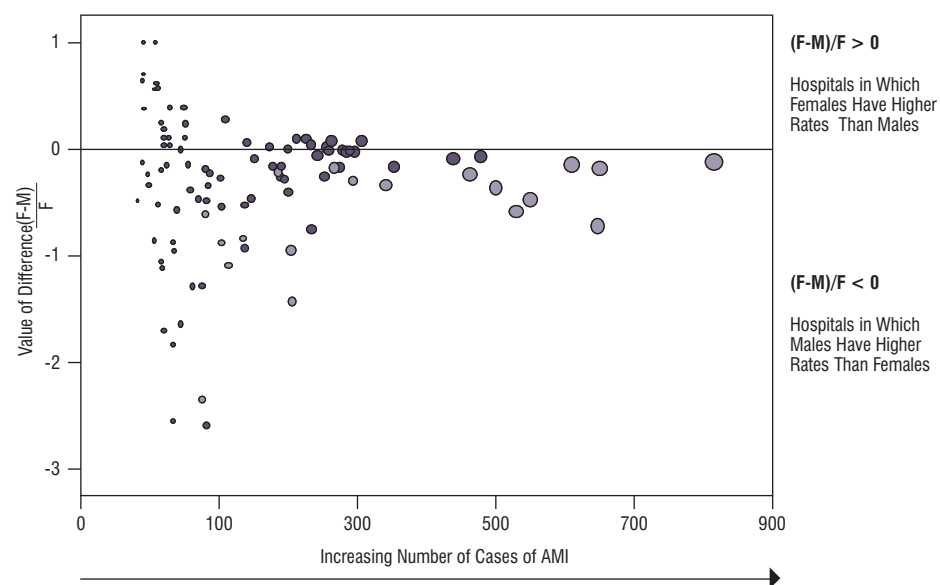


Note: The box and whisker plots display the distribution of the hospital-level scores based on risk-adjusted data. The provincial means are calculated using unadjusted weighted data.

Figure 25

For the indicator access to coronary angiography, Figure 25 shows that in 2003–2004, women admitted to hospital with an acute myocardial infarction (AMI) had a significantly lower level of access to coronary angiography within the episode of hospital care than men ($p < 0.0001$); the rates of access for women and men are risk-adjusted for comorbidities (that is, that may contraindicate angiography) and age. Figure 26 shows that 19 of the 83 hospitals with reported sex equity performance had a statistically significant difference in the rate of access to this diagnostic technology; for all of these hospitals, women had lower rates of access than men ($p < 0.0001$). Further study of age-sex interactions, and the relationship between other biological and gender-related variables with access to coronary angiography should help highlight the causes of and implications of these differences.

Difference Between Women and Men on Access to Coronary Angiography Following Hospitalization for AMI 2003–2004



Note: All circles in this graph are acute care hospitals (the size of each circle is proportional to the total number patients or cases; the red circles have statistically significant sex differences).

Figure 26

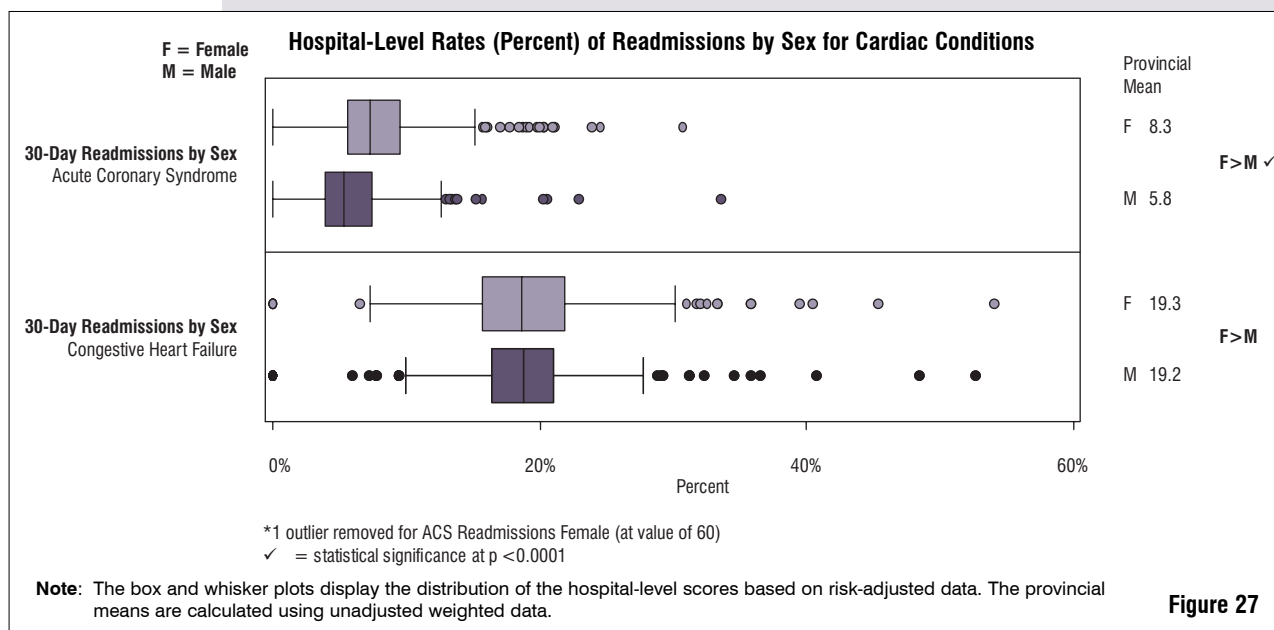


Figure 27

For the indicators of 30-day readmissions for acute coronary syndrome (ACS) and congestive heart failure (CHF), women had an overall higher rate than men of ACS readmissions, and women and men had similar rates of CHF readmissions.

