



How you want to be treated.

PHC Annual Performance Report 2007/2008

Holy Family Hospital • Mount Saint Joseph Hospital • St. Paul's Hospital
St. Vincent's Hospitals: Brock Fahrni, Langara, Honoria Conway - Heather • Youville Residence • Marion Hospice
Community Dialysis Clinics: Sechelt, Richmond, Powell River, Squamish, North Shore, Vancouver

Last revised: July 15, 2008



Hot Dates

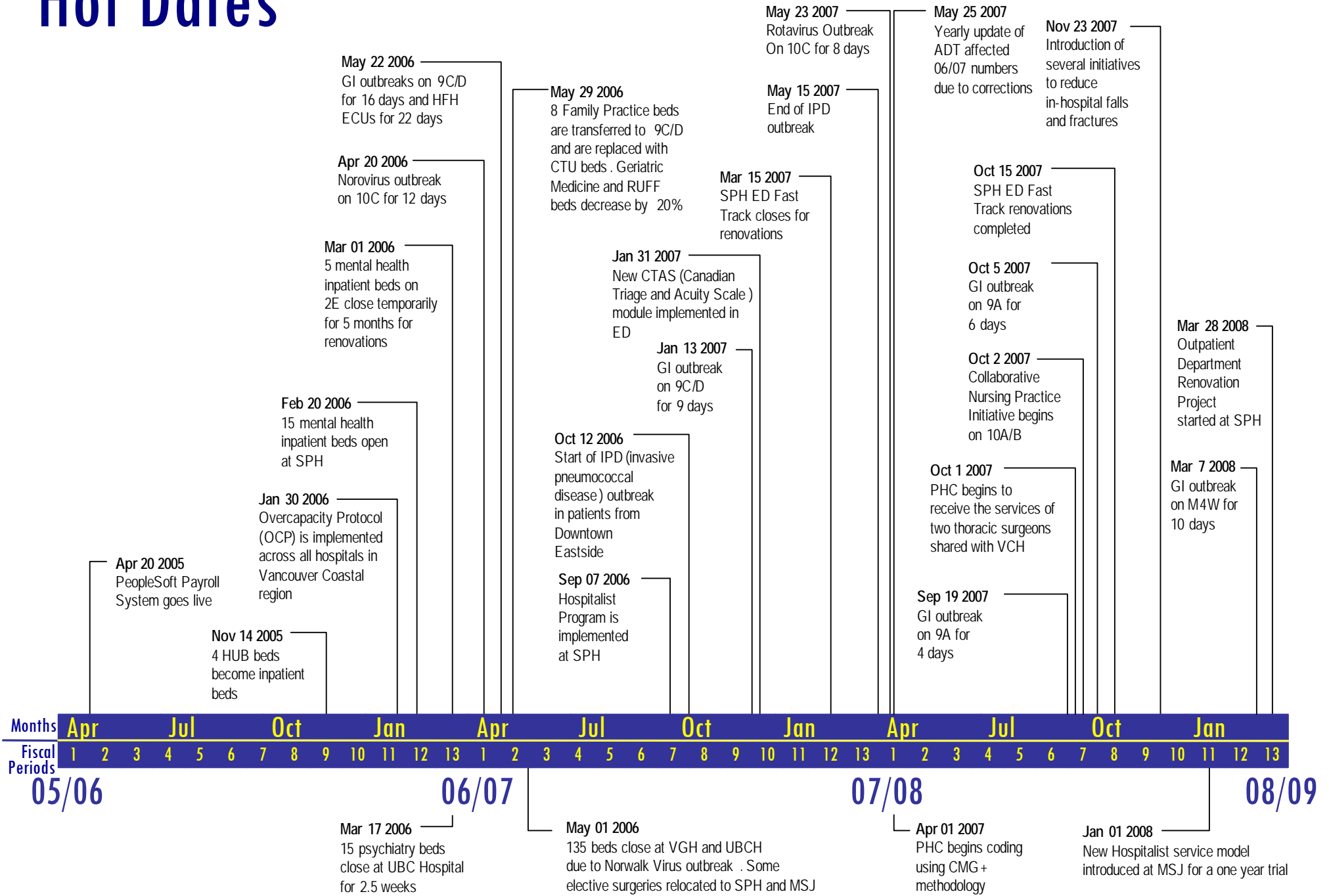


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Performance summary

Strategic Directions Goal	Status	Indicator Name	Comments	Page Ref.
Provide excellent care & service		1.1. Complication rate for diagnostic cardiac catheterization	Rate is stable. Rate is within the comparator range.	10
		1.2. Aspirin administration rate for AMI and suspected AMI	Rate is stable. Target is being met.	10
		1.3. In-hospital mortality rate for community-acquired pneumonia	Rate is stable. Rate is within the comparator rate.	11
		1.4. AMA rate for HIV/AIDS patients	Rate is stable.	11
		1.5. Rate of receipt of adequate hemodialysis	Rate has shifted in desired direction. Target is being met.	12
		1.6. Rate of adequate renal function at 6 months post-kidney transplant	Rate is stable. Target is not being met.	12
		1.7. Unplanned readmission rate for mental health & addictions	Rate is stable. Target is being met.	13
		1.8. Residential care indicators – Placeholder	Indicators are currently under review.	13
		1.9. Resident overall satisfaction rate	Rate has improved over previous survey year. Target is not met in most recent year; gap between rate and target is not significant.	14
		1.10. Resident family overall quality rate	Rate has deteriorated over previous survey year. Target is met in most recent survey year.	14
		1.11. Emergency patient satisfaction rate	Target is met.	15
		1.12. Acute inpatient satisfaction rate	Rate has performed on par with comparator.	15
		1.13. Ambulatory oncology satisfaction rate	Rate has performed at the optimal level.	16
		1.14. HSMR (hospital standardized mortality ratio)	Ratio has improved significantly over previous year. PHC is performing significantly better than national comparator.	16
		1.15. In-hospital deaths per 100 patients in CMGs with less than 1% mortality	Rate is stable. Target is being met.	17
		1.16. In-hospital fracture rate per 1,000 patients aged 65 years and older	Rate continues to improve. Target is not met in most recent year; gap between rate and target is not significant.	17
		1.17. Influenza immunization rate for residents	Slight improvement in rate over previous year. Target is met in most recent year.	18
		1.18. Influenza immunization rate for staff	Targets are not being met; gaps between rates and targets are significant.	18
		1.19. %ARO (antibiotic-resistant organism) positive census days	The % ARO positive census days has been stable since fiscal 05/06.	19
		1.20. Housekeeping audits	Rate is stable. Target is being met.	19
		1.21. Clean Hands for Life™ campaign	Overall, hand hygiene compliance improved significantly by the time of the conclusion of the Clean Hands for Life™ campaign.	20
1.22. Average wait time in ED for admitted patients	Rate is stable since shift in the desired direction. Target is not being met at SPH; gap between rate and target is significant.	20		
1.23. % admitted patients who leave ED within 10 hours of decision to admit time	Rate is decreasing. Target is not being met; gap between the rate and target is not significant.	21		
Improve health services		1.24. Proportion of ED patients seen by physician within target times	Rate is unstable for CTAS 2 and has shifted in the desired direction. The rate is stable for CTAS 3. Targets are not being met.	21
		1.25. % acute LOS (length of stay) compared to ELOS (expected length of stay)	Rate is stable. Action point is being exceeded.	22
		1.26. % ALC census days	Rate is improving. Target is not being met; gap between rate and target is significant.	22
		1.27. % mental health & addictions ALC discharge days	Rate is unstable. Target is not being met; gap between actual and target is not significant.	23
		1.28. Surgical cancellation rate	Rate is stable in recent periods. Target is not being met; gap between rate and target is not significant.	23
		1.29. % hip replacement patients receiving surgery within targeted wait time	Rate is unstable. Target is being met.	24
		1.30. % knee replacement patients receiving surgery within targeted wait time	Target is not being met; gap between rate and target is not significant.	24

Performance summary



	Strategic Directions Goal	Status	Indicator Name	Comments	Page Ref.
Provide excellent care & service	Improve health services	◆	1.31. % oncology mastectomy patients receiving surgery within targeted wait time	Rate is stable. Target is not being met; gap between rate and target is significant.	25
		◆	1.32. Median wait time for CABG (coronary artery bypass graft)	Rate is stable. Target is not being met; gap between rate and target is not significant.	25
		●	1.33. Unplanned readmission rate for CHF (congestive heart failure)	Rate is unstable. Target is being met	26
		●	1.34. Unplanned readmission rate for diabetes	Rate is unstable. Target is being met	26
	Improve business operations	●	1.35. Budget Variance	Target has been met; gap between actual and target is not significant.	27
		●	1.36. Current ratio	Target is being met and ratio is stable.	27
		●	1.37. Administrative and support costs as % of total expenses	Rate has remained the same as previous fiscal year. PHC is outperforming the comparator.	28
		●	1.38. Non-Ministry of Health Services revenues as % of total revenues	Rate has improved over previous fiscal year.	28
		●	1.39. Occupancy rate	Target is being met.	29
		●	1.40. % actual inpatient days to planned inpatient days	No significant change in rate over previous fiscal year. Target is being met.	29
Live our mission every day	Increase understanding of PHC's Mission	□	2.1. % positive responses to survey items related to Spirituality	Insufficient data for colour assignment.	30
		□	2.2. % positive responses to survey items related to Integrity	Insufficient data for colour assignment.	30
		□	2.3. % positive responses to survey items related to Trust	Insufficient data for colour assignment.	31
		□	2.4. % positive responses to survey items related to Respect	Insufficient data for colour assignment.	31
Create an environment that attracts & retains the best people	Attract & retain talent	◆	3.1. RN vacancy rate	Rate is stable. Target is not being met	32
	Create a superior workplace	◆	3.2. % sick hours	No significant change in rate over previous fiscal year. Target is not being met; gap between rate and target is not significant.	32
		■	3.3. % overtime hours	Rate has improved slightly over previous fiscal year. Target is not being met; gap between rate and target is significant.	33
		●	3.4. WCB MSI (musculoskeletal injury) incidence rate for direct care areas	Rate is stable. Target is being met.	33
		●	3.5. WCB incidence rate	Rate is stable. Target is being met.	34
		□	3.6. % days of work lost due to injury for direct care areas	Rate has shifted in the undesired direction.	34
		◆	3.7. WCB claims cost	Rate is stable.	35
		◆	3.8. WCB experience rating adjustment	Rate has improved over previous year. Target is not met in most recent year; gap between rate and target is not significant.	35
		●	3.9. Grievances filed rate	Rate is unstable in recent periods, however rate has improved slightly over previous fiscal years.	36
Support research & new knowledge integration	Nurture research	◆	4.1. Total annual research funding	Funding has increased over previous fiscal year.	37

Indicator status legend (refer to page 7 for status assignment rules):

● Continue to monitor	◆ Review required	■ Action required	□ Not available
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A day in the life of PHC



At PHC, on an average weekday:

- 62 patients are admitted to an acute inpatient bed
- 3 patients are admitted to an acute rehabilitation bed
- 5 babies are born
- 1 resident moves into one of our residential care homes
- 212 people visit our EDs, 30 of whom are eventually admitted to hospital as an inpatient
- 23,435 examinations, tests or procedures are conducted
- 902 clinical visits
- 59 people go home or are transferred from our acute inpatient sites
- 2 people pass away at our acute inpatient sites
- 3 people go home or are transferred from our acute rehabilitation site
- 5 babies go home
- 1 resident passes away or moves out of one of our residential care homes
- At midnight:
 - There are 528 patients in an acute inpatient bed; 17 are in intensive care, 10 are on the palliative care unit (which is the Pal unit)
 - There are 66 patients in an acute rehabilitation bed
 - There are 13 newborns
 - There are 664 residents in our residential care homes
- 87 people have major surgery in one of our main ORs or procedure rooms; 59 have major surgery on an outpatient basis and 28 on an inpatient basis (not yet checked)

Note:

The above data were compiled by calculating the average volumes occurring on weekdays (Monday to Friday) in FY 06/07. Various data sources were used, including:

- ADT Admission, Census, and Discharge Cubes
- CCIMS extract
- ORMIS Cube
- Workload Drilldown Report (Financial Analysis)



Background

Introduction

This document is intended to provide a broad view of organizational performance with an emphasis on the performance for the fiscal year 07/08.

Since its original release in February 2004, the PHC Performance Report has undergone several iterations, each iteration contributing to the improvement of the report in terms of its completeness and relevance to organizational priorities. Major changes and developments that have occurred since the last release of the report in July 2007 are:

- The introduction at PHC of a new Case Mix Grouper.
- The addition of three new patient safety indicators to the BSC and to this report: Housekeeping Audits, % Antibiotic Resistant Organism Census Days and a Clean Hands for Life™ Hand Hygiene Audit.
- Introduction of Finance Reports, a web based application which uses PHC's PeopleSoft enterprise software data to track a number of financial and human resources statistics and is accessible via the Commitment to Excellence intranet site.

