

## Perceptions of Patient Safety Culture in Four Health Regions

Prepared by:  
Liane R. Ginsburg  
Assistant Professor  
School of Health Policy & Management  
York University  
[lgins@yorku.ca](mailto:lgins@yorku.ca)

April 2006

## Table of Contents

Background	...1
Subjects	...1
Questionnaire	...1
Response Rates	...2
Using Patient Safety Culture Data to Drive Change and Improvement	...3
Data Analysis & Reporting	...3
Comparing Mean Scores by Region, Staff Group and Sector	...3
Data for individual survey Questions	...4
Results	...5
By region	...5
By staff category	...7
By Sector	...8
Site comparisons by question	...9
Discussion and Interpretation	...11
Identifying Areas for Celebration and Areas for Improvement	...11
Identifying the Most Important Survey Questions	...12
Considering Performance and Importance	...12
Other Options for Considering These Data	...13
References	...14
Appendix A – Patient Safety Culture Questionnaire	...15
Appendix B – Data for Individual Questions by Region	...17

## Perceptions of Patient Safety Culture in Four Health Regions

In the Fall of 2005 four Health Regions in one Canadian province participated in an initiative where each organizations collected questionnaire data from staff across their region to help examine patient safety culture. This report provides a summary of the data collected as part of this initiative.

### Background

The provincial body undertook this initiative as part of its mandate to coordinate and promote activities that enhance patient safety and quality care in that Province. A variety of instruments that have been used to measure patient safety culture were examined and a decision was made to use the Modified Stanford Instrument (MSI). This instrument, initially developed by Singer, Gaba, et al., (2003), was modified by a group of Canadian researchers in 2002 and used in a study that examined the effects of a patient safety educational intervention on nurse leader perceptions of patient safety culture (Ginsburg, Norton, Casebeer, & Lewis, 2005). Since this decision to implement the MSI in these 4 provincial health Regions, a larger study has been funded by the Canadian Patient Safety Institute to more closely examine the properties of the MSI with multiple staff groups and multiple settings in several Canadian jurisdictions. This broader research, which is currently getting underway, will also examine links between patient safety culture and patient safety improvement activity.

### Subjects

The safety body worked together with each of the 4 participating health regions to identify all staff members in the region whose role linked them with patient care (either directly or indirectly). This means that all staff in each region, with the exception of support staff in administrative departments, were identified to receive the MSI Patient Safety Culture Survey. Staff were surveyed in the fall of 2005. A three-stage mailing approach was used where all identified staff received a survey in October 2005 and a reminder card two weeks after the initial mailing. A second survey was sent to all non-respondents 4 weeks after the reminder cards were sent out. This approach led to the collection of data from direct care providers, clinical care managers, direct (E.g. unit clerk) and non-direct care support staff (E.g. maintenance staff) and non-direct care managers (e.g food services supervisor). Data were collected from staff in all sectors including pre-hospital care, acute care, long term (personal) care, community care, mental health.

### Questionnaire

Staff were mailed a 36-item patient safety culture questionnaire (adapted from Singer, Gaba et al., 2003 and Ginsburg et al., 2005). The survey included items in four areas previously found to be valid, reliable, and meaningful: (1) Valuing safety at the organization and department level – 10 items; (2) Fear of repercussions – 4 items; (3) Perceived State of safety – 8 items; (4) Supervisory leadership – 4 items<sup>1</sup>. The first 3 grouping emerged from the initial Canadian Study and the 4<sup>th</sup> group was taken from the Agency for Healthcare Research and Quality Hospital Survey on Patient Safety Culture (AHRQ, 2005). Each of these questions were answered using a 5-point agree-disagree Likert type scale with a “not applicable” option.

---

<sup>1</sup> The psychometric properties of the instrument were reported previously (Ginsburg et al., 2005).

The questionnaire also contained 2 items adapted from the AHRQ survey designed to provide an overall assessment of patient safety culture at the unit and regional level. These two questions were answered using an A (excellent) through F (Failing) rating scale. The questionnaire can be found in Appendix A.

### Response Rates

The response rate was 30% across all 4 regions. Table 1 shows response rates by region and by staff category. For the regional response rates, the number of surveys mailed out and returned is not shown in order to protect the identity of the 4 regions that participated in the study. The number of respondents is also shown by sector and as a proportion of all responses. Response rates could not be calculated by sector as we relied on a combination of site information and respondent information to link respondents to sectors. The sector data should be interpreted with care as certain sectors are more likely to be underreported (MH and LTC) because of the way the questionnaire was structured.

**Table 1 - Respondents**

	# returned/ # sent out	Response rate
<b>Across Full Sample</b>	<b>1790/5993</b>	<b>30%</b>
<b>By Region</b>		
Region 1		36%
Region 2		31%
Region 3		28%
Region 4		26%
<b>By Staff Category</b>		
Nursing	563/1656	34%
Care assistants	423/1626	26%
Allied HPs, health care technicians, EMS staff	297/966	31%
Direct Care Managers	177/297	60%
Support Staff (direct care and non-direct care areas)	261/1253	21%
	# returned in sector	Proportion of respondent group
<b>By Sector</b>		
Acute Care	549	30.7%
Long Term Care	445	24.9%
Community / Out-Patient Care	435	24.3%
Pre-hospital Care	103	5.8%
Mental Health Services	56	3.1%
Acute & Community Care	160	8.9%
Corporate or unknown	42	2.3%
<b>TOTAL Returns</b>	<b>1790</b>	<b>100%</b>

## Using Patient Safety Culture Data to Drive Change and Improvement

Survey items reflect perceptions of the importance of patient safety on the unit and in the organization, perceptions of how safety failures are handled, the state of attitudes and knowledge regarding patient safety issues and perceptions of the state of patient safety in the organization. There are many ways to consider and approach data such as these when it comes to driving change initiatives.

- (1) *Looking at high and low performance on individual survey items.* It is reasonable and may be important to examine items where a fairly low proportion of staff give positive responses while at the same time celebrating those areas where an organization achieves a very high percentage of positive responses (e.g where over 80% of staff agree and strongly agree with various individual survey items).
- (2) *Focusing on questions that reflect areas that are the most important to staff.* Using simple correlations between individual survey items and overall ratings of patient safety can help to prioritize which items are the most important contributors to overall safety ratings from staff members' perspectives. Combining this knowledge with knowledge from (1) above can help regions focus in on areas that are particularly important and are achieving fewer positive responses.
- (3) *Benchmarking - Looking for high performing groups.* Looking to other groups for which similar data are available can provide useful learning opportunities. It is reasonable to consider how other similar organizations perform using the same instrument and, in particular, how specific sites within a health region perform. Indeed, in a regionalized setting, it is likely that sites will provide richer sources of meaningful variation for comparison and learning purposes. There were 15 sites in this dataset with respondent groups large enough to permit meaningful comparisons (15 sites had >30 respondents). Comparing these data at a regional level is not recommended because (a) using a unit of analysis that is regional will be heavily biased by larger sites in the region, and (b) culture within a region is likely to be a heterogeneous aggregate of what are really more meaningful homogeneous site and professional sub-cultures.

## Data Analysis & Reporting

In keeping with the above suggestions for how to use these data to foster change and improvement, data are reported in several ways.

### *Comparing Mean Scores by Region, Staff Group and Sector.*

First, data are presented for groups of questions that were used to measure each of the four broad areas covered by the survey noted above: (1) Valuing safety at the organization and department level; (2) Fear of repercussions; (3) Perceived State of safety; and (4) Supervisory leadership (see Box 1 for questions in each dimension). Mean scores on each of these dimensions of patient safety culture are presented by staff group and by sector (for all 4 regions combined), and by region. These high level data are presented in tables 2 through 4 and are designed to show broad differences across these groups. The 95% Confidence Interval (CI) of the mean is provided to help make it clear when differences between groups should be considered statistically significant. If the lower and upper bounds of the 95% CI for 2 groups overlap, then differences between the groups are NOT statistically significant<sup>2</sup>. These data are presented in tables 2 through 4 and some discussion is

---

<sup>2</sup> A Confidence Interval of the mean reflects the fact that mean scores are actually estimates of the mean (E.g the mean will vary from sample to sample of respondents with these 4 health regions). Instead of a single estimate for the mean, a confidence interval generates a lower and upper limit for the mean. The interval estimate gives an indication of how

provided indicating which differences are statistically significant as well as what level of difference should be considered clinically meaningful<sup>3</sup>.