In comparing the overall difference between women and men for the cardiac indicators, over two years, the disparities between women and men were greater in 2003–2004 for access to coronary angiography than in the previous year, at a provincial level and for all hospital peer groups. This change over two years in the differences between sexes over time for coronary angiography, and the change for CHF and ACS readmissions indicators are highlighted in Table 6.0.

Table 6.0 Comparison of Cardiac Indicators by Sex Over Two Years (Provincial and Peer Group Means)

	2002–2003	2003–2004
Access to Coronary Angiography (Value of Difference Between Women and Men (F–M)/F)		
Provincial	-0.28	-0.36
Teaching Hospitals	-0.11	-0.16
Community Hospitals	-0.33	-0.41
Small Hospitals	-0.05	-0.27
Acute Coronary Syndrome 30-Day Readmissions (Value of Difference Between Women and Men (F–M)/F)		
Provincial	0.09	0.14
Teaching Hospitals	0.29	0.24
Community Hospitals	0.00	0.07
Small Hospitals	-0.03	0.38
Acute Coronary Syndrome 30-Day Readmissions (Value of Difference Between Women and Men (F–M)/F)		
Provincial	-0.12	-0.07
Teaching Hospitals	-0.09	0.04
Community Hospitals	-0.14	-0.19
Small Hospitals	0.00	-0.09

Note: A positive value means that the rate is higher for women than men. A negative value means that the rate is higher for men than women. A value of zero means that the rates are similar (or equal). Note that rounding may have changed a small value to zero.

The Cardiac Care section of the Women's Health Structures and Services survey asked acute care hospitals about the structures, processes and practices they have in place to provide high quality, and equitable, cardiac care. An analysis of the results found that hospitals without an ambulatory care congestive heart failure program had significantly greater readmissions for women than men ($p = 0.02$). This finding reinforces the importance of providing structured, comprehensive ambulatory care programs, including automatic referrals, for congestive heart failure patients to improve equitable access and outcomes of care. The availability and use of other structured systems, such as automatic referral systems for cardiac rehabilitation, have successfully led to greater equity in access to cardiac rehabilitation.

In addition to these access and outcome indicators, hospitals will have access to additional *Hospital Report* indicators for evaluating system-level sex equitable access for cardiac care patients in 2005–2006, including:

- Rate of access to drug-eluting stents for patients undergoing PTCA with stents by sex.

Gynecological Procedures and Hysterectomy

Hospital	Community Served	LHIN	Route of Hysterectomy Difference Between Vaginal and Abdominal	Adverse Events Gynecological Procedures	Readmissions Gynecological Procedures
PROVINCIAL AVERAGE			-0.30	1.86	0.94
TEACHING HOSPITALS AVERAGE			0.18	2.30	1.24
Hamilton Health Sciences Corporation	Hamilton	4	-0.87	2.90	1.81
Kingston General Hospital*	Kingston	10	-0.49	1.69	1.82
London Health Sciences Centre	London	2	-0.11	0.69	0.36
Mount Sinai Hospital	Toronto	7	-0.35	5.26	1.52
St. Joseph's Health Care (London)	London	2	0.43	0.39	0.95
St. Joseph's Healthcare (Hamilton)	Hamilton	4	-0.58	2.55	0.00
St. Michael's Hospital	Toronto	7	-0.30	1.34	1.70
Sunnybrook and Women's College Health Sciences Centre	Toronto	7	0.02	6.28	0.67
The Ottawa Hospital	Ottawa	11	0.07	1.23	1.82
University Health Network	Toronto	7	-0.17	2.50	4.91
SMALL HOSPITALS AVERAGE			0.20	0.53	0.43
Alexandra Hospital	Ingersoll	2	NR	NR	NR
Alexandra Marine and General Hospital	Goderich	2	0.48	0.00	0.00
Almonte General Hospital	Almonte	11	-0.97	0.00	0.00
Arnprior & District Memorial Hospital	Arnprior	11	NR	NR	NR
Carleton Place & District Memorial Hospital	Carleton Place	11	NR	NR	NR
Deep River and District Hospital	Deep River	11	NR	NR	NR
Dryden Regional Health Centre	Dryden	14	0.55	0.00	0.00
Eglehart & District Hospital	Eglehart	13	NR	NR	NR
Four Counties Health Services	Newbury	2	NR	NR	NR
Glengarry Memorial Hospital	Alexandria	11	NR	NR	NR
Haldimand War Memorial Hospital	Dunnville	4	NR	4.41	0.00
Haliburton Highlands Health Services	Haliburton	9	NR	NR	NR
Hanover & District Hospital	Hanover	2	NR	NR	NR
Kemptville District Hospital	Kemptville	11	NR	NR	NR
Listowel & Wingham Hospitals Alliance	Listowel	2	NR	NR	NR
MICs Group Health Services	Cochrane	13	NR	NR	NR
North Wellington Health Care Corporation	Mount Forest	3	NR	NR	NR
Services de santé de Chapleau Health Services	Chapleau	13	NR	NR	NR
South Huron Hospital	Exeter	2	NR	NR	NR
St. Francis Memorial Hospital	Barry's Bay	11	NR	NR	NR
Stevenson Memorial Hospital	Alliston	8	0.52	0.00	0.00
The West Nipissing General Hospital	Sturgeon Falls	13	NR	NR	NR

*The values for the indicators for Kingston General Hospital are based on a combination of data from both Kingston General Hospital and Hotel Dieu Hospital, Kingston.

