

# ***Hospital Report 2007: Acute Care***

## **Financial Performance and Condition Technical Summary**

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## Overview

Indicators of financial performance and condition have been included in the *Hospital Report: Acute Care* project since its first issue in 1998. Over the subsequent years, changes in the hospital industry, hospital financial and statistical data, and performance criteria have occurred. In order to accurately reflect these changes, the financial performance and condition indicators included in the *Hospital Report: Acute Care* project were reviewed and redeveloped in 2006.

This section describes the methodology used to redevelop this quadrant and define and calculate the nine measures of financial performance and condition presented in *Hospital Report 2007: Acute Care*. A discussion of the process used to select these measures is provided, followed by a brief overview of the data sources used and the steps taken to verify and validate data prior to calculating indicators. Methods to assess hospital performance are also outlined. This document concludes with a presentation of descriptive statistics for the indicators used in *Hospital Report 2007: Acute Care*.

## Methodology

### Developing the Indicators

The redevelopment process of 2006 was led and guided by the Financial Quadrant Research Team, a group of researchers from the University of Toronto, the University of Waterloo and the University of North Carolina at Chapel Hill. This group of researchers has served as advisors in the production of the Financial Quadrant of *Hospital Report: Acute Care* since 2001. The Canadian Institute for Health Information (CIHI) assumed responsibility of the production of the report at that time, and helped coordinate many of the data-related tasks involved in the redevelopment process.

The redevelopment process began with a non-systematic literature review of financial indicators by the Financial Quadrant Research Team in order to identify measures of hospital financial performance and condition evaluated as important by other sources in the field.

The next step was the formation of an expert panel to evaluate the validity, importance, usefulness and technical specifications of the financial performance and condition indicators used in previous volumes of *Hospital Report: Acute Care*. This expert panel consisted of senior hospital, nursing and ministry executives, as well as experts familiar with hospital finances and Ontario reporting requirements. The mission of the expert panel was to assist the Financial Quadrant Research Team in the redevelopment of many of these indicators, and the selection of new indicators for this quadrant. The names and affiliations of the expert panel members appear in Appendix A of this document.

Before the indicators could be selected, dimensions of financial performance and condition for representation in *Hospital Report 2006: Acute Care* had to be confirmed. The expert panel reviewed a list of potential performance dimensions drawn from the afore-mentioned literature review. After consideration of this list, the expert panel elected to use the same dimensions of financial performance and condition that were used in previous volumes of *Hospital Report: Acute Care*.

These dimensions are:

- **Financial Viability** - these indicators measure the ability to generate the financial resources required to maintain services, replace assets, acquire new technology, and meet changes in patient need and volume.
- **Liquidity** - these indicators measure the ability to meet cash obligations in a timely manner.
- **Capital** - these indicators measure the ability to meet long-term debt obligations and how capital assets (equipment) are being maintained.
- **Efficiency** – these indicators measure the ability to provide services at the expected cost and to minimize administrative costs.
- **Human Resources** – these indicators measure the effectiveness of hospital human resource management and practices.

The expert panel's next task was to assist the Financial Quadrant Research Team in their selection of suitable indicators of financial performance and condition. The expert panel was provided with a list of financial indicators identified in the literature review as “frequently used” and a list of financial indicators used in previous volumes of *Hospital Report: Acute Care*. Each of these indicators was discussed. The expert panel also suggested additional indicators that were not mentioned in either list that they wanted considered for inclusion. After extension discussion and consideration by the expert panel, the number of financial performance and condition indicators used in *Hospital Report: Acute Care* was reduced from twelve to nine. The following indicators of financial performance and condition were selected for use in *Hospital Report 2006: Acute Care*:

#### ***Financial Viability***

1. 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).

#### ***Liquidity***

2. Current Ratio – measures the number of times a hospital's short-term obligations can be paid using the hospital's short-term assets.

#### ***Capital***

3. Debt Service Coverage - measures a hospital's ability to pay obligations related to long-term debt-principal payments and interest expense.
4. % Equipment Expense – 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.