#### *Data for individual survey Questions.*

More detailed data are shown by reporting the percentage of positive responses for each of the individual questions that make up these four dimensions. The percentage of positive responses includes the percentage of respondents who *agreed* or *strongly agreed* with the positively worded statements in the questionnaire and, for negatively worded statements, the percentage of respondents who *disagreed* or *strongly disagreed* with the statement. These data on individual questions are provided on a site by site basis. Consistent with the suggestions above, Regions are encouraged to look at and learn from their own high and low performing questions, as well as lower performing areas where another site performed very well and might provide opportunities for networking, data sharing and learning. The safety body that initiated the project will facilitate this networking process by brokering contacts between sites wishing to share current practice in these areas. Responses for individual questions for each Region are provided in Appendix B.

### Box 2 – Survey Items in Each of the Four Dimensions

<b>Valuing Safety</b>	<b>State of Safety</b>
Senior management provides a climate that promotes patient safety	Loss of experienced personnel has negatively affected my ability to provide high quality patient care (%disagree)
Patient safety decisions are made at the proper level by the most qualified people	I have enough time to complete patient care tasks safely
Good communication flow exists up the chain of command regarding patient safety issues	I believe that health care error constitutes a real and significant risk to the patients that we treat (%disagree)
Senior management has a clear picture of the risk associated with patient care	In the last year, I have witnessed a co-worker do something that appeared to me to be unsafe for the patient in order to save time (%disagree)
My organization effectively balances the need for patient safety and the need for productivity	I have made significant errors in my work that I attribute to my own fatigue (%disagree)
My unit does a good job managing risks to ensure patient safety	I believe health care errors often go unreported (%disagree)
Senior management considers patient safety when program changes are discussed	I am provided with adequate resources (personnel, budget, and equipment) to provide safe patient care
I work in an environment where patient safety is a high priority	<b>Supervisory Leadership</b>
My unit takes the time to identify and assess risks to patients	My supervisor says a good word when he/she sees a job done according to established patient safety procedures
I am rewarded for taking quick action to identify a serious mistake	My supervisor seriously considers staff suggestions for improving patient safety
<b>Fear of Repercussions</b>	Whenever pressure builds up, my supervisor wants us to work faster, even if it means taking shortcuts (%disagree)
I will suffer negative consequences if I report a safety problem (%disagree)	My supervisor overlooks patient safety problems that happen over and over (%disagree)
If people find out I made a mistake, I will be disciplined (%disagree)	
Clinicians who make serious mistakes are usually punished (%disagree)	
Reporting a patient safety problem will not result in negative repercussions for the person reporting it	

much uncertainty there is in the estimate of the true mean. The narrower the interval, the more precise the estimate and the smaller the size of the respondent group, the larger the confidence interval.

<sup>3</sup> Effect sizes are used to comment on how clinically meaningful differences between groups are.

## Results

### *Comparing Mean Scores by Region, Staff Group and Sector.*

Table 2 shows the scores on each of the 4 safety culture dimensions by Region. Table 2 shows that regions tend to score between 3.5 and 4 out of 5 on three of the four dimensions, with lower scores (averaging closer to 3.0) on the state of safety dimension. This shows that responses to question in these dimensions tended to fall between 3 and 4 on a five-point scale where 1 is *strongly disagree*, 3 is *neutral* and 5 is *strongly agree* (with the statements in the dimension). Any negatively phrased items in the dimension were recoded so that a 1 = *strongly agree* and 5 = *strongly disagree*. Accordingly, a higher mean score is always a more positive score.

None of the differences between the regions in Table 2 are significant which means that when data are rolled up to the region level, scores are the same across regions. For this reason and for reasons mentioned above (e.g larger sites bias region-level data), region-level data are not discussed in the remainder of the report.

**Table 2 - Safety Culture Dimension Scores by Region**

	N	Mean	Std. Deviation	95% CI for Mean	
				Lower Bound	Upper Bound
<b>Valuing Safety</b>					
Region 1		3.71	0.64	3.63	3.78
Region 2		3.67	0.65	3.62	3.71
Region 3		3.60	0.67	3.54	3.65
Region 4		3.63	0.72	3.54	3.72
All Regions	1783	3.65	0.67	3.62	3.68
<b>Fear of Repercussions</b>					
Region 1		3.77	0.61	3.70	3.84
Region 2		3.71	0.60	3.67	3.75
Region 3		3.64	0.64	3.58	3.70
Region 4		3.70	0.67	3.62	3.79
All Regions	1784	3.70	0.62	3.67	3.73
<b>State of Safety</b>					
Region 1		3.01	0.66	2.94	3.09
Region 2		3.09	0.66	3.04	3.14
Region 3		3.08	0.62	3.02	3.13
Region 4		3.06	0.66	2.98	3.14
All Regions	1783	3.07	0.65	3.04	3.10
<b>Supervisory Leadership</b>					
Region 1		3.75	0.80	3.65	3.84
Region 2		3.65	0.77	3.60	3.71
Region 3		3.61	0.82	3.54	3.69
Region 4		3.64	0.84	3.53	3.74
All Regions	1760	3.65	0.80	3.62	3.69

Table 3 shows the scores on each of the 4 safety culture dimensions by staff group. There are several differences between various groups on these dimensions. On the Valuing Safety dimension, nurses and physicians score significantly lower than healthcare aides, clinical care managers, and support staff. On the fear of repercussions dimension, clinical care managers score more positively than all other groups and EMS staff score lower than nurses and health care aides on this dimension. Interestingly, on the state of safety dimension clinical care managers score LOWER than health care aides, allied and technicians, and support staff. Health care aides and support staff feel more positively about the state of safety than most clinicians (nurses, physicians and clinical care managers). In terms of supervisory leadership, clinical care managers give significantly more positive scores than both nurses and physicians.

Effect sizes<sup>4</sup> tell us about the clinical significance of these differences. Differences between groups of 0.2 or 0.3 on this 5-point scale would be considered small to medium effects. Differences between groups that approach 0.5 would be considered large effects. For instance, physicians score nearly 0.5 lower than clinical care managers on the valuing dimension, the fear of repercussions dimension and the supervisory leadership dimension.

---

<sup>4</sup> Effect sizes are differences expressed as a proportion of the standard deviation. 0.2 is considered a small effect, 0.5 a medium effect and 0.8 a large effect (Cohen & Cohen, 1983)



Table 3 - Safety Culture Scale Scores by Staff Category

Staff Group	N	Mean	Std. Deviation	95% CI for Mean	
				Lower Bound	Upper Bound
<b>Valuing Safety</b>					
Nursing	558	3.51	0.69	3.46	3.57
Care assistant	423	3.70	0.70	3.63	3.76
Allied & technicians	208	3.65	0.60	3.57	3.73
Clinical Care manager	177	3.82	0.55	3.74	3.90
Direct & non-direct care support staff	260	3.73	0.57	3.66	3.80
Physicians	30	3.31	0.56	3.10	3.52
EMS staff	88	3.57	0.78	3.41	3.74
All Staff Groups	1744	3.64	0.67	3.61	3.67
<b>Fear of Repercussions</b>					
Nursing	559	3.71	0.62	3.65	3.76
Care assistant	423	3.69	0.62	3.63	3.75
Allied & technicians	209	3.64	0.55	3.56	3.71
Clinical Care manager	177	4.01	0.58	3.93	4.10
Direct & non-direct care support staff	259	3.60	0.60	3.53	3.67
Physicians	30	3.52	0.72	3.25	3.79
EMS staff	88	3.41	0.66	3.27	3.55
All Staff Groups	1745	3.69	0.62	3.66	3.72
<b>State of Safety</b>					
Nursing	559	3.02	0.63	2.97	3.07
Care assistant	422	3.17	0.64	3.11	3.23
Allied & technicians	208	3.11	0.57	3.03	3.18
Clinical Care manager	176	2.88	0.60	2.79	2.97
Direct & non-direct care support staff	261	3.19	0.71	3.10	3.28
Physicians	30	2.75	0.80	2.45	3.04
EMS staff	88	3.05	0.68	2.90	3.19
All Staff Groups	1744	3.07	0.65	3.04	3.10
<b>Supervisory Leadership</b>					
Nursing	555	3.59	0.79	3.52	3.65
Care assistant	420	3.71	0.86	3.63	3.79
Allied & technicians	207	3.65	0.72	3.55	3.75
Clinical Care manager	172	3.83	0.67	3.73	3.93
Direct & non-direct care support staff	255	3.59	0.81	3.49	3.69
Physicians	26	3.30	0.70	3.02	3.58
EMS staff	88	3.64	0.94	3.44	3.84
All Staff Groups	1723	3.65	0.80	3.61	3.69

Table 4 shows the scores on each of the 4 safety culture dimensions by sector. There are few differences between the sectors on these 4 safety culture dimensions. The pre-hospital care sector provides lower scores on the fear of repercussions dimension than acute, LTC and community sectors. The Mental Health sector also provides lower scores than acute care on this dimension. Finally on the state of safety dimension, the acute care sector provided lower scores than the community sector. All of these differences reflect relatively small effects. None of the differences between sectors on the valuing safety dimension or the supervisory leadership dimension are significant.

