

# Hospital Report

## HIGHLIGHTS



2001

COMPLEX CONTINUING CARE & EMERGENCY DEPARTMENT CARE

## About this Report

*Hospital Reports 2001*, a joint initiative of the Government of Ontario and Ontario Hospital Association, are once again breaking new ground by examining two new areas.

This summary highlights two hospital service areas that touch the lives of many people on a daily basis: complex continuing care for people who are chronically ill and emergency care.

For many years, Ontario hospitals assessed their performance in a variety of ways to improve care for their patients. It wasn't until 1998 however, that hospital information was collected in a scientifically sound, feasible and relevant way that allowed for province-wide comparisons.

When the Ontario Hospital Association (OHA) and the University of Toronto first introduced *Hospital Report '98*, it was a groundbreaking effort that paved the way for a series of hospital reports. These reports examined many aspects of hospital care by using what researchers describe as a "balanced scorecard"; measuring performance in the areas of clinical outcomes, system integration and change, patient sat-



Photo Courtesy of The Riverdale Hospital

isfaction and financial performance and condition.

Taken in total, these reports known as the *Hospital Report Series*, represent a large, diverse research effort that has sparked interest both nationally and internationally and has resulted in the most comprehensive description of hospital performance in the world.

Earlier this year, *Hospital Report 2001: Acute Care* was released, which helped people

understand how acute care hospitals performed when dealing with a wide range of illnesses, showing hospital strengths in many areas as well as areas for review and improvement.

These latest reports are the first to provide a balanced scorecard on care provided to complex continuing care patients and patients who are seen in emergency departments. Many physicians, nurses, hospital managers and other

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

health care professionals voluntarily participated on advisory panels to provide input into the development of these reports.

The results of both the complex continuing care and emergency department care reports describe performance at a regional, hospital peer group, and provincial level but do not include hospital-specific results.

The information resulting from these reports should be considered a "screening test." It is the first step in an ongoing effort to examine, in greater detail, the care provided in order to identify areas for quality improvement.

## Future Directions

As part of the *Hospital Report Series*, further exploratory reports will be released this winter on Women's Health, Nursing, Rehabilitation, Mental Health and Population Health.

The methods used to produce the reports, the data sources underlying the reports, and the depth of the reports will continue to increase over time. They represent a commitment by the Government of Ontario and Ontario's hospitals to greater accountability.

## About the Hospital Report Research Collaborative

Since 1998, researchers in the Department of Health Policy, Management and Evaluation, Faculty of Medicine at the University of Toronto have led a research collaborative to develop the framework and methods for the *Hospital Report Series*. Many individuals contributed research and clinical expertise to the reports.

The Department of Health Policy, Management and Evaluation, Faculty of Medicine at the University of Toronto, partnered with other departments at the University of Toronto and other leading edge organizations from across the province to enhance the scope and methods for the *Hospital Report Series*.

A full listing of research participants and authors, as well as the health care professionals who volunteered their time to the project, is contained in the

complete version of each report available from the Government of Ontario, Ontario Hospital Association, and the University of Toronto (U of T).

### The Hospital Report Research Collaborative includes:

- Department of Health Policy, Management and Evaluation, U of T
- Canadian Institute for Health Information
- Centre for Addiction and Mental Health
- Department of Rehabilitation Sciences, Faculty of Medicine, University of Toronto
- Faculty of Nursing, University of Toronto
- Institute for Clinical Evaluative Sciences
- Providence Centre
- University Health Network Research Institute
- University of Western Ontario
- Wilfrid Laurier University



Photo Courtesy of St. Joseph's Healthcare, Hamilton

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## What you need to know to understand the results of these reports

The *Hospital Report Series* is not intended to provide advice to patients trying to decide where to go for care. Measures used in these reports help to identify areas of strength that all hospitals can benefit or learn from in some way and also identify problems that enable hospitals, or groups of hospitals, to further investigate.

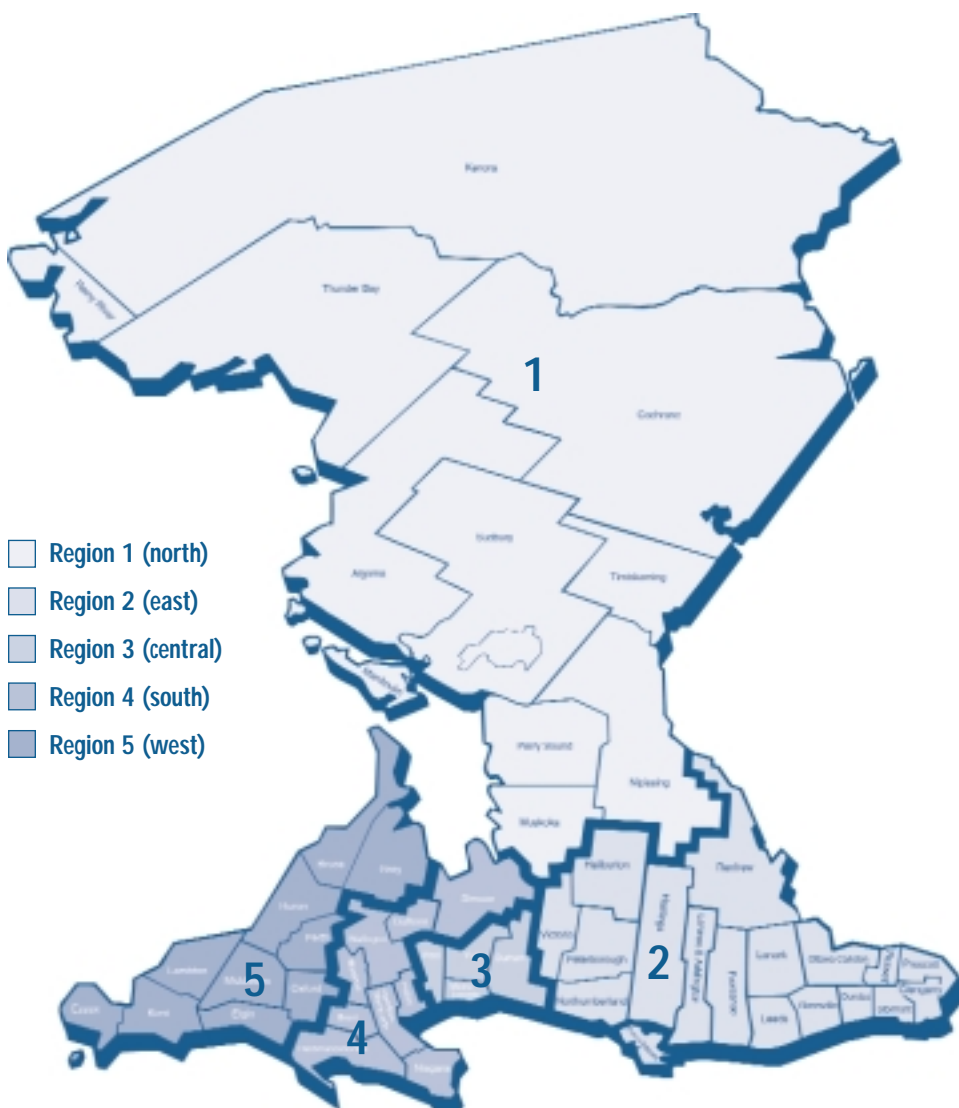
Where possible, researchers have calculated measures for five hospital regions based on definitions used by the Ontario Hospital Association and also for similar (peer) groups of hospitals. Each region has unique population characteristics and a different mix of hospital types and sizes.