#### ***Efficiency***

5. Unit Cost Performance – measures the extent to which a hospital's actual cost per equivalent weighted case differs from its expected cost.
6. % Corporate Services – measures how much a hospital spends in areas of administrative services relative to its total operating expenses.

#### ***Human Resources***

7. % Sick Time - Measures the proportion of full-time patient care personnel hours that were paid sick hours.

8. Inpatient Nursing Productivity - measures the proportion of nursing worked hours (including purchased service hours) for direct patient care using nursing workload data.
9. % Registered Nurse Hours - measures the proportion of nursing care hours that were provided by registered nurses.

After the indicators were selected, a subgroup of the expert panel met to define each indicator using the account structure of the Ontario Healthcare Reporting Standards (OHRS). Ontario acute care hospitals participating in *Hospital Report 2006: Acute Care* were then surveyed in order to seek feedback on indicator relevance, usefulness and account considerations. In addition to an indicator evaluation form, each hospital received their organization's value for each indicator, calculated from 2004/05 data, and was asked to verify each value. Comments and feedback received through the survey were extremely valuable; as a result of the feedback from this survey, changes were made to the technical specifications of three of the nine indicators. The finalized values for these indicators were then re-submitted to the hospitals for re-verification<sup>1</sup>.

### **Modifications in *Hospital Report 2007: Acute Care***

Two of the selected indicators were modified for *Hospital Report 2007: Acute Care*. The % Sick Time indicator was changed to measure the proportion of earned hours worked by all full-time hospital personnel that were paid sick hours. This indicator previously measured only the sick hours reported in patient care departments of the hospital.

The % Registered Nurse Hours indicator was also modified in *Hospital Report 2007: Acute Care*. In April 2005, hospitals were required to submit earned hours by occupational class. This change allows for a more detailed reporting of the earned hours of hospital staff by the type of health provider. The technical specifications of the % Registered Nurse Hours indicator were changed to take advantage of this new level of detail. As hospitals increase their familiarity with these new reporting standards, it is expected that the data collected will provide a clearer depiction of the type of health providers employed within Ontario hospitals.

Comprehensive definitions of the nine financial performance and condition indicators presented in *Hospital Report 2007: Acute Care* can be found in Appendix B. This appendix provides the necessary information for hospitals to replicate indicator values.

### **Data Sources**

All indicators, with the exception of the Unit Cost Performance indicator, were calculated exclusively from data obtained from a database developed by the Ontario Ministry of Health and Long-Term Care (MOHLTC). This electronic database contains the internally generated, year-end general ledger balances for each hospital in the province. Data are submitted by individual hospitals using a common coding structure known nationally as the MIS Guidelines, which has been adapted for use in Ontario in the form of the Ontario Healthcare Reporting Standards (OHRS). The MOHLTC applies a number of edit checks before adding hospital annual submissions to the provincial database.

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<sup>1</sup> For more information on the verification process, please read "Data Verification and Validation" on page 5.

The data included in *Hospital Report 2007: Acute Care* are for the fiscal year 2005/06, the most recent data available at the time of publication. In November 2006, the MOHLTC provided the research team with the data used to generate the indicators.<sup>2</sup>

## Data Verification and Validation

Although the financial data used in this study passed all of the MOHLTC edit checks, experience with use of internally generated accounting records for performance measurement has shown that data quality problems and reporting variations among hospitals may still be present. As an additional check, the data were also subjected to CIHI edit routines to confirm that national data quality requirements were met.

One of the key objectives in publishing *Hospital Report 2007: Acute Care* is to improve the quality of data used for management and statutory reporting purposes. Accurate data lead to informed decisions. Accordingly, the research team was committed to ensuring that the most accurate data available were used for *Hospital Report 2007: Acute Care* indicators. To achieve this goal, a further data verification process that allowed hospitals to identify and correct data errors prior to the release of *Hospital Report 2007: Acute Care* was undertaken.