**Table 4 - Safety Culture Scale Scores by Sector**

Sector	N	Mean	Std. Deviation	95% CI for Mean	
				Lower Bound	Upper Bound
<b>Valuing Safety</b>					
Acute	547	3.62	0.66	3.56	3.67
LTC	445	3.68	0.68	3.62	3.75
Community	430	3.70	0.62	3.64	3.76
Pre-Hospital	103	3.62	0.77	3.47	3.76
Mental Health	56	3.55	0.60	3.39	3.71
All Sectors	1783	3.65	0.67	3.62	3.68
<b>Fear of Repercussions</b>					
Acute	546	3.75	0.57	3.71	3.80
LTC	444	3.72	0.64	3.66	3.77
Community	433	3.70	0.62	3.65	3.76
Pre-Hospital	103	3.49	0.68	3.35	3.62
Mental Health	56	3.46	0.67	3.28	3.64
All Sectors	1784	3.70	0.62	3.67	3.73
<b>State of Safety</b>					
Acute	548	3.01	0.68	2.96	3.07
LTC	444	3.09	0.65	3.03	3.15
Community	431	3.17	0.64	3.11	3.23
Pre-Hospital	103	3.03	0.66	2.90	3.16
Mental Health	56	3.04	0.48	2.91	3.17
All Sectors	1783	3.07	0.65	3.04	3.10
<b>Supervisory Leadership</b>					
Acute	542	3.63	0.78	3.56	3.69
LTC	441	3.63	0.82	3.55	3.71
Community	421	3.76	0.75	3.69	3.84
Pre-Hospital	103	3.66	0.93	3.48	3.84
Mental Health	56	3.54	0.79	3.32	3.75
All Sectors	1760	3.65	0.80	3.62	3.69

*Data for individual survey Questions*

Table 5 and the remainder of the data presented focus on the proportion of positive responses to individual questions in the 4 dimension of patient safety culture. As noted, it is often these more detailed data that can best help drive specific change and improvement efforts.

**Table 5 - Percentage of Positive Responses on Each Question by Site**

		Site Number															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	n=1970
<b>Valuing Safety</b>																	
	Senior management provides a climate that promotes patient safety	64.7	51.8	53.3	60.3	83.6	54.2	71.8	75.7	68.4	65.7	48.6	91.2	79.4	90.9	70.0	66.7
	Patient safety decisions are made at the proper level by the most qualified people	74.8	55.2	66.7	75.8	80.3	75.0	71.8	89.7	89.5	52.8	51.4	83.3	69.7	77.4	90.0	71.8
	Good communication flow exists up the chain of command regarding patient safety issues	71.0	47.9	59.4	57.1	75.0	58.3	75.0	86.8	68.4	33.3	54.3	77.8	81.8	81.8	69.0	65.7
	Senior management has a clear picture of the risk associated with patient care	62.8	45.5	40.6	54.8	64.5	58.3	61.5	89.2	57.9	50.0	55.9	72.2	81.8	81.8	43.3	58.7
	My organization effectively balances the need for patient safety and the need for productivity	57.8	31.7	46.8	46.0	57.1	33.9	64.1	63.9	50.0	30.6	37.1	65.7	63.6	77.4	65.5	53.9
<b>H</b>	My unit does a good job managing risks to ensure patient safety	91.2	71.9	80.6	75.9	86.7	76.8	78.9	97.4	89.5	81.8	82.4	94.3	87.5	96.9	87.1	83.1
	Senior management considers patient safety when program changes are discussed	47.0	35.4	55.0	49.2	66.7	48.3	70.0	70.3	69.4	45.5	50.0	77.1	77.4	72.7	48.3	56.5
	I work in an environment where patient safety is a high priority	83.6	63.9	85.9	71.4	88.3	63.9	74.4	89.7	91.9	69.4	71.4	91.7	94.1	100.0	84.4	79.9
<b>H</b>	My unit takes the time to identify and assess risks to patients	83.9	73.0	85.7	79.7	83.3	72.7	74.4	91.9	91.7	81.8	80.0	91.4	84.4	100.0	83.9	83.1
<b>L</b>	I am rewarded for taking quick action to identify a serious mistake	35.6	25.9	41.0	41.0	27.1	25.0	45.7	27.0	35.1	37.5	28.6	37.1	47.1	40.6	41.9	33.2
<b>Fear of Repercussions</b>																	
<b>H</b>	I will suffer negative consequences if I report a safety problem (%disagree)	85.1	76.5	85.9	88.9	90.2	93.3	80.0	94.9	92.1	88.2	64.7	82.9	90.9	90.9	87.5	83.5
	If people find out I made a mistake, I will be disciplined (%disagree)	56.7	53.4	56.7	66.7	60.7	53.3	61.5	55.3	50.0	51.4	39.4	55.6	66.7	56.3	55.2	53.8
<b>L</b>	Clinicians who make serious mistakes are usually punished (%disagree)	41.8	34.3	50.0	44.4	27.3	50.9	47.2	40.0	35.7	51.6	21.4	25.8	41.4	37.0	30.8	40.8
	Reporting a patient safety problem will not result in negative repercussions for the person reporting it	79.3	67.5	79.7	88.9	85.5	90.0	77.5	94.9	89.5	69.4	68.6	77.8	81.8	78.8	71.0	78.9

**NOTE: Only differences of approximately 15-20% between sites should be considered statistically significant**

		Site Number															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	n=1970
<b>State of Safety</b>																	
<b>L</b>	Loss of experienced personnel has negatively affected my ability to provide high quality patient care (%disagree)	47.2	27.3	30.9	54.8	46.2	31.6	51.4	47.1	27.8	33.3	36.4	48.5	36.7	42.9	39.3	43.7
	I have enough time to complete patient care tasks safely	53.4	46.4	43.9	47.4	50.0	37.5	77.1	57.1	47.1	35.5	57.6	58.1	78.8	60.7	63.0	54.6
<b>L</b>	I believe that health care error constitutes a real and significant risk to the patients that we treat (%disagree)	20.3	12.4	26.2	13.3	17.5	5.0	10.0	24.3	13.9	11.4	14.3	28.6	17.6	6.5	19.4	15.9
<b>L</b>	In the last year, I have witnessed a co-worker do something that appeared to me to be unsafe for the patient in order to save time (%disagree)	46.4	46.7	46.7	48.2	55.4	37.5	63.3	44.4	47.1	18.8	33.3	33.3	64.5	53.6	55.6	49.3
	I have made significant errors in my work that I attribute to my own fatigue (%disagree)	80.6	72.6	76.6	79.4	71.2	71.9	92.3	89.2	83.8	78.8	87.9	85.7	79.4	83.3	80.6	78.5
<b>L</b>	I believe health care errors often go unreported (%disagree)	21.3	10.0	31.3	27.4	20.0	18.3	10.0	43.2	35.3	16.7	12.1	22.9	41.2	21.9	20.7	21.7
	I am provided with adequate resources (personnel, budget, and equipment) to provide safe patient care	48.1	25.6	43.5	41.4	49.1	37.5	55.3	48.6	31.4	31.3	39.4	65.6	64.7	45.2	48.3	46.3
<b>Supervisory Leadership</b>																	
	My supervisor says a good word when he/she sees a job done according to established patient safety procedures	54.3	44.9	60.7	47.5	64.4	61.8	57.1	72.2	66.7	44.1	52.9	71.4	68.8	62.5	74.2	56.6
	My supervisor seriously considers staff suggestions for improving patient safety	67.9	57.5	73.8	65.6	70.7	74.1	75.0	83.8	66.7	45.7	44.1	83.3	75.0	84.8	81.3	68.9
	Whenever pressure builds up, my supervisor wants us to work faster, even if it means taking shortcuts (% disagree)	65.2	60.7	66.1	62.9	75.9	66.7	75.7	82.1	65.8	45.7	56.3	77.1	81.3	84.4	87.5	69.0
	My supervisor overlooks patient safety problems that happen over and over (%disagree)	73.7	67.0	77.4	75.4	76.3	70.9	81.1	91.9	73.0	51.4	58.8	88.9	90.9	83.9	87.5	75.8