Gynecological Procedures and Hysterectomy (cont'd)

Hospital	Community Served	LHIN	Route of Hysterectomy Difference Between Vaginal and Abdominal	Adverse Events Gynecological Procedures	Readmissions Gynecological Procedures
COMMUNITY HOSPITALS AVERAGE			-0.35	1.73	0.85
Algonquin Health Services	Huntsville	12	NR	NR	NR
Bluewater Health	Sarnia	1	-0.65	0.59	0.00
Brantford General Hospital	Brantford	4	-0.63	3.29	1.23
Brockville General Hospital	Brockville	10	-0.92	5.63	0.00
Cambridge Memorial Hospital	Cambridge	3	-0.28	3.74	1.15
Chatham–Kent Health Alliance	Chatham	1	-0.48	0.79	0.00
Collingwood General & Marine Hospital	Collingwood	12	NR	NR	NR
Grand River Hospital	Kitchener	3	-0.28	2.11	1.44
Grey Bruce Health Services	Owen Sound	2	-0.66	7.16	0.00
Groves Memorial Community Hospital	Fergus	3	NR	NR	NR
Guelph General Hospital	Guelph	3	-0.24	0.66	0.50
Halton Healthcare Services	Oakville	6	-0.29	0.99	1.03
Hawkesbury & District General Hospital	Hawkesbury	11	-0.97	0.00	0.00
Headwaters Health Care Centre	Orangeville	5	-0.83	1.92	0.00
Hôpital Montfort	Ottawa	11	-0.36	3.41	0.00
Hôpital régional de Sudbury Regional Hospital	Sudbury	13	-0.49	1.56	1.44
Hotel Dieu Health Science Hospital (Niagara)	St. Catharines	4	0.35	4.47	0.00
Hôtel-Dieu Grace Hospital (Windsor)	Windsor	1	-0.76	3.22	1.22
Humber River Regional Hospital	Toronto	8	-0.39	1.45	0.67
Huron Perth Healthcare Alliance	Seaforth	2	0.04	2.41	0.00
Huron District Hospital (North Simcoe Hospital Alliance)	Midland	12	NR	NR	NR
Joseph Brant Memorial Hospital	Burlington	4	-0.06	0.71	1.02
Kirkland and District Hospital	Kirkland Lake	13	-0.96	0.00	0.00
Lake of the Woods District Hospital	Kenora	14	NR	NR	NR
Lakeridge Health Corporation	Durham	9	-0.93	1.22	1.44
Leamington District Memorial Hospital	Leamington	1	-0.96	5.55	1.95
Markham Stouffville Hospital	Markham	9	-0.21	2.03	0.00
Niagara Health System	Niagara	4	-0.29	0.92	1.80
Norfolk General Hospital	Simcoe	4	NR	NR	NR
North Bay General Hospital	North Bay	13	-0.42	3.59	3.80
North York General Hospital	Toronto	8	-0.22	1.58	0.82
Northumberland Hills Hospital	Cobourg	9	NR	NR	NR
Orillia Soldiers' Memorial Hospital	Orillia	12	-0.39	0.48	2.25

■ Above-average performance

■ Average performance

■ Below-average performance

Pembroke General Hospital	Pembroke	11	0.14	0.00	0.00
Perth and Smiths Falls District Hospital	Smiths Falls	10	NR	NR	NR
Peterborough Regional Health Centre	Peterborough	9	-0.35	1.27	0.00
Queensway Carleton Hospital	Nepean	11	0.21	0.00	0.00
Quinte Healthcare Corporation	Hastings and Prince Edward	10	-0.61	0.28	0.46
Renfrew Victoria Hospital	Renfrew	11	NR	NR	NR
Ross Memorial Hospital	Lindsay	9	-0.75	0.00	0.00
Rouge Valley Health System	Toronto	9	-0.55	3.67	0.43
Sault Area Hospitals	Sault Ste. Marie	13	-0.22	1.63	2.47
South Bruce Grey Health Centre	Kincardine	2	NR	NR	NR
South Muskoka Memorial Hospital	Bracebridge	12	NR	NR	NR
Southlake Regional Health Centre	Newmarket	8	-0.38	2.45	0.49
St. Joseph's Health Centre (Toronto)	Toronto	7	0.10	1.08	1.72
St. Mary's General Hospital	Kitchener	3	NR	NR	NR
St. Thomas Elgin General Hospital	St. Thomas	2	0.93	1.30	3.05
Strathroy Middlesex General Hospital	Strathroy	2	NR	NR	NR
Temiskaming Hospital	New Liskeard	13	-0.88	0.00	0.00
The Credit Valley Hospital	Mississauga	6	-0.02	1.14	1.82
The Scarborough Hospital	Toronto	9	-0.56	2.89	0.00
Thunder Bay Regional Hospital	Thunder Bay	14	-0.19	0.44	1.35
Tillsonburg District Memorial Hospital	Tillsonburg	2	-0.38	0.00	0.00
Timmins and District Hospital	Timmins	13	-0.62	0.00	0.00
Toronto East General Hospital	Toronto	7	-0.42	4.76	0.59
Trillium Health Centre	Mississauga	6	-0.69	1.06	0.00
West Lincoln Memorial Hospital	Grimsby	4	-0.95	0.00	0.00
West Parry Sound Health Centre	Parry Sound	13	NR	NR	NR
William Osler Health Centre	Brampton	5	-0.47	1.77	0.57
Winchester District Memorial Hospital	Winchester	11	0.48	0.98	0.00
Windsor Regional Hospital	Windsor	1	-0.48	1.03	0.40
Woodstock General Hospital	Woodstock	2	0.39	2.07	0.00
York Central Hospital	Richmond Hill	8	-0.46	4.19	0.00

Notes:

Non-reportable (NR)-results are not shown due to either <5 total cases or due to physician confidentiality.

For the indicator Route of Hysterectomy-Difference Between Vaginal and Abdominal, (NR) is due to <5 total hysterectomy cases.

All indicators are rates (in percent) except for Route of Hysterectomy-Difference Between Vaginal and Abdominal (see indicator definition on page 50).

See the Women's Health Technical Notes (www.hospitalreport.ca) for an explanation of how sample size affects performance allocations.