PHC Balanced Scorecard Online

The online PHC Balanced Scorecard enables leaders and other stakeholders to monitor the performance of the indicators from their desktops. The online PHC Balanced Scorecard can be accessed via the Commitment to Excellence hyperlink on the PHC intranet homepage. The Balanced Scorecard is one of the options in the Data section. Users are able to either view the performance of an individual indicator at the corporate level, or drill down to greater levels of detail (to program/care team or cost centre, depending on the indicator) for selected indicators.

Balanced Scorecard

The balanced scorecard provides a comprehensive framework for evaluating the overall performance of an organization by including both financial and non-financial perspectives. Traditionally, the measure of the success of organizations has been based on financial performance without consideration of performance measures relative to the organization's ability to live its mission or achieve its strategic, non-financial goals. Originally designed for use in the private sector, the use of the balanced scorecard by health care organizations is increasing due to its relevance in managing the many different aspects of performance within the health care setting.



A balanced scorecard measures organizational performance from four different perspectives: the financial, the customer, internal business processes, and learning and growth. The traditional four-perspective approach to the balanced scorecard has been adapted to better align with PHC's five Strategic Directions:

- 1 Provide excellent care & service
- 2 Live our mission every day
- 3 Create an environment that attracts & retains the best people
- 4 Support research & new knowledge integration
- 5 Achieve strategic growth

Background



Selection of PHC Performance Indicators

The selection of the performance indicators presented in this report is the result of the efforts of numerous groups within PHC and are approved by PHC senior leadership. Additional indicators have been adopted from the VCH Balanced Scorecard. The overarching principles that guide the selection of indicators are as follows:

1. PHC performance indicators reflect the unique mission, vision, and values of this organization
2. PHC performance indicators meet the following criteria:
 - Promote improvement
 - Are simple and relevant to PHC priorities, goals, and initiatives
 - Are as specific as possible (with reference to location, time frame, patient group, etc.)
 - Reflect a mixture of process and outcome measures
 - The data required to construct the indicator is readily available and reliable
3. PHC performance indicators will evolve over time with learning, the finalization of organizational strategic directions and goals, as well as the ongoing improvement of our information systems
4. PHC performance indicators are aligned with those of the Ministry of Health and VCH

Clinical indicators for PHC are intended to measure the quality of clinical care at the corporate level with particular emphasis on the five populations of emphasis as identified by the Strategic Directions Group:

- People with Cardio-Pulmonary Risks and Illnesses
- People with Complex Medical/Social Needs (formerly Urban Health)
- People with Mental Illness
- People with Specialized Needs in Aging
- People with Renal Risks and Illnesses

The aim is also to select a set of indicators that collectively address the following dimensions of quality: effectiveness, safety, timeliness, equitability, patient-centredness, and efficiency. **Appendix B - Dimensions of quality matrix** (page 39) lists the selected indicators and the dimension(s) of quality each indicator addresses.

Indicator Limitations

The selection of indicators is limited by the availability and quality of data currently collected by existing information systems and thus the indicators presented here are not necessarily the best indicators of organizational performance. Comments related to data limitations for specific indicators can be found in **Appendix C – Technical notes**.

Report Content

This report is presented in five sections, each section corresponding to one of PHC's Strategic Directions. Within each section, the following information for each indicator is presented:

- **Indicator definition** – a description of the indicator (for details regarding the method of calculation and inclusion/exclusion criteria for each indicator, refer to **Appendix C – Technical notes**)
- **Indicator specifications** – additional information pertaining to the indicator (refer to following section for an explanation)
- **Run chart** – the data for the indicator plotted over time (refer to following section for an explanation of run charts)
- **Analysis** – an interpretation of the indicator results
- **Next steps** – a summary of the proposed follow-up actions or actions in progress for the indicator



Background

Indicator specifications

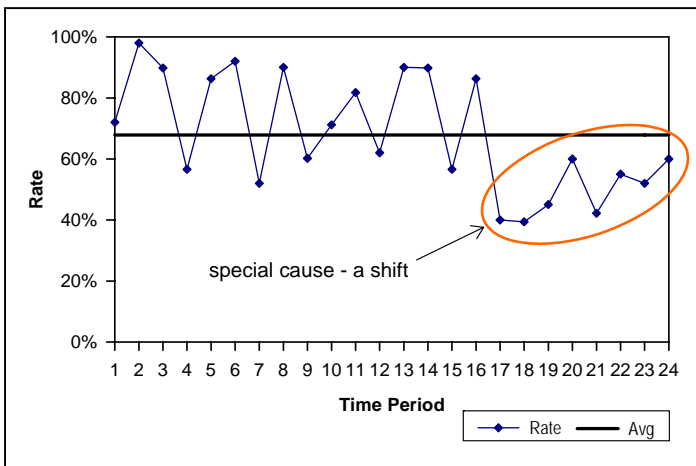
The following table provides an explanation of the specifications that are provided for each indicator.

Specification	Description	
Type	PHC	The indicator is unique to PHC
	PHC = VCH	The indicator is also included in the VCH Balanced Scorecard and is defined in the same way
	PHC ≠ VCH	The indicator is also included in the VCH Balanced Scorecard but defined differently
Report Frequency	The unit of reporting (e.g. fiscal period, calendar month)	
Preferred Trend	↓	A decrease in the level of performance is the desired trend for the indicator
	↑	An increase in the level of performance is the desired trend for the indicator
Target	The desired level of performance for the indicator	
Comparator	The level of performance for a comparison organization/entity	
Summary Symbol	See Indicator Status Legend on page 9	

Run charts

Wherever possible and relevant, the data in this report have been presented as run charts. A run chart is a performance improvement tool used to understand variation in a process. Run chart theory is based on the premise that two kinds of variation exist: the kind that is inherent in the process (*common-cause variation*) and the kind that is caused by some external influence (*special cause variation*). Run charts aid in the detection of special causes variation. The four following tests can be applied to a chart to determine the presence of a special cause (Note: As a general rule of thumb, the minimum number of useful observations (i.e., data points) that are needed to construct a run chart is 15):

- Test 1: Too many/too few runs** – A run is one or more consecutive data points on the same side of the center line. Depending on the number of data points available, there is a range of the number of runs one would expect to see from a common cause process. If there are too few or too many runs than expected, this suggests the presence of special causes of variation. For a chart with 15 useful observations the number of runs one expects to see is 4 to 12.
- Test 2: A trend** – A trend has occurred when there is an unusually long series of consecutive increases or decreases in the data. For a dataset with 20 or less useful observations, what constitutes an “unusually long series” is 6 or more data points all increasing or decreasing, and for a dataset with more than 20 useful observations, 7 or more data points.
- Test 3: A shift** – A shift has occurred in the process when a run contains too many data points. 7 or more data points in a run is considered “too many” for a dataset with less than 20 useful observations, and 8 or more data points in a run for 20 or more useful observations.
- Test 4: A pattern** – When 14 or more points form a zig-zag pattern.



When any of the above test conditions are met, this suggests the presence of a special cause, and therefore requires further investigation into the nature of the special cause.

Background



Chart colour-coding

This report adheres to the following colour-coding conventions for most run charts presented:

- ◆ PHC actual
- PHC average
- Target
- Action point
- ◆ Comparator

Indicator status legend

A status symbol is assigned to each indicator based on the following rules:

	Continue to monitor	Target is being met ↳ OR, if no target is defined, PHC is outperforming comparator ↳ OR, if no comparator is defined, a shift is observed in the desired direction
	Review required	Action point is not exceeded, but target is not being met ↳ OR, if no action point is defined, target is not being met (gap between actual and target is not "significant") ↳ OR if no target is defined, comparator is on a par with or is outperforming PHC (gap between actual and comparator is not "significant") ↳ OR, if no comparator is defined, the indicator is stable or a shift is observed in the undesired direction
	Action required	Action point is exceeded ↳ OR, if no action point is defined, target is not being met (gap between actual and target is "significant") ↳ OR, if no target is defined, comparator is outperforming PHC (gap between actual and comparator is "significant")
	Not available	Any of these conditions are met: <ul style="list-style-type: none"> ▪ Indicator has not yet been defined or is currently under review ▪ Data is currently unavailable ▪ Neither a target nor comparator is defined and there is insufficient data for trend analysis

Case Mix Groups Plus (CMG+)

At the start of fiscal year 07/08 PHC began abstracting patient charts using a new Case Mix Group methodology referred to as CMG+. CMG+ replaces the CMG/Plx schema used in previous years. CMG+, which was developed by the Canadian Institute for Health Information (CIHI) using multiple years of acute care inpatient activity and cost records, introduces and enhances several grouping factors to improve the ability to clinically group inpatients.

The CMG+ methodology is intended to allow hospitals to predict length of stay and resource use more accurately. CMG+ was designed to take advantage of the increased clinical specificity of the ICD-10-CA diagnosis schema and of the Canadian Classification of Interventions (CCI). In addition to this, CMG+ further refines CMG/Plx with components of a patient's acute visit that are known factors that influence length of stay. The factors applied across most CMG+ groups include: refined age groups, comorbidity levels, flagged interventions, intervention events and out of hospital interventions. Together, these factors are applied to the acute care inpatient cases to improve estimates of resource indicators such as Resource Intensity Weightings (RIW) and Expected Length of Stay (ELOS).

Where applicable, indicators in this report have been re-stated on a CMG+ basis for past years.

1

Provide excellent care & service

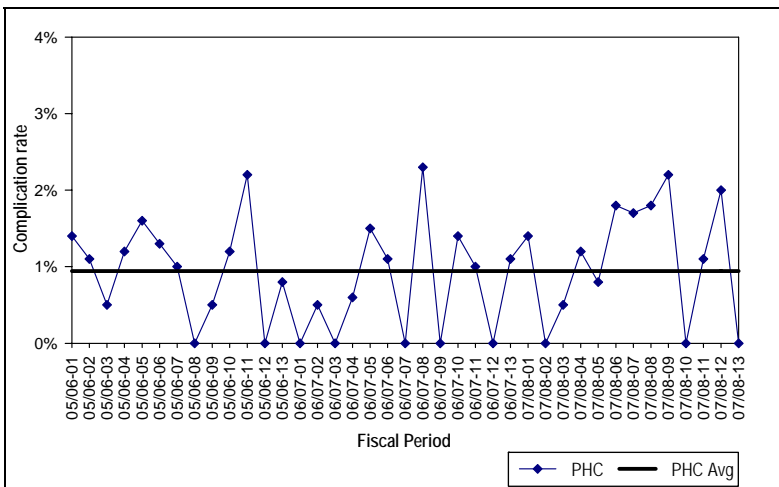
People with
Cardio-Pulmonary
Risks & Illnesses

1.1. Complication rate for diagnostic cardiac catheterization

Definition

The proportion of inpatient and outpatient cases that underwent diagnostic cardiac catheterization that also experienced a complication post-procedure.

Type	Report Frequency	Preferred Trend	Target	Comparator	Summary Symbol
PHC	Fiscal Period	↓	-	0.80 – 1.77%	●



Analysis

The average complication rate for diagnostic cardiac catheterization in FY 07/08 is 1.1%. The rate has been stable in recent periods. The average rate is within the comparator complication rates cited in the literature, which range from 0.80% to 1.77%.

Next Steps

Continue to monitor the progress of this indicator.

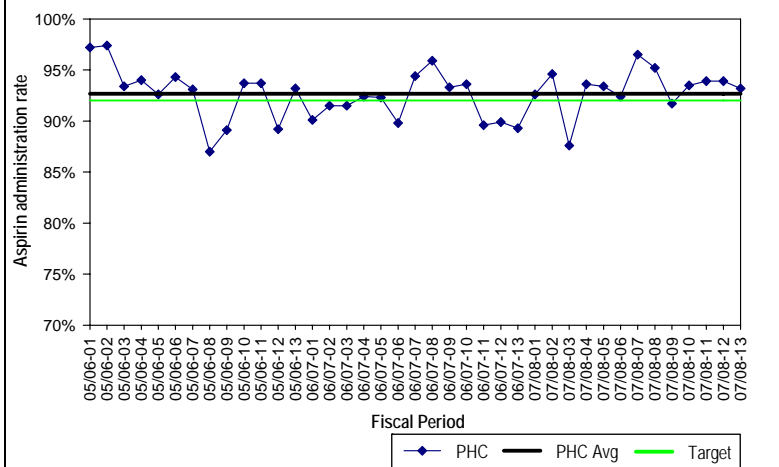
People with
Cardio-Pulmonary
Risks & Illnesses

1.2. Aspirin administration rate for AMI and suspected AMI

Definition

The proportion of inpatient cases with a most responsible, Type 1, or Type 2 diagnosis of acute myocardial infarction (AMI) or suspected AMI that received a scheduled regular dose of aspirin during hospitalization.