**NOTE: Only differences of approximately 15-20% between sites should be considered statistically significant**

## Discussion and Interpretation

### *Identifying Areas for Celebration and Areas for Improvement*

While table 5 reveals differences between sites on the proportion of positive responses for individual survey questions, it is also clear that the same groups of questions seem to receive higher and lower proportions of positive responses across all sites. Recall that the individual survey items reflect perceptions regarding leadership for safety at the unit level and in the organization, responses to reporting of safety failures and the state of safety in the organization. The far right column in table 5 reveals the %age of positive responses to each question across the 4 regions combined. Regions tend to receive a higher proportion of positive response to questions about how safety is valued and handled in the unit/organization and fewer positive responses to questions about the actual state of safety. These data are consistent with the idea that positive leadership support and cultural change around safety must precede real improvements in the state of safety.

A summary of table 5 suggests opportunities for celebration on three areas where the regions achieved >80% positive responses (these items have an H on the left in table 5):

Q16. I will suffer negative consequences if I report a safety problem (%disagree)	83.5% disagree
Q6. My unit does a good job managing risks to ensure patient safety	83.1% agree
Q5. My unit takes the time to identify and assess risks to patients	83.1% agree

In terms of identifying opportunities for improvement, it may be useful to consider the five areas where the regions achieved fewer than 50% positive responses (these items have an L on the left in table 5):

Q24. In the last year, I have witnessed a co-worker do something that appeared to me to be unsafe for the patient in order to save time (%disagree)	49.3% disagree
Q21. Loss of experienced personnel has negatively affected my ability to provide high quality patient care (% disagree)	43.7% disagree
Q23. Clinicians who make serious mistakes are usually punished (%disagree)	40.8% disagree
Q18. I am rewarded for taking quick action to identify a serious mistake	33.2% agree
Q28. I believe health care errors often go unreported (%disagree)	21.7% disagree
Q27. I believe that health care error constitutes a real and significant risk to the patients that we treat (%disagree)	15.9% disagree

### *Identifying the Most Important Survey Questions*

Another approach to prioritizing areas for change and improvement is to try to identify which questions are the most important for patient safety. One way to do this is to look at those questions on the survey that contribute most to overall ratings of patient safety for the organization. To accomplish this each of the survey questions was correlated with the question on the survey which asked respondents to give an overall grade to their region on patient safety (q38). Questions with the highest correlation can be considered to be among the most important contributors to respondents overall safety rating. Box 2 shows 9 questions that were among the most highly correlated<sup>5</sup> with overall safety ratings in all 4 regions in this initiative.

#### **Box 2**

- Q2. Good communication flow exists up the chain of command regarding patient safety issues
- Q4. Senior management has a clear picture of the risk associated with patient care
- Q7. Senior management provides a climate that promotes patient safety
- Q25. I am provided with adequate resources (personnel, budget, and equipment) to provide safe patient care
- Q29. My organization effectively balances the need for patient safety and the need for productivity
- Q30. I work in an environment where patient safety is a high priority
- \*Q40. The people who run this organization are quick to spend money to improve the quality of our services
- \*Q41. Senior managers in this organization are completely committed to the idea that if we study the way we do our work, we can make things better around here
- \*Q43. The organizational leaders are extremely active in identifying priority areas for improvement

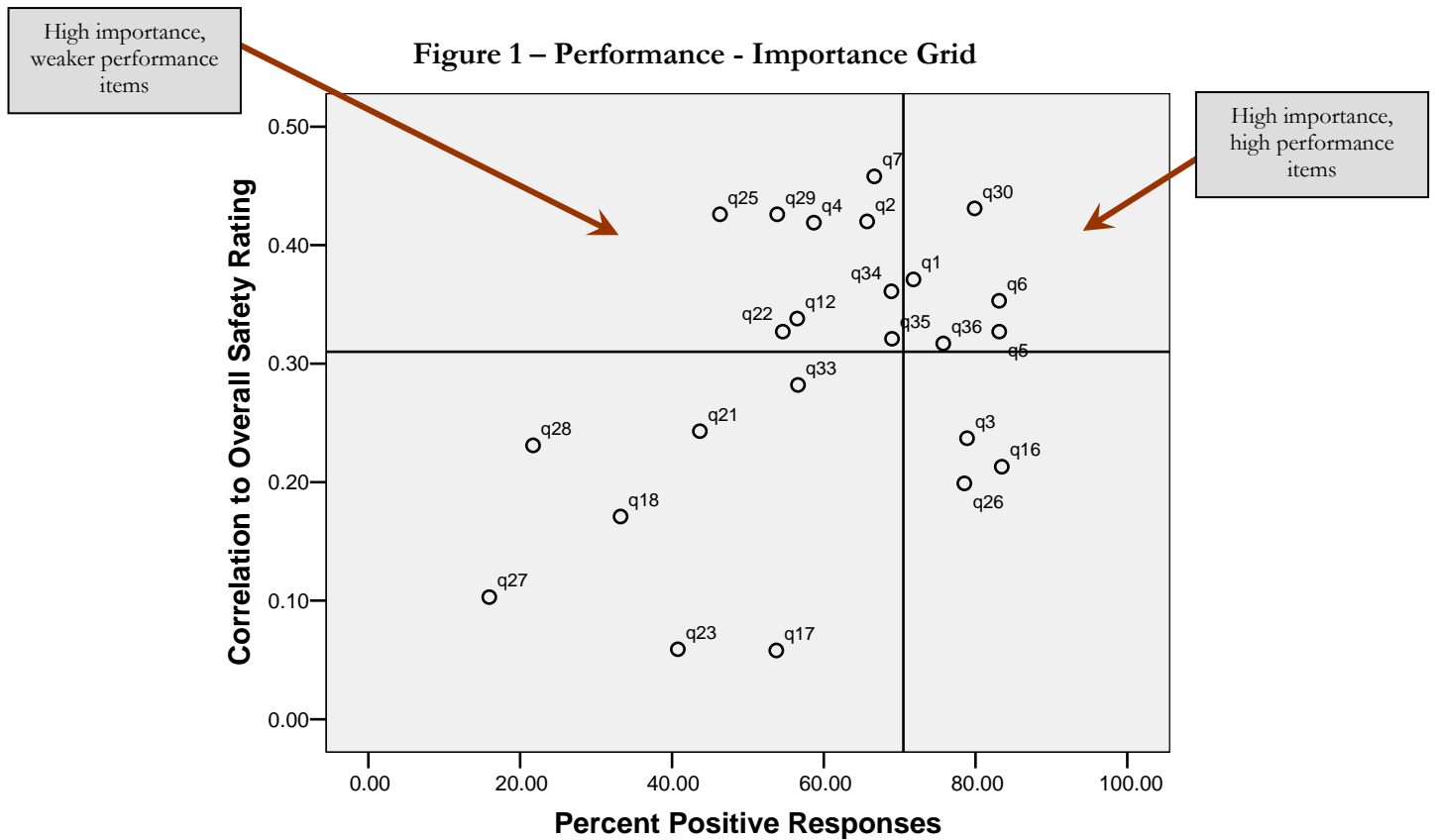
\*These 3 questions were asked at the end of the questionnaire using a different scale in a section with 9 questions on the organization's improvement orientation. These questions are not included with other analyses because of the different response scale that was used (7-point agree-disagree Likert-type instead of 5-point).