Gynecological Procedures and Hysterectomy (cont'd)

LHIN	Route of Hysterectomy Difference (Normalized) Between Vaginal and Abdominal	Adverse Events Gynecological Procedures	Readmissions Gynecological Procedures
MEAN HOSPITAL RESULTS BY LOCAL HEALTH INTEGRATION NETWORK (LHIN)			
1 (Erie—St. Clair)	-0.60	1.58	NR
2 (South West)	0.06	1.28	0.77
3 (Waterloo Wellington)	-0.27	1.80	1.03
4 (Hamilton Niagara Haldimand Brant)	-0.52	2.14	1.13
5 (Central West)	-0.51	1.78	0.52
6 (Mississauga Halton)	-0.28	1.06	1.06
7 (Toronto Central)	-0.15	3.59	1.40
8 (Central)	-0.32	1.94	0.59
9 (Central East)	-0.59	2.45	0.43
10 (South East)	-0.60	1.12	1.08
11 (Champlain)	0.07	1.06	0.92
12 (North Simcoe Muskoka)	-0.53	1.06	1.12
13 (North East)	-0.50	1.58	1.82
14 (North West)	-0.11	1.14	1.03

All indicators are rates in percent except for the difference values: Route of Hysterectomy-Difference Between Vaginal and Abdominal; Access to Coronary Angiography-Difference Between the Sexes (F-M)/F; Readmissions for Acute Coronary Syndrome-Difference Between the Sexes (F-M)/F; Readmissions for Congestive Heart Failure-Difference Between the Sexes (F-M)/F.

Labour and Delivery

Hospital	Community Served	LHIN	Adverse Events Labour and Delivery	Readmissions Labour and Delivery
PROVINCIAL AVERAGE			2.26	0.63
TEACHING HOSPITALS AVERAGE			4.10	0.70
Hamilton Health Sciences Corporation	Hamilton	4	6.86	0.69
Kingston General Hospital*	Kingston	10	7.29	0.48
London Health Sciences Centre	London	2	2.14	0.73
Mount Sinai Hospital	Toronto	7	2.79	0.40
St. Joseph's Health Care London	London	2	2.82	1.06
St. Joseph's Healthcare Hamilton	Hamilton	4	2.57	0.71
St. Michael's Hospital	Toronto	7	1.64	0.65
Sunnybrook and Women's College Health Sciences Centre	Toronto	7	8.59	0.85
The Ottawa Hospital	Ottawa	11	3.72	0.78
University Health Network	Toronto	7	NR	NR

SMALL HOSPITALS AVERAGE			3.27	2.06
Alexandra Hospital	Ingersoll	2	0.00	0.00
Alexandra Marine and General Hospital	Goderich	2	3.58	1.69
Almonte General Hospital	Almonte	11	4.08	0.79
Arnprior & District Memorial Hospital	Arnprior	11	NR	NR
Carleton Place & District Memorial Hospital	Carleton Place	11	NR	NR
Deep River and District Hospital	Deep River	11	NR	NR
Dryden Regional Health Centre	Dryden	14	2.65	0.85
Englehart & District Hospital	Englehart	13	NR	NR
Four Counties Health Services	Newbury	2	NR	NR
Glengarry Memorial Hospital	Alexandria	11	NR	NR
Haldimand War Memorial Hospital	Dunnville	4	1.70	1.64
Haliburton Highlands Health Services	Haliburton	9	0.00	0.00
Hanover & District Hospital	Hanover	2	2.25	1.08
Kemptville District Hospital	Kemptville	11	NR	NR
Listowel & Wingham Hospitals Alliance	Listowel	2	1.19	0.57
MICs Group Health Services	Cochrane	13	2.89	0.00
North Wellington Health Care Corporation	Mount Forest	3	0.00	0.00
Services de santé de Chapleau Health Services	Chapleau	13	NR	NR
South Huron Hospital	Exeter	2	NR	NR
St. Francis Memorial Hospital	Barry's Bay	11	NR	NR
Stevenson Memorial Hospital	Alliston	8	4.32	3.17
The West Nipissing General Hospital	Sturgeon Falls	13	NR	NR

*The values for the indicators for Kingston General Hospital are based on a combination of data from both Kingston General Hospital and Hotel Dieu Hospital, Kingston.

Labour and Delivery (cont'd)

Hospital	Community Served	LHIN	Adverse Events Labour and Delivery	Readmissions Labour and Delivery
COMMUNITY HOSPITALS AVERAGE			1.59	0.58
Algonquin Health Services	Huntsville	12	1.54	1.56
Bluewater Health	Sarnia	1	0.61	0.46
Brantford General Hospital	Brantford	4	1.25	0.35
Brockville General Hospital	Brockville	10	3.62	0.00
Cambridge Memorial Hospital	Cambridge	3	3.10	0.59
Chatham–Kent Health Alliance	Chatham	1	1.97	0.62
Collingwood General & Marine Hospital	Collingwood	12	3.87	0.83
Grand River Hospital	Kitchener	3	1.42	0.66
Grey Bruce Health Services	Owen Sound	2	6.46	0.82
Groves Memorial Community Hospital	Fergus	3	2.48	0.82
Guelph General Hospital	Guelph	3	2.10	0.92
Halton Healthcare Services	Oakville	6	1.31	0.31
Hawkesbury & District General Hospital	Hawkesbury	11	2.19	1.28
Headwaters Health Care Centre	Orangeville	5	1.98	0.19
Hôpital Montfort	Ottawa	11	3.80	1.09
Hôpital régional de Sudbury Regional Hospital	Sudbury	13	1.11	0.26
Hotel Dieu Health Science Hospital (Niagara)	St. Catharines	4	NR	NR
Hôtel-Dieu Grace Hospital (Windsor)	Windsor	1	1.45	0.19
Humber River Regional Hospital	Toronto	8	0.74	0.48
Huron Perth Healthcare Alliance	Seaforth	2	1.65	0.09
Huron District Hospital (North Simcoe Hospital Alliance)	Midland	12	2.27	0.44
Joseph Brant Memorial Hospital	Burlington	4	1.57	0.33
Kirkland and District Hospital	Kirkland Lake	13	0.00	3.08
Lake of the Woods District Hospital	Kenora	14	6.94	0.60
Lakeridge Health Corporation	Durham	9	1.90	0.71
Leamington District Memorial Hospital	Leamington	1	2.16	0.47
Markham Stouffville Hospital	Markham	9	1.19	0.40
Niagara Health System	Niagara	4	1.68	0.98
Norfolk General Hospital	Simcoe	4	2.38	0.66
North Bay General Hospital	North Bay	13	1.87	1.42
North York General Hospital	Toronto	8	0.85	0.43
Northumberland Hills Hospital	Cobourg	9	1.30	1.27
Orillia Soldiers' Memorial Hospital	Orillia	12	5.10	0.99