Type	Report Frequency	Preferred Trend	Target	Comparator	Summary Symbol
PHC	Fiscal Period	↑	92%	-	●



Analysis

The aspirin administration rate for acute myocardial infarction (AMI) and suspected AMI is stable with an average of 93.2% for FY 07/08, which is meeting the target of 92%. The aspirin administration rate for the Heart Centre, the program designated as the most responsible for the majority of AMI and suspected AMI cases, is 98.2%.

Next Steps

Continue to monitor the progress of this indicator.

Provide excellent care & service



1.3. In-hospital mortality rate for community-acquired pneumonia

People with Cardio-Pulmonary Risks & Illnesses

Definition

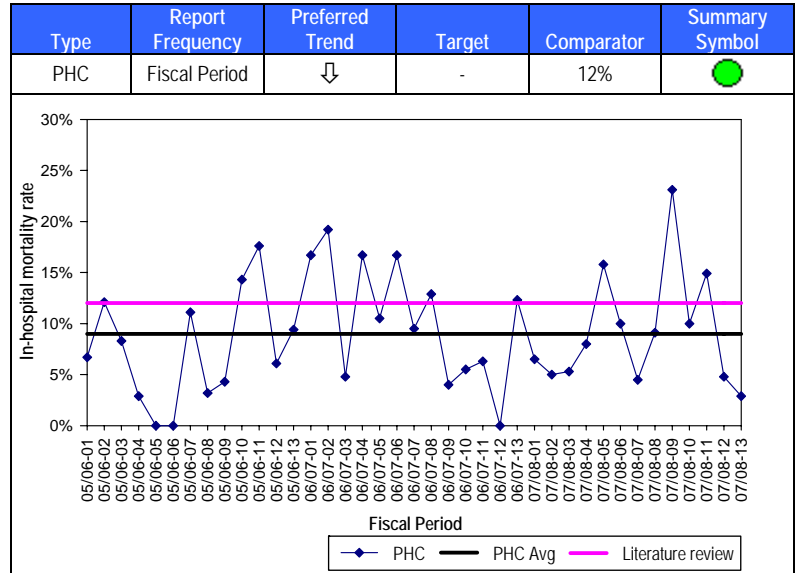
The proportion of inpatient cases with a most responsible diagnosis of community-acquired pneumonia that died in hospital.

Analysis

The overall in-hospital mortality rate for FY 07/08 is 9.2% for the entire period shown which is within the rate found in the literature of 12%.

Next Steps

Continue to monitor the progress of this indicator.



1.4. AMA rate for HIV/AIDS patients

People with Complex Medical/Social Needs

Definition

The proportion of total HIV positive inpatient cases that signed themselves out of hospital against medical advice (AMA).

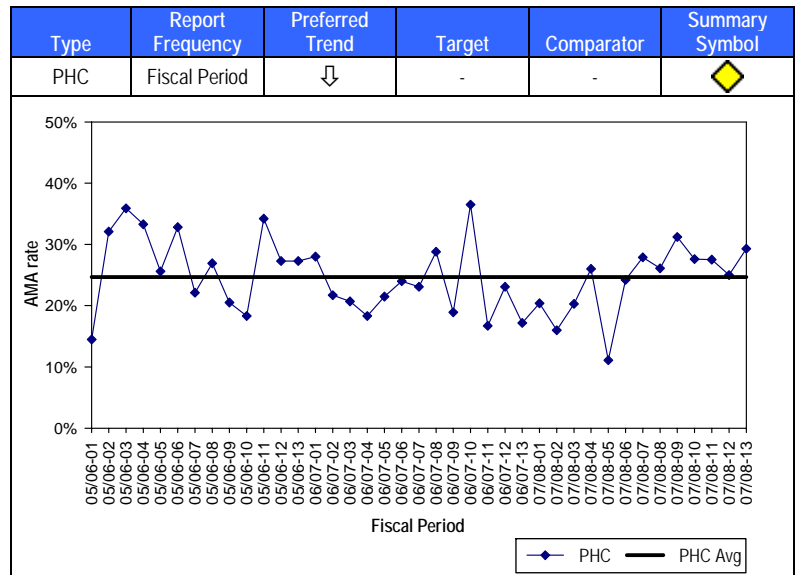
Analysis

The average AMA rate for HIV/AIDS is stable and high with an average of 24.1% for FY 07/08. This indicator is strongly influenced by the proportion of HIV positive patients who are also Intravenous Drug Users (IVDUs). IVDUs typically have AMA rates that are more than twice as high as that of non-IVDUs.

Various initiatives have been implemented to encourage patients to remain in hospital for the full duration of their treatment. The HIV/AIDS Program collaborated with the Ministry of Human Resources to ensure that patients receiving social assistance do not receive a reduction for the time spent in hospital. In addition, a process was set up by which welfare cheques could be delivered to the hospital. A transitional care unit for IV drug users, called the CTCT (Community Transitional Care Team), opened in May 2005 in the downtown eastside. Despite these efforts, there has not been a concomitant improvement in the performance of this indicator.

Next Steps

Evaluate the usefulness of this indicator.



1

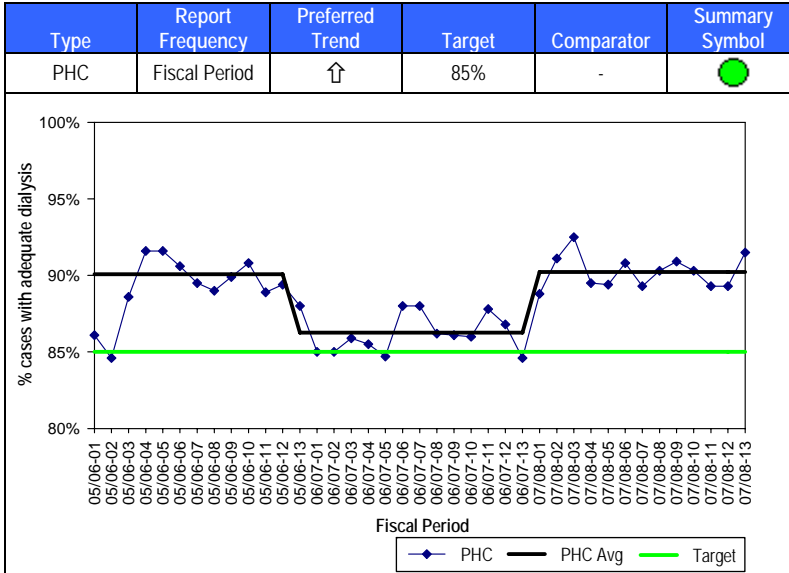
Provide excellent care & service

People with Renal Risks & Illnesses

1.5. Rate of receipt of adequate hemodialysis

Definition

The proportion of dialysis patients receiving adequate hemodialysis (defined as a percent reduction of urea, or PRU, measurement equal to or above 0.65).



Analysis

After a shift in the undesired direction at the end of FY 05/06, the rate of receipt of adequate hemodialysis has returned to levels experienced prior to the shift with an average of 90.3% since P1-07/08. The deterioration in performance coincided with a change made in membranes of the dialyzers—the machines used for performing dialysis. A new dialyzer membrane was implemented in April/May. This caused the improvement in performance seen in recent periods. Throughout the fluctuations in performance, however, the target of 85% has consistently been met.

Next Steps

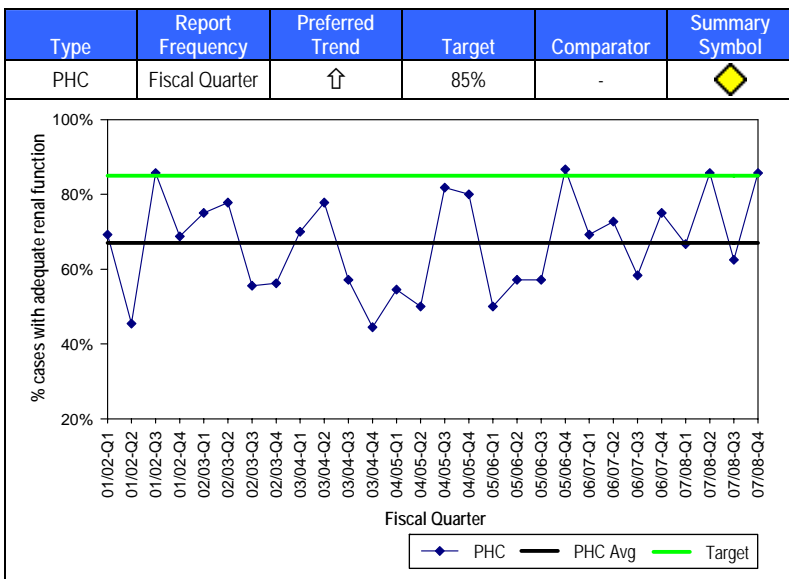
Continue to monitor the performance of the dialyzers for the next contract.

People with Renal Risks & Illnesses

1.6. Rate of adequate renal function at 6 months post-kidney transplant

Definition

The proportion of all kidney recipients with adequate renal function (defined as glomerular filtration rate equal to or above 50 mL/min) at 6 months post-transplant surgery.



Analysis

The average rate of adequate renal function at 6 months post-kidney transplant surgery is 66.1%. The rate fluctuates, and is lower than the 85% target.

The factors driving indicator this are multi-factorial but the predominant driver is the quality of the donor kidney.

Next Steps

Evaluate the usefulness of this indicator.

Provide excellent care & service



1.7. Unplanned readmission rate for mental health & addictions



Definition

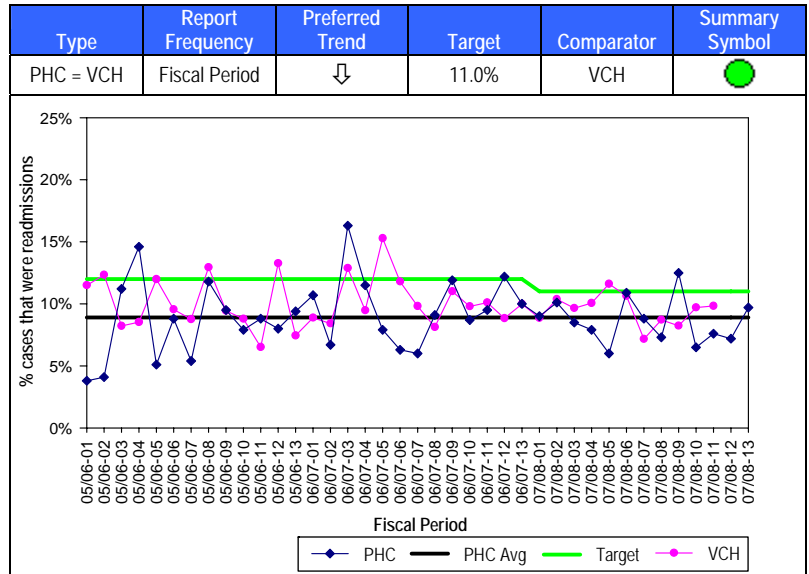
The proportion of total inpatients with a most responsible mental health or addictions diagnosis and between the ages of 15 and 64 that were readmitted to the same facility within 28 days.

Analysis

For FY 07/08, 8.6% of mental health and addictions patients were unplanned readmissions within 28 days of their previous inpatient admission. The rate is stable and is meeting the target rate of 11%. PHC is performing on par with VCH.

Next Steps

Continue to monitor the progress of this indicator.



1.8. Residential care indicators — Placeholder

Residential care indicators are currently under review for inclusion in the corporate BSC.