This report follows a *balanced scorecard format* and includes four major quadrants or areas. Each quadrant represents one important aspect of hospital performance. No single quadrant provides a complete picture of a hospital's performance. It would be misleading to judge hospital performance based on one measure only or the measures included

in one quadrant. The four quadrants included in the reports are called:

- **Financial Performance and Condition.** This quadrant describes the productivity, financial efficiency and sustainability of complex continuing care and emergency department programs.
- **Patient Satisfaction.** This quadrant describes patients' perceptions of the care received and in the case of complex continuing care, it also includes families' perceptions of the care received by loved-ones.
- **System Integration and Change.** This area describes the processes and innovations used by hospitals to support quality improvement efforts.
- **Clinical Utilization and Outcomes.** This area measures clinical processes and outcomes important to patient care. Within each quadrant, performance indicators measure key aspects of hospital performance. The number of indicators varies in each section.

## The Regions of the Ontario Hospital Association



## INDICATOR LIST

### Complex Continuing Care

#### Financial Performance and Condition

- 1 Total cost per RUG weighted patient day
- 2 Direct cost per RUG weighted patient day
- 3 Unit cost performance
- 4 Corporate services
- 5 Total margin
- 6 Current ratio
- 7 Working capital
- 8 Patient care hours as a percent of total staff hours

#### Patient/Family Satisfaction

##### Patient Satisfaction

- 9 Global quality
- 10 The living environment
- 11 Food and food services
- 12 Activities
- 13 Staff
- 14 Dignity
- 15 Autonomy

##### Family Satisfaction

- 16 Global quality
- 17 Living environment
- 18 Activities
- 19 Communication with staff
- 20 Patient care and services
- 21 Assistance with eating

#### System Integration and Change

##### Process of Care

- 22 Prevalence of the use of clinical practice guidelines/protocols in the delivery of care to most or all patients
- 23 Prevalence of monitoring and reporting back to clinical staff about variance in practice from recommended procedures in protocols/guidelines
- 24 Prevalence of printed information to inform patients/families of their rights and opportunities to participate in all aspects of their own care

##### Integration of Care

- 25 Prevalence of use of standardized admission criteria
- 26 Relationships between complex continuing care providers and CCAC's

##### Information Use and Technology

- 27 Use of the RAI-MDS in quality improvement, clinical and utilization management
- 27 Availability of information technology to support clinical functions
- 29 Prevalence of current information technology strategic plans with provisions relevant to complex continuing care

##### Human Resources

- 30 Prevalence of the use of staff skill/competency descriptions specific to complex continuing care

#### Clinical Utilization and Outcomes

- 31 New stage two or greater skin ulcers in previously ulcer-free patients
- 32 Frequency and number of new signs of delirium
- 33 Prevalence of moderate pain daily or any more severe pain
- 34 Prevalence of little or no activity
- 35 Prevalence of antipsychotic use, in the absence of psychotic and related conditions
- 36 Prevalence of hypnotic medication use more than two times per week
- 37 Prevalence of daily physical restraints
- 38 Prevalence of symptoms of depression, with and without antidepressant treatment
- 39 Prevalence of occasional or frequent incontinence without a toileting plan



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# Complex Continuing Care

At some point in time, many Ontario residents will be touched by the need for prolonged medical care provided in a complex continuing care setting.

The term "complex continuing care" (CCC) includes a wide variety of programs such as long-term complex medical care, geriatric assessment and rehabilitation, psychogeriatric care, palliative care and respite care. Hospital-based continuing care is provided in Ministry of Health and Long-Term Care designated chronic care beds, either in freestanding chronic and rehabilitation hospitals or in designated units within acute care hospitals. In this report, complex continuing care is applied to care provided in these designated chronic care beds.



Photo courtesy of The Riverdale Hospital

The term "complex continuing care" (CCC) includes a wide variety of programs such as long-term complex medical care, geriatric assessment and rehabilitation, psychogeriatric care, palliative care and respite care.

In total, 81 hospital corporations/partnerships, representing 109 hospital sites, participated in at least one section of *Hospital Report 2001: Complex Continuing Care*, for an overall corporate participation rate of 77.9%. Ontario's hospitals provided 2.3 million days of care for complex continuing care patients in the 1999/2000 fiscal year and hospitals participating in the report represent a large proportion (95%) of these days.

This summary provides some, but not all, key findings resulting from the report. A more thorough review of results is available in the complete published results found in *Hospital Report 2001: Complex Continuing Care*.

## Financial Performance and Condition

The financial health of hospitals providing complex continuing care is an important component of the organizations' performance. The following indicator relates to all CCC programs in hospitals.