Pembroke General Hospital	Pembroke	11	1.26	0.00
Perth and Smiths Falls District Hospital	Smiths Falls	10	1.04	0.00
Peterborough Regional Health Centre	Peterborough	9	1.70	0.63
Queensway Carleton Hospital	Nepean	11	4.79	0.71
Quinte Healthcare Corporation	Hastings and Prince Edward	10	1.58	0.45
Renfrew Victoria Hospital	Renfrew	11	1.10	2.18
Ross Memorial Hospital	Lindsay	9	2.15	0.60
Rouge Valley Health System	Toronto	9	2.76	0.34
Sault Area Hospitals	Sault Ste. Marie	13	1.78	1.19
South Bruce Grey Health Centre	Kincardine	2	1.85	0.46
South Muskoka Memorial Hospital	Bracebridge	12	2.11	0.69
Southlake Regional Health Centre	Newmarket	8	1.23	0.73
St. Joseph's Health Centre (Toronto)	Toronto	7	0.55	0.57
St. Mary's General Hospital	Kitchener	3	NR	NR
St. Thomas Elgin General Hospital	St. Thomas	2	0.56	0.41
Strathroy Middlesex General Hospital	Strathroy	2	0.87	1.27
Temiskaming Hospital	New Liskeard	13	0.80	0.78
The Credit Valley Hospital	Mississauga	6	0.81	0.57
The Scarborough Hospital	Toronto	9	1.68	0.64
Thunder Bay Regional Hospital	Thunder Bay	14	3.15	1.13
Tillsonburg District Memorial Hospital	Tillsonburg	2	NR	NR
Timmins and District Hospital	Timmins	13	1.99	1.05
Toronto East General Hospital	Toronto	7	0.93	0.91
Trillium Health Centre	Mississauga	6	0.87	0.21
West Lincoln Memorial Hospital	Grimsby	4	5.79	1.59
West Parry Sound Health Centre	Parry Sound	13	0.64	0.00
William Osler Health Centre	Brampton	5	0.99	0.46
Winchester District Memorial Hospital	Winchester	11	0.47	0.46
Windsor Regional Hospital	Windsor	1	0.42	0.37
Woodstock General Hospital	Woodstock	2	1.11	0.18
York Central Hospital	Richmond Hill	8	1.00	0.23

Notes:

Non-reportable (NR)-results are not shown due to either <5 total cases or due to physician confidentiality.

All indicators are rates (in percent).

See the Women's Health Technical Notes (www.hospitalreport.ca) for an explanation of how sample size affects performance allocations.

Labour and Delivery (cont'd)

LHIN	Adverse Events Labour and Delivery	Readmissions Labour and Delivery
MEAN HOSPITAL RESULTS BY LOCAL HEALTH INTEGRATION NETWORK (LHIN)		
1 (Erie–St. Clair)	0.97	0.40
2 (South West)	2.16	0.69
3 (Waterloo Wellington)	1.91	0.71
4 (Hamilton Niagara Haldimand Brant)	3.38	0.78
5 (Central West)	1.06	0.44
6 (Mississauga Halton)	0.92	0.39
7 (Toronto Central)	3.26	0.64
8 (Central)	0.96	0.51
9 (Central East)	1.86	0.57
10 (South East)	4.55	0.47
11 (Champlain)	3.72	0.79
12 (North Simcoe Muskoka)	2.68	0.85
13 (North East)	1.47	0.96
14 (North West)	3.86	1.28

All indicators are rates in percent except for the difference values: Route of Hysterectomy-Difference Between Vaginal and Abdominal; Access to Coronary Angiography-Difference Between the Sexes (F-M)/F; Readmissions for Acute Coronary Syndrome-Difference Between the Sexes (F-M)/F; Readmissions for Congestive Heart Failure-Difference Between the Sexes (F-M)/F.

Cardiac Care

Hospital	Community Served	LHIN	Access to Coronary Angiography			Readmissions—Acute Coronary Syndrome			Readmissions—Congestive Heart Failure		
			Females	Males	Difference Between the Sexes (F-M)/F	Females	Males	Difference Between the Sexes (F-M)/F	Females	Males	Difference Between the Sexes (F-M)/F
PROVINCIAL AVERAGE			36.5	46.4	-0.36	8.3	5.8	0.14	19.3	19.2	-0.07
TEACHING HOSPITALS AVERAGE			52.3	61.0	-0.16	6.1	4.4	0.24	18.0	17.1	0.04
Hamilton Health Sciences Corporation	Hamilton	4	48.5	59.8	-0.23 ^{M>F}	6.1	3.8	0.37	17.3	17.3	0.00
Kingston General Hospital*	Kingston	10	79.4	83.6	-0.05	3.5	3.3	0.05	25.1	19.7	0.22
London Health Sciences Centre	London	2	56.6	67.6	-0.19 ^{M>F}	5.7	4.2	0.25	19.6	16.4	0.16
Mount Sinai Hospital	Toronto	7	38.3	58.6	-0.53	2.3	4.1	-0.79	20.0	17.2	0.14
St. Joseph's Health Care (London)	London	2	0.0	34.2	NR	19.2	NR	NR	16.4	10.9	0.34
St. Joseph's Healthcare (Hamilton)	Hamilton	4	32.8	31.1	0.05	5.1	4.8	0.06	16.9	19.9	-0.18
St. Michael's Hospital	Toronto	7	51.9	53.5	-0.03	9.8	5.0	0.49 ^{F>M}	21.8	17.7	0.19
Sunnybrook and Women's College Health Sciences Centre	Toronto	7	66.8	73.7	-0.10	6.4	3.9	0.39	17.0	20.0	-0.18
The Ottawa Hospital	Ottawa	11	41.4	53.5	-0.29 ^{M>F}	8.3	5.8	0.29	14.2	13.8	0.02
University Health Network	Toronto	7	57.0	54.9	0.04	4.1	3.9	0.05	18.7	18.7	0.00