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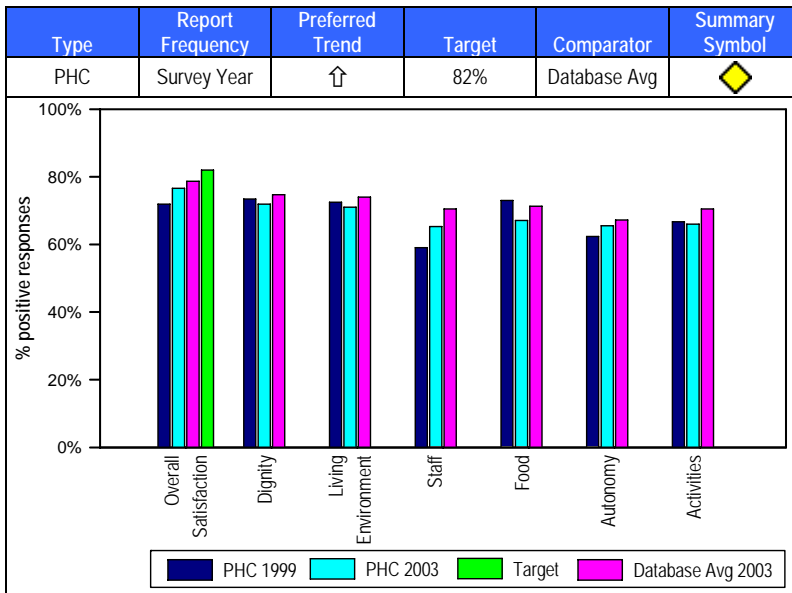
Provide excellent care & service

Patient-Centredness

1.9. Resident overall satisfaction rate

Definition

The proportion of total responses that were positive from residents for NRC+Picker Long Term Care Resident Survey questions about the quality of care provided.



Analysis

The % positive responses for the Long Term Care Resident Survey overall satisfaction was 76.6% in survey year 2003, which is lower than the target of 82%. PHC's level of performance is below the average rate of 78.7% for Canadian residential care facilities in the survey database.

Several steps have and are being taken to improve the quality of care and life in our care homes. These include, for example, changes to our staffing model including increased staffing levels, better physician services, and continued focus on the Eden Alternative philosophy. In addition, regular measurement of satisfaction with food services is being conducted to assist with improvements in this area.

The BC Health Leadership Council has decided not to conduct this survey since 2003.

Next Steps

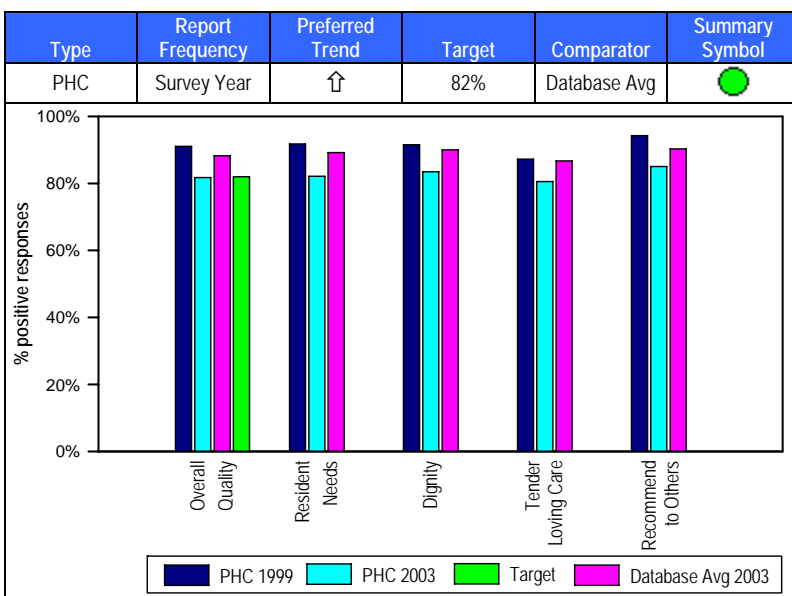
PHC will be repeating this survey in 2008 using the same survey tool.

Patient-Centredness

1.10. Resident family overall quality rate

Definition

The proportion of total responses that were positive from residents' families for NRC+Picker Long Term Care Family Survey questions about the quality of care provided.



Analysis

The % positive responses for the Long Term Care Family Survey for overall quality was 81.7% in survey year 2003, which meets the target of 82%. PHC's level of performance is below the average rate of 88.2% for Canadian residential care facilities in the survey database.

Several steps have and are being taken to improve the quality of care and life in our care homes. These include, for example, changes to our staffing model including increased staffing levels, better physician services, and continued focus on the Eden Alternative philosophy. In addition, regular measurement of satisfaction with food services is being conducted to assist with improvements in this area.

The BC Health Leadership Council has decided not to conduct this survey since 2003.

Next Steps

PHC will be repeating this survey in 2008 using the same survey tool.

Provide excellent care & service



1.11. Emergency patient satisfaction rate



Definition

The proportion of total responses that were positive from ED patients for the NRC+Picker Emergency Department Satisfaction Survey questions about the quality of care provided.

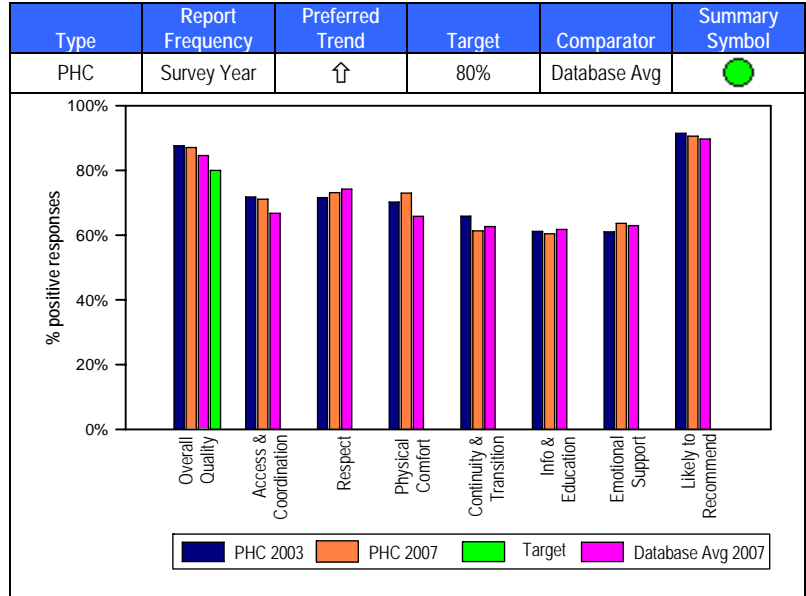
Analysis

The proportion of all responses for the 2007 survey related to Overall Quality that were positive was 87.1%. This meets the target of 80% and significantly exceeds the average result for the Emergency Departments across BC of 84.0%. The areas of significantly better results compared to the database average are Access & Coordination and Physical Comfort while PHC was below average in the areas of Respect and Continuity & Transition.

Next Steps

In response to the mandatory reporting requirements for ED wait time and patient satisfaction indicators identified in the Government Letter of Expectations, the BC Patient Satisfaction Steering Committee has moved forward with continuous surveying in the ED sector.

Continue to monitor the progress of this indicator.



1.12. Acute inpatient satisfaction rate



Definition

The proportion of total responses that were positive from acute inpatients for the NRC+Picker Acute Inpatient Satisfaction Survey questions about the quality of care provided.

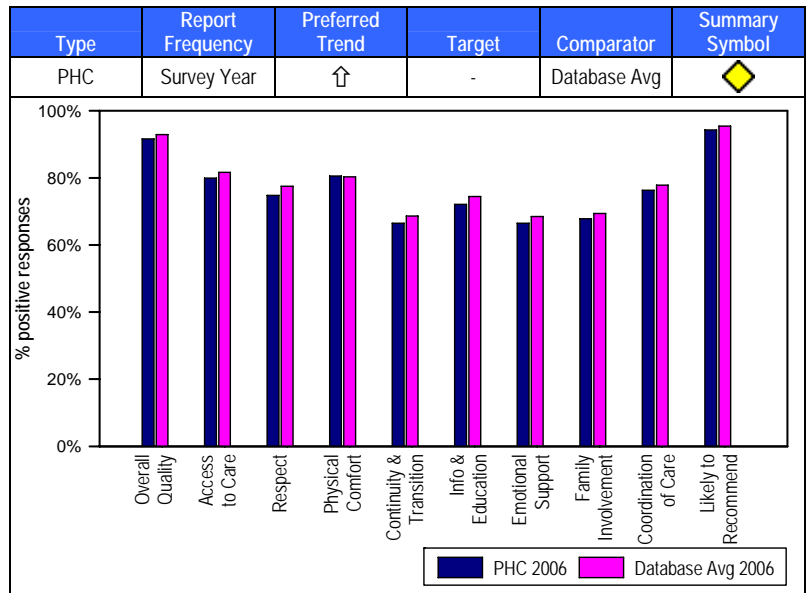
Analysis

The % of positive responses to the Acute Inpatient Satisfaction Survey item pertaining to overall quality was 91.6% in the survey year 2006. This is slightly lower than the database average of 92.9%. There are no statistically significant differences between PHC and the database average on any of the dimensions presented.

Next Steps

Since the last time this survey was conducted PHC has initiated Transforming Care At the Bedside (TCAB) project in March of 2008. One goal of the project is to improve emotional support.

A second province-wide survey of acute inpatients will occur in FY 08/09 with initial results available in April 2009.



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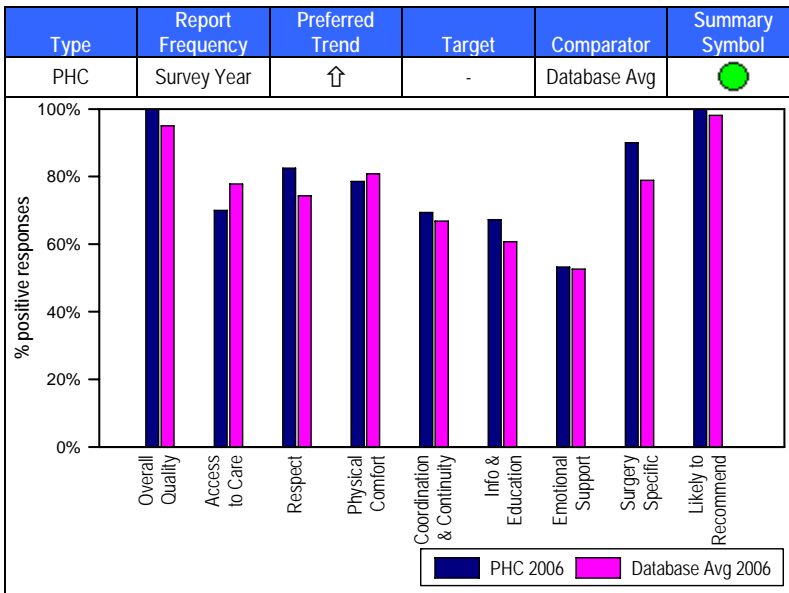
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Patient-Centredness

1.13. Ambulatory oncology satisfaction rate

Definition

The proportion of total responses that were positive from ambulatory oncology patients for the NRC+Picker Ambulatory Oncology Satisfaction Survey questions about the quality of care provided.



Analysis

The % positive responses to the Ambulatory Oncology Satisfaction Survey question pertaining to overall quality was 100.0% in the survey year 2006, which was higher than the Canadian Community Hospitals average of 95.0%. SPH either matched or exceeded the database average for all dimensions except Access to Care, although the differences were not statistically significant. The % positive scores in the Emotional Support dimension were the lowest. The range of scores at the item/question level was 21.4% to 78.6% with 4 of 8 questions scoring 25% or less.

Next Steps

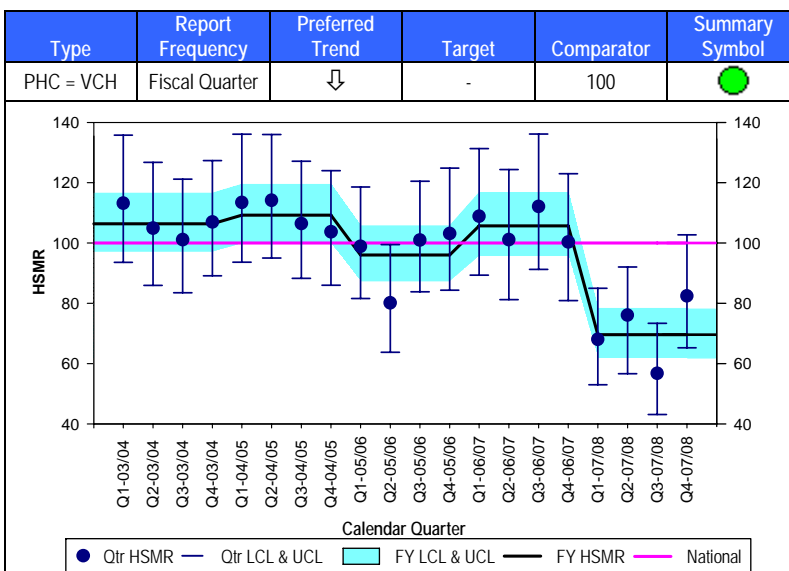
Since the last time this survey was conducted PHC has initiated the Transforming Care At the Bedside (TCAB) project in March 2008. One goal of the project is to improve emotional support.