### *Considering Performance and Importance*

Finally, figure 1 on the next page plots (1) an items performance (percentage of agree/strongly agree responses –or disagree/strongly disagree for negatively worded questions) as the percentage of positive responses on the X axis, and (2) the item's correlation with the overall patients safety rating question (q38) as the importance rating on the Y-axis. This plot is useful for identifying items with strong performance and high importance to celebrate (top right quadrant), items with strong performance but less importance (bottom right quadrant). Items with weaker performance and high importance (the top left quadrant) may be the areas to prioritize and target for change and improvement. Items in the bottom left quadrant can also be targeted for action, though they are less important to overall patient safety scores given by staff. Note that the lines are somewhat arbitrary and simply help to group items into the areas just described. This grid is provided with all 4 regions data combined given the lack of variation in performance and importance at the region level.

---

<sup>5</sup> r = at least 0.35 for all of these questions and r>0.4 for most of them (the r-squared range is .12 to .36)



**Other Options for Considering These Data**

Provided that caution is used, the Regions may be interested to see how other hospitals have scored on some of these survey items. Singer, Gaba, and colleagues (2003) reported on data from 15 U.S hospitals where a similar questionnaire was completed. Raw data on a question by question basis are presented in their paper. When making any comparisons, it is important to recognize that personnel surveyed in the Singer et al. study may not be identical. Also note that Singer et al. report on the percentage of “problematic responses” (those who disagree and strongly disagree with positively worded items and agree to negatively worded items). Frequencies for each question by Region are provided in Appendix B and these are the data that should be used if you are seeking similar comparisons to the Singer et al. data.

Finally, as this instrument achieves more widespread use across Canada as part of a recently funded study by the Canadian Patient Safety Institute (Ginsburg & Tregunno, Principal Investigators), there will be additional hospitals and health regions to work with in efforts to understand and improve perceptions of hospital patient safety culture. Although this is the first time these Regions used this survey, this instrument allows organizations to track change in safety culture over time if implemented at regular intervals.

## References

- Cohen, J., & Cohen, P. (1983). Applied Multiple Regression / Correlation Analysis for the Behavioral Sciences (2<sup>nd</sup> ed.). Hillsdale, NJ: Lawrence Erlbaum
- Ginsburg, L., Norton, P.G., Casebeer, A., Lewis, S. (2005). An Educational Intervention to Enhance Nurse Leaders' Perceptions of Patient Safety Culture. Health Services Research, 40(4):997-1020.
- Singer, S.J., Gaba, D.M., Geppert, J.J., Sinaiko, A.D., Howard, S.K., & Park, K.C. (2003). The culture of safety: results of an organization-wide survey in 15 California hospitals. Quality and Safety in Health Care, 12: 112-118.
- Sorra, J. A. & Nieva, V. F. (2004). Hospital Survey on Patient Safety Culture. Rockville, MD: Agency for Healthcare Research and Quality.



Patient Safety Culture In Healthcare Organizations

**Instructions:** For the following statements, please indicate if you "strongly disagree", "disagree", "agree", or "strongly agree." If you are unsure of your answer mark "Neutral". If the question does not apply to your role or the setting you work in please mark "Not Applicable."

**Patient Safety:** Activities to avoid, prevent, or correct adverse outcomes which may result from the delivery of health care.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
1. Patient safety decisions are made at the proper level by the most qualified people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Good communication flow exists up the chain of command regarding patient safety issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Reporting a patient safety problem will not result in negative repercussions for the person reporting it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Senior management has a clear picture of the risk associated with patient care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. My unit takes the time to identify and assess risks to patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. My unit does a good job managing risks to ensure patient safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Senior management provides a climate that promotes patient safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Asking for help is a sign of incompetence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. If I make a mistake that has significant consequences and nobody notices, I do not tell anyone about it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Telling others about my mistakes is embarrassing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I am less effective at work when I am fatigued	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Senior management considers patient safety when program changes are discussed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Personal problems can adversely affect my performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Compared to other facilities in the area, this facility cares more about the quality of patient care it provides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I have learned how to do my own job better by learning about mistakes made by my coworkers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I will suffer negative consequences if I report a patient safety problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. If people find out that I made a mistake, I will be disciplined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I am rewarded for taking quick action to identify a serious mistake	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Individuals in my unit are willing to report behaviour which is unsafe for patient care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I am asked to cut corners to get the job done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Loss of experienced personnel has negatively affected my ability to provide high quality patient care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I have enough time to complete patient care tasks safely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Clinicians who make serious mistakes are usually punished	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. In the last year, I have witnessed a co-worker do something that appeared to me to be unsafe for the patient in order to save time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I am provided with adequate resources (personnel, budget, and equipment) to provide safe patient care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. I have made significant errors in my work that I attribute to my own fatigue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. I believe that health care error constitutes a real and significant risk to the patients that we treat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. I believe health care errors often go unreported	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. My organization effectively balances the need for patient safety and the need for productivity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. I work in an environment where patient safety is a high priority	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. I believe that most serious occurrences happen as a result of multiple small failures, and are not attributable to one individual's actions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
32. I would probably self report a “near miss” (an event that had the potential to harm a patient) if the patient was not harmed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. My supervisor/manager seriously considers staff suggestions for improving patient safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcuts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. My supervisor/manager overlooks patient safety problems that happen over and over	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

These questions are about overall patient safety	A Excellent	B Very Good	C Acceptable	D Poor	F Failing
37. Please give your unit an overall grade on patient safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Please give the Region an overall grade on patient safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about your organization over the last year, for each of the following statements please indicate the extent to which you agree or disagree with the following statements using this 7-point scale.	strongly disagree	neutral				strongly agree
39. This organization devotes an enormous amount of energy trying to learn what patients need and want	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. The people who run this organization are quick to spend money to improve the quality of our services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. Senior managers in this organization are <u>completely</u> committed to the idea that if we study the way we do our work, we can make things better around here	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. This organization devotes resources to measurement initiatives, but the results often end up sitting on a shelf	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. The organizational leaders are extremely active in identifying priority areas for improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. Other priorities leave little time for measurement and improvement activities in this organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. My organization focuses on underlying processes and systems as causes of failure as opposed to singling out individuals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. There is a leader(s) in this organization who truly promotes/champions measurement and improvement activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. This organization devotes significant resources to follow up on satisfaction survey results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please take a moment to respond to 3 additional questions to help us check the wording of a few items. These may remind you of some earlier questions.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
(a) My department takes the time to identify and assess risks to patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) My department does a good job managing risks to ensure patient safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Individuals in my department are willing to report behaviour which is unsafe for patient care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

48. Finally, please help us by providing the following information:

**Age:**  18-25    **Time in facility:**  0-6 months    **Role:**  RN    **Work Setting:**  Inpatient    **Gender:**  Female  
 26-30     6 months – 1 yr     LPN     Outpatient     Male  
 31-40     2-5 years     MD     Community  
 41-50     6-10 years     Nurse Manager  
 51-60     > 10 years     Healthcare Aide  
 > 60     0-6 months     Other \_\_\_\_\_

Adapted with permission from:



*Thank you for helping us to evaluate this patient safety initiative*

## Appendix B

**Q1 Patient safety decisions are made at the proper level by the most qualified people \* region  
Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q1 Patient safety decisions are made at the proper level by the most qualified people	1 St. disagree	.8%	1.7%	1.6%	2.9%	1.7%
	2 disagree	9.8%	10.9%	13.2%	12.7%	11.7%
	3 neutral	14.7%	14.7%	15.1%	15.2%	14.9%
	4 agree	50.0%	51.0%	56.6%	50.4%	52.4%
	5 St. agree	24.8%	21.7%	13.6%	18.9%	19.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q2 Good communication flow exists up the chain of command regarding patient safety issues \* region  
Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q2 Good communication flow exists up the chain of command regarding patient safety issues	1 St. disagree	3.4%	3.6%	3.7%	5.7%	3.9%
	2 disagree	14.6%	15.0%	17.2%	17.9%	16.0%
	3 neutral	17.5%	14.6%	14.1%	11.0%	14.4%
	4 agree	46.6%	51.0%	50.3%	48.8%	49.8%
	5 St. agree	17.9%	15.7%	14.7%	16.7%	15.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q3 Reporting a patient safety problem will not result in negative repercussions for the person reporting it \* region  
Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q3 Reporting a patient safety problem will not result in negative repercussions for the person reporting it	1 St. disagree	1.1%	1.5%	2.7%	2.0%	1.9%
	2 disagree	5.6%	6.3%	7.6%	6.9%	6.6%
	3 neutral	14.6%	13.4%	11.7%	10.2%	12.6%
	4 agree	47.0%	48.6%	54.6%	52.8%	50.7%
	5 St. agree	31.7%	30.3%	23.5%	28.0%	28.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q4 Senior management has a clear picture of the risk associated with patient care \* region  
Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q4 Senior management has a clear picture of the risk associated with patient care	1 St. disagree	5.6%	5.5%	4.6%	7.5%	5.5%
	2 disagree	13.3%	19.4%	19.4%	13.7%	17.7%
	3 neutral	23.0%	16.8%	17.8%	17.4%	18.1%
	4 agree	39.3%	40.9%	45.5%	40.2%	41.9%
	5 St. agree	18.9%	17.5%	12.7%	21.2%	16.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q5 My unit takes the time to identify and assess risks to patients \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q5 My unit takes the time to identify and assess risks to patients	1 St. disagree	1.2%	1.3%	1.6%	2.1%	1.5%
	2 disagree	5.0%	5.8%	6.7%	7.2%	6.1%
	3 neutral	7.4%	8.1%	10.8%	11.4%	9.3%
	4 agree	57.8%	55.3%	57.6%	47.9%	55.3%
	5 St. agree	28.7%	29.5%	23.3%	31.4%	27.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q6 My unit does a good job managing risks to ensure patient safety \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q6 My unit does a good job managing risks to ensure patient safety	1 St. disagree	1.1%	1.0%	1.8%	2.2%	1.4%
	2 disagree	6.1%	5.2%	6.7%	6.5%	5.9%
	3 neutral	7.6%	8.8%	11.1%	10.4%	9.5%
	4 agree	53.4%	54.8%	56.6%	53.5%	54.9%
	5 St. agree	31.7%	30.2%	23.8%	27.4%	28.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q7 Senior management provides a climate that promotes patient safety \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q7 Senior management provides a climate that promotes patient safety	1 St. disagree	2.2%	3.1%	3.3%	6.2%	3.5%
	2 disagree	9.4%	10.2%	11.6%	7.1%	10.0%
	3 neutral	16.9%	20.3%	20.8%	19.9%	19.9%
	4 agree	48.3%	48.7%	49.6%	46.9%	48.6%
	5 St. agree	23.2%	17.8%	14.7%	19.9%	18.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q8 Asking for help is a sign of incompetence \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q8 Asking for help is a sign of incompetence	1 St. disagree	61.9%	54.8%	54.1%	60.7%	56.5%
	2 disagree	29.7%	35.0%	35.7%	31.8%	33.9%
	3 neutral	2.2%	4.5%	3.7%	2.5%	3.6%
	4 agree	4.0%	2.7%	4.1%	2.9%	3.3%
	5 St. agree	2.2%	3.0%	2.5%	2.1%	2.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q9 If I make a mistake that has significant consequences and nobody notices, I do not tell anyone about it \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q9 If I make a mistake that has significant consequences and nobody notices, I do not tell anyone about it	1 St. disagree	57.6%	52.3%	54.8%	61.7%	55.1%
	2 disagree	34.7%	42.3%	40.2%	32.9%	39.2%
	3 neutral	4.8%	2.7%	3.1%	2.5%	3.1%
	4 agree	1.5%	2.2%	1.2%	.4%	1.5%
	5 St. agree	1.5%	.5%	.8%	2.5%	1.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q10 Telling others about my mistakes is embarrassing \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q10 Telling others about my mistakes is embarrassing	1 St. disagree	20.3%	16.4%	21.2%	16.0%	18.3%
	2 disagree	41.7%	36.4%	41.4%	32.0%	38.0%
	3 neutral	10.0%	14.2%	9.1%	13.1%	11.9%
	4 agree	24.7%	29.3%	27.2%	34.4%	28.7%
	5 St. agree	3.3%	3.8%	1.0%	4.5%	3.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q11 I am less effective at work when I am fatigued \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q11 I am less effective at work when I am fatigued	1 St. disagree	2.3%	.9%	.8%	.4%	1.0%
	2 disagree	6.1%	6.5%	5.6%	3.7%	5.8%
	3 neutral	6.1%	6.4%	8.9%	4.5%	6.8%
	4 agree	52.1%	55.4%	53.8%	56.4%	54.6%
	5 St. agree	33.5%	30.8%	30.9%	35.0%	31.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q12 Senior management considers patient safety when program changes are discussed \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q12 Senior management considers patient safety when program changes are discussed	1 St. disagree	.8%	2.4%	4.3%	5.1%	3.1%
	2 disagree	10.1%	9.4%	9.6%	6.0%	9.1%
	3 neutral	31.4%	32.5%	29.7%	31.1%	31.3%
	4 agree	45.7%	43.8%	46.7%	47.7%	45.5%
	5 St. agree	12.0%	11.9%	9.6%	10.2%	11.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q13 Personal problems can adversely affect my performance \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q13 Personal problems can adversely affect my performance	1 St. disagree	4.4%	3.8%	4.6%	4.1%	4.2%
	2 disagree	19.6%	20.5%	18.8%	15.2%	19.1%
	3 neutral	13.0%	14.7%	13.9%	14.4%	14.1%
	4 agree	46.7%	50.2%	50.9%	53.5%	50.3%
	5 St. agree	16.3%	10.9%	11.8%	12.8%	12.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q14 Compared to other facilities in the area, this facility cares more about the quality of patient care it provides \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q14 Compared to other facilities in the area, this facility cares more about the quality of patient care it provides	1 St. disagree	3.1%	3.4%	3.1%	3.4%	3.3%
	2 disagree	13.1%	9.8%	12.2%	8.6%	10.8%
	3 neutral	35.9%	44.8%	47.6%	48.9%	44.8%
	4 agree	28.2%	25.6%	24.7%	28.8%	26.2%
	5 St. agree	19.7%	16.4%	12.4%	10.3%	14.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q15 I have learned how to do my own job better by learning about mistakes made by my coworkers \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q15 I have learned how to do my own job better by learning about mistakes made by my coworkers	1 St. disagree	3.0%	1.8%	2.2%	.8%	2.0%
	2 disagree	11.4%	12.4%	13.1%	7.5%	11.8%
	3 neutral	21.4%	18.6%	16.7%	13.0%	17.7%
	4 agree	49.4%	54.0%	57.9%	61.5%	55.4%
	5 St. agree	14.8%	13.2%	10.1%	17.2%	13.1%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q16 I will suffer negative consequences if I report a patient safety problem \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q16 I will suffer negative consequences if I report a patient safety problem	1 St. disagree	30.4%	25.1%	26.8%	24.0%	26.3%
	2 disagree	56.7%	59.7%	55.1%	55.0%	57.2%
	3 neutral	8.9%	9.8%	9.1%	13.6%	10.0%
	4 agree	3.3%	4.4%	6.8%	4.5%	4.9%
	5 St. agree	.7%	1.1%	2.1%	2.9%	1.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q17 If people find out that I made a mistake, I will be disciplined \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q17 If people find out that I made a mistake, I will be disciplined	1 St. disagree	7.6%	9.1%	9.0%	8.7%	8.8%
	2 disagree	45.4%	45.7%	41.8%	48.5%	44.9%
	3 neutral	27.9%	24.3%	24.6%	23.7%	24.8%
	4 agree	16.4%	18.1%	21.8%	17.4%	18.9%
	5 St. agree	2.7%	2.7%	2.8%	1.7%	2.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q18 I am rewarded for taking quick action to identify a serious mistake \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q18 I am rewarded for taking quick action to identify a serious mistake	1 St. disagree	5.0%	6.2%	5.4%	6.1%	5.7%
	2 disagree	24.4%	23.9%	26.5%	22.5%	24.6%
	3 neutral	34.7%	37.7%	36.7%	34.2%	36.5%
	4 agree	30.2%	27.0%	28.3%	32.5%	28.6%
	5 St. agree	5.7%	5.2%	3.2%	4.8%	4.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q19 Individuals in my department are willing to report behaviour which is unsafe for patient care \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q19 Individuals in my department are willing to report behaviour which is unsafe for patient care	1 St. disagree	2.3%	1.4%	1.8%	1.7%	1.7%
	2 disagree	8.4%	6.1%	8.0%	3.8%	6.7%
	3 neutral	11.8%	12.8%	14.0%	10.9%	12.8%
	4 agree	60.5%	59.8%	60.2%	61.8%	60.3%
	5 St. agree	17.1%	19.8%	16.0%	21.8%	18.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q20 I am asked to cut corners to get the job done \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q20 I am asked to cut corners to get the job done	1 St. disagree	29.2%	19.8%	22.5%	21.6%	22.2%
	2 disagree	47.3%	46.8%	49.7%	50.6%	48.3%
	3 neutral	11.0%	16.2%	12.2%	12.9%	13.8%
	4 agree	9.5%	12.9%	11.6%	9.5%	11.6%
	5 St. agree	3.0%	4.3%	3.9%	5.4%	4.1%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q21 Loss of experienced personnel has negatively affected my ability to provide high quality patient care \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q21 Loss of experienced personnel has negatively affected my ability to provide high quality patient care	1 St. disagree	10.0%	7.8%	8.6%	8.5%	8.5%
	2 disagree	32.4%	33.8%	36.8%	39.0%	35.2%
	3 neutral	24.9%	23.1%	23.1%	15.7%	22.3%
	4 agree	21.2%	23.7%	22.2%	27.4%	23.4%
	5 St. agree	11.6%	11.5%	9.3%	9.4%	10.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q22 I have enough time to complete patient care tasks safely \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q22 I have enough time to complete patient care tasks safely	1 St. disagree	4.9%	5.7%	6.0%	7.2%	5.9%
	2 disagree	22.9%	24.2%	21.0%	22.4%	22.8%
	3 neutral	14.3%	19.7%	16.3%	11.2%	16.7%
	4 agree	48.2%	42.8%	49.0%	51.6%	46.7%
	5 St. agree	9.8%	7.5%	7.7%	7.6%	7.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q23 Clinicians who make serious mistakes are usually punished \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q23 Clinicians who make serious mistakes are usually punished	1 St. disagree	12.1%	9.6%	8.6%	10.0%	9.7%
	2 disagree	33.0%	29.3%	31.1%	34.1%	31.0%
	3 neutral	43.8%	48.3%	44.2%	41.7%	45.5%
	4 agree	9.8%	11.9%	13.1%	13.3%	12.1%
	5 St. agree	1.3%	.9%	3.0%	.9%	1.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q24 In the last year, I have witnessed a co-worker do something that appeared to me to be unsafe for the patient in order to save time \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q24 In the last year, I have witnessed a co-worker do something that appeared to me to be unsafe for the patient in order to save time	1 St. disagree	8.1%	9.9%	9.7%	10.8%	9.7%
	2 disagree	38.5%	38.2%	42.5%	39.2%	39.6%
	3 neutral	18.8%	21.1%	20.1%	16.5%	19.8%
	4 agree	23.9%	25.8%	22.2%	25.5%	24.4%
	5 St. agree	10.7%	5.0%	5.5%	8.0%	6.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%