### Average total cost per typical patient day

The average total cost per typical patient day for complex continuing care programs was \$286.17. This statistic, which is used to compare the cost efficiency of caring for CCC patients, takes into consideration the differences in types of patients at hospitals and the different amounts of resources needed for their care. This is accomplished by assigning a relative value of the costliness of care (weighting) to patients using a standardized methodology called the Resource Utilization Groups (RUG-III).

At \$261.29 Region 4 (South) had the lowest total cost per weighted patient day and Region 5 (West) had the highest cost at \$326.62.

## Patient and Family Satisfaction

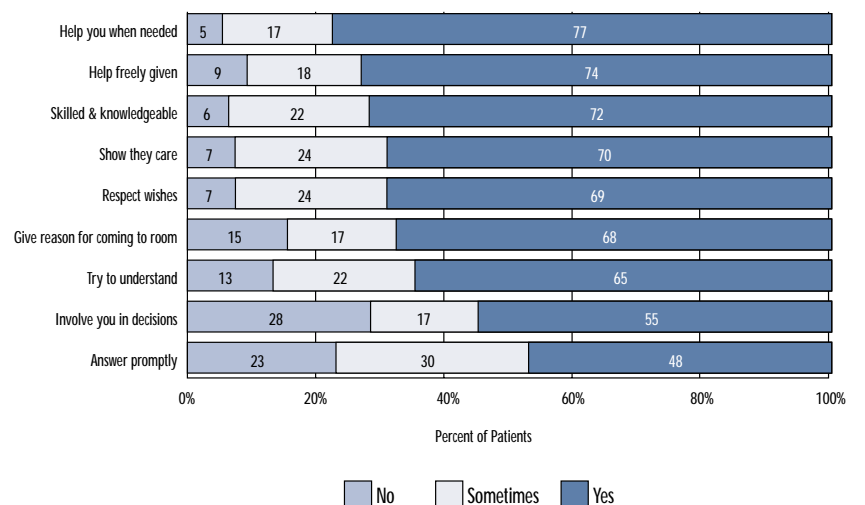
Asking patients and family members for feedback on the care they are receiving is a very important part of measuring hospital performance. Both groups provide valuable insights into what hospitals do well and what they need to improve.

Since many complex continuing care patients have difficulty reading and writing due to their illness, patients were personally interviewed. In total, 39 hospitals participated in the survey process and 1,370 patient interviews were completed. This large number of interviews reflects the fact that 69% of the patients, who were physically and cognitively able to participate completed an interview. 1,520 mailed family surveys were completed for a response rate of 54.5%.

### Patient Results

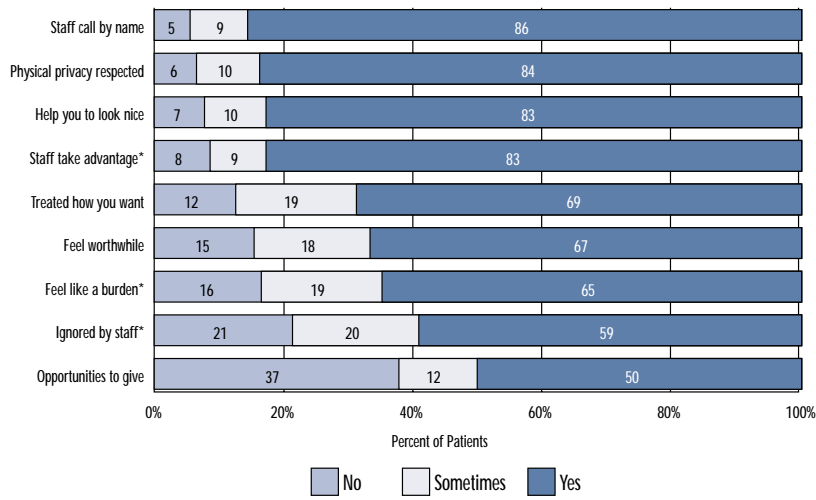
- When questioned about their **relationships with staff**, over half of the patients (56.8%) gave staff scores of 80 points or more out of 100. This indicates that patients consider the staff knowledgeable and that overall, staff interactions with patients are positive.
- The majority of patients (73%) rated the **overall quality of care** as good or excellent. More than three-quarters said they **would recommend the hospital to others** requiring CCC. For these indicators, patient satisfac-

