

Financial Performance and Condition

Overview

In this section of *Hospital Report 2003: Complex Continuing Care* we provide the methodology used to select and calculate the measures of financial performance and condition for complex continuing care hospitals. A brief overview of data sources used, together with the steps taken to verify and validate data prior to calculating indicators, is provided. The role of the Advisory Panel is discussed, together with the process used to select the measures of financial performance and condition presented in *Hospital Report 2003: Complex Continuing Care*. The methods used to assign relative performance allocations are then outlined. This document concludes with a presentation of descriptive statistics for the indicators used in *Hospital Report 2003: Complex Continuing Care*.

In this report, the term “complex continuing care” refers to care provided in beds that have been designated for complex continuing care by the Ontario Ministry of Health and Long Term Care. These beds are found in three different settings. These settings are freestanding complex continuing care facilities, acute care hospitals with a wing or ward dedicated to complex continuing care, and small hospitals where only a few beds in a larger unit are designated for complex continuing care services.

Participating Hospitals

Hospital Report 2003: Complex Continuing Care includes hospital-specific results in the insert for the 12 freestanding complex continuing care. The provincial means reported in this section are based on data for all hospitals with complex continuing care activity on March 31, 2002 (the year-end date for 2001/02 fiscal year). The following table highlights hospital corporations that have agreed to have their results reflected in *Hospital Report 2003: Complex Continuing Care*.

	Acute Care Hospitals with Complex Continuing Care Programs	Freestanding Complex Continuing Care Hospitals	Total
Number participating	52	10	62
Number non-participating	40	2	42
Total	92	12	104

Hospital Report 2003: Complex Continuing Care divides hospitals into two groups: freestanding complex continuing care hospitals and acute care hospitals with complex continuing care programs. The former are facilities with a primary mission related to servicing a complex continuing care population. Criteria defining freestanding complex continuing care hospitals are included in the Introduction. The latter are facilities that

also serve other populations (most commonly by providing acute care services) in addition to their complex continuing care role.

Because the mandate and size of a hospital will affect the hospital's underlying financial structure, the Financial Performance and Condition quadrants in the *Hospital Report* series only compare hospitals with like hospitals. For example, the mandate of a hospital that provides both acute care and complex continuing care services results in the underlying financial structure of these hospitals being fundamentally different from the structure of hospitals that provide primarily complex continuing care services. For this reason, the provincial financial performance and condition indicators presented in *Hospital Report 2003: Complex Continuing Care* are compared among hospitals of similar types (Freestanding and Acute Care).

Methods

Preparation of the Financial Performance and Condition Quadrant of the *Hospital Report 2003: Complex Continuing Care* required two research activities: identifying appropriate financial and statistical indicators and collecting, organizing and validating the data needed to calculate values for the indicators.

An extensive review of the literature related to complex continuing care financial performance was undertaken during the preparation of the *Hospital Report 2001: Complex Continuing Care*. To investigate whether any additional complex continuing care financial indicators were published since the previous report, a literature search was conducted for articles using HealthStar (2001 to 2003) and Medline (2001 to 2003) databases. Articles were selected for review if they met either of the following criteria: 1) the article examined financial performance measurement issues related to complex continuing care; or 2) the article described or discussed financial analysis of complex continuing care programs. Although a number of articles were examined, no additional financial indicators were identified as a result of this literature review.

Advisory Panel

An Advisory Panel of hospital executives, clinical directors, and managers with extensive knowledge of financial issues related to complex continuing care in Ontario assisted the research team with the evaluation and assessment of indicators presented in this quadrant. Members of the Advisory Panel are listed in Appendix A in *Hospital Report 2003: Complex Continuing Care*.

The Advisory Panel began by adopting the set of financial indicator categories used in previous Hospital Reports. These categories are:

- **Efficiency** – defined as a comparison of hospital output with the cost of inputs required to produce the output.
- **Financial Viability** – defined as positive financial outcomes that ensure long-term financial health.

- **Liquidity** – defined as the ability of an organization to meet its short-term obligations.
- **Capital** – defined as the capacity of the organization to acquire and manage long-term assets such as major equipment.
- **Human Resources** – defined as the allocation of human resources by hospitals to patient care and non-patient care activities.

