

***Hospital e-Scorecard Report 2008: Complex Continuing Care***  
**System Integration and Change Technical Summary**

This technical document has been updated by Clara Pong and Sara Grimwood for Hospital e-Scorecard Report 2008. Acknowledgement is given to Walter Wodchis, Gary F. Teare, and Lynn Weiler, the original contributors of the technical document.

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## 1. Overview

This *SIC Technical Summary* presents additional details of the methodology and results not provided in *Hospital e-Scorecard Report 2008: Complex Continuing Care*. The Complex Continuing Care System Integration and Change (SIC) quadrant reports on indicators that assess efforts made by Ontario hospitals to improve the quality and client-centredness of care they provide to patients, integrate their services with other aspects of the health care system, use information and technology to support decision-making and planning, and ensure that staff have the skills and supports they need. This is the second year that the SIC Survey has been administered online.

Unlike the other three quadrants, there are few accepted standard measures in the areas captured by the SIC indicators. While some hospitals collect measures of employee skills and training, few measures of human capital and organizational learning are available through existing administrative databases. Available measures are also often unusable because variations in data coding create difficulties in comparing performance across organizations. Thus, the indicators used in the SIC quadrant of *Hospital e-Scorecard Report 2008: Complex Continuing Care* were derived from the *2008 SIC survey*.

For each SIC indicator, this *SIC Technical Summary* provides a description of the calculations used to arrive at indicator values and performance categories for participating hospitals. In addition, data on the distribution of scores for each indicator are provided for the province as a whole and for teaching, community and small hospital peer groups.

## 2. Methodology

The following sections describe the methodology used to identify indicators for *Hospital e-Scorecard Report 2008: Complex Continuing Care*, including the modification of the survey instrument, redevelopment of the indicators, the data collection process, a detailed description of how each indicator was constructed and the modified performance allocation method. There are five SIC indicators presented in *Hospital e-Scorecard Report 2008: Complex Continuing Care*.

After the multi-sector survey, consisting of 67 questions was entered into the survey tool, validation, skip logic, and workflow design were developed using the online software. In November 2007, three web-based demonstrations were conducted with approximately 85 hospitals in attendance. These web-based demonstrations included an online demonstration of how to navigate through the survey, discussion on frequently asked questions and an overview of the glossary of terms.

A pilot survey consisting of the SIC questions were conducted with eleven participating hospitals to receive feedback on question format and the online tool. The final survey was sent to Ontario hospitals via email in December 2007. Participant satisfaction, ease of use, and data quality were assessed by various qualitative and quantitative feedback methods.

### Survey Redevelopment

As per initial discussions with the Ontario Ministry of Health and Long Term Care and the Ontario Hospital Association, a condensed version of the SIC Survey was carried out in order to address specific areas.

Indicators proposed for the 2008 SIC survey fell into one of the following four categories:

1. Quality improvement (including the availability and use of clinical information technology)
2. Patient safety
3. Received extensive media attention in *Hospital Report 2007*
4. New indicator in *Hospital Report 2007* (which allow for comparison in *Hospital e-Scorecard Report 2008*)

Also, the following question was added to the 2008 Survey: What are your top three patient safety or quality improvement initiatives? This question was asked in order to gauge hospital's key patient safety priorities.

It is important to note that there is no difference in methodology with the shortened version of the survey.

### Describing the Survey Process

The survey was administered in December 2007. A total of 78 complex continuing care hospitals completed and returned the surveys for a participation rate of approximately 75% from all CCC hospitals. Hospitals were asked to complete one survey for the entire corporation.

For the second year, a web-based survey was distributed via email to the Hospital e-Scorecard Report main contact at each organization. The Hospital e-Scorecard Report main contact disseminated the sections of the survey (via the custom-designed workflow of the online tool) to the person in the organization who possesses the most knowledge about topics covered in that section. At the end of each section, one individual was required to sign-off on a statement of accuracy. This statement required hospital personnel to confirm that their responses were accurate and reflected the current operating circumstances.

Hospitals were given approximately six weeks to complete the survey. One month after the initial distribution of surveys, reminder notices were sent to hospitals that had not yet completed the survey. Responses, by hospital type, are presented below.

**Table 2.1: Complex Continuing Care SIC Surveys Completed**

	Completed Surveys	Surveys Not Returned/ Non-participating	Total
Freestanding CCC facilities	13	2	15
CCC hospitals with Acute Care	65	24	89
All CCC Hospitals	78	26	104

## Data Quality and Verification

The indicators for this quadrant are based on hospital survey data that are inevitably subject to a "social desirability bias". That is, consciously or unconsciously, respondents may answer questions in a way that puts their organization in the best possible light. To counteract this bias, an effort was made to construct survey questions that focused on specific behaviours rather than attitudes. Despite this focus, opportunities remained for varying interpretations, and some degree of interpretation may still be reflected in answers to many of the questions.