### STAFF (Patient Results)

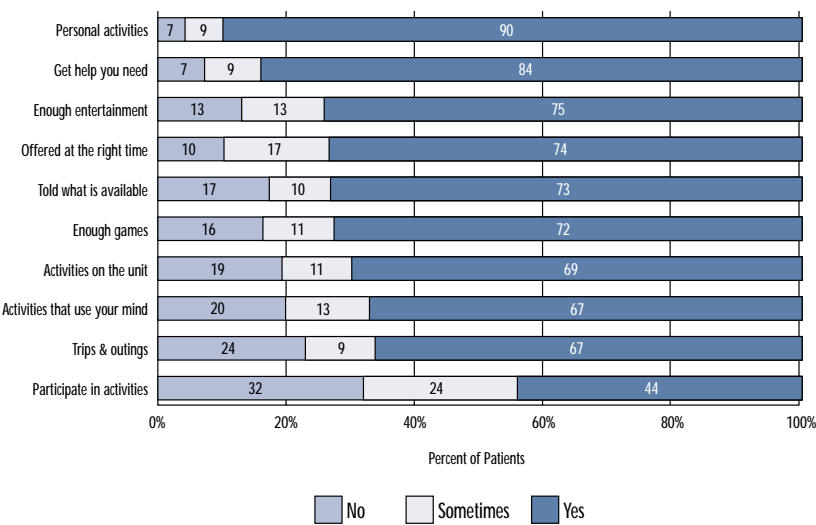




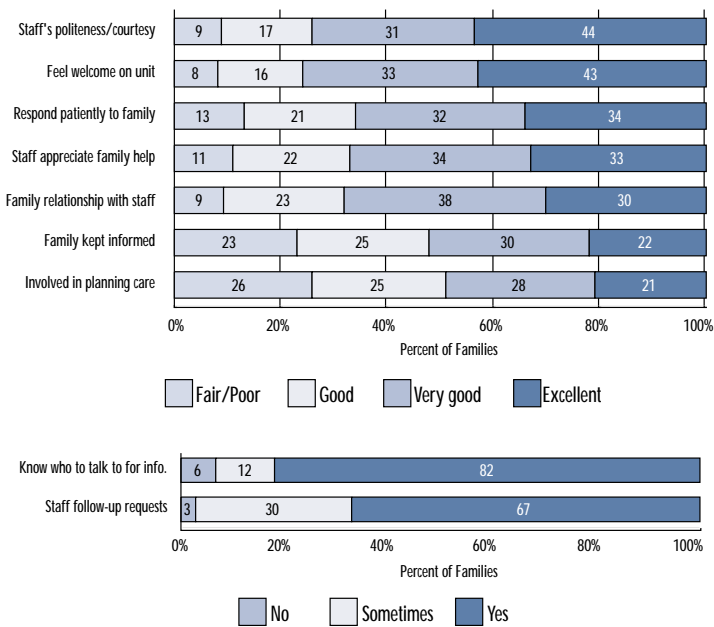
## DIGNITY (Patient Results)



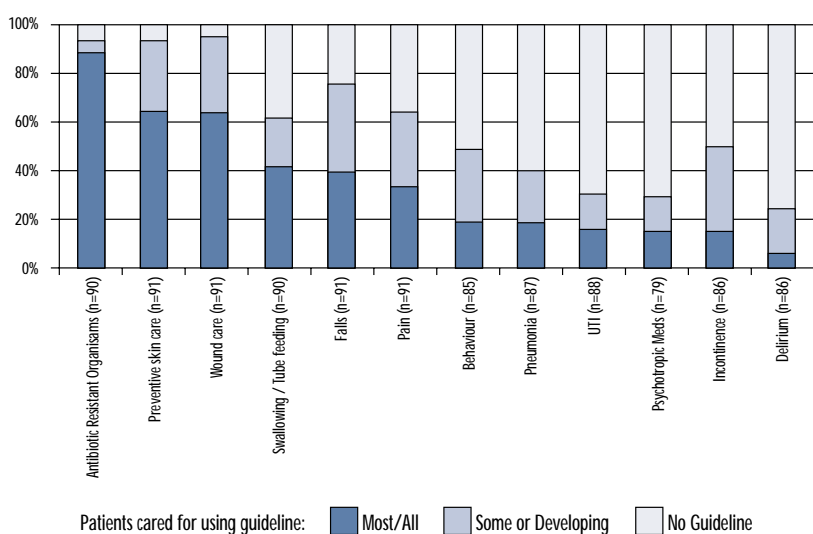
## ACTIVITIES (Patient Results)



## COMMUNICATION WITH STAFF (Family Results)



## DEVELOPMENT AND USE OF CLINICAL GUIDELINES/PROTOCOLS FOR MAJOR CLINICAL ISSUES IN COMPLEX CONTINUING CARE



tion scores were high, regardless of the type of hospital or region.

- Patients were very positive about the **cleanliness of the hospital** (88%).
- More than half of patients were satisfied with **food and food services**.
- 44% of patients indicated that they **regularly participate in activities** and 24% indicated that they participate sometimes. Many patients were not interested in participating or felt they could not because of their illness. Of those that did participate, over half (62.4%) were satisfied with the activities. Patients were less positive about having enough **trips and outings** (23%) and enough **activities that use their minds** (20%).

## Family Results

- Over half of family members (68.9%) rated **overall quality** in the excellent or very good range and an additional 19.5% were in the good range.
- Most family members' scores in the area of **communication with staff** were in the excellent or very good range (73.7%). The results were fairly consistent regardless of the type of hospital or region.
- More than half of family members rated **patient care and services** in the very good and excellent range (57.3%). 19.8% had scores in the fair and poor range.
- 70% said the **respect shown to their loved ones** was excellent or very good.
- 62% said the **quality of medical care** was excellent or very good.
- 42% of family members felt that there was not enough staff. In addition, more than one quarter of family members rated **keeping track of patient belongings** as fair or poor.
- Approximately half the patients in complex continuing care require assistance with eating. In this area, 71% of family members felt that patients received the **required help to eat** but 40% felt that an insufficient amount of **time** was spent **feeding patients**.

## System Integration and Change

This section of the report looks at how CCC services are integrating with other parts of the health care system and how complex continuing care is supported by the use of clinical guidelines/protocols, information, and specialized skills.

## Use of Guidelines

- Clinical guidelines or protocols are tools that are designed to assist clinicians in making decisions about treatment and care in accordance with the best available understanding of "best practices"
- More than 90% are using or developing guidelines for the management of antibiotic resistant organisms, preventive skin care and wound care.
  - Just over one third of hospitals routinely use guidelines for management of pain.
  - Fewer than one in five hospitals routinely use guidelines/protocols for management of pneumonia, incontinence, or delirium.
  - 95% of hospitals reported they are using, or are in the process of developing, a guideline regarding use of physical restraints.

## Information Use and Technology

Computer-based information systems have the potential to improve the quality and usefulness of patient records, reduce the time it takes to receive diagnostic reports, decrease medication error rates and can help to ensure timely patient follow-up. CCC hospitals routinely contribute to a rich database of clinical information about patients in their care called the Resident Assessment Instrument – Minimum Data Set (RAI-MDS)\*.

**\*Since 1996, Ontario hospitals have been required by the Ministry of Health and Long-Term Care to record patient data using a standardized assessment tool (the RAI-MDS). The RAI-MDS is used to assess all CCC patients shortly after admission and at regular intervals thereafter.**

Overall, complex continuing care hospitals could use these data more. On average, hospitals score less than 4 out of 10 points on an indicator of the extent to which they use RAI-MDS data for planning and decision-making. Large/free-standing hospitals and those in Region 3 (Central) scored relatively better than other hospitals on this indicator. The results show that hospitals have just begun to use the applications available from this data



set and could increase their quality improvement efforts by using these data more.

### Informing Patients and Families of Their Rights and Opportunities to be Involved in Their Care

A primary goal of complex continuing care is to ensure that patients and their families are aware of opportunities to become involved in care planning and decision making about their own care. While many hospitals may communicate this information verbally, only one in three hospitals communicates these rights and opportunities in writing.