Safety

1.14. HSMR (hospital standardized mortality ratio)

Definition

The ratio of the actual number of acute in-hospital deaths to the expected number of in-hospital deaths in CMGs (case mix groups) accounting for 80% of inpatient mortality nationally.



Analysis

The HSMR for PHC for FY 07/08 is 69.6, which indicates that PHC's actual number of deaths is lower than the expected number of deaths. This constitutes a statistically significant improvement over the previous fiscal year's HSMR of 105.6.

Next Steps

Continue implementation of the Patient Safety Plan, which include: Safer Healthcare Now! initiatives, improved care for acute myocardial infarction, prevention of central line-associated bloodstream infections, implementation of medication reconciliation, implementation of Rapid Response Teams, prevention of surgical site infections, and prevention of ventilator-associated pneumonia.

Set a target for this indicator.

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1.15. In-hospital deaths per 100 patients in CMGs with less than 1% mortality



Definition

The number of in-hospital deaths per 100 patients in "low mortality" case mix groups (CMGs). "Low mortality" CMGs are defined as those CMGs with less than 1% mortality based on national Discharge Abstract Database data for FY 03/04.

Analysis

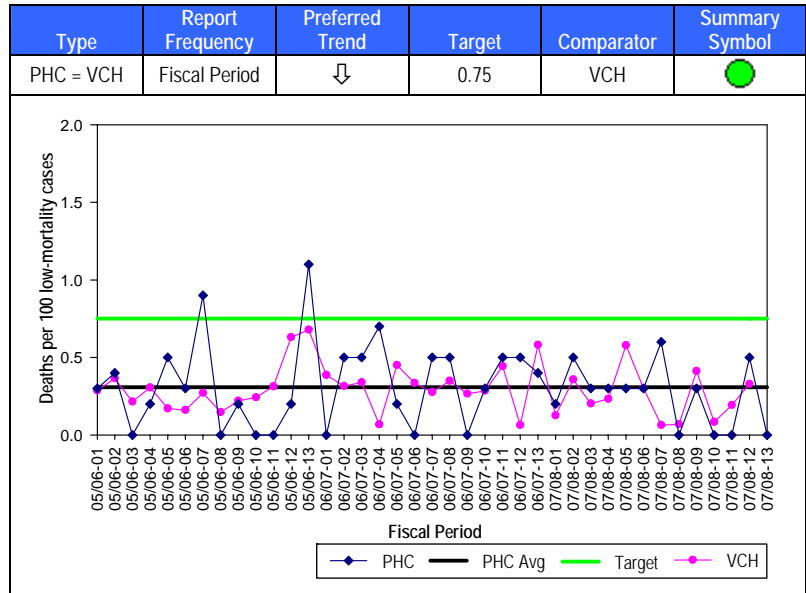
There have been an average of 0.39 in-hospital deaths per 100 cases in low-mortality CMGs in FY 07/08. Since the beginning of FY 07/08 the rate is stable and the target of 0.75 is being met in all periods.

PHC has been performing on par with VCH

Note: The number of deaths per period (the numerator) is low (median of 2 cases). The list of CMGs defining Low Mortality changes every year.

Next Steps

Continue to monitor the progress of this indicator.



1.16. In-hospital fracture rate per 1,000 patients aged 65 years and older



Definition

The number of patients with at least one in-hospital fracture per 1,000 patients aged 65 years and older. Excludes fractures of the bone following orthopaedic implant and minor fractures.

Analysis

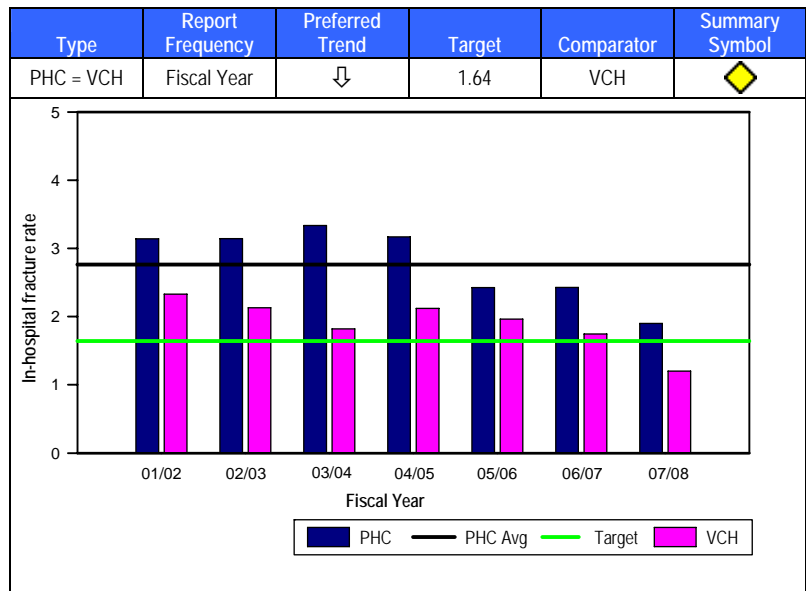
The average in-hospital fracture rate for FY 07/08 is 1.93 fractures per 1,000 patients aged 65 years or older, which is an improvement from the rate experienced in the previous fiscal year.

Initiatives that have been implemented include: the development of SAFESTEP, a collection of evidence-based interventions aimed at reducing injurious falls, which will be posted on all patient units; the addition of 2 trigger questions to the admitting Patient Biography to identify which patients require a Falls Risk Assessment; and the development of the Quick Mobility Screen to assist nurses in mobilizing patients safely from their beds.

Note: VCH FY 07/08 data only available up to P9-07/08.

Next Steps

Focus on strategies to enhance the adoption of the various initiatives to improve performance in this area.



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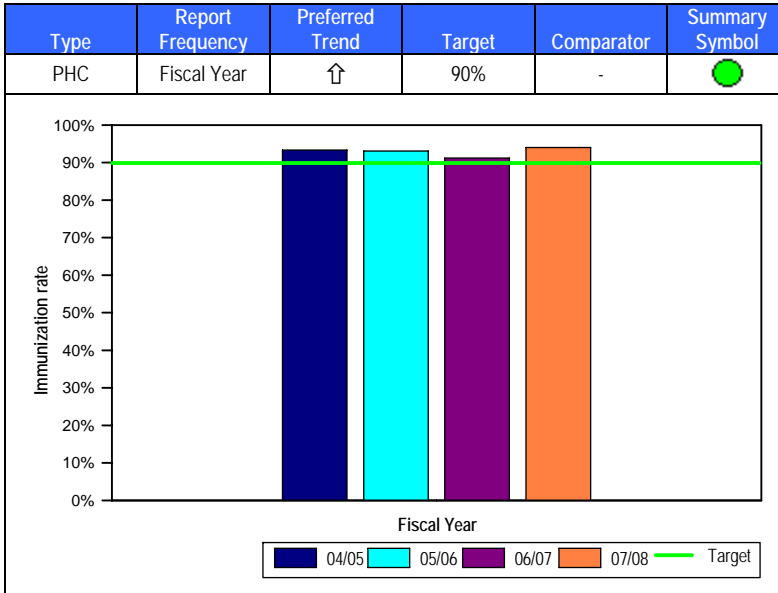
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Safety

1.17. Influenza immunization rate for residents

Definition

The proportion of all residents who received an influenza vaccination.



Analysis

The influenza immunization rate for residents for FY 07/08 was 94.0%, which meets the target of 90%. The rate has been relatively stable over the time period shown.

Next Steps

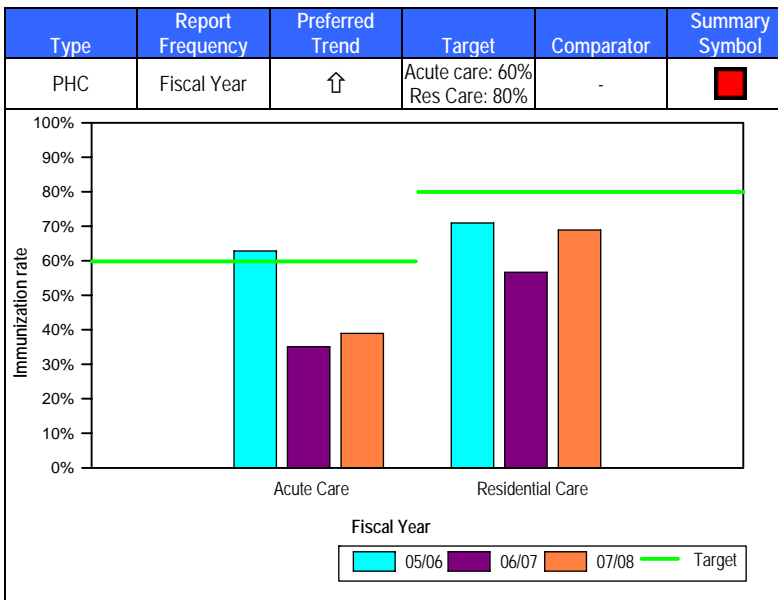
Continue to monitor the progress of this indicator.

Safety

1.18. Influenza immunization rate for staff

Definition

The proportion of all full-time, part-time, and casual staff working in acute and residential care who received an influenza vaccination during the flu season.



Analysis

The influenza immunization rate for staff for FY 07/08 was 39.0% for acute care and 68.9% for residential care. This is an improvement from the FY 06/07. Neither target is being met.

Next Steps

Change definition to adhere to the definition used by the BC Centre for Disease Control.

OHS will be working with infection control, patient safety and leaders to develop a strategy to improve staff immunization rates. Data collection methodologies for this indicator will be changed for the FY 08/09 flu season.

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1.19. %ARO (antibiotic-resistant organisms) positive census days



Definition

Number of acute inpatient census days where the patient has an active Antibiotic-Resistant Organism (ARO) alert (MRSA or VRE alerts for this indicator) expressed as a percentage of patient days.

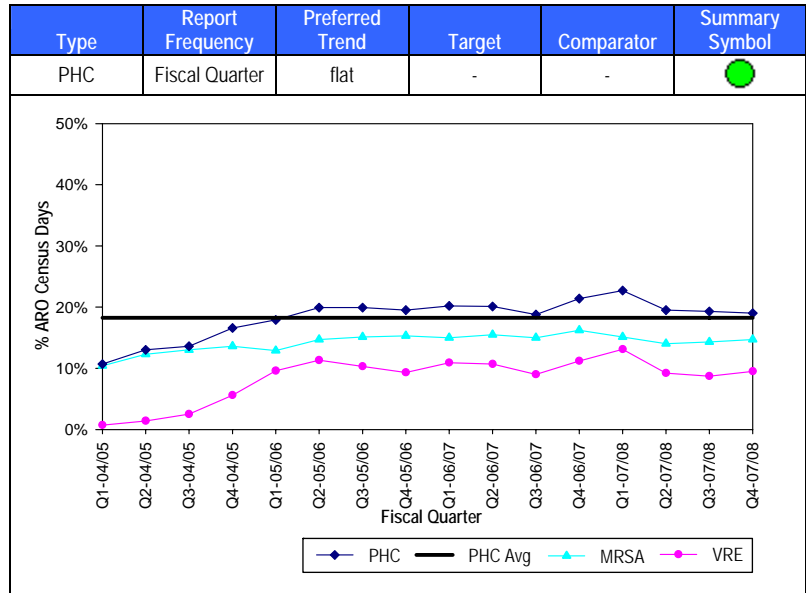
Analysis

The % ARO positive census days is stable since FY 05/06.

Efforts to lower transmission of AROs include screening patients and conducting surveillance, managing cases appropriately once they are identified (including contact tracing); outbreak management; environmental hygiene, education, research, and implementing the updated policies and procedures.

Next Steps

Over the up coming year, Infection Prevention and Control will be enhancing MRSA and VRE surveillance. This will include improving laboratory diagnosis of MRSA and VRE with decreased turnaround time for ARO Testing



1.20. Housekeeping audits



Definition

The house keeping audit score is an arithmetic mean of PHC's audit scores for tracking the performance of third party house keeping providers.