CIHI analysts performed data quality checks on the completed surveys to ensure that all mandatory questions were answered and that skip logic, validation and question masking were performed correctly by the online survey. CIHI followed-up with seven hospitals via email and asked the Hospital e-Scorecard Report main contact to complete the missing questions in a hard copy document. Analysts then entered this data into the populated database. Two analysts then developed SAS code for the indicator calculations independently of each other and compared results. Once the SIC indicator scores were produced, random manual checks of hospitals' scores were done by examining the original surveys to ensure a high level of reliability.

Hospitals were not sent preliminary values for the survey questions that were used in the calculations of the SIC indicators. This is because there were phone calls made and emails were sent after the surveys were received, where hospitals were given ample time to respond to any data quality issues or missing answers that were detected.

## Developing the Indicators

The five SIC indicators used in *Hospital Report 2008: Complex Continuing Care* are:

1. Evidence-Based Practice
2. Evidence of Client-Centred Care

3. Integration of Care
4. Use of RAI-Minimum Data Set in Quality Improvement and in Clinical and Utilization Management Applications
5. Healthy Work Environment (corporate-level indicator)

Once the surveys were completed, the process of confirming the questions to be used in the SIC indicator calculations for *Hospital Report 2008: Complex Continuing Care* began. Response distributions were calculated for each question in the *2008 SIC survey*.

During the 2008 survey redevelopment process, modifications were made to *Hospital Report 2008: Complex Continuing Care* SIC indicators such as recalculation and reweighing of indicators, and adding new or deleting survey indicator questions. Therefore, please note that caution should be taken when comparing indicator results with previous years. Please see Appendix A for list of indicator changes.

## Scoring of the Indicator

A detailed description of the questions used and points allocated in the construction of each of the five indicators is provided below. To calculate the indicator score, each question must be multiplied by the specified weighting. For example:

Hospital A received 18 points for Question **X** out of a possible total of 25 points. To calculate the contribution of this question to the indicator score, divide hospital A's score (18) by the total possible points (25) and multiple by the specified weighting for Question **X** (23%). Therefore, hospital A received 16.56% of the total indicator score for question **X**.

The weights for each question are provided in tables at the end of each indicator. The weighted scores are then summed for each question to get the overall score for that component of the indicator. For example:

Component Score =

$$\left\{ \left( \frac{HospitalQuestionScore}{MaximumQuestionScore} \times QuestionWeight \right) + \left( \frac{HospitalQuestionScore}{MaximumQuestionScore} \times QuestionWeight \right) + \dots \right\}$$

The overall indicator scores are then calculated by summing the scores for each component. When a question is not applicable to a hospital, the question is removed from the denominator for that component.

### 3. Detailed Description of the Indicator Calculations

#### **Indicator 1: Evidence-Based Practice**

The Evidence-Based Practice indicator measures the extent to which hospitals use and integrate one of several specified practice guidelines, and the number of clinical issues for which hospitals have guidelines. This indicator consists of two components and is comprised of three questions from section 8.

Note that the responses to Question 40, 41, and 42 are linked. The same clinical issues are listed in Questions 40 and 41. In Question 42b, hospitals are asked to select up to three of the clinical issues from Question 40 upon which to base their responses.

**Component 1 is scored based on one clinical issue across Questions 40, 41, and 42.**

*Choosing the clinical issue*

Scenario 1: If at least one clinical issue was selected from question 42 b, then the clinical issue with the highest points from questions 42c becomes the selected clinical issue for Component 1.

Scenario 2: If no clinical issue was selected from question 42 b, then the clinical issue with the highest combined points from questions 40 and 41 becomes the selected clinical issue for Component 1.

**Component 2 is scored based on the remaining clinical issues.**  
Points are not allocated to the clinical issue selected in Component 1.

**Table 1.2: Evidence-Based Practice Indicator Summary**

Question	Total Possible Points	Weighting	Overall Weighting
<b>Component 1: Depth of Guideline Use (50%)</b>			
Section 8, Question 42c	2.5	40%	50%
Section 8, Question 40	1	30%	
Section 8, Question 41	3	30%	
<b>Component 2: Breadth of Guideline Use (50%)</b>			
Section 8, Question 40	13	50%	50%
Section 8, Question 41	Based on Q40	50%	
<b>Total Score</b>			<b>100%</b>

## Component 1: Depth of Guideline Use (one selected clinical issue) (50%)

### Component 1: Section 8, Question 42c

This question inquired about the method of recording guideline adherence or exception (Part A), and about the frequency of reporting back to clinical staff (Part B). The following table displays the scoring for this question.

Response	Points	Total Point Allocation For Question 42 c
<b>Question 42c - part A</b>		<b>Points from Part A</b> + <b>Points from Part B</b> = 1.5 + 1 = 2.5 points  (row with highest points is selected)
On Paper – In Progress Notes	0.5 points	
On paper – in permanent care plan or guideline-related form <b>or</b> Electronically – in permanent care plan or guideline-related form	1.5 points	
<b>Maximum points for each clinical issue.</b> <i>Multiple options can be selected for each clinical issue. However, the maximum points are capped at 1.5 points.</i>	<b>1.5 points</b>	
<b>Question 42c - part B</b>		
Never	0 points	
Once per Year	0.5 points	
At least twice per year (for different time periods)	1 point	
<b>Maximum points for each clinical issue</b> <i>Only one option can be checked for each clinical issue.</i>	<b>1 point</b>	

### Component 1: Section 8, Question 40

This question inquired about the extent to which practice guidelines are available for patient care. The following table displays the scoring for this question.