### Clinical Utilization and Outcomes

Measures in this section examine both processes of care and outcomes. The indicators cover some, but not all, key aspects of quality in complex continuing care. Indicators included in this summary focus on pain management, recreational activity and the use of physical restraints. The sample represents 34.2% of patients receiving care in the study period, or those patients who stayed a minimum of 90 days.

### Pain Management

Significant pain on a daily basis, or periods of severe pain can have a great impact on functioning and quality of life. There have been major advances in recent years in pain control. Recent advances in pain control can eliminate or reduce pain to a level that allows the patient to function to the best of his or her ability. Information on the severity and frequency of pain is generally obtained directly from patients. In cases where patients cannot communicate this information, care providers report the level of pain, based on their observa-

tions of signs indicative of pain.

- More than one quarter of patients had, on a daily basis, a level of pain that could restrict their ability to carry out daily tasks of living or participate in activities. Some of these patients had experienced severe pain.
- The prevalence of significant pain on a daily basis or severe pain at any frequency was quite similar among hospital peer groups. Region 4 (South) had a slightly higher percentage of patients with this sort of pain than elsewhere in the province.

### Activity Levels

Measuring the amount of activity in which CCC patients engage is an indicator of patients' quality of life. For many patients, the hospital has become at least a temporary place of residence. Engagement in some form of recreation, social interaction or activity is important to maintaining psychosocial well-being in all patients and preventing disruptive or adverse behaviours in patients with moderate or advanced stages of dementia. Although some patients will choose not to engage in activities, and others may only be capable of limited engagement, it is expected that most patients in complex continuing care, as elsewhere, would desire to spend a good portion of their "free time" (while not engaged in treatment) doing something that brings them enjoyment. The kinds of activities measured in this indicator included private (for example, conversations with family/friends, reading) and group activities (for example, musical concerts, games).

- After receiving treatment and personal care, 55% of patients were involved in activities for less than one third of their remaining time awake.



Photo Courtesy of The Riverdale Hospital

- 65% of patients with moderate or greater cognitive impairment participated in little or no activity compared to 36% of patients with mild or less impairment.
- The indicator varied more by region than by type of hospital. Patients in Regions 4 (South) and 5 (West) had the lowest activity levels compared with Regions 1 and 3 which had the highest activity levels.

### Prevalence of Physical Restraints

The definition of physical restraints used in the RAI-MDS assessment data focuses on whether a device has been used that restricts freedom of movement, regardless of the reason it is used. For example, some devices that are used to stabilize a patient's arm to enable them to operate some equipment like a power wheelchair may be counted as a restraint in this context. Nevertheless, the RAI-MDS definition of restraints is based on a philosophy of care that emphasizes patient autonomy and use of least restraint methods.

- The use of physical restraints on a daily basis was more common in medium sized community hospitals (32.5%) than in small (29.2%) or large/freestanding ones (24.8%). Hospitals in Regions 1 (North), 4 (South), and 5 (West), used daily restraints for a greater

percentage of patients than did hospitals in Regions 2 (East) and 3 (Central).

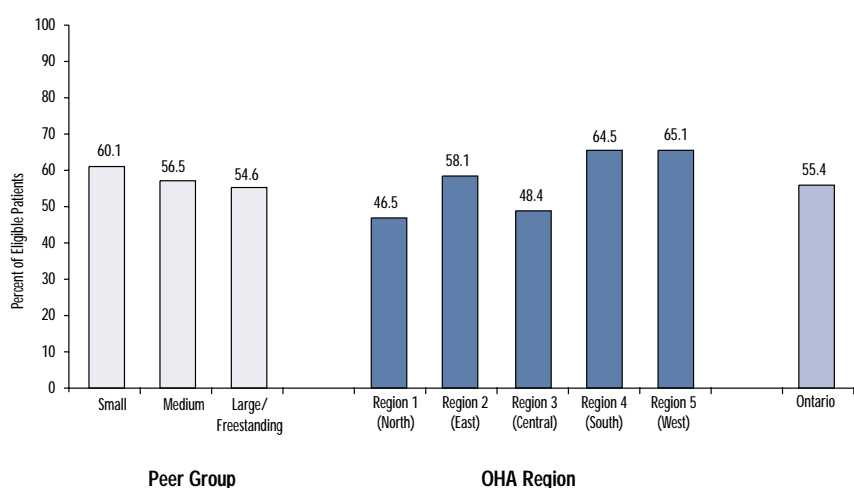
### What Does it All Mean?

Hospitals that provide complex continuing care have taken an important first step towards a common and transparent method of demonstrating accountability to the public and their stakeholders, by participating in *Hospital Report 2001: Complex Continuing Care*.

Two key elements that emerge from all sections of the report include the need for hospitals to improve the way they collect and use information to guide clinical and management decision-making and for hospitals to ensure that care is patient-centred. Patient and family satisfaction is high across the province, regardless of the region or type of hospital providing complex continuing care.

*Hospital Report 2001: Complex Continuing Care* marks the beginning of a process to develop and refine measures of quality and efficiency. Over time, as research continues, methodological improvements will create more fair and more useful comparisons.

### LITTLE OR NO ACTIVITY





# Emergency Department Care

Every year, Ontario residents make more than 4 million visits to emergency departments across the province. For many people, the emergency department provides life saving treatment and is often a common point of entry into the hospital for inpatient care. Although emergency departments share the common goal of responding to the urgent care needs of their communities, they vary based on their resources, complexity of patient cases and the types of communities they serve.

For the first time in Ontario, *Hospital Report 2001: Emergency Department Care* provides a balanced scorecard that emergency departments can use to describe and evaluate their performance. Participation in this report, by itself, represents an important commitment to accountability by hospitals.

In total, 158 hospital sites participated in at least one quadrant of the Report for an overall site participation rate of 91.3%. This summary provides some, but not all, key findings resulting from *Hospital Report 2001: Emergency Department (ED) Care*.

## Financial Performance and Condition

The high level of activity in emergency departments has a ripple effect throughout a hospital organization, requiring flexibility to reallocate resources to address pressures that originate there. While the important clinical role played by emergency rooms is widely recognized, the ability to measure the financial condition and performance of this unit within a hospital has been more difficult to achieve. Province-wide adoption of standards (eg Ontario Hospital Reporting Systems OHRS) has made it possible to look at the financial performance of emergency departments in order to describe their efficiency, productivity and sustainability.