SMALL HOSPITALS AVERAGE			17.1	24.0	-0.27	12.1	6.1	0.38	21.0	22.7	-0.09
Alexandra Hospital	Ingersoll	2	34.2	13.7	0.60	14.2	5.0	0.65	35.8	36.5	-0.02
Alexandra Marine and General Hospital	Goderich	2	26.0	11.9	0.54	5.8	2.9	0.49	26.8	9.9	0.63
Almonte General Hospital	Almonte	11	NR	11.9	NR	0.0	0.0	NR	NR	NR	NR
Arnprior & District Memorial Hospital	Arnprior	11	0.0	28.3	NR	20.3	4.5	0.78	19.9	27.0	-0.36
Carleton Place & District Memorial Hospital	Carleton Place	11	NR	12.2	NR	8.8	9.2	-0.05	0.0	32.3	NR
Deep River and District Hospital	Deep River	11	NR	34.7	NR	NR	NR	NR	NR	NR	NR
Dryden Regional Health Centre	Dryden	14	0.0	3.6	NR	7.2	0.0	NR	0.0	24.3	NR
Englehart & District Hospital	Englehart	13	0.0	NR	NR	9.5	0.0	NR	19.6	NR	NR
Four Counties Health Services	Newbury	2	15.7	30.4	-0.94	23.9	11.2	0.53	40.4	27.3	0.32
Glengarry Memorial Hospital	Alexandria	11	NR	NR	NR	NR	0.0	NR	7.9	35.8	-3.54
Haldimand War Memorial Hospital	Dunnville	4	0.0	11.3	NR	19.7	0.0	NR	12.6	24.3	-0.93
Haliburton Highlands Health Services	Haliburton	9	19.3	NR	NR	24.5	0.0	NR	NR	0.0	NR
Hanover & District Hospital	Hanover	2	30.5	0.0	NR	0.0	0.0	NR	16.1	19.0	-0.18
Kemptville District Hospital	Kemptville	11	49.7	32.4	0.35	0.0	22.9	NR	13.1	0.0	NR
Listowel & Wingham Hospitals Alliance	Listowel	2	22.3	43.5	-0.95	4.3	3.5	0.18	35.8	31.2	0.13
MICs Group Health Services	Cochrane	13	0.0	0.0	NR	14.8	9.9	0.33	NR	0.0	NR
North Wellington Health Care Corporation	Mount Forest	3	24.9	29.9	-0.20	5.6	3.1	0.44	7.3	16.2	-1.21
Services de santé de Chapleau Health Services	Chapleau	13	NR	NR	NR	NR	NR	NR	0.0	0.0	NR
South Huron Hospital	Exeter	2	0.0	7.0	NR	10.9	5.2	0.52	9.9	0.0	NR
St. Francis Memorial Hospital	Barry's Bay	11	NR	26.8	NR	NR	0.0	NR	0.0	NR	NR
Stevenson Memorial Hospital	Alliston	8	15.5	45.9	-1.96	6.6	13.2	-0.99	18.8	6.0	0.68
The West Nipissing General Hospital	Sturgeon Falls	13	14.5	18.0	-0.24	15.9	2.8	0.82	19.5	23.3	-0.19

*The values for the indicators for Kingston General Hospital are based on a combination of data from both Kingston General Hospital and Hotel Dieu Hospital, Kingston.

Statistically Significant Difference

No Statistically Significant Difference

Cardiac Care (cont'd)