<b>Item(s) used for scoring:</b>		
<ul style="list-style-type: none"> <li>The following points are assigned to the <b>one</b> selected clinical issue.</li> </ul>		
Response	Points	Total Point Allocation
No practice guideline is available	0 points	1 point (1 * 1)
Our organization is developing a practice guideline for this clinical issue	0.5 points	
A practice guideline is available and expected to be used in the care of all eligible patients for this clinical issue	1 point	
<b>Maximum points for each clinical issue</b> <i>Only one option can be checked for each clinical issue.</i>	<b>1 point</b>	

**Component 1: Section 8, Question 41**

This question asked about the source and application of clinical practice guidelines available in the hospitals' complex continuing care services. The following points are assigned to the one selected clinical issue from Question 42c.

<b>Item(s) used for scoring:</b>		
• The following points are assigned to the <b>one</b> selected clinical issue.		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
<b>PART B</b>		3 points (3 * 1)
Practice guideline available on CCC units to inform staff about current best practice	1 point	
Practice guideline includes standardized tools to be used for patient assessment	1 point	
Practice guideline recommendations are linked to expected decision-making and care processes through use of decision-tree(s) and/or algorithm or protocols	1 point	
<b>Maximum points for each clinical issue</b> <i>Multiple options can be selected for each clinical issue.</i>	<b>3 points</b>	

**Component 2: Breadth of Guideline Use (remaining clinical issues) (50%)**

\*\* Note that points are not allocated to the clinical issue selected in Component 1.

**Component 2: Section 8, Question 40**

This question inquired about the extent to which practice guidelines are available for patient care. The following table displays the scoring for this question.

<b>Item(s) used for scoring:</b>		
• The following points are assigned to the 13 remaining clinical issues		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
No practice guideline available	0 points	13 points (1 * 13)
Our organization is developing a practice guideline for this clinical issue	0.5 points	
A practice guideline is available and expected to be used in the care of all eligible patients for this clinical issue	1 point	
<b>Maximum points for each clinical issue</b> <i>Only one option can be selected for each clinical issue.</i>	<b>1 point</b>	
<b>Note:</b> Points are not allocated to the selected clinical issue used in Component 1.		

**Component 2: Section 8, Question 41**

This question asked about the source and application of clinical practice guidelines available in the hospitals' complex continuing care services. The following table displays the scoring for this question.

<b>Item(s) used for scoring:</b>		
The rows from remaining 13 clinical issues where the hospitals indicated that a practice guideline is available and expected to be used in the care of all eligible patients for the clinical issues (last column) in Question 40.		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
Practice guideline available on CCC units to inform staff about current best practice	1 point	3 * (N)
Practice guideline includes standardized tools to be used for patient assessment	1 point	
Practice guideline recommendations are linked to expected decision-making and care processes through use of decision-tree(s) and/or algorithm or protocols	1 point	
<b>Maximum points for each clinical use</b> <i>Multiple options can be selected for each clinical issue.</i>	<b>3 points</b>	
Note: "N" is determined by the number of the <b>remaining 13 clinical issues</b> where the last column of Question 40 is selected.		

## **Indicator 2: Evidence of Client-Centred Care**

The Evidence of Client-Centred Care indicator examines the extent to which hospitals are providing patient care in a client-centred manner at the individual client level. Four components form this indicator: patient/family information and education; family involvement in patient care; patient involvement in decision-making; and emotional support for patients/families. This indicator is based on five questions from section 8.

**Table 1.3: Evidence of Client-Centred Care Indicator Summary**

<b>Question</b>	<b>Total Possible Points</b>	<b>Weighting</b>	<b>Overall Weighting</b>
<b>Component 1: Patient/family information and education (28%)</b>			
Section 8, Question 53	10	9%	28%
Section 8, Question 54	8	19%	
<b>Component 2: Family Involvement (14%)</b>			
Section 8, Question 55	4	14%	14%
<b>Component 3: Involving patients in decision-making (34%)</b>			
Section 8, Question 56	18	34%	34%
<b>Component 4: Emotional support for patients/families (24%)</b>			
Section 8, Question 57	13.5	24%	24%
<b>Total Score</b>			<b>100%</b>

## Component 1: Patient/Family Information and Education (28%)

### Component 1: Section 8, Question 53

This question inquires about information that is available to patients and families regarding services and opportunities in the hospitals' complex continuing care services. The following table displays the scoring for this question.