Since staffing costs are usually the single largest expense in hospitals, a comprehensive set of measures dealing with staffing hours was used to help determine how costs are managed in emergency departments.

### Total worked hours, as a percentage of total hours

This reflects efficiency, from a cost management perspective, although the ability of a hospi-



Photo Courtesy of St. Joseph's Healthcare, Hamilton

tal to achieve more worked time is influenced by collective agreements, the supply of labour and other factors. In 1999/2000, 87.1% of total hours in Ontario's EDs were for worked time. 13% of the total hours were for holidays, sick time, maternity leave, educational time and other non-worked activities. Although the variation among peer groups was small, Region 1 (North) and small hospitals had the highest percent of worked time and Region 3 (Central) and community hospitals had the lowest.

### Hours for professional staff who provide patient care

For 1999/00, 90% of staff who provide direct patient care were professional staff, most likely nurses. This result suggests emergency departments employ primarily professional staff, such as registered nurses. Teaching hospitals reported the highest percentage.

## Patient Satisfaction

Patient satisfaction represents an important part of hospital performance. It reflects the ability of hospitals to make patients feel comfortable when they are most vulnerable and assesses their ability to communicate effectively with patients and their families. To participate in this quadrant, hospitals had to sign up and pay for surveys. In total, 125 hospital corporations/sites participated in the patient satisfaction survey. These hospitals represented 75.2% of all hospital corporations with emergency departments in Ontario.

The report describes patients' perceptions of care received in emergency departments between August and October 2000. 75,271 patients seen in an ED during this time period were mailed a survey and about 24,000 patients responded, making this the largest emergency department patient satisfaction survey in North America

and quite likely, the world. The survey responses were converted to numerical scores out of 100. For example a response of "excellent" was converted to a score of 100, "good" was converted to 75 and so on. Researchers were able to use this data to draw some conclusions about patient satisfaction, including the following highlights:

- Patient satisfaction with care received in Ontario's emergency departments varied across individual hospitals as well as across regions and types of hospitals. Average ratings of patients' overall satisfaction with their visit to the emergency department varied from 63 to 90 (out of a possible 100) across hospitals.
- Although there were differences in the way that patients responded about their satisfaction with **physicians and medical treatment**, there was very little variation across regions in average scores for this indicator, suggesting that patients had similar levels of satisfaction across the province. About 72.0% of patients provided scores for this indicator of 80 or greater. Another 18.6% provided scores for this indicator between 50 and 79.9 and the remaining 9.4% of patients provided scores of less than 50. As with every indicator, higher scores indicate more satisfaction.
- When asked about their **willingness to return to the same emergency department**, approximately 79.3% of patients provided scores of 80 or greater, 12.6% of patients provided scores of 50 to 79.9 and 8.1% provided scores of less than 50. Like overall satisfaction and satisfaction with physicians, there was relatively little variation across regions or across peer groups for this indicator.
- Hospitals received the lowest ratings on patient **satisfaction with the facility**. This indicator describes satisfaction with the quality of ED facilities and the attention to their privacy and property while in the emergency department. Only 40.1% of patients provided scores of 80 or greater. The majority of patients (54.4%) provided scores for this indicator of 50 to 79.9. Average scores ranged from just over 72 in Region 3 (Central) to just over 79 in Region 5 (West). Average scores ranged from over 72 in teaching hospitals to just over 82 in small hospitals.



- **Satisfaction with waiting times** in the ED was the second lowest rated indicator. About 56.4% of patients provided scores of 80 or greater for satisfaction with their estimate of waiting times in the emergency department. It is important to note that responses to these questions are based on perceptions, not actual waiting times in the emergency department. There was substantial variation across regions ranging from just over 71 in Region 3 (Central) to just over 80 in Region 5 (West). Although satisfaction with waiting times is an important indicator, comparisons across regions may have been subject to some bias—expectations of residents in Region 3 tend to be different from those of residents in the rest of the province. For any given waiting time, patients from Region 3 (Central) were more likely to report that the waiting time was unacceptable compared to patients from other regions.
  - **Satisfaction with bedside care** was the most highly rated of all indicators. In total, 72.3% of patients provided scores of 80 or greater with their satisfaction with bedside care during their ED visit. Average scores by region ranged from just over 81 in Region 3 (Central), to 88 in Region 5 (West). Satisfaction by type of hospital ranged from over 83 in teaching hospitals to just under 90 in small hospitals.
  - When asked about their **satisfaction with staff** in the emergency department (which included a broad range of professionals), about 63.1% of patients gave scores of 80 or more, 34.2% gave ratings of 50 to 79.9 and 2.7% gave scores of less than 50. Overall, most patients were satisfied with their visits to emergency departments in Ontario. No region or peer group received an average score of less than 70 on any indicator. Satisfaction with hospital personnel tended to be higher than satisfaction with both the facilities and waiting times. However there were some indicators that showed substantial differences by region and by peer group. Region 3 (Central), which consists mostly of teaching and community hospitals, had the lowest satisfaction compared to other regions and small hospitals had higher satisfaction than other peer groups.
- Consistent with lower satisfaction in teaching and community hospitals, satisfaction tended to decline with increasing numbers of patients seen in the ED. Generally, busier emer-

gency departments had lower satisfaction rates. There were also some interesting trends in patient satisfaction over the three-month survey period. In a number of hospitals, patients who visited the ED in October were more satisfied than patients who visited in August. Some of these hospitals were in communities that have large numbers of summertime tourists. Satisfaction may improve when these communities are less busy. Changes at some of these hospitals may also be the result of quality improvement or other factors.

### System Integration and Change

In the system integration and change quadrant, researchers describe the processes and innovations used by hospitals to support quality improvement. This section looks at how emergency departments link up with other care providers in the hospital and the community to coordinate patient care. Investments made in technology such as computers, staff education and the working environment are also examined.

### Use of Clinical Information Technology

The electronic availability of patient data may reduce unnecessary diagnostic testing and errors. The results indicate that most emergency departments have access to patient registration information (94%) and diagnostic laboratory results (71%). Fewer hospitals report electronic access to diagnostic images (<50%) or drug profiles (18%).