Analysis

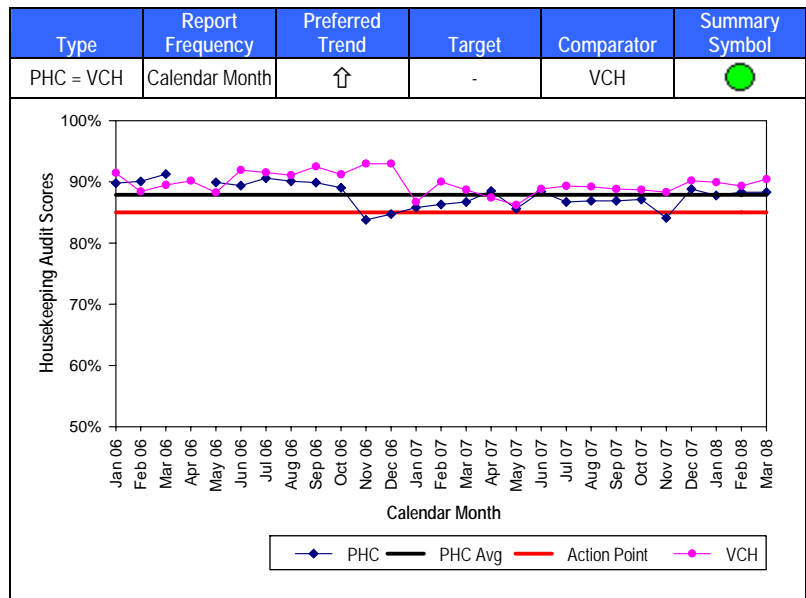
PHC has consistently met the minimum acceptable threshold for FY 07/08 with the exception of November 2007 (84.1%). PHC scores for the month of November were low mainly due to floor care issues noted by the auditors at St. Paul's Hospital and Mount Saint Joseph's Hospital. However, action plans were implemented and completed within 48 hours of the original audit. Re-audits conducted in November verified that the issues noted were rectified. PHC scores since that time have been above threshold.

In January 2008 Aramark changed its training of new cleaners to a more intensive 5 day program. Furthermore, vendor's staff are now encouraged to communicate with patients and family in the room to determine if there is any perceived deficiencies of the cleanliness of the patients' room.

Note: Not enough PHC audits were conducted in April 2006 to assign a score.

Next Steps

Continue to monitor the progress of this indicator.



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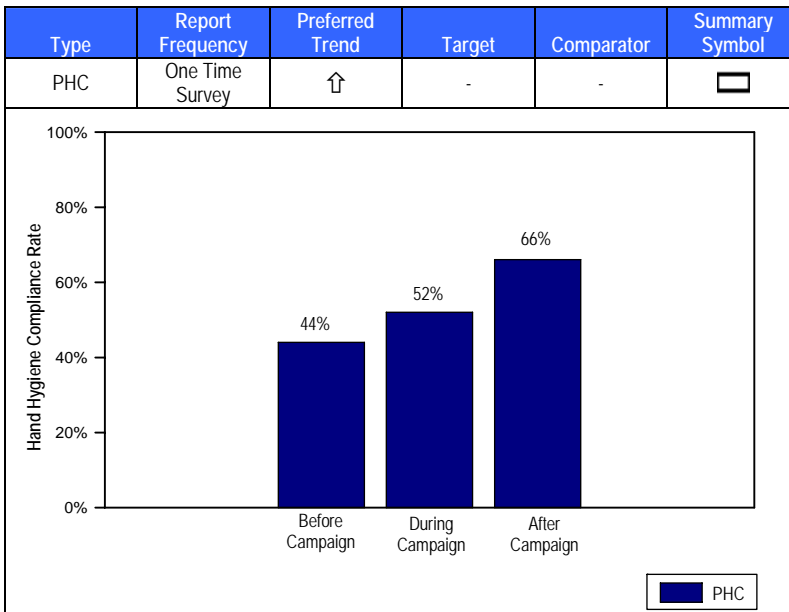
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Safety

1.21. Clean Hands for Life™ campaign

Definition

The number of compliant hand hygiene events divided by the number of hand hygiene opportunities, expressed as a percentage.



Analysis

Overall, hand hygiene compliance improved significantly by the time of the conclusion of the Clean Hands for Life™ campaign. These results are significant at a p-value of <0.05.

Note: This was an evaluation conducted in order to monitor the effectiveness of the Clean Hands for Life™ campaign. Audits were conducted before the campaign (September 21 - October 19, 2005), at the mid-point of the campaign (February 8 - March 22, 2006) and after the campaign (November 9, 2006 - July 19, 2007).

Next Steps

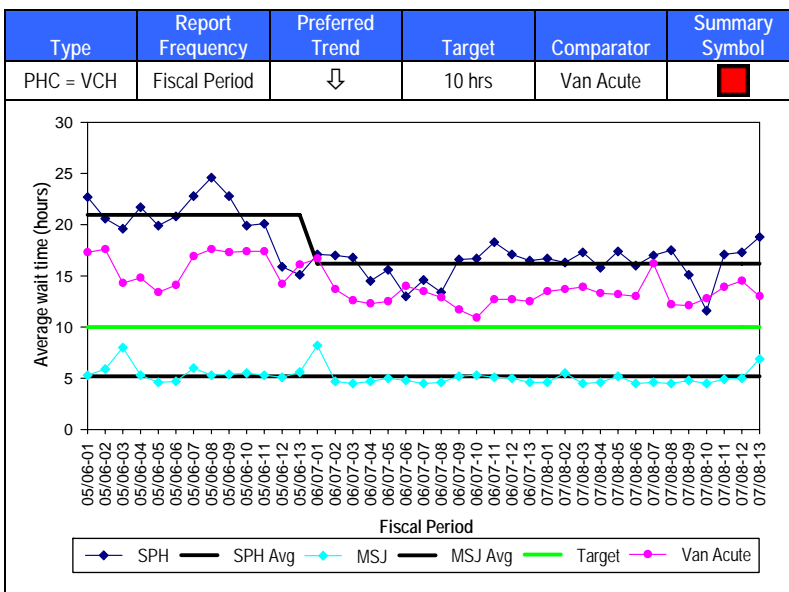
Infection Prevention & Control plans to perform regular, periodic audits to measure the sustainability of improved hand hygiene compliance.

Timeliness

1.22. Average wait time in ED for admitted patients

Definition

The average number of hours elapsed from the time of triage to either a) time of transfer from the ED to an inpatient bed OR b) time of discharge from ED, for all patients admitted through the ED.



Analysis

The average wait time in ED for admitted patients for SPH in FY 07/08 is 16.4 hours and the rate has been stable since P1-06/07. The target of 10 hours is still not being met. Several initiatives such as the Fast Track redesign and the Critical Care initiative have been implemented. There was a decrease in the number of patients staying at Comox around Christmas time, which resulted in decreased average LOS for all admitted patients. Vancouver Acute is outperforming SPH.

MSJ is consistently meeting the target with an average ED wait time of 4.9 hours (FY 07/08). In P13-07/08, the ED was open 24 hours for 4 days, which influenced the higher wait time in this period.

Next Steps

In FY 08/09 a steering committee will be charged with sustaining and spreading the positive affects of the Critical Care initiative. Over the next year the Rapid Assessment Zone will be completed and the Physician At Triage (PAT) program will be implemented.

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1.23. % admitted patients who leave ED within 10 hours of decision to admit time



Definition

The proportion of all patients admitted through the ED who leave the ED within 10 hrs of the decision to admit time.

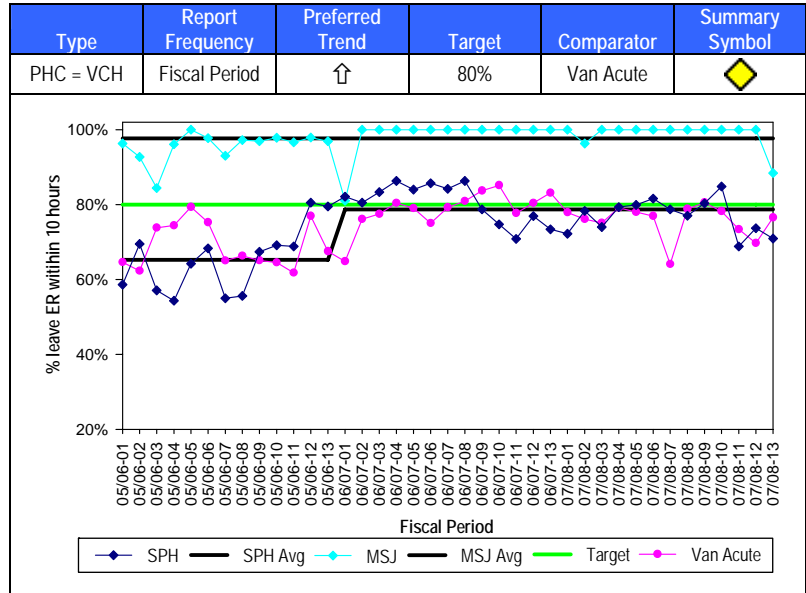
Analysis

For SPH the overall % of admitted patients who leave the ER within 10 hours of their decision to admit time has been stable with an average of 76.9 in FY 07/08. Performance at SPH and Vancouver Acute has been on par in recent periods. The two programs with the greatest impact on the indicator's performance for SPH are Medicine and Mental Health. The rate for Medicine has experienced a shift in the desired direction in P12-05/06 with an average rate of 88.6% following the start of the shift. Mental Health's average in FY 07/08 is 14.6%.

The rate for MSJ has also shifted in the desired direction starting in P2-06/07 with an average of 99.4% for the time period following the shift. MSJ has been consistently meeting the target.

Next Steps

Collaboration with the Medical and Mental Health teams is in progress to develop and design workflow systems to enable earlier admissions to these areas. Also see the **Average wait time in ED for admitted patients** indicator's Next Steps for relevant changes.



1.24. Proportion of ED patients seen by physician within target times



Definition

The proportion of Canadian Emergency Department Triage & Acuity Scale (CTAS) level 2 and 3 ED patients seen by a physician within target times of 15 minutes and 30 minutes, respectively.

Analysis

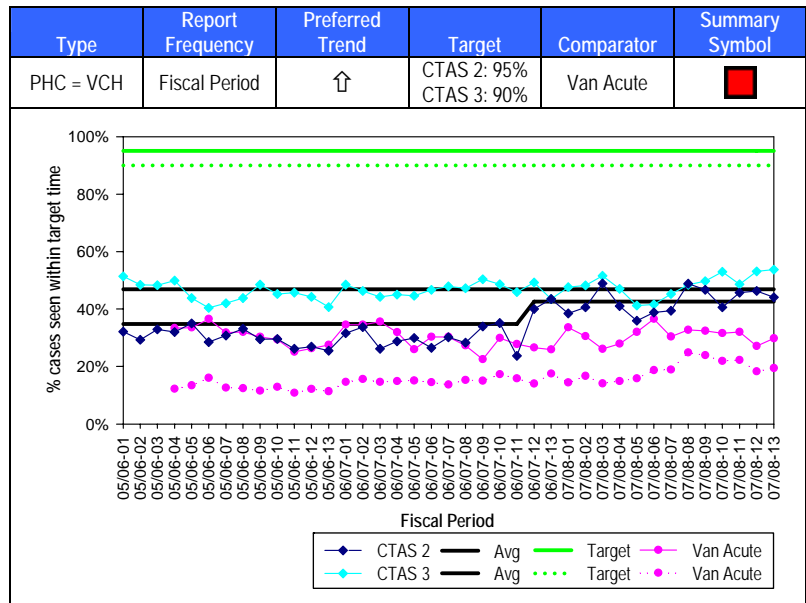
At PHC in FY 07/08, the average proportion of patients seen by a physician within target times for CTAS levels 2 and 3 is 42.9% and 48.9%, respectively. The rate for CTAS level 2 is moving in desired direction since P12-06/07, while the rate for CTAS 3 is stable.

Neither rate's target is being met, however at the site level a shift in desired direction is seen with CTAS 2 patients at SPH. The performance at MSJ for CTAS 3 patients is improving, with the shift in desired direction between P13-06/07 and P10-07/08.

PHC is outperforming Vancouver Acute for both CTAS 2 and CTAS 3 levels.

Next Steps

Initiatives that are planned or underway include: implementation of express registration for CTAS 2 and 3 patients, streamlining of Registration Clerk duties, alerting physicians of incoming CTAS 2, Physician At Triage (PAT) is in the early stages and posting of the triage algorithm, which clarifies patient flow and triage responsibilities. Decentralization of the registration process is under consideration.