<b>Item(s) used for scoring:</b>		
<ul style="list-style-type: none"> <li>• Services that support wellness, improvement and quality of life</li> <li>• Patient advocate/ombudsperson</li> <li>• Taking part or refusing to take part in research or clinical trials</li> <li>• Services within the hospital that are relevant to their condition</li> <li>• Services in the community that are relevant to their condition</li> <li>• How to report a complaint or commendation</li> </ul>		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
Information is not provided	0 points	10 points (2*5)
Information is provided prior to admission	1 point	
information is readily accessible within the CCC	1 point	
<b>Maximum points for each item</b>	<b>2 points</b>	
<i>Multiple options can be selected for each item.</i>		

### Component 1: Section 8, Question 54:

This question assesses whether CCC services customize educational activities to the individual needs of patients and families. The following table displays the scoring for this question.

<b>Item(s) used for scoring:</b> All education activities listed in questions 54.		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
There is no process in place	0 points	8 points (2*4)
There is an informal process	1 point	
There is a formal process	2 point	
<b>Maximum points for each item</b>	<b>2 points</b>	
<i>Only one option can be selected for each clinical issue.</i>		

## Component 2: Family Involvement (14%)

### Component 2: Section 8, Question 55:

This question looks at processes in which to involve families in patient care. The following table displays the scoring for this question.

<b>Item(s) used for scoring:</b> The two processes listed in question 55.		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
There is no process in place	0 points	4 points (2*2)
There is an informal process	1 point	
There is a formal process	2 points	
<b>Maximum points for each item</b>	<b>2 points</b>	
<i>Only one option can be selected for each item.</i>		

### Component 3: Involving Patients in Decision-Making (34%)

#### **Component 3: Section 8, Question 56:**

This question looks at how patient input is incorporated into decision-making about care, goals, treatment and discharge planning. The following table displays the scoring for this question.

Item(s) used for scoring: All eight processes listed in question 56.		
Response	Points	Total Point Allocation
There is no process in place	0 points	18 points (2*7 + 4)
There is an informal process	* 1 points	
There is a formal process	* 2 points	
<b>Maximum points for each item</b> <i>Only one option can be selected for each item.</i>	<b>2 points</b>	
<b>Note:</b> * The process "Evaluation by the patient of progress toward goal achievement", is scored as follows: 0 points allocated if there is no process in place, 2 points if there is an informal process, and 4 points if there is a formal process. The maximum points for this process are 4.		

### Component 4: Emotional Support for Patients/Families (24%)

#### **Component 4: Section 8, Question 57a and b:**

This question asks whether there is a process to assess and document patients' and families' emotional support needs. The following table displays the scoring for this question.

Response	Points		Total Point Allocation
57 a)			<b>Points from 57 a + Points from 57 b = 6 + 7.5 = 13.5 points</b>
We do not have a formal process to assess and document patient or family emotional support needs	0 points		
We have a formal process for patients	4 points		
We have a formal process for families	2 points		
<b>Maximum points for each item</b> <i>Multiple options can be selected.</i>	<b>6 points</b>		
57 b)	For Families	For Patients	
None of these mechanisms are in place	0 points	0 points	
Provide one-to-one counseling	1 point	2 points	
Provide group counseling <b>or</b> Provide formal buddy system	1 point	2 points	
Provide printed information	0.5 points	1 point	
<b>Maximum points for each item</b> <i>Multiple options can be selected.</i>	<b>2.5 + 3 = 7.5 points</b>		

### **Indicator 3: Integration of Care**

The Integration of Care indicator measures the extent to which CCC services are collaborating on a range of activities with other levels of care and other service providers. These activities include formal consultations on the development of standardized admission and discharge criteria; integrated development and application of practice guidelines; and joint initiatives with other service providers. This indicator consists of four components and is comprised of four questions from section 8.

**Table 1.4: Integration of Care Indicator Summary**

<b>Question</b>	<b>Total Possible Points</b>	<b>Overall Weighting</b>
<b>Component 1: Stakeholder Consultation in Standardized Admission Criteria Development (20%)</b>		
Section 8, Question 45a	4	20%
<b>Component 2: Stakeholder Consultation in Standardized Discharge Criteria Development (20%)</b>		
Section 8, Question 45b	4.5	20%
<b>Component 3: Extent of Practice Guideline Use and Development Spanning Other Levels of Care (30%)</b>		
Section 8, Question 43d	6	30%
<b>Component 4: Extent of Joint Initiatives with Other Service Providers (30%)</b>		
Section 8, Question 58b	16	30%
Total Score		100%

**Component 1: Stakeholder Consultation in Standardized Admission Criteria Development (20%)**

**Component 1: Section 8, Question 45a:**

This question asks about the types of stakeholders that are formally consulted in the development of standardized admission criteria for the CCC program that offered for each patient type. The following table displays the scoring for this question.