Hospital	Community Served	LHIN	Access to Coronary Angiography			Readmissions—Acute Coronary Syndrome			Readmissions—Congestive Heart Failure		
			Females	Males	Difference Between the Sexes (F-M)/F	Females	Males	Difference Between the Sexes (F–M)/F	Females	Males	Difference Between the Sexes (F-M)/F
COMMUNITY HOSPITALS AVERAGE			34.3	44.4	-0.41	8.9	6.5	0.07	19.6	19.5	-0.19
Algonquin Health Services	Huntsville	12	25.2	30.2	-0.20	6.8	3.6	0.47	NR	0.0	NR
Bluewater Health	Sarnia	1	13.2	19.3	-0.47	14.1	5.3	0.62 F>M	15.5	24.5	-0.58
Brantford General Hospital	Brantford	4	18.0	36.8	-1.04 M>F	9.5	8.4	0.12	20.5	21.5	-0.05
Brockville General Hospital	Brockville	10	35.9	60.5	-0.68 M>F	19.0	13.8	0.27	15.5	27.1	-0.74
Cambridge Memorial Hospital	Cambridge	3	35.3	34.6	0.02	5.6	5.9	-0.04	20.9	19.4	0.07
Chatham—Kent Health Alliance	Chatham	1	5.8	6.2	-0.07	7.5	6.5	0.13	25.9	19.1	0.26
Collingwood General & Marine Hospital	Collingwood	12	13.4	12.6	0.06	9.8	6.0	0.39	28.2	29.2	-0.04
Grand River Hospital	Kitchener	3	49.0	37.0	0.24	1.6	10.4	-5.60	15.9	18.2	-0.14
Grey Bruce Health Services	Owen Sound	2	12.3	22.4	-0.83	11.6	4.3	0.63 F>M	11.3	17.7	-0.56
Groves Memorial Community Hospital	Fergus	3	52.8	49.2	0.07	4.2	12.6	-2.01	0.0	9.9	NR
Guelph General Hospital	Guelph	3	31.0	35.3	-0.14	11.2	4.8	0.57	11.7	19.7	-0.69
Halton Healthcare Services	Oakville	6	27.6	36.4	-0.32	7.3	3.7	0.49	18.7	11.2	0.40
Hawkesbury & District General Hospital	Hawkesbury	11	69.6	54.7	0.21	11.7	2.3	0.81	8.8	7.8	0.11
Headwaters Health Care Centre	Orangeville	5	27.4	53.5	-0.96 M>F	2.6	5.4	-1.08	7.8	16.1	-1.08
Hôpital Montfort	Ottawa	11	40.4	49.3	-0.22	15.1	11.4	0.25	10.1	25.7	-1.54
Hôpital régional de Sudbury Regional Hospital	Sudbury	13	50.9	61.7	-0.21	8.7	6.3	0.28	23.5	18.6	0.21
Hotel Dieu Health Science Hospital (Niagara)	St. Catharines	4	35.9	50.4	-0.41	13.5	11.1	0.18	9.4	20.0	-1.12
Hôtel-Dieu Grace Hospital (Windsor)	Windsor	1	43.9	59.3	-0.35 M>F	5.3	7.9	-0.49	21.9	25.5	-0.17
Humber River Regional Hospital	Toronto	8	26.4	29.5	-0.12	5.9	6.0	-0.02	19.6	17.9	0.09
Huron Perth Healthcare Alliance	Seaforth	2	25.6	40.9	-0.60	13.4	2.3	0.83 F>M	12.6	15.4	-0.22
Huron District Hospital (North Simcoe Hospital Alliance)	Midland	12	19.8	43.2	-1.18 M>F	7.4	12.0	-0.63	32.5	22.9	0.30
Joseph Brant Memorial Hospital	Burlington	4	43.8	41.3	0.06	8.5	7.4	0.13	17.7	22.5	-0.28
Kirkland and District Hospital	Kirkland Lake	13	12.6	35.4	-1.82	0.0	10.6	NR	16.3	27.1	-0.66
Lake of the Woods District Hospital	Kenora	14	30.4	30.7	-0.01	5.7	6.2	-0.10	25.7	7.7	0.70
Lakeridge Health Corporation	Durham	9	30.7	43.6	-0.42 M>F	7.2	8.7	-0.21	21.1	21.0	0.01
Leamington District Memorial Hospital	Leamington	1	18.2	28.2	-0.55	12.5	8.2	0.34	16.1	12.4	0.23
Markham Stouffville Hospital	Markham	9	32.5	62.4	-0.92 M>F	9.4	6.5	0.31	24.3	11.0	0.55
Niagara Health System	Niagara	4	16.3	29.3	-0.80 M>F	13.5	9.1	0.33 F>M	24.0	20.8	0.13
Norfolk General Hospital	Simcoe	4	5.8	21.8	-2.74	8.3	9.5	-0.14	29.1	19.1	0.34
North Bay General Hospital	North Bay	13	9.8	24.9	-1.53 M>F	5.7	4.7	0.17	24.4	22.3	0.09
North York General Hospital	Toronto	8	53.5	55.5	-0.04	9.6	8.0	0.17	17.0	12.6	0.26
Northumberland Hills Hospital	Cobourg	9	38.4	55.4	-0.44	7.7	15.7	-1.04	6.5	22.4	-2.43
Orillia Soldiers’ Memorial Hospital	Orillia	12	25.2	32.4	-0.29	6.7	9.1	-0.35	16.1	20.9	-0.30