**Q25 I am provided with adequate resources (personnel, budget, and equipment) to provide safe patient care \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q25 I am provided with adequate resources (personnel, budget, and equipment) to provide safe patient care	1 St. disagree	8.7%	9.3%	8.8%	12.8%	9.6%
	2 disagree	28.2%	27.2%	24.3%	23.4%	26.0%
	3 neutral	11.9%	20.1%	17.4%	20.4%	18.1%
	4 agree	44.0%	34.5%	43.6%	38.7%	39.2%
	5 St. agree	7.1%	8.9%	5.9%	4.7%	7.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q26 I have made significant errors in my work that I attribute to my own fatigue \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q26 I have made significant errors in my work that I attribute to my own fatigue	1 St. disagree	23.7%	24.9%	25.8%	25.8%	25.1%
	2 disagree	54.6%	53.4%	52.6%	53.8%	53.4%
	3 neutral	11.5%	13.1%	12.2%	12.5%	12.5%
	4 agree	9.2%	6.8%	7.9%	6.7%	7.4%
	5 St. agree	1.1%	1.8%	1.4%	1.3%	1.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q27 I believe that health care error constitutes a real and significant risk to the patients that we treat \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q27 I believe that health care error constitutes a real and significant risk to the patients that we treat	1 St. disagree	2.7%	3.9%	2.2%	4.6%	3.3%
	2 disagree	8.7%	16.1%	9.7%	12.6%	12.6%
	3 neutral	17.9%	20.3%	18.6%	15.5%	18.8%
	4 agree	45.2%	43.3%	45.7%	47.7%	44.9%
	5 St. agree	25.5%	16.4%	23.8%	19.7%	20.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q28 I believe health care errors often go unreported \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q28 I believe health care errors often go unreported	1 St. disagree	1.5%	4.1%	2.4%	2.9%	3.1%
	2 disagree	18.6%	18.7%	20.2%	15.4%	18.7%
	3 neutral	17.5%	26.8%	21.5%	22.4%	23.3%
	4 agree	44.9%	38.5%	43.5%	46.1%	42.0%
	5 St. agree	17.5%	11.8%	12.5%	13.3%	13.1%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q29 My organization effectively balances the need for patient safety and the need for productivity \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q29 My organization effectively balances the need for patient safety and the need for productivity	1 St. disagree	4.6%	3.0%	2.7%	4.2%	3.3%
	2 disagree	11.8%	13.2%	12.8%	13.4%	12.9%
	3 neutral	28.6%	30.4%	29.3%	31.4%	29.9%
	4 agree	48.9%	45.7%	48.7%	45.6%	47.0%
	5 St. agree	6.1%	7.8%	6.6%	5.4%	6.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q30 I work in an environment where patient safety is a high priority \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q30 I work in an environment where patient safety is a high priority	1 St. disagree	1.1%	2.2%	2.3%	2.9%	2.2%
	2 disagree	5.2%	4.5%	7.4%	7.4%	5.9%
	3 neutral	9.3%	12.0%	13.7%	11.9%	12.1%
	4 agree	55.0%	52.6%	53.0%	53.9%	53.3%
	5 St. agree	29.4%	28.7%	23.5%	23.9%	26.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q31 I believe that most serious occurrences happen as a result of multiple small failures, and are not attributable to one individual's actions \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q31 I believe that most serious occurrences happen as a result of multiple small failures, and are not attributable to one individual's actions	1 St. disagree	3.1%	2.0%	1.6%	3.0%	2.2%
	2 disagree	14.1%	11.1%	16.5%	13.1%	13.4%
	3 neutral	26.2%	32.0%	26.8%	31.2%	29.5%
	4 agree	47.7%	43.9%	46.1%	43.5%	45.0%
	5 St. agree	9.0%	11.1%	9.1%	9.3%	9.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q32 I would probably self report a "near miss" (an event that had the potential to harm a patient) if the patient was not harmed \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q32 I would probably self report a "near miss" (an event that had the potential to harm a patient) if the patient was not harmed	1 St. disagree	1.5%	1.1%	.8%	.8%	1.1%
	2 disagree	8.0%	8.2%	6.5%	8.1%	7.6%
	3 neutral	12.9%	16.3%	12.0%	10.6%	13.7%
	4 agree	61.4%	59.1%	65.1%	61.4%	61.5%
	5 St. agree	16.3%	15.3%	15.6%	19.1%	16.1%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q33 My supervisor says a good word when he/she sees a job done according to established patient safety procedures \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q33 My supervisor says a good word when he/she sees a job done according to established patient safety procedures	1 St. disagree	6.5%	6.0%	7.9%	7.8%	6.9%
	2 disagree	13.4%	15.9%	16.8%	14.8%	15.6%
	3 neutral	18.8%	21.7%	18.6%	25.7%	20.9%
	4 agree	47.1%	45.6%	46.8%	39.6%	45.4%
	5 St. agree	14.2%	10.8%	9.9%	12.2%	11.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q34 My supervisor seriously considers staff suggestions for improving patient safety \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q34 My supervisor seriously considers staff suggestions for improving patient safety	1 St. disagree	4.2%	3.6%	5.8%	5.0%	4.5%
	2 disagree	6.4%	9.4%	11.3%	8.4%	9.4%
	3 neutral	17.4%	19.4%	13.1%	18.8%	17.2%
	4 agree	54.0%	50.8%	55.0%	50.2%	52.4%
	5 St. agree	18.1%	16.8%	14.7%	17.6%	16.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q35 Whenever pressure builds up, my supervisor wants us to work faster, even if it means taking shortcuts (% disagree) \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q35 Whenever pressure builds up, my supervisor wants us to work faster, even if it means taking shortcuts (% disagree)	1 St. disagree	21.1%	15.0%	15.8%	15.3%	16.2%
	2 disagree	53.0%	52.5%	52.7%	53.3%	52.8%
	3 neutral	15.0%	17.8%	17.3%	17.9%	17.2%
	4 agree	7.5%	11.7%	11.5%	8.7%	10.6%
	5 St. agree	3.4%	2.9%	2.7%	4.8%	3.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q36 My supervisor overlooks patient safety problems that happen over and over (%disagree) \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q36 My supervisor overlooks patient safety problems that happen over and over (%disagree)	1 St. disagree	25.9%	25.5%	23.7%	27.9%	25.4%
	2 disagree	51.1%	50.4%	50.8%	48.5%	50.4%
	3 neutral	15.0%	14.8%	13.8%	12.2%	14.2%
	4 agree	5.6%	6.9%	8.2%	8.3%	7.3%