### Use of Standardized Protocols and Guidelines

Standardized protocols and guidelines are used to ensure that care is consistent and reflects “best practices.” These guidelines are used to help make clinical decisions regarding the diagnosis and treatment of patients. The use of standardized guidelines was measured in the clinical areas of cardiac (eg chest pain), respiratory (eg asthma), women’s health (eg sexual assault) and paediatrics (eg croup). Survey results highlight several opportunities for improvement in the use of standardized guidelines.

Overall, emergency departments report high use of standardized guidelines for cardiac care and women’s health and lower use of standardized guidelines for respiratory care and paediatrics. Overall 21% of emergency departments report the use of at least one standardized guideline with most or all eligible patients in all four clinical areas.

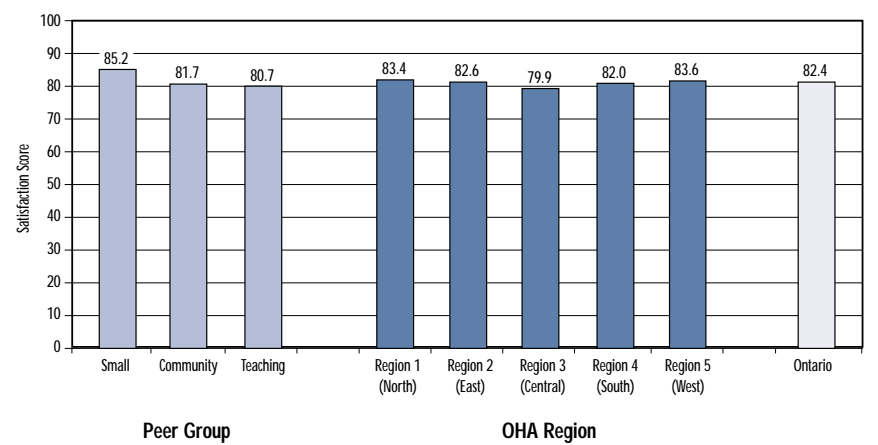
### Linkages with Other Care Providers

To ensure that patients receive care in the most appropriate setting, emergency departments need effective relationships with community-based providers. Researchers examined emergency department relationships with community providers to determine the extent to which they are involved in at least one activity with three community groups: Community Care Access Centres (CCACs), long-term care providers and community family physicians. Overall, most emergency departments (82%) reported being engaged in at least one initiative with their CCACs. Fewer emergency departments

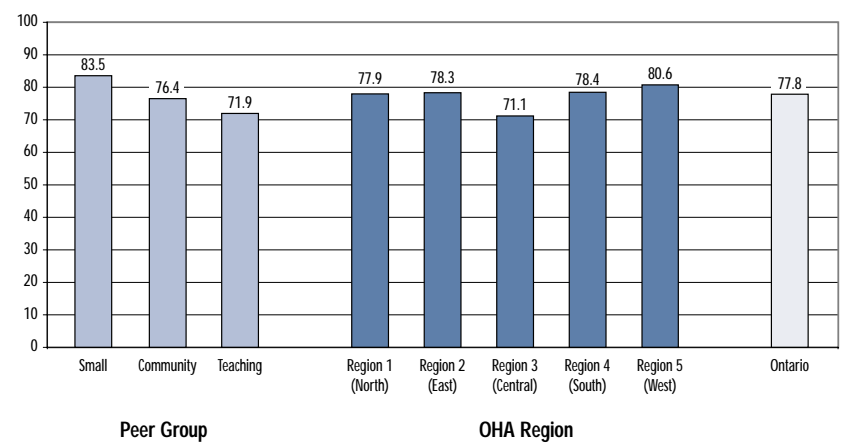
reported that they were engaged in initiatives with long-term care providers (56%) and community family physicians (45%).

Overall, the system integration and change quadrant indicators suggest that many Ontario hospitals could expand their investments in human resources, relationships with other organizations, and information technology and decision support. Performance in this quadrant varied somewhat among different regions and peer groups. No region did poorly on all indicators; however Region 1 (North) hospitals and, to a lesser degree, Region 5 (West) hospitals, appear to have invested less in the systems and skills related to these indicators.