<b>Patient types: (Chronic) Complex Medical, Reactivation, Palliative/End of Life Care, Cognitive/Behavioral Support</b>		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
Standardized admission criteria do not exist	0 point	4 points *(N)
Representatives of other levels of care within our organization	0.5 point	
Patients and families	0.5 point	
Other CCC providers	1 point	
Other organizations that refer patients to our CCC services	2 points	
<b>Maximum points for each program</b> <i>Multiple options can be selected.</i>	<b>4 points</b>	
<b>Note:</b> N is the number of patient types selected in Question 44.		

**Component 2: Stakeholder Consultation in Standardized Discharge Criteria Development (20%)**

**Component 2: Section 8, Question 45b**

This question asks about the types of stakeholders that are formally consulted in the development of standardized discharge criteria. The following table displays the scoring for this question.

<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
Standardized discharge criteria do not exist	0 points	4.5 points *(N)
Representatives of other levels of care within our organization	0.5 point	
Patients and families	1 point	
Other CCC providers	1 point	
Other organizations that refer patients to our CCC services	2 points	
<b>Maximum points for each program</b> <i>Multiple options can be selected.</i>	<b>4.5 points</b>	
<b>Note:</b> N is the number of patient types selected in Question 44.		

### Component 3: Extent of Practice Guideline Use and Development Spanning Other Levels of Care (30%)

#### Component 3: Section 8, Question 43d

This question asks about a selected practice guideline that span across levels of care and about staff involvement from different levels of care in the development and adoption of the guidelines. The following table displays the scoring for this question.

<b>Guideline used for scoring: The selected practice guideline from question 44 b</b>		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
Guiding care for any level of care within the organization	1 point	6 points
Guiding care for any level of care external to the organization	2 points	
Formally developing/adapting within the organization for any level of care	1 point	
Formally developing/adapting external to the organization for any level of care	2 points	
<b>Maximum points for each item</b> <i>Multiple options can be selected.</i>	<b>6 points</b>	

### Component 4: Extent of Joint Initiatives with Other Service Providers (30%)

#### Component 4: Section 8, Question 58b

This question asks about joint initiatives with other service providers ( Acute Care hospitals, CCACs, Community-based service agencies, Mental Health Agencies, LTC facilities, Cancer centres, other CCC providers, others). Scores are given based the number of service providers that are involved in the joint initiative.

<b>Items used for scoring: All eight initiatives listed in questions 58 b</b>		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
Participating in joint initiative with one other service provider.	1 point	16 points (2*8)
Participating in joint initiative with two or more service providers.	2 points	
<b>Maximum points for each joint initiative</b> <i>Multiple service providers can be selected; however the maximum point allocation is 2.</i>	<b>2 points</b>	

**Indicator 4: Use of RAI-Minimum Data Set in Quality Improvement and in Clinical and Utilization Management Applications**

This indicator examines the extent to which hospitals utilize RAI-MDS data with respect to level of reporting detail, dissemination of results, and decision-making about clinical care and quality improvement. This indicator consists of three components and is comprised of eight questions from section 8.

**Table 1.5: Use of RAI-MDS in Quality Improvement and in Clinical and Utilization Management Applications Indicator Summary**

<b>Question</b>	<b>Total Possible Points</b>	<b>Overall Weighting</b>
<b>Component 1: MDS Reporting-Level of Reporting Detail (25%)</b>		
Section 8, Question 46	0.5	25%
Section 8, Question 47	1.5	
Section 8, Question 50	1	
<b>Component 2: MDS Reporting-Dissemination (25%)</b>		
Section 8, Question 48	1.5	25%
<b>Component 3: Applications of MDS data in decision-making (50%)</b>		
Section 8, Question 49	1.5	12.5%
Section 8, Question 51b	1.5	12.5%
Section 8, Question 52a	1.5	12.5%
Section 8, Question 52b	1.5	12.5%
<b>Total Score</b>		<b>100%</b>

**Component 1: MDS Reporting – Level of Reporting Detail (25%)**

**Component 1: Section 8, Question 46**

This question inquires about the source of MDS Quality Indicator reports. The following table displays the scoring for this question.

Response	Points	Total Point Allocation
The MDS-QI reports are obtained from CIHI	0 points	0.5 points
The MDS-QI reports are generated internally from an analyst at the hospital	0.5 points	
The MDS-QI reports are generated directly from MDS vendors software	0.5 points	
The MDS-QI reports are generated from external data analysis services	0.5 points	
<b>Maximum points for each item</b> <i>Multiple options can be selected, however the maximum point allocation is 0.5</i>	<b>0.5 points</b>	

**Component 1: Section 8, Question 47:**

This question inquires about the reporting level of MDS-QI reports. Scores are given based on the level of reporting.

Response	Points	Total Point Allocation
Reporting at the level of the entire CCC service	0 points	1.5 points
Reporting at Sub-levels within CCC service	0.5 point	
Reporting at level of individual patients	1 point	
<b>Maximum points for each item</b> <i>Multiple options can be selected.</i>	<b>1.5 points</b>	

**Component 1: Section 8, Question 50**

This question asks about the source of the Resource Utilization Groups-III reports. The following table displays the scoring for this question.