The hospital corporations were provided with verification reports summarizing data elements used in the calculation of the indicators. Each hospital was advised of its own value for each measure of financial performance and condition. Hospitals were asked to review these reports and advise the research team at CIHI of any errors in the data. For *Hospital Report 2007: Acute Care*, a small number of indicator values were suppressed as a result of hospitals identifying and reporting data quality issues to CIHI; however, no requested changes to indicator values were accepted.

## Results

### Participating Hospitals

*Hospital Report 2007: Acute Care* includes hospital-specific financial and statistical data for 107 of the 123 hospital corporations in Ontario that provided acute care services on March 31, 2006 (the year-end date for the 2005/06 fiscal year). Table 1 highlights participating and non-participating hospital corporations by hospital type.

Table 1 – Number of Hospital Corporations Participating in *Hospital Report 2007: Acute Care* By Hospital Type

Hospital Corporations	Hospital Type			Total
	Teaching	Community	Small	
# Participating	15	63	29	107
# Not Participating	0	1	15	16
<b>Total</b>	15	64	44	123

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<sup>2</sup> The lone exception is the Unit Cost Performance indicator, which is obtained directly from the Ontario Joint Policy and Planning Committee (JPPC). Unfortunately, this indicator was unavailable for the initial release of *Hospital Report 2007: Acute Care*.

Provincial averages presented in *Hospital Report 2007: Acute Care* include data from all 123 hospital corporations in the province. Averages by peer grouping are also listed; the peer groupings used are small, community and teaching hospitals. Definitions of the peer groups can be found in Appendix C of this document.

## **Performance Measurement**

### ***High Performing Hospitals***

For quality improvement purposes, the *Hospital Report* series identifies high performing hospitals in two ways: 1) hospitals that meet “high performer” criteria in two or more quadrants; and 2) hospitals that meet “high performer” criteria in a single quadrant. For the Financial Performance and Condition quadrant in *Hospital Report 2007: Acute Care*, high performing hospitals had to have indicator averages higher than the provincial mean for at least seven of the eight indicators<sup>3</sup>.

### ***Benchmarks***

Benchmarks for two indicators in the Financial Performance and Condition quadrant are used in this year’s report. Benchmarks were developed for the Total Margin and Current Ratio indicators for use in *Hospital Report 2005: Acute Care*. These indicators 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.

The benchmark thresholds are also used in the e-Scorecard web product of *Hospital Report 2007*. The e-Scorecard is a Web based, password-protected electronic application incorporating annual *Hospital Report* indicators and underlying components. Its prime objective is to allow interactive comparative analysis among hospitals by providing predefined and customized reports and graphs.

Development of indicator benchmarks and thresholds for other financial performance and condition indicators remains a research priority for future reports.

### ***Not Reportable***

Indicator values were designated as Not Reportable (NR) if an issue related to the quality of the data used to calculate the indicator was determined.

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<sup>3</sup> For Corporate Services and % Sick Time, an indicator score lower than the provincial mean was required to meet “high performer” criteria. The Unit Cost Performance indicator was excluded from this analysis as it was unavailable during the report’s production cycle.

## Data Quality

There exist reporting variations and other data quality concerns that affect the validity of the indicators. It is hoped that the dissemination of indicators that use OHS data will make administrators aware of data quality problems which could lead to better data in the future.

One indicator that demonstrated a data quality problem among some hospitals was the Debt Service Coverage indicator. The Debt Service Coverage indicator measures the ratio of a facility's revenues (net of expenses) to its current portion of long-term debt and interest expense. Some hospitals reported neither a current portion of long-term debt nor any interest expense, yet the 2005/06 OHS data submission for these facilities showed that long-term debt has been reported during this period. As a result, the Debt Service Coverage indicator values for these hospitals are replaced by an 'NR' symbol in *Hospital Report 2007: Acute Care* and are suppressed in the e-Scorecard.

## System-Level Findings

Table 2 shows descriptive statistics for each of the twelve indicators of Financial Performance and Condition, including mean, standard deviation, and quintile values (0, 20<sup>th</sup>, 40<sup>th</sup>, 60<sup>th</sup>, 80<sup>th</sup> and 100<sup>th</sup> percentiles). Just as the median is the value above and below which 50% of hospitals fall, percentiles provide the same information for different percentages of observations. For example, at the 20<sup>th</sup> percentile, twenty percent of hospitals had indicator values at or below that value in terms of performance evaluation and 80% of hospitals had indicator values above.

Table 2 – Descriptive Statistics for Hospital-Specific Indicators of Financial Performance and Condition (2005/06)

	Total Margin	Current Ratio	Debt Service Coverage	% Equipment Expense	% Corporate Services	% Sick Time	Inpatient Nursing Productivity	% Registered Nurse Hours
# of Hospitals	123	122	88	123	122	123	122	123
Mean <sup>†</sup>	1.3	0.8	2.7	6.8	8.9	4.8	74.7	87.2
Std. Deviation	3.8	1.3	3490.4	1.6	2.5	1.3	13.5	14.3
0 <sup>th</sup> percentile	-15.0	0.2	-1454.9	3.0	6.4	1.6	10.2	37.2
20 <sup>th</sup> percentile	-0.4	0.6	0.0	5.5	8.0	3.6	61.7	66.1
40 <sup>th</sup> percentile	0.5	0.9	4.0	6.6	8.9	4.1	69.4	74.7
60 <sup>th</sup> percentile	1.7	1.5	9.3	7.1	10.4	4.6	75.7	81.6
80 <sup>th</sup> percentile	4.1	2.3	36.8	8.0	12.2	5.1	81.7	92.1
100 <sup>th</sup> percentile	14.4	7.8	25162.3	12.9	16.8	10.7	107.1	100.0

<sup>†</sup> This is a weighted mean of Ontario hospital indicator values, not an arithmetic mean.

\* Includes only those facilities that reported long-term debt.

## Appendix A: Members of the Expert Panel

<u>Name</u>	<u>Affiliation</u>
Annabelle Bandurchin	Ontario Hospital Association
Charles Botz	London Health Sciences
Sandra Chase	Ministry of Health and Long-Term Care
Paul Davies	South Bruce Grey Health Centre
Jim Elliott	Toronto Rehabilitation Institute
Chris Ferrao	William Osler Health Centre
Christina Hoy	Ministry of Health and Long-Term Care
Steve Isaak	Joint Policy and Planning Committee
Marc Joyal	Montfort Hospital
Norman Maciver	West Parry Sound Health Centre
Karim Mamdani	Centre for Addiction and Mental Health
Irene Pasel	Orillia Soldiers Memorial Hospital
Donna Thomson	St. Peters Hospital
Mary Lou Toop	St. John's Rehabilitation Centre
Greg Zinck	The Canadian Institute for Health Information

## Appendix B: Financial Indicator Definitions

### 1. Total Margin

#### Definition

Revenues – Expenses \* 100

Revenues

#### OHRS Accounts

The numerator includes the surplus or deficit excluding facility amortization. (Total Revenues - Facility Grant Amortization) – (Total Expenses – Facility Amortization). [Codes include: All fund types in all sector codes excluding sector code 2\*, revenue and expense secondary accounts 1\*-9 excluding 122\*, 69700, 95020; 95040; 95060; 95065; 13102; 14102; 15102; 15103].

The denominator includes all revenues excluding facility grant amortization . [Codes include: All fund types in all sector codes excluding sector code 2\*, revenue secondary accounts 1\*, excluding 122\*, 12195, 12196; 12197; 13102; 14102; 15102; 15103].

#### Interpretation

Total margin measures the control of expenses relative to revenues as a percent. A positive value indicates total expenses are less than total revenues (a surplus). Very high positive values may indicate temporary cash inflows (such as the sale of an asset), relatively high levels of funding, relatively high efficiency, or under-provision of service. A negative value indicates total expenses are greater than total revenues (a deficit). Very high negative values may indicate temporary cash outflows (such as the purchase of an asset), relatively low levels of funding, relatively low efficiency, or over-provision of service, and, as a consequence, financial difficulty.

#### Factors that Influence Indicator

The ability to generate a surplus is influenced by government funding levels, patient need and volume, local prices, service mix and complexity, third party payer rates, management strategies, and other factors.

## 2. Current Ratio

### Definition

Current Assets

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Current Liabilities

### OHRS Accounts

The numerator includes Current Assets plus debit Current Liability Balances excluding Deferred Revenues. [Codes include: All sector codes excluding sector codes 2\*, primary 1\* + debit balances in primary 4\* excluding 4\*8.]

The denominator includes Current Liabilities, excluding Deferred Revenues plus credit Current Assets, except Current Asset Contra Accounts. [Codes include: All sector codes excluding sector codes 2\*, primary 4\* excluding 4\*8 + credit balances in primary 1\* except 1\*355.]

### Interpretation

Current ratio measures the number of times short-term obligations can be paid using short-term assets. A value greater than 1.0 indicates current assets are greater than current liabilities. Very high values may indicate underinvestment in longer-term assets that usually yield higher returns. A value less than 1.0 indicates current assets are less than current liabilities. Very low values may indicate financial difficulty.

### Factors the Influence Indicator

The ability to manage current assets and liabilities and to meet day-to-day requirements for paying creditors is influenced by payer practices, payment policies, credit arrangements, investment policies, management strategies, and other factors.

## 3. Debt Service Coverage

### Definition

$$\frac{[(\text{Revenues} - \text{Expenses}) + \text{Depreciation} + \text{Interest Expense}]}{\text{Current Portion of Long-Term Debt} + \text{Interest Expense}}$$

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### OHRS Accounts

The numerator includes the surplus excluding amortization, depreciation and interest expenses. [Codes include: All sector codes except sector codes 2\*; primary accounts 7\* and 8\*; revenue and expense secondary accounts 1\* to 9\* excluding 13102; 13104; 14102; 14104; 15102; 15103; 15104; 15105; 63030; 75000; 75500; 95500; 950\*]

The denominator includes the current portion of long-term debt and interest expenses. [Codes include: All sector codes except sector codes 2\*; primary accounts 7\* and 8\*; revenue and expense secondary accounts 95500, 75500 and 63030 plus balance sheet account primaries 4\*580; 4\*730]

### **Interpretation**

Debt service coverage measures the ability to pay obligations related to long-term debt - principal payments and interest expense. A positive value greater than 1.0 indicates cash flow greater than current fixed charge payments. Very high positive values may indicate a capacity for debt financing. A positive value less than 1.0 or a negative value indicates cash flow less than current fixed charge payments. Very low values may indicate a need to reassess debt policies. This indicator is calculated only for hospitals reporting debt.

### **Factors that Influence Indicator**

The ability to meet interest and principal payments on debt is influenced by magnitude of surplus, annual depreciation, interest rates, and other factors.

## **4. % Equipment Expense**

### **Definition**

Equipment Expense \* 100

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Expenses

### **OHRS Accounts**

The numerator includes Equipment Maintenance, Replacement of Major Equipment Parts, Amortization on Major Equipment, Net Gain/Loss on Disposal, Interest on Major Equipment Loans, Rental/Lease of Equipment, Minor Equipment Purchases, and Equipment Expense not Elsewhere Classified; [Codes include: All fund types in all sector codes except sector codes 2\*; primary accounts 7\* and 8\*; revenue and expense secondary accounts 7\* excluding 72000\*.]

The denominator includes Total Expenses, Net of all Recoveries; [Codes include: All fund types in all sector codes except sector codes 2\*, primary accounts 7\* and 8\*; revenue and expense secondary accounts 3\*-9\* excluding 950\*, net of revenue secondaries 12\*.]

### **Interpretation**

% equipment expense measures how much of total expenses is spent to acquire and operate computer systems, x-ray machines, and other capital equipment. Higher than average values indicate more complex, newer, or more equipment, and/or higher equipment maintenance. Very high values may indicate over-spending on equipment. Lower than average values indicate less complex, older or less equipment, and/or lesser equipment maintenance. Very low values may indicate under-spending on equipment.

### **Factors the Influence Indicator**

The ability to appropriately acquire and manage equipment is influenced by service mix and complexity, tertiary care role, teaching activities, research programs, asset management decisions, funding sources, and other factors.

## 5. Unit Cost Performance

### Definition

$$\frac{[\text{Actual Cost per Equivalent Weighted Case} - \text{Expected Cost per Equivalent Weighted Case}] * 100}{\text{Expected Cost per Equivalent Weighted Case}}$$

### OHRs Accounts

The actual cost per equivalent weighted case is determined from OHRs data. The expected cost per equivalent weighted case is determined using a methodology developed and maintained by the Joint Policy and Planning Committee (JPPC) (see [www.jppc.org](http://www.jppc.org) for details).

### Interpretation

Unit cost performance measures the extent to which a hospital's actual cost per equivalent weighted case differs from its expected cost. A negative value indicates actual cost is less than expected cost (unit cost efficiency). Very high negative values may indicate relatively high efficiency or under-spending. A positive value indicates actual cost is greater than expected cost (unit cost inefficiency). Very high positive values may indicate relatively high inefficiency or over-spending.

### Factors that Influence Indicator

The ability to achieve unit cost efficiency is influenced by staff mix, productivity, local prices of goods and services, community linkages, management practices and physician practice patterns, and other factors.

## 6. % Corporate Services

### Definition

$$\frac{\text{Corporate Services Expense} * 100}{\text{Expenses}}$$

### OHRs Accounts

The numerator includes all functional centres defined by the OHRs as administrative services, with the exception of Administrative Services – Staff Recruitment and Retention. Amortization is excluded because of variations in the allocation of amortization to various functional centres. [Codes include: All sector codes except sector codes 2\*, primaries 7\*110\*, 7\*115\*, 7\*120\*, 7\*125\*, 7\*130\*, revenue and expense secondary accounts 3\*-9\*, excluding 950\*; net of revenue secondaries 12\*.]

The denominator includes Total Expenses, Net of all Recoveries; [Codes include: All fund types in all sector codes except sector codes 2\*, primary accounts 7\* and 8\*; revenue and expense secondary accounts 3\*-9\* excluding 950\*, net of revenue secondaries 12\*.]

### **Interpretation**

% corporate services measures how much of total expenses is spent on administrative, finance, human resources, and systems support. Higher than average values indicate more complex or a greater amount of corporate services. Very high values may indicate over-spending on corporate services. Lower than average values indicate less complex or a lesser amount of corporate services. Very low values may indicate under-spending on corporate services.

### **Factors that Influence Indicator**

The ability to appropriately manage corporate services is influenced by organizational size, service mix and complexity, information systems, management models, and other factors.

## **7. % Sick Time**

### **Definition**

Sick Hours \* 100

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Full-Time Earned Hours

### **OHS Accounts**

The numerator includes the paid sick hours for full-time hospital personnel. [Codes include: For sector code 1\*, primary accounts 71\*, 81\*; and secondary statistical accounts 631\*\*13, 635\*\*13, 638\*\*13.]

The denominator includes earned hours for full-time hospital personnel. [Codes include: For sector code 1\*, primary accounts 71\*, 81\*; and secondary statistical accounts 631\*\*1\*, 635\*\*1\*, 638\*\*1\*.]

### **Interpretation**

% sick time measures the proportion of full-time personnel hours that were paid sick hours. Higher than average values indicate more staff claiming sick time or longer sick time per staff member. Very high values may indicate high staff vacancy, widespread workplace illness, generous benefits, or problems in the management of human resources and technology. Lower than average values indicate less staff claiming sick time or shorter sick time per staff member. Very low values may indicate low staff vacancy, lack of widespread workplace illness, poor benefits, or strengths in the management of human resources and technology.

### **Factors that Influence Indicator**

The ability to appropriately manage sick time is influenced by prevalence of workplace illness, type and level of sick time benefits, attendance awareness programs, human resources practices, organizational climate, and other factors.

## 8. Inpatient Nursing Productivity

### Definition

Acute Inpatient Nursing Workload Hours \*100

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Acute Inpatient Nursing Worked Hours

### OHRS Accounts

The numerator includes Acute Nursing Inpatient Services Service Recipient Workload Units (excluding Nursing Administration, Rehabilitation and Long-Term Care) /60; [Codes include sector codes 1\*, primary accounts 712\* (excluding 71205\*, 71206\*, 71207\*, 71281\* and 71295\*) and secondary statistical accounts 102\*]

The denominator includes Acute Nursing Inpatient Services Unit-Producing Personnel Worked and Purchased Service Hours (excluding Nursing Administration, Rehabilitation and Long-term Care); [Codes include sector codes 1\*, primary accounts 712\* (excluding 71205\*, 71206\*, 71207\*, 71281\* and 71295\*) and secondary statistical accounts 35010\*, 35090\*, 38010\* and 38090\*.]

### Interpretation

Inpatient nursing productivity measures the proportion of nursing worked hours (including purchased service hours) for direct patient care. Higher than average values indicate a greater proportion of hours for direct patient care. Very high values may indicate insufficient time for care planning and documentation. Lower than average values indicate a lower proportion of hours for direct patient care. Very low values may indicate insufficient time for patient care.

### Factors that Influence Indicator

The ability to manage nursing productivity is influenced by collective agreements, teaching and learning activities, staff turnover, patient care delivery model, program and service changes, the size and composition of the nursing staff mix, and other factors.

## 9. % Registered Nurse Hours

### Definition

Acute Inpatient Registered Nurse Earned Hours \*100

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Acute Inpatient Nursing Earned Hours

### OHRS Accounts

The numerator includes Acute Nursing Inpatient Services Registered Nurse Unit-Producing Personnel Earned Hours (excluding Nursing Administration, Rehabilitation and Long-Term Care); [Codes include: Sector codes 1\*, primary accounts 712\* (excluding 71205\*, 71206\*, 71207\*, 71281\* and 71295\*) and secondary statistical accounts 63511\*, 63513\*, 63514\*, 63515\*, 63516\*, 63816\*]

The denominator includes Acute Nursing Inpatient Services Total Nursing Unit-Producing Personnel Earned Hours (excluding Nursing Administration, Rehabilitation and Long-term Care); [Codes include: Sector codes 1\*, primary accounts 712\* (excluding 71205\*, 71206\*, 71207\*, 71281\* and 71295\*) and secondary statistical accounts 6351\*, 6381\*.]

**Interpretation**

% Registered Nurse Hours measures the proportion of nursing care hours provided by Registered Nurses (RNs). Higher than average values indicate greater use of RNs and less use of Registered Practical Nurses (RPNs). Lower than average values indicate less use of RNs and greater use of RPNs.

**Factors that Influence Indicator**

The ability to use RNs in patient care is influenced by the supply of RNs, wage rates, benefits, nurse staffing model, provincial nurse staffing strategy, and other factors.

## Appendix C: Acute Care Peer Groups

Data that are analyzed by hospital peer group use the following definitions:

### Teaching

These acute and paediatric hospitals belong to the Ontario Council of Teaching Hospitals.

### Small

This classification, defined by the Joint Policy and Planning Committee (JPPC), includes hospitals that generally admit fewer than 3,500 weighted cases, have a referral population of fewer than 20,000 people and are the only hospital in their community.

### Community

This classification includes any acute care hospital that does not fit the definition of a small or teaching hospital.

*Note:* For multi-site organizations, peer group designation was based on the size of the largest single hospital/site in the organization. For example, if five small hospitals belong to the same organization, they are included in the small hospital group; if five small hospitals and one community hospital belong to the same organization; all six hospitals/sites are included in the community hospital peer group.