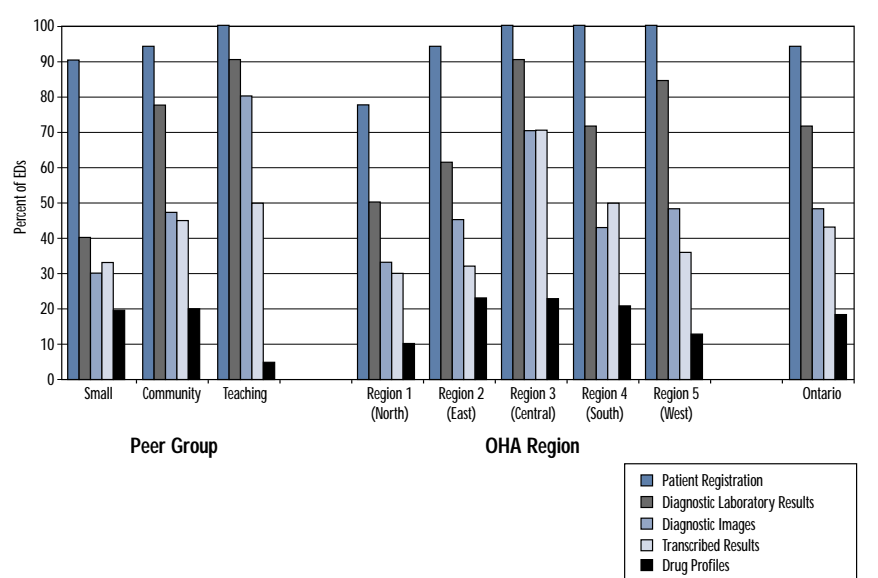
### OVERALL SATISFACTION WITH PHYSICIANS AND MEDICAL TREATMENT



### SATISFACTION WITH WAITING TIMES IN THE EMERGENCY DEPARTMENT



### CLINICAL INFORMATION TECHNOLOGY





## EMERGENCY DEPARTMENT USE

- ✓ The Canadian Triage Acuity Scale (CTAS) is a scale that prioritizes patients arriving in the ED, based on the seriousness of their condition. A small proportion of patients (less than 1%) are listed in the most urgent triage category (CTAS Level 1). People who require emergent care (CTAS Level 2) account for about 5% of total emergency room visits, and approximately 22% of total visits to the emergency department are for patients who were classified as non-urgent (CTAS Level 5).
- ✓ The diagnoses most commonly associated with the two highest triage levels are cardiac problems such as heart attacks and chest pain.
- ✓ 7% of people arrive in the emergency department by ambulance. The proportion arriving by ambulance increases steadily by age group to over 30% for those over 85 years of age.
- ✓ Just over 26% of visits to the emergency department were by patients aged 18 years of age or less. A majority (57%) are between the ages of 19 and 65.
- ✓ Once seen, assessed and treated, 84% of patients are sent home from the emergency department.
- ✓ Of those patients sent home, 56% were seen within two hours and 5% stayed for longer than 8 hours. Of the patients admitted, 16% stayed less than 2 hours and 60% stayed from 2 to 8 hours.
- ✓ Less than 2% of patients leave the emergency department without being assessed by staff.

## Clinical Utilization and Outcomes

Clinical utilization and outcome indicators describe the volume and quality of care provided in emergency room departments. The research focused on five high volume patient groups that account for 8.2% of all care provided in emergency departments. The five clinical conditions are heart attacks, ankle injury, asthma, chest pain and pneumonia.

Return visits to the emergency department can be used as a measure of care provided during the initial visit. Return visits were measured for asthma and chest pain. The average return visit rate for asthma, within 24 hours of the initial visit, was 1.8 per 100 visits. This indicator reflects return visits following treatment for an acute asthma attack. 1 out of 100 cases returned 24 to 72 hours after the initial visit. This indicator describes hospitals' attention to longer term prevention. The average recurrent visit rate for chest pain was 0.6 per 100 cases, and more than half of the emergency departments had no recurrent visits for chest pain. In order to interpret these

results, benchmarks are needed. It will be important to track changes in direction over time.

## What Does it All Mean?

Emergency departments provide an important source of care for Ontario residents and an important point of entry to the hospital system. This Report builds on previous studies to provide a comprehensive picture of hospital performance including measures of the use and outcomes of care, patients' satisfaction with care, the efficiency and productivity of emergency departments, and their own innovations and integration into the communities they serve. This Report provides clear evidence of variations in performance. These variations indicate the need for improvement across the Province, but they also provide some guidance on models for improvement. Hospitals can use this Report, and other components of the *Hospital Report Series*, to select important areas for their own improvement activities. They can also use this Report as one step in demonstrating their accountability to the communities they serve.

## INDICATOR LIST

### Emergency Department Care

#### System Integration and Change

- 1 Use of standardized protocols
- 2 Routine collection of clinical data
- 3 Clinical information technology
- 4 Relationships with community providers
- 5 Human resources – Roles
- 6 Human resources – Skill development
- 7 Preparation for discharge

#### Patient Satisfaction

- 8 Overall satisfaction with physicians and medical treatment
- 9 Willingness to return to the ED
- 10 Satisfaction with the facility
- 11 Satisfaction with waiting times in the ED
- 12 Satisfaction with bedside care
- 13 Satisfaction with staff in the ED

#### Financial Performance and Condition

- 14 Total worked hours as a percent of total hours
- 15 Hours for management and operational staff as a percent of total hours
- 16 Worked hours for unit producing personnel as a percent of total unit producing personnel hours
- 17 Professional hours for unit producing personnel as a percent of total unit producing personnel hours

#### Clinical Utilization and Outcomes

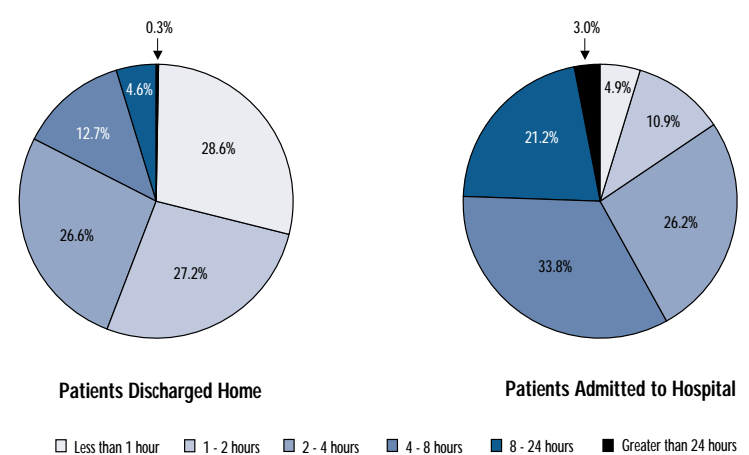
##### Utilization Indicators

- 18 Visits by age and sex
- 19 Acuity level of patients
- 20 Major disease categories
- 21 Arrival by ambulance
- 22 Disposition after discharge from ED
- 23 Time spent in the ED

##### Outcome Indicators

- 24 AMI: Death in the ED
- 25 AMI: Receipt of thrombolytics in the ED
- 26 Ankle Injury: Use of ankle X-rays
- 27 Asthma: Return visit within 24 hours of initial visit
- 28 Asthma: Return visit within 24-72 hours of initial visit
- 29 Chest Pain: Return visit within 72 hours of an initial visit with a diagnosis of AMI or pain from ischemic heart disease
- 30 Chest Pain: Length of stay in ED for patients who returned home
- 31 Pneumonia: Admission to hospital from ED

### DISTRIBUTION OF ED LENGTH OF STAY ACROSS VISITS



## For More Information

To download a copy of Hospital Report 2001: Complex Continuing Care; and or Hospital Report 2001: Emergency Department Care, visit:

- The Government of Ontario: [www.gov.on.ca/health](http://www.gov.on.ca/health)
- Hospital Report Research Collaborative: [www.hospitalreport.ca](http://www.hospitalreport.ca)
- Ontario Hospital Association: [www.oha.com](http://www.oha.com)