	5 St. agree	2.3%	2.4%	3.5%	3.1%	2.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q37 Please give your unit an overall grade on patient safety \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q37 Please give your unit an overall grade on patient safety	1 A-Excellent	16.7%	16.2%	12.8%	14.8%	15.1%
	2 B-Very Good	52.8%	55.5%	51.8%	54.0%	53.8%
	3 C - Acceptable	26.8%	25.6%	29.9%	25.3%	27.0%
	4 D - Poor	2.6%	2.2%	4.1%	4.6%	3.2%
	5 F - Failing	1.1%	.5%	1.4%	1.3%	1.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q38 Please give the Region an overall grade on patient safety \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q38 Please give the Region an overall grade on patient safety	1 A-Excellent	7.9%	8.2%	7.7%	5.4%	7.6%
	2 B-Very Good	44.6%	40.7%	39.9%	45.7%	41.8%
	3 C - Acceptable	40.1%	45.0%	43.9%	39.8%	43.2%
	4 D - Poor	5.4%	5.1%	6.4%	7.2%	5.8%
	5 F - Failing	2.1%	.9%	2.1%	1.8%	1.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q39 This organization devotes an enormous amount of energy trying to learn what patients need and want \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q39 This organization devotes an enormous amount of energy trying to learn what patients need and want	1 St. disagree	3.3%	4.7%	5.0%	5.8%	4.8%
	2	9.2%	6.4%	7.2%	8.3%	7.3%
	3	9.6%	11.7%	9.1%	7.4%	10.0%
	4 neutral	21.8%	25.1%	23.8%	27.3%	24.5%
	5	23.6%	24.1%	26.9%	28.5%	25.5%
	6	20.7%	17.3%	17.6%	14.9%	17.6%
	7 St. agree	11.8%	10.7%	10.3%	7.9%	10.4%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q40 The people who run this organization are quick to spend money to improve the quality of our services \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q40 The people who run this organization are quick to spend money to improve the quality of our services	1 St. disagree	13.7%	16.5%	14.4%	14.1%	15.1%
	2	17.4%	16.4%	14.0%	14.5%	15.6%
	3	14.4%	19.5%	18.9%	18.3%	18.4%
	4 neutral	31.5%	30.6%	30.4%	27.0%	30.2%
	5	16.3%	11.7%	12.8%	19.1%	13.7%
	6	4.4%	3.7%	6.0%	5.8%	4.8%
	7 St. agree	2.2%	1.6%	3.5%	1.2%	2.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q41 Senior managers in this organization are completely committed to the idea that if we study the way we do our work, we can make things better around here \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q41 Senior managers in this organization are completely committed to the idea that if we study the way we do our work, we can make things better around here	1 St. disagree	6.3%	7.6%	7.4%	5.8%	7.1%
	2	7.7%	8.9%	11.3%	7.0%	9.2%
	3	11.1%	13.8%	10.7%	7.9%	11.7%
	4 neutral	32.5%	33.9%	34.6%	31.4%	33.5%
	5	21.0%	23.3%	21.4%	31.8%	23.6%
	6	15.1%	8.3%	8.7%	12.0%	10.0%
	7 St. agree	6.3%	4.2%	6.0%	4.1%	5.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q42 This organization devotes resources to measurement initiatives, but the results often end up sitting on a shelf \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q42 This organization devotes resources to measurement initiatives, but the results often end up sitting on a shelf	1 St. disagree	3.7%	2.5%	4.7%	2.1%	3.3%
	2	12.4%	8.2%	8.8%	8.8%	9.1%
	3	10.1%	11.2%	9.3%	10.0%	10.3%
	4 neutral	36.0%	45.3%	40.7%	43.5%	42.3%
	5	22.5%	18.0%	21.6%	20.5%	20.1%
	6	9.7%	9.1%	9.3%	9.6%	9.4%
	7 St. agree	5.6%	5.7%	5.6%	5.4%	5.6%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q43 The organizational leaders are extremely active in identifying priority areas for improvement \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q43 The organizational leaders are extremely active in identifying priority areas for improvement	1 St. disagree	3.7%	5.0%	4.9%	6.6%	5.0%
	2	8.9%	9.0%	6.4%	7.1%	8.0%
	3	12.6%	12.8%	14.0%	10.4%	12.8%
	4 neutral	27.8%	31.9%	32.7%	27.8%	30.9%
	5	25.9%	27.5%	24.8%	31.5%	27.0%
	6	15.9%	9.3%	11.9%	12.0%	11.4%
	7 St. agree	5.2%	4.5%	5.3%	4.6%	4.8%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q44 Other priorities leave little time for measurement and improvement activities in this organization \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q44 Other priorities leave little time for measurement and improvement activities in this organization	1 St. disagree	3.7%	3.4%	2.3%	3.3%	3.1%
	2	11.5%	7.0%	8.4%	12.0%	8.8%
	3	12.6%	12.9%	14.4%	17.8%	14.0%
	4 neutral	37.8%	40.1%	37.0%	32.8%	37.8%
	5	20.7%	22.9%	23.5%	21.2%	22.5%
	6	7.8%	8.4%	9.1%	8.3%	8.5%
	7 St. agree	5.9%	5.2%	5.3%	4.6%	5.3%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q45 My organization focuses on underlying processes and systems as causes of failure as opposed to singling out individuals \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q45 My organization focuses on underlying processes and systems as causes of failure as opposed to singling out individuals	1 St. disagree	4.5%	3.0%	4.5%	2.5%	3.6%
	2	4.5%	4.5%	4.7%	4.2%	4.5%
	3	7.5%	8.0%	7.4%	10.5%	8.1%
	4 neutral	36.2%	38.8%	40.2%	37.0%	38.6%
	5	27.6%	29.4%	26.6%	26.5%	27.9%
	6	14.2%	11.4%	11.3%	15.1%	12.3%
	7 St. agree	5.6%	4.8%	5.3%	4.2%	5.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q46 There is a leader(s) in this organization who truly promotes/champions measurement and improvement activities \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q46 There is a leader(s) in this organization who truly promotes/champions measurement and improvement activities	1 St. disagree	5.6%	5.9%	5.8%	5.0%	5.7%
	2	5.9%	5.5%	5.7%	6.2%	5.7%
	3	6.3%	9.9%	9.0%	9.1%	9.0%
	4 neutral	34.1%	39.1%	33.9%	34.9%	36.2%
	5	22.6%	22.0%	25.9%	24.5%	23.6%
	6	18.5%	12.6%	12.1%	14.5%	13.6%
	7 St. agree	7.0%	4.9%	7.6%	5.8%	6.2%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

**Q47 This organization devotes significant resources to follow up on satisfaction survey results \* region Crosstabulation**

% within region

		region				Total
		1	2	3	4	
Q47 This organization devotes significant resources to follow up on satisfaction survey results	1 St. disagree	6.8%	6.1%	4.7%	7.9%	6.1%
	2	8.7%	8.3%	7.4%	10.8%	8.5%
	3	8.7%	11.2%	9.6%	11.7%	10.4%
	4 neutral	41.1%	46.4%	47.7%	45.8%	45.9%
	5	19.8%	18.7%	18.8%	17.1%	18.7%
	6	11.4%	6.1%	6.8%	4.6%	6.9%
	7 St. agree	3.4%	3.0%	5.1%	2.1%	3.5%
Total		100.0%	100.0%	100.0%	100.0%	100.0%