Response	Points	Total Point Allocation
The RUG-III reports are obtained from CIHI	0 points	1 point
The RUG-III reports are generated internally from an analyst at the hospital	1 point	
The RUG-III reports are generated directly from MDS vendors software	1 point	
The RUG-III reports are generated from external data analysis services	1 point	
<b>Maximum points for each item</b> <i>Multiple options can be selected; however the maximum point allocation is 1.</i>	<b>1 point</b>	

## Component 2: MDS Reporting – Dissemination (25%)

### Component 2: Section 8, Question 48

This question asks about dissemination of MDS-QI report results with the stakeholders listed in questions 48. The following table displays the scoring for this question.

<b>Stakeholders listed in question 48:</b>		
1. The board or a board committee,	2. Senior management team	
3. Senior medical staff	4. Program/department level	
5. Patient care unit level (front line managers and staff)		
6. Committee looking at quality and/or utilization		
7. Patients and families		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
Results presented and discussed (with at least three groups of stakeholders)	0.5 point	<b>1.5 points</b>
Specific results further discussed (with at least three groups of stakeholders not including "Patients and families")	0.5 point	
Specific results further discussed with "patients and families".	0.5 points	
<b>Maximum points for each item</b> <i>Multiple options can be selected; however the maximum point allocation is 1.5.</i>	<b>1.5 points</b>	

## Component 3: Applications of MDS data in Decision-Making (50%)

### Component 3: Section 8, Question 49b

This question asks about the application of MDS-QIs to quality improvement. Scores are based on the usage of the MDS-QIs for quality improvement. The following table displays the scoring for this question.

<b>Applications of the MDS-QIs listed in question 49b:</b>		
<ul style="list-style-type: none"> <li>Identify areas for focus of quality improvement</li> <li>Track responses to quality improvement initiatives over time</li> <li>Compare our CCC services performance to comparable facilities we consider to be leaders in one or more issues measured with the MDS-QIs</li> </ul>		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
MDS-QIs are not applied in quality improvement work	0 points	<b>1.5 points</b>
MDS-QIs are only used in one of these applications listed.	0.75 points	
MDS-QIs are used in at least two of these applications listed.	1.5 points	
<b>Maximum points for each item</b> <i>Multiple options can be selected; however the maximum point allocation is 1.5 points.</i>	<b>1.5 points</b>	

**Component 3: Section 8, Question 51b**

This question asks about the use of RUG-III reports. Scores are based on the usage of the RUG-III reports. The following table displays the scoring for this question.

<b>Applications of the RUG-III reports listed in question 51b:</b>		
<ul style="list-style-type: none"><li>• Review appropriateness of current MDS coding practice</li><li>• Identify patients for review of appropriateness of CCC level of care</li><li>• Help determine/plan for staffing needs</li><li>• Review costs of care for budgeting</li></ul>		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
RUG-III reports are not used	0 point	1.5 points
RUG-III reports are only used in one of these applications listed in question 51.	0.75 point	
RUG-III reports are used in at least two of these applications listed in question 51.	1.5 points	
<b>Maximum points for each item</b> <i>Multiple options can be selected; however the maximum point allocation is 1.5 points.</i>	<b>1.5 points</b>	

**Component 3: Section 8, Question 52a, b**

This question asks about the usage of the MDS applications in **clinical** (52a) and **administrative** (52b) decision-making and evaluation regarding individual patients. Scores are based on the level of usage of the MDS applications. The following tables display the scoring for this question.

<b>List of MDS applications in question 52</b>
<ul style="list-style-type: none"><li>• Resident Assessment Protocols (RAPS)</li><li>• Published MDS subscales</li><li>• Any MDS item or combination of items</li></ul>

<b>Section 8, Question 52 - part a</b>		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
If one or more MDS applications are used in targeting interventions to individual patients	0.75 points	1.5 points
If one or more MDS application are used in measuring intervention/care plan outcomes for individual patients	0.75 points	
<b>Maximum points</b> <i>Multiple options per item can be selected</i>	<b>1.5 points</b>	

<b>Section 8, Question 52 - part b</b>		
<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
If one or more MDS applications are used in identifying patient populations for service program/planning	0.75 points	1.5 points
If one or more MDS applications are used in measuring outcomes of care for patient populations	0.75 points	
<b>Maximum points for each item</b> <i>Multiple options per item can be selected</i>	<b>1.5 points</b>	

## **Indicator 5: Healthy Work Environment**

The Healthy Work Environment indicator was designed to measure the extent to which hospitals have mechanisms in place to support and promote a healthy work environment and thereby contribute to employee’s physical, social, mental and emotional well-being. This indicator consists of four components and is comprised of eleven questions from section 5.

The Healthy Work Environment indicator is calculated across all sectors.

**Note:** Hospitals who participated in multiple sectors would have the same Healthy Work Environment score across all sectors. However, the provincial average and performance allocation for that indicator would vary because it is based on participating hospitals within that sector only.