Statistically Significant Difference

No Statistically Significant Difference

Pembroke General Hospital	Pembroke	11	28.2	34.7	-0.23	0.0	20.6	NR	22.1	20.4	0.08
Perth and Smiths Falls District Hospital	Smiths Falls	10	10.8	37.5	-2.49 ^{M>F}	6.1	9.4	-0.55	27.9	20.4	0.27
Peterborough Regional Health Centre	Peterborough	9	41.9	42.1	-0.01	6.6	5.5	0.17	14.6	9.5	0.35
Queensway Carleton Hospital	Nepean	11	15.1	23.1	-0.53	17.1	11.4	0.33	20.7	16.8	0.19
Quinte Healthcare Corporation	Hastings and Prince Edward	10	46.4	49.4	-0.06	8.6	13.6	-0.59	22.7	24.8	-0.09
Renfrew Victoria Hospital	Renfrew	11	41.4	41.7	-0.01	30.7	8.1	0.74 ^{F>M}	39.5	25.0	0.37
Ross Memorial Hospital	Lindsay	9	11.7	23.4	-1.01	9.7	4.7	0.52	13.3	27.8	-1.09
Rouge Valley Health System	Toronto	9	42.7	66.0	-0.55 ^{M>F}	6.5	4.2	0.35	27.3	19.9	0.27
Sault Area Hospitals	Sault Ste. Marie	13	50.5	51.7	-0.02	19.9	7.4	0.63 ^{F>M}	20.9	17.6	0.16
South Bruce Grey Health Centre	Kincardine	2	8.7	20.7	-1.38	11.7	8.8	0.25	27.6	27.6	0.00
South Muskoka Memorial Hospital	Bracebridge	12	5.6	20.7	-2.70	4.8	6.5	-0.34	NR	NR	NR
Southlake Regional Health Centre	Newmarket	8	63.9	81.0	-0.27 ^{M>F}	3.1	3.8	-0.25	15.7	16.4	-0.04
St. Joseph's Health Centre (Toronto)	Toronto	7	37.2	39.5	-0.06	5.1	5.7	-0.13	19.4	9.4	0.52 ^{F>M}
St. Mary's General Hospital	Kitchener	3	48.0	58.5	-0.22	1.6	2.9	-0.79	14.0	11.8	0.16
St. Thomas Elgin General Hospital	St. Thomas	2	12.7	20.2	-0.59	12.0	5.8	0.52	27.6	13.0	0.53
Strathroy Middlesex General Hospital	Strathroy	2	6.6	18.1	-1.75	16.0	3.3	0.79	10.1	24.7	-1.45
Temiskaming Hospital	New Liskeard	13	12.7	20.1	-0.59	0.0	0.0	NR	9.3	26.2	-1.82
The Credit Valley Hospital	Mississauga	6	44.8	47.6	-0.06	9.1	4.4	0.52	15.2	12.7	0.16
The Scarborough Hospital	Toronto	9	29.6	48.9	-0.65 ^{M>F}	7.3	6.7	0.09	21.1	18.5	0.12
Thunder Bay Regional Hospital	Thunder Bay	14	48.2	67.0	-0.39 ^{M>F}	7.7	6.1	0.20	17.5	22.3	-0.27
Tillsonburg District Memorial Hospital	Tillsonburg	2	5.2	12.4	-1.39	3.3	13.0	-2.94	21.6	29.0	-0.34
Timmins and District Hospital	Timmins	13	13.7	18.1	-0.32	3.5	5.2	-0.47	33.3	27.0	0.19
Toronto East General Hospital	Toronto	7	63.0	77.6	-0.23 ^{M>F}	8.1	4.6	0.42	32.0	16.3	0.49 ^{F>M}
Trillium Health Centre	Mississauga	6	63.6	72.6	-0.14	7.1	2.9	0.59 ^{F>M}	15.2	19.1	-0.26
West Lincoln Memorial Hospital	Grimsby	4	31.3	32.7	-0.05	18.5	2.4	0.87	18.1	40.7	-1.25
West Parry Sound Health Centre	Parry Sound	13	7.3	12.0	-0.64	9.5	7.0	0.26	22.3	11.6	0.48
William Osler Health Centre	Brampton	5	49.9	58.6	-0.17 ^{M>F}	8.6	5.2	0.40	16.9	24.3	-0.44
Winchester District Memorial Hospital	Winchester	11	44.4	28.5	0.36	0.0	15.2	NR	11.4	20.3	-0.78
Windsor Regional Hospital	Windsor	1	38.2	50.4	-0.32	13.8	8.1	0.41	16.6	27.1	-0.63
Woodstock General Hospital	Woodstock	2	16.8	10.8	0.36	11.7	4.9	0.59	10.9	16.1	-0.47
York Central Hospital	Richmond Hill	8	59.2	72.0	-0.22	8.9	5.3	0.41	18.7	19.3	-0.03

Notes:

Non-reportable (NR)-results are not shown due to either <5 total cases or due to physician confidentiality; (NR) for the difference values-that is, (F-M)/F occurs when the number of cases is <5 for either females or males.

Cardiac care (by sex) performance allocations: F>M = statistically significant difference where women have a higher rate for an indicator; M>F = statistically significant difference where men have a higher rate for an indicator.

See the Women's Health Technical Notes (www.hospitalreport.ca) for an explanation of how sample size affects performance allocations.

Cardiac Care (cont'd)

LHIN	Access to Coronary Angiography			Readmissions—Acute Coronary Syndrome			Readmissions—Congestive Heart Failure		
	Females	Males	Difference Between the Sexes (F-M)/F	Females	Males	Difference Between the Sexes (F-M)/F	Females	Males	Difference Between the Sexes (F-M)/F
MEAN HOSPITAL RESULTS BY LOCAL HEALTH INTEGRATION NETWORK (LHIN)									
1 (Erie –St. Clair)	26.3	32.8	-0.31	10.3	6.9	0.20	19.8	23.1	-0.23
2 (South West)	30.8	40.7	-0.42	8.7	7.3	0.21	18.6	18.5	-0.10
3 (Waterloo Wellington)	40.9	43.8	-0.07	4.3	7.4	-1.36	14.8	16.5	-0.14
4 (Hamilton Niagara Haldimand Brant)	28.3	40.5	-0.60	9.5	7.7	0.30	19.6	20.3	-0.08
5 (Central West)	47.1	57.9	-0.27	7.8	7.8	0.18	15.7	23.0	-0.54
6 (Mississauga Halton)	49.7	57.0	-0.15	7.6	6.0	0.55	15.8	15.9	-0.02
7 (Toronto Central)	54.9	59.7	-0.11	6.2	5.8	0.21	21.3	16.8	0.17
8 (Central)	43.2	51.8	-0.23	6.4	5.3	-0.03	18.2	16.6	0.09
9 (Central East)	33.7	49.5	-0.52	7.6	5.4	0.12	21.2	20.0	-0.07
10 (South East)	52.7	62.3	-0.41	6.7	5.1	-0.12	22.7	24.2	-0.15
11 (Champlain)	34.9	43.0	-0.22	10.1	4.6	0.30	16.0	17.6	-0.14
12 (North Simcoe Muskoka)	25.9	31.2	-0.43	10.7	4.7	0.10	22.6	21.6	0.03
13 (North East)	29.8	37.3	-0.47	10.0	5.1	0.25	21.6	18.7	0.06
14 (North West)	39.2	51.3	-0.27	7.6	4.7	0.20	21.3	21.6	-0.26

All indicators are rates in percent except for the difference values: Route of Hysterectomy-Difference Between Vaginal and Abdominal; Access to Coronary Angiography-Difference Between the Sexes (F-M)/F; Readmissions for Acute Coronary Syndrome-Difference Between the Sexes (F-M)/F; Readmissions for Congestive Heart Failure-Difference Between the Sexes (F-M)/F



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