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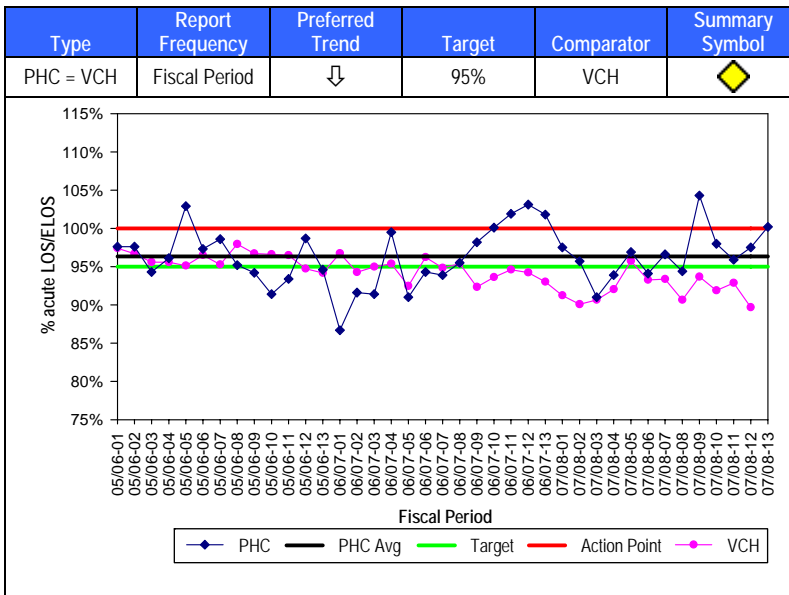
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Efficiency

1.25. % acute LOS (length of stay) compared to ELOS (expected length of stay)

Definition

The actual length of stay (LOS) as compared to the expected length of stay (ELOS), expressed as a percentage. Includes only typical cases and excludes newborns, stillbirths, HFH, and ALC days.



Analysis

The % acute LOS compared to ELOS has been stable for the time period shown. The average rate for FY 07/08 is 96.5%, which is above the target of 95%. In general, VCH has been outperforming PHC.

Next Steps

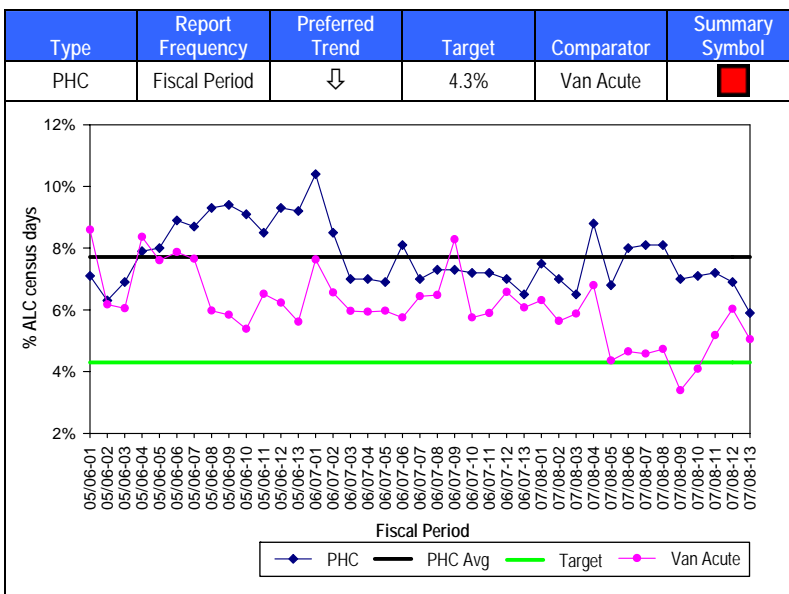
Initiatives that are planned or underway include: discharge planning redesign, improved ALC identification and the Transforming Care At the Bedside (TCAB) project.

Timeliness

1.26. % ALC census days

Definition

Proportion of all acute and rehab inpatient census days experienced in a fiscal period that are designated as alternate level of care (ALC). Includes HFH and excludes newborns.



Analysis

The average in FY 07/08 is 7.3%; however, the target is still not being met. Overall, Vancouver Acute has been outperforming PHC.

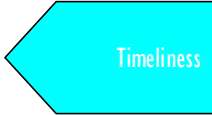
Next Steps

PHC is continuing with joint planning and decision-making with Vancouver Community and efforts are being made to improve early ALC identification and address system factors that have been found to increase ALC days.

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1.27. % mental health & addictions ALC discharge days



Definition

Proportion of all inpatient days experienced by patients with a most responsible mental health or addictions diagnosis AND between the ages of 15 and 64 that were designated as alternative level of care (ALC).

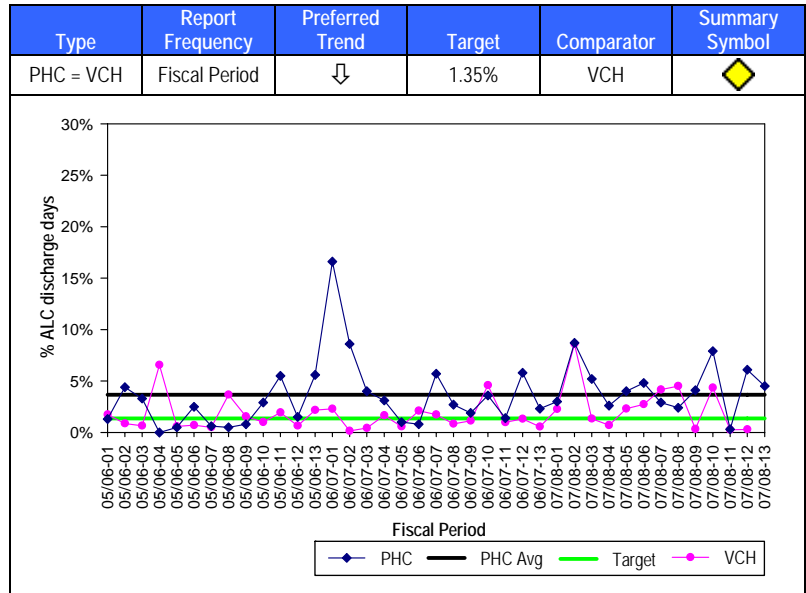
Analysis

The % mental health and addictions ALC discharge days is 4.3% for FY 07/08, which does not meet the target of 1.35%.

**Note: Long stay cases with a high proportion of their days of stay designated as ALC can result in spikes in the data.*

Next Steps

PHC is continuing with joint planning and decision-making with Vancouver Community and efforts are being made to improve early ALC identification and address system factors that have been found to increase ALC days.



1.28. Surgical cancellation rate



Definition

The number of surgical cases cancelled after publication of the final slate due to bumping by an urgent/emergent case or lack of inpatient or critical care bed expressed as a rate of the total number of scheduled inpatient and same day care cases.

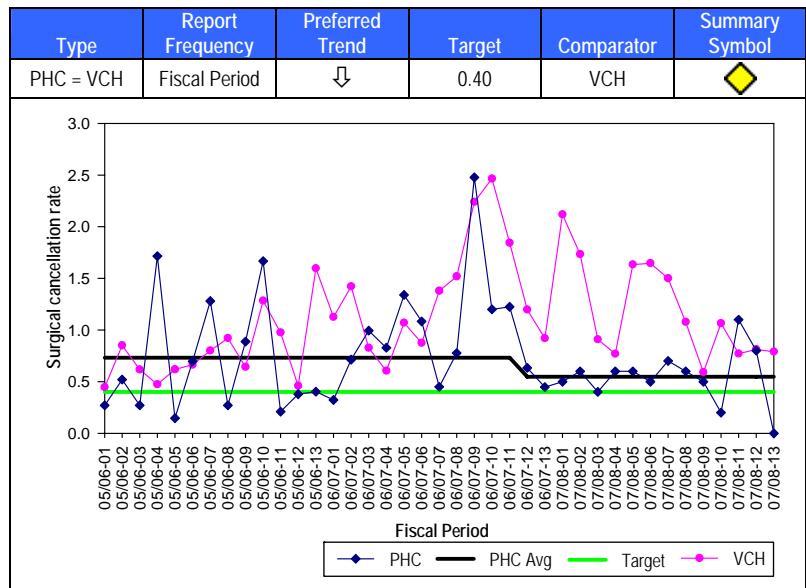
Analysis

The average surgical cancellation rate for the last 13 periods is 0.55 cancellations per 100 surgical cases. This exceeds the target rate of 0.40 however it is an improvement over previous periods. The primary reason for improvement has been dynamic surgical bed smoothing and surgical bed allotment initiatives.

The main driver of the cancellation rate in FY 07/08 has been bumping by emergency patients (60% of cases). Cancellations due to lack of unit beds occurred in 27% of cases, while 13% of cancellations were due to unavailable critical care beds.

Next Steps

This indicator is currently being reviewed by RSEC (Regional Surgical Executive Council).



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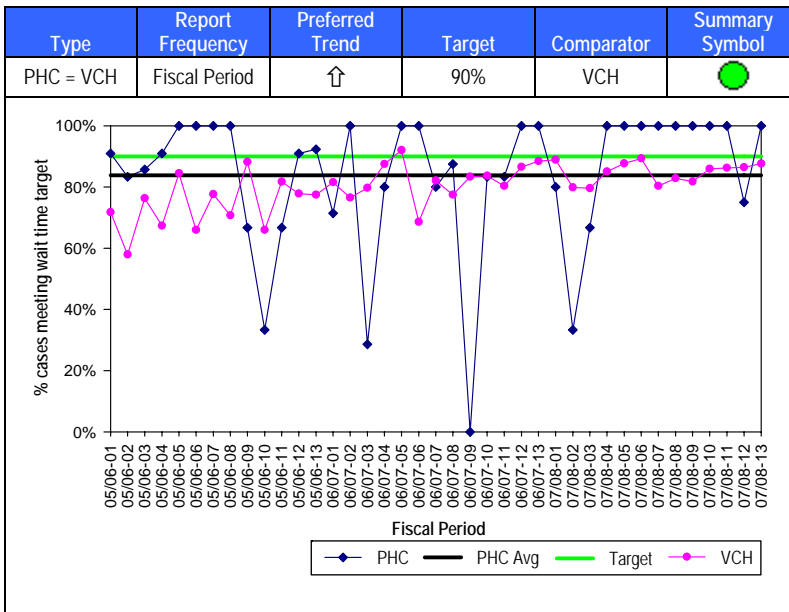
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Timeliness

1.29. % hip replacement patients receiving surgery within targeted wait time

Definition

The proportion of patients who underwent hip replacement surgery who received surgery within 26 weeks of their booking card receipt date. Excludes revisions.



Analysis

In FY 07/08, 91% of elective hip replacement surgeries were performed within 26 weeks of the booking card receipt date meeting the target of 90%.

Recently, PHC has been outperforming VCH.

Note: The case volume per period is low (median of 6 cases). There was only 1 case in P9-06/07 during which the rate dropped to 0%.

Next Steps

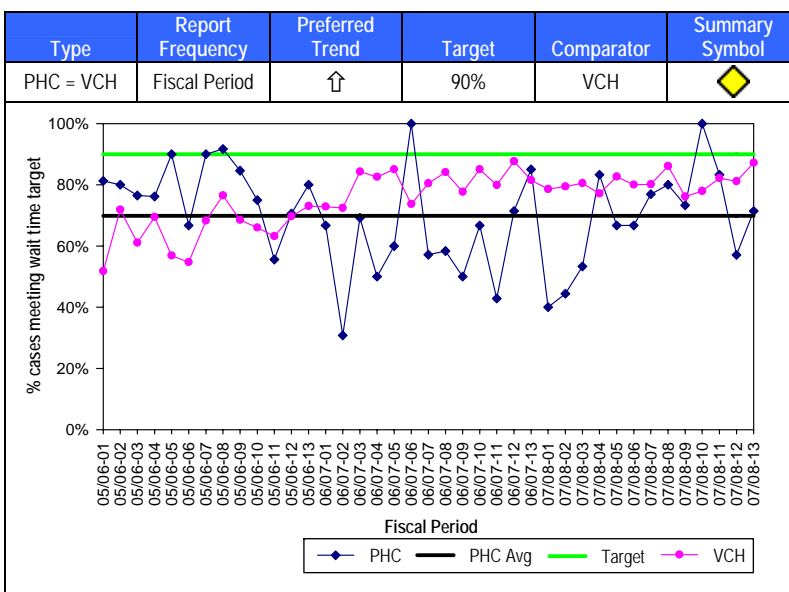
The Surgical Access Manager is meeting 1:1 with the surgeon's Medical Office Assistants in order to help prioritize and schedule their longest-waiting cases.

Timeliness

1.30. % knee replacement patients receiving surgery within targeted wait time

Definition

The proportion of patients who underwent knee replacement surgery who received surgery within 26 weeks of their booking card receipt date. Excludes revisions.



Analysis

In FY 07/08, 65.5% of elective knee replacement surgeries were performed within 26 weeks of the booking card receipt date. The target of 90% is not being met.

In general, VCH has been outperforming PHC.

Note: The case volume per period is low (median of 12 cases).

Next Steps

The Surgical Access Manager is meeting 1:1 with the surgeon's Medical Office Assistants in order to help prioritize and schedule their longest-waiting cases.

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1.31. % oncology mastectomy patients receiving surgery within targeted wait time

Definition

The proportion of patients who underwent oncology mastectomy surgery who received surgery within 21 days of their booking card receipt date.



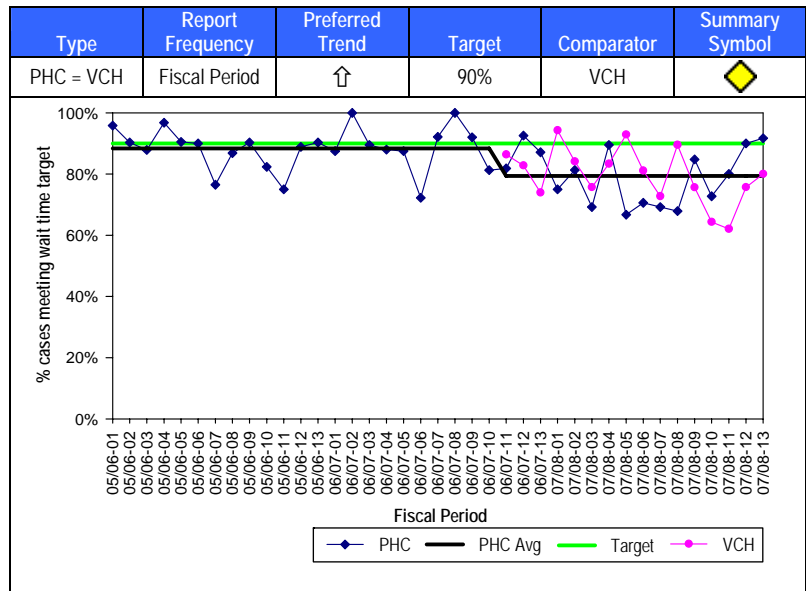
Analysis

The % of oncology mastectomies being performed within 21 days of the booking card receipt date is stable with an average of 77.5% in FY 07/08, which is below the target of 90%.

PHC is performing on par with VGH in most periods.

Next Steps

A regional review of the care of mastectomy patients is currently in progress. VCH hospitals are collaborating with BCCA to create a seamless, coordinated system, which will ultimately result in faster access for patients. In the meantime PHC is implementing process improvements such as more OR time and better access to OR Swing Rooms.



1.32. Median wait time for CABG (coronary artery bypass graft)

Definition

The median number of weeks elapsed from the surgery booking date to the surgery date for patients who underwent coronary artery bypass graft (CABG) surgery.

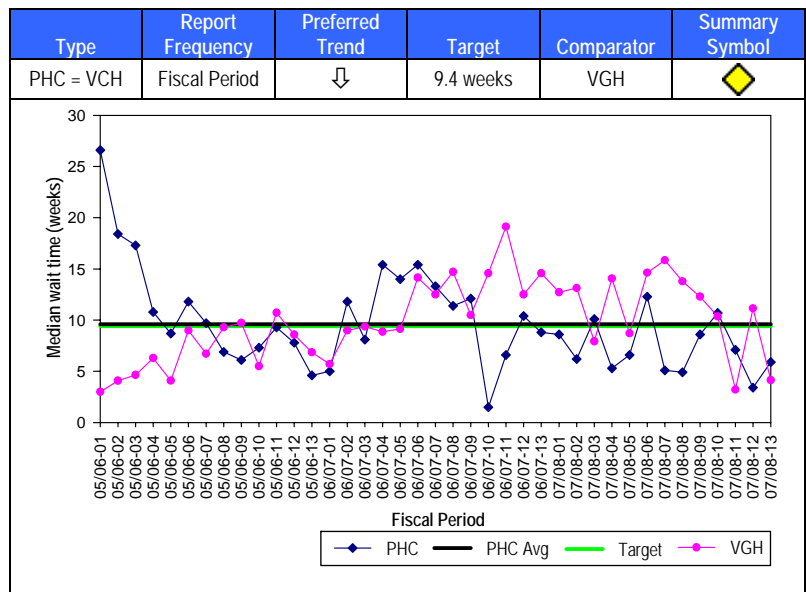


Analysis

The average of the median wait times for elective CABG surgery is 7.3 weeks for FY 07/08. The target wait time of 9.4 weeks is being met in most of the recent periods. Median wait times have been relatively stable since mid-FY 05/06.

Next Steps

Continue to monitor the progress of this indicator.



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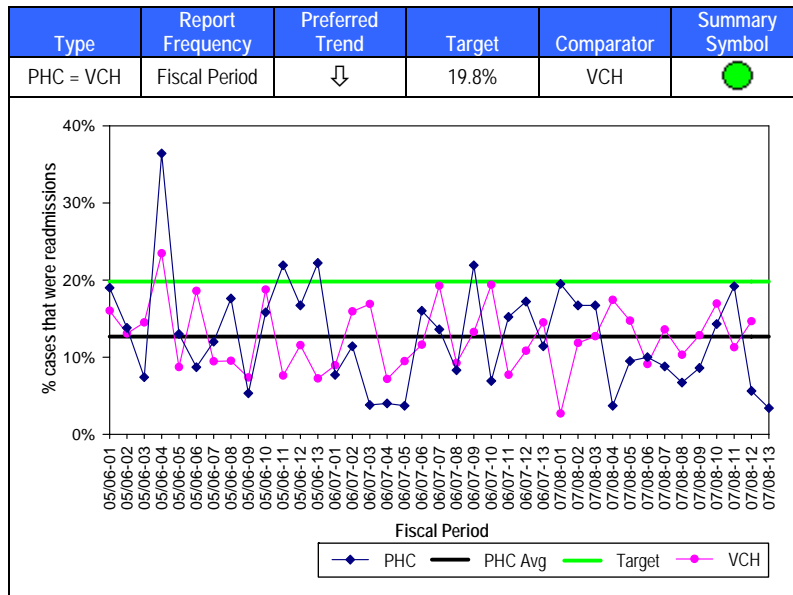
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Effectiveness

1.33. Unplanned readmission rate for CHF (congestive heart failure)

Definition

The proportion of all patients with a most responsible diagnosis of CHF (congestive heart failure) that were unplanned readmissions within 28 days of their previous inpatient hospital stay.



Analysis

For FY 07/08, 11.4% of congestive heart failure patients were unplanned readmissions within 28 days of a previous inpatient admission for a related reason, which meets the target of 19.8%. The rate is stable considering the low case counts (a median of 27 cases per fiscal period). PHC is performing on par with VCH.

Note: Meaningful analysis is made difficult due to the low case counts observed per fiscal period.

Next Steps

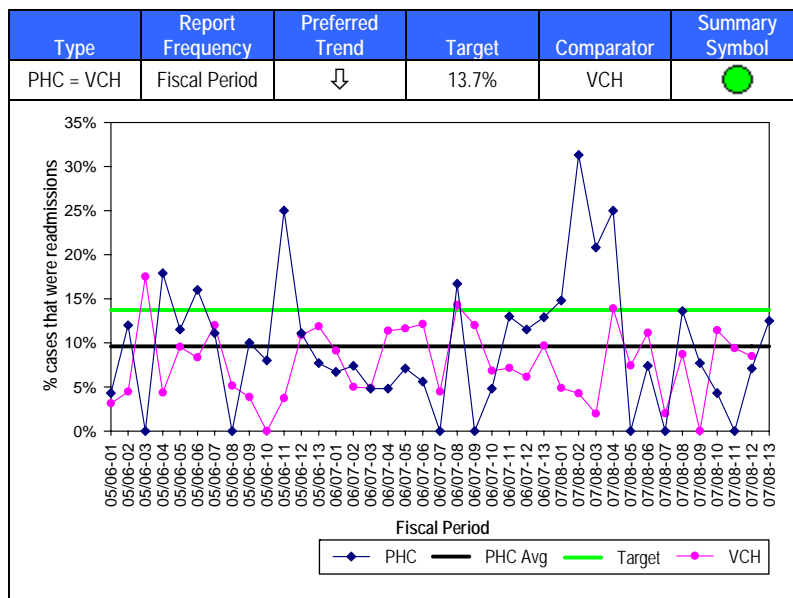
Continue to monitor the progress of this indicator.

Effectiveness

1.34. Unplanned readmission rate for diabetes

Definition

The proportion of all patients with a most responsible diagnosis of diabetes that were unplanned readmissions within 28 days of their previous inpatient hospital stay.



Analysis

For FY 07/08, 10.4% of patients with diabetes were unplanned readmissions within 28 days of a previous inpatient admission for a related reason, which meets the target rate of 13.7%. The rate is unstable with an unusual spike from P2-07/08 to P4-07/08 and a shift in the desired direction occurring from P13-05/06 to P7-06/07.

**Note: Meaningful analysis is made difficult due to the low case counts observed per fiscal period.*

Next Steps

Continue to monitor the progress of this indicator.

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1.35. Budget Variance



Definition

The actual cumulative year-to-date net surplus (deficit) variance from the budgeted net surplus (deficit).

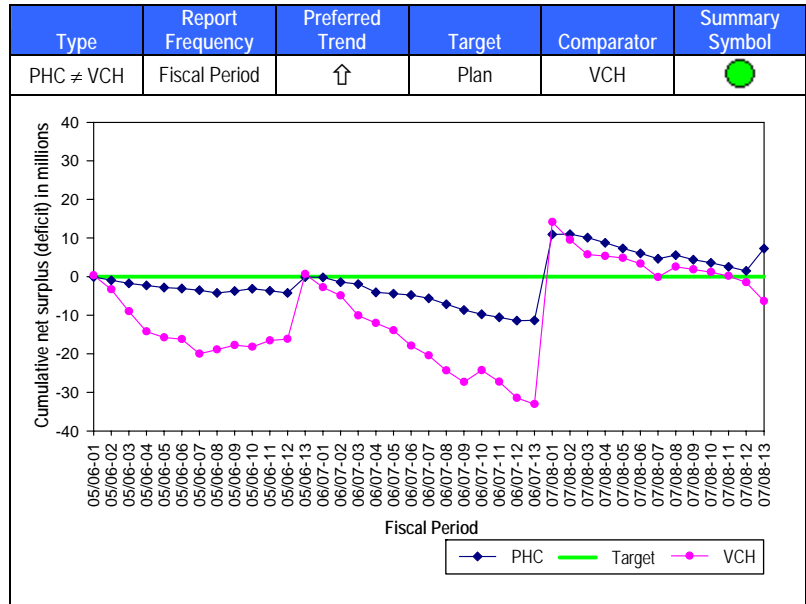
Analysis

Cumulative net deficit as at the end of FY 07/08 was \$6.9M whereas a \$14.2M deficit was planned. As a result the positive budget variance for FY 07/08 was \$7.3M.

PHC has been outperforming VCH.

Next Steps

Continue to monitor the progress of this indicator against the FY 08/09 budget plan.



1.36. Current ratio



Definition

Current assets divided by current liabilities.

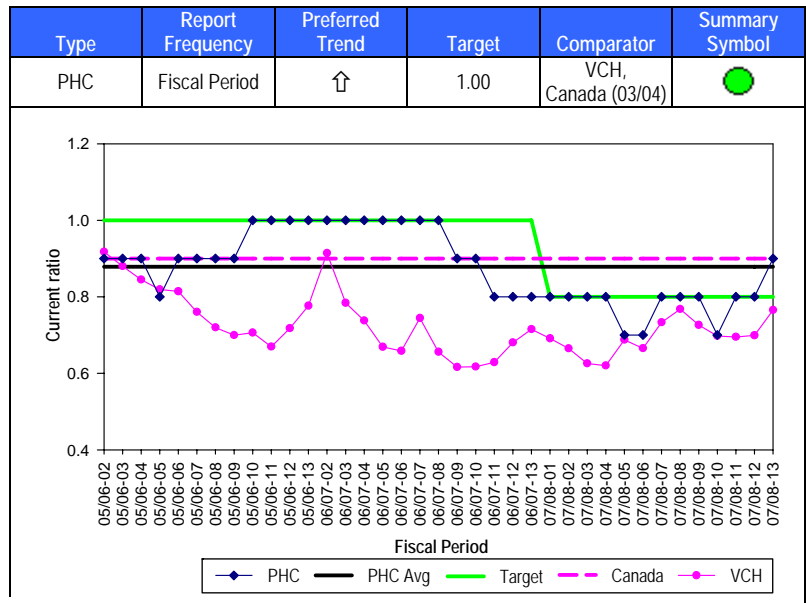
Analysis

PHC's current ratio as of P13-07/08 is 0.85, indicating that current assets are short of meeting current liabilities. The target of 0.80 for FY 07/08 has been met. PHC is consistently outperforming VCH.

Note: There are no data available for P1 of FYs 03/04 to 06/07 as financial reports were not prepared for these periods.

Next Steps

Arrangements have been made to secure short term cash inflow if required. Continue to monitor the progress of this indicator.



1

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Efficiency

1.37. Administrative and support costs as % of total expenses

Definition