**Table 1.8: Healthy Work Environment Indicator Summary**

<b>Question</b>	<b>Total Possible Points</b>	<b>Overall Weighting</b>
<b>Component 1: Healthy Workplace Plan/Policy (30%)</b>		
Section 5, Question 13a	3	30%
Section 5, Question 13b	2	
<b>Component 2: Accountability &amp; Responsibility (10%)</b>		
Section 5, Question 14a	3	10%
Section 5, Question 14b	3	
<b>Component 3: Assessment, Analysis, and Improvement (20%)</b>		
Section 5, Question 15a	3	20%
Section 5, Question 15b	22	
Section 5, Question 15c	16	
<b>Component 4: Key Dimensions (40%)</b>		
Section 5, Question 16	18	27%
Section 5, Question 17a	3	13%
Section 5, Question 17b	4	
Section 5, Question 17c	3	
Total Score		100%

**Component 1: Healthy Workplace Policy/Plan (30%)**

**Component 1: Section 5, Question 13a**

Organizations were asked about their workplace policy/plan.

<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
No policy/plan that extended beyond policies mandated by health and safety legislation	0 points	3 points
Policy/plan that extended beyond policies mandated by health and safety legislation	3 points	
<b>Maximum points for each item</b> <i>Only one option can be selected</i>	<b>3 points</b>	

**Component 1: Section 5, Question 13b**

This question asked if the organization’s healthy workplace policy/plan was based on an employee needs assessment.

<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
No assessment process in place	0 points	2 points
Informal assessment process in place to evaluate employee needs, attitudes and preferences in regard to healthy workplace programs	1 point	
Formal assessment process in place to evaluate employee needs, attitudes and preferences in regard to healthy workplace programs mandated by health and safety legislation	2 points	
<b>Maximum points for each item</b> <i>Only one option can be selected</i>	<b>2 points</b>	

**Component 2: Accountability & Responsibility (10%)**

**Component 2: Section 5, Question 14a:**

This question asked if accountability and responsibility for healthy workplace initiatives were formally assigned within the organization.

<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
No accountability and responsibility were formally assigned	0 points	3 points
Accountability and responsibility were formally assigned	3 points	
<b>Maximum points for each item</b> <i>Only one option can be selected</i>	<b>3 points</b>	

**Component 2: Section 5, Question 14b**

If accountability and responsibility for healthy workplace initiatives were formally assigned within the organization, they were then asked to specify which group was accountable and responsible for healthy workplace initiatives.

Response	Points	Total Point Allocation
Senior management	1 point	3 points
Shared broadly throughout the organization	2 points	
<b>Maximum points for each item</b> <i>Only one option can be selected</i>	<b>3 points</b>	

Organizations that chose senior management received 1 point. If accountability and responsibility were shared broadly throughout the organization, organizations were given 2 points. The total point allocation for this question was 3 points.

### Component 3: Assessment, Analysis, & Improvement (20%)

#### **Component 3: Section 5, Question 15a:**

Organizations were asked if there were processes in place to assess and analyze the organization's approach to healthy workplace issues.

Response	Points	Total Point Allocation
No ongoing processes in place	0 points	3 points
Ongoing processes in place	3 points	
<b>Maximum points for each item</b> <i>Only one option can be selected</i>	<b>3 points</b>	

#### **Component 3: Section 5, Question 15b**

Organizations were asked to identify which of the following outcomes associated with developing a healthy workplace were collected and analyzed within the organization.

Item(s) used for scoring:		
<ul style="list-style-type: none"> <li>All 11 outcomes listed in Question 15b</li> </ul>		
Response	Points	Total Point Allocation
This was not analyzed	0 points	22 points (2 * 11)
This is analyzed informally	1 point	
This is analyzed formally	2 points	
<b>Maximum points for each item</b> <i>Only one option can be selected</i>	<b>2 points</b>	

#### **Component 3: Section 5, Question 15c**

This question asks organizations how they disseminated information about the outcomes associated with their healthy workplace policy/programs.

Item(s) used for scoring:		
<ul style="list-style-type: none"> <li>All 4 groups listed in Question 15c</li> </ul>		
Response	Points	Total Point Allocation
Data was not shared with this group	0 points	16 points (4 * 4)
Internal written report is circulated about key	1 point	

highlights		
Verbal presentation and discussion of results occurred	3 points	
Results reviewed beyond the initial verbal presentation for a specific initiative		
<b>Maximum points for each item</b> <i>Multiple options can be selected</i>	<b>4 points</b>	

#### Component 4: Key Dimensions (40%)

##### Component 4: Section 5, Question 16

Organizations were asked about 7 processes in place to support a positive psychosocial environment.