As its first task, the Advisory Panel reviewed lessons learned from *Hospital Report 2001*. This review involved assessing the continued relevance of the *Hospital Report 2001* indicators and reflecting on feedback received from hospitals after release of the report. Based on this feedback, as well as an addition two years of data, a better understanding of measurement issues, and an increased awareness of data quality, the Advisory Panel engaged in an iterative process to identify indicators that could be included in *Hospital Report 2003*. The Panel used the First Principles, adopted by the Hospital Report Research Collaborative (see Appendix H, *Hospital Report 2003: Complex Continuing Care*), in its deliberations. A summary of the Advisory Panel’s suggestions regarding each indicator is presented in the following table.

	Acute Care Hospitals With Complex Continuing Care Programs	Freestanding Complex Continuing Care Hospitals
Efficiency		
1) Total cost per RUG-III weighted patient days	√	√
2) Direct cost per RUG-III weighted patient days	√	√
3) Unit cost performance	Cannot be calculated (Impossible to isolate data needed)	√
4) Corporate services	Cannot be calculated (Impossible to isolate data needed)	√
Financial Viability		
5) Total margin	Cannot be calculated (Impossible to isolate data needed)	√
Liquidity		
6) Current ratio	Cannot be calculated (Impossible to isolate data needed)	√
7) Working capital to revenue*	Cannot be calculated (Impossible to isolate data needed)	√
Capital		
No proposed indicators	n/a	n/a
Human Resources		
8) Patient care hours	Cannot be calculated (Impossible to isolate data needed)	√

*NOTE: In previous editions of *Hospital Report*, this indicator was named “Working Capital”. The name has been changed this year to more accurately reflect the components of the indicator. However, the formula and technical specifications of the indicator remain the same.

Complex continuing care services are often co-located in hospitals that have other significant service mandates such as rehabilitation programs or acute care. The record-keeping conventions of acute care and complex continuing care hospitals make it difficult to isolate in-patient revenues, assets and liabilities that relate solely to complex

continuing care services. As a result, indicators that require this distinction cannot be reported.

Data Sources

The data used to calculate the indicators presented in this quadrant are submitted annually to the Ontario Ministry of Health and Long-Term Care (MOHLTC) using formats specified by the Ontario Hospital Reporting System (OHRS). The OHRS is a comprehensive multi-year database of financial and statistical information describing the activities of Ontario hospitals. The costs reported in the OHRS are categorized as direct and indirect using the methods described in the Ontario Cost Distribution Methodology (OCDM). (For a detailed examination of the OCDM applied to 2001/02 data, see JPPC Website www.jppc.org) The Financial Performance and Condition quadrants in all volumes in the *Hospital Report* series use data extracted from the OHRS. The financial data included in this report is for the 2001/02 fiscal year, which was the most recent data available during the research. Comprehensive indicator definitions, account codes and account definitions are provided in Appendix G, *Hospital Report 2003: Complex Continuing Care* for each of the indicators reported in this quadrant. Account descriptions have been added for completeness.

To calculate the RUG-III weighted patient days, the Resident Assessment Instrument Minimum Data Set Version 2.0 was used to measure inpatient complex continuing care activity. These data are routinely collected by all hospitals with designated complex continuing care beds. RUG-III groups are analogous to acute care case-mix groups (CMG's). Relative per diem resource weights for each of 44 RUG-III groups were developed by the Joint Policy and Planning Committee using Ontario wage rates for various labour categories including RNs, RNAs, physiotherapists, and occupational therapists. (For further details see *Cost Per Case-Mix Weighted Activity for Complex Continuing Care in Ontario*, JPPC Reference Documents – Summary Report #8-11 and Technical Report #8-12.)

Some complex continuing care hospitals treat specialty populations, such as chronic ventilator, HIV and palliative care patients. Typically these specialty patients are low volume, treated in only a few hospitals, and require more resources than other patients in the same RUG categories. Unfortunately, the extra resources, such as drugs and equipment, cannot be discretely identified for specialty patients. Therefore, the weighted activity for hospitals that treat specialty patients is probably under-estimated. As part of the on-going development of the Rates Model of the Hospital Funding Formula, the Joint Policy & Planning Committee has acknowledged RUG methodological limitations and has refined the model to include an adjustment factor for chronic tertiary activity, similar to the acute tertiary activity adjustment factor. This factor is applied to all hospitals with complex continuing care activity and is reflected in the unit cost performance indicator for freestanding complex continuing care hospitals.

Freestanding complex continuing care and acute hospitals may differ in cost allocation practices. For example, two 1996 studies [Metro Toronto District Health Council Restructuring Report and the Chronic Care Committee of the Ontario Hospital

Association, Overhead Costs in Chronic Care and Rehabilitation Hospitals, October, 1996] showed that the proportions of overhead in the two types of facilities cannot be directly compared because of different service mixes. This reporting variation means that direct comparison of indicator values for freestanding and acute care facilities may be misleading.

Data Quality

Although OHRS data submissions are subjected to a variety of edit routines before being added to the provincial database, inconsistencies in hospital reporting practices can create data quality issues. The following data quality issues may affect the consistency of indicators in this report.

1. There are variations in the reporting of complex continuing care patient days by hospitals that affect the calculation of the *Total cost per RUG-III weighted patient days*, *Direct cost per RUG-III weighted patient days*, and the *Unit cost performance*. For some hospitals, there were differences in the number of complex continuing care patient days reported in the RAI Minimum Data Set versus the MIS dataset. In cases where the difference was greater than 2%, the lower number was used to calculate the final RUG-III weighted patient days. For the 2001/2002 fiscal year, this difference occurred in 17 of the 104 hospital corporations in Ontario. This approach is consistent with the treatment of discrepancies used in the Hospital Funding Formula.
2. Most freestanding complex continuing care hospitals also provide rehabilitation and other programs of varying size. Revenues, assets, liabilities, and various statistics relating to complex continuing care cannot usually be disaggregated in facilities with both complex continuing care and other types of activity. This inability to identify financial and statistical data specifically for complex continuing care may mean that the indicator values of freestanding complex continuing care hospitals reflect the presence of other programs in the hospital.

Assessing Performance

The numerator, denominator and values for the eight indicators included in the financial performance and condition section of *Hospital Report 2003: Complex Continuing Care* are presented at the aggregate provincial level. The rates of change for the means for each indicator were calculated $(\text{Mean for 2000/01} - \text{Mean for 1999/00}) / \text{Mean for 1999/00}$ and these results can be found in the discussion section for each indicator in *Hospital Report 2003: Complex Continuing Care*. Values of the Total Cost Per RUG-III Weighted Patient Day and Direct Cost Per RUG-III Weighted Patient Day are presented for 12 freestanding complex continuing care hospitals.

In the absence of broadly accepted and validated benchmarks of “good” and “bad” performance for each of the financial indicators presented in *Hospital Report 2003: Complex Continuing Care*, the research team decided to use tertile ranges to report hospital performance. The use of tertiles: 1) show ranges of actual indicator values

instead of indicator values relative to a mean value and: 2) are more appropriate for indicators where a particular band of values represent better performance and values on either side of this band represent poor performance. For example, values of current ratio below 1.0 represent poor performance and extremely high values also represent poor performance.

For each of the six hospital-specific indicators, the tertile range in which a hospital's indicator value lies is displayed. Tertiles were preferred over other percentiles (such as quintiles) because the groupings were large enough to ensure there are meaningful differences between hospitals that have indicator values in different quintile ranges. Tertiles ranges were calculated using indicator values from all 12 Ontario freestanding complex continuing care hospitals.

System-Level Findings

Table 1 shows descriptive statistics for each of the six hospital-specific indicators of Financial Performance and Condition for freestanding complex continuing care hospitals, including mean, standard deviation, and tertile values (0, 33rd, 67th and 100th 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 33rd percentile, four hospitals had indicator values at or below that value in terms of performance evaluation and 80% of hospitals had indicator values above.

Table 1 – Descriptive Statistics for Hospital-Specific Indicators of Financial Performance and Condition

	Unit Cost Performance	Corporate Services)	Total Margin	Current Ratio	Working Capital to Revenue	Patient Care Hours
Number of Hospitals	12	12	12	12	12	12
Mean [†]	NR	11.7%	2.5%	1.3	7.4%	61.1%
Standard Deviation	11.4%	2.8%	3.4%	3.0	37.1%	4.2%
0 th percentile	-16.9%	5.8%	-1.0%	0.6	-22.3%	54.3%
33 rd percentile	-8.2%	11.1%	1.0%	1.1	1.5%	59.0%
67 th percentile	7.3%	12.9%	4.4%	2.2	13.5%	61.7%
100 th percentile	18.2%	16.5%	10.9%	9.5	119.2%	70.1%

[†] This is a weighted mean of Ontario freestanding complex continuing care hospitals indicator values, not an arithmetic mean.