<b>Processes used for scoring:</b>		<b>Total Point Allocation</b>
<ul style="list-style-type: none"> <li>• Job Definition and Clarification of Work Roles</li> <li>• Orientation Programs</li> <li>• Assessment of Existing workloads and contrasting them with current staffing patterns and Patient/Client demands</li> <li>• Recognition of Diversity</li> <li>• Provide work opportunities sensitive to the needs of older workers</li> </ul>		
<b>Response</b>	<b>Points</b>	18 points (2*5 + 4*2)
This was not undertaken	0 points	
This was undertaken informally	1 point	
This was undertaken formally	2 points	
<b>Maximum points for each item</b> <i>Only one option can be selected</i>	<b>2 points</b>	
<b>Processes used for scoring:</b>		
<ul style="list-style-type: none"> <li>• Participation of front-line employees in decision-making and overall control of their jobs</li> <li>• Creating innovative schedules, hours of work and job sharing arrangements to meet the needs of work settings</li> </ul>		
<b>Response</b>	<b>Points</b>	
This was not undertaken	0 points	
This was undertaken informally	2 points	
This was undertaken formally	4 points	
<b>Maximum points for each item</b> <i>Only one option can be selected</i>	<b>4 points</b>	

##### Component 4: Section 5, Question 17a

This question asked if there were one or more healthy lifestyle programs offered by your organization.

<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
No	0 points	3 points
Yes	3 points	
<b>Maximum Points for each item</b>	<b>3 points</b>	

***Component 4: Section 5, Question 17b***

If an organization indicated there was a healthy lifestyle program offered, they were asked which of the healthy lifestyle program(s) included any of the 4 components.

<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
A formal approach to education and skill development that extends beyond simply providing written information	1 point	4 points (1 * 4)
Assessment of behaviour change among employees de to use of healthy lifestyle programs	1 point	
Monitoring/evaluation of utilization of programs	1 point	
Long term planning including allocation of financial resources	1 point	
<b>Maximum Points for each item</b>	<b>1 point</b>	

***Component 4: Section 5, Question 17c***

Organizations were asked if their program(s) were developed (or lack thereof) based on an employee needs assessment.

<b>Response</b>	<b>Points</b>	<b>Total Point Allocation</b>
No	0 points	3 points
Yes	3 points	
<b>Maximum Points for each item</b>	<b>3 points</b>	
<b>N.B.:</b> If organizations answered in Q17a = 'NO' and Q17c = 'YES', then Q17 was removed from the component and the key dimensions component was composed of Q16 only.		

## 4. Performance Allocation Methodology: Complex Continuing Care

As in previous report, a three-point scale was used to designate performance allocations as “above average”, “average” or “below average”. This section describes the method for determining relative performance between organizations.

Determining relative performance among hospitals for the seven indicators derived from the *Hospital e-Scorecard Report 2008 SIC Survey* was based on two peer groups: teaching/community hospitals and small hospitals. Peer group reporting was adopted because small hospitals face different challenges in carrying out many of the activities reported in the SIC areas. In addition, not all of these indicators apply equally to small hospitals and teaching/community hospitals. For example, it might be less meaningful for a small hospital to conduct a formal patient or employee satisfaction survey when they only have 200 discharges annually or 80 full-time staff. Small hospitals were defined as those hospitals funded using the JPPC Small Hospital Rate Model. Please refer to [www.jppc.org](http://www.jppc.org) for more information.

Hospitals are allocated into three categories: "below average", "average", and "above average", determined by the position of the hospital's indicator value relative to the mean indicator value of its peer group. These values were reviewed to ensure meaningful differences among hospitals in the three categories. The criteria used to determine relative performance in each peer group is described below.

The performance allocation method used in the Hospital e-Scorecard Report 2008 SIC indicators determines the upper and lower cut points based on the 95th percentile as above average and the 5th percentile as below average. This interval should capture roughly 90% of the indicator values. This method does not require normality and bounded the cut points within 0 to 100. This method is consistent among all sectors of the System Integration and Change quadrant.

Table 4.1 shows the cut off values correspond for each of the indicators. Hospitals with scores above or below these cut points were respectively identified as hospitals with above or below average levels of performance.

**Table 4.1: Indicator cut points**

<b>Indicator</b>	<b>Below Average Cut-Off Point</b>	<b>Above Average Cut-Off Point</b>
1. Evidence-Based Practice	42.76	95.23
2. Evidence of Client-Centred Care	31.34	95.74
3. Integration of Care	4.72	89.31
4. Use of RAI-Minimum Data Set in Quality Improvement and in Clinical and Utilization Management Applications	0.00	93.75
5. Healthy Work Environment	27.82	98.70

It is important to consider the meaning and value of these cut points. The methodology used for identifying these cut points (which subsequently mark an organization as having average, or above, or below average performance in each of these areas) is reasonable, scientifically sound, and conservative. Because the range of scores that capture "average" performance on these indicators is quite large, hospitals with scores close to the upper or lower cut points can gain an increased understanding of their performance levels upon receipt of their hospitals' results.

From a performance improvement standpoint, a hospital achieving a score of 5 on the Integration of Care Use indicator, while identified as having "average" level of performance, the score is relatively low compares to the actual mean 50.52 (see Table 1.10 for detail). Clearly there is opportunity for considering improvement in this area for such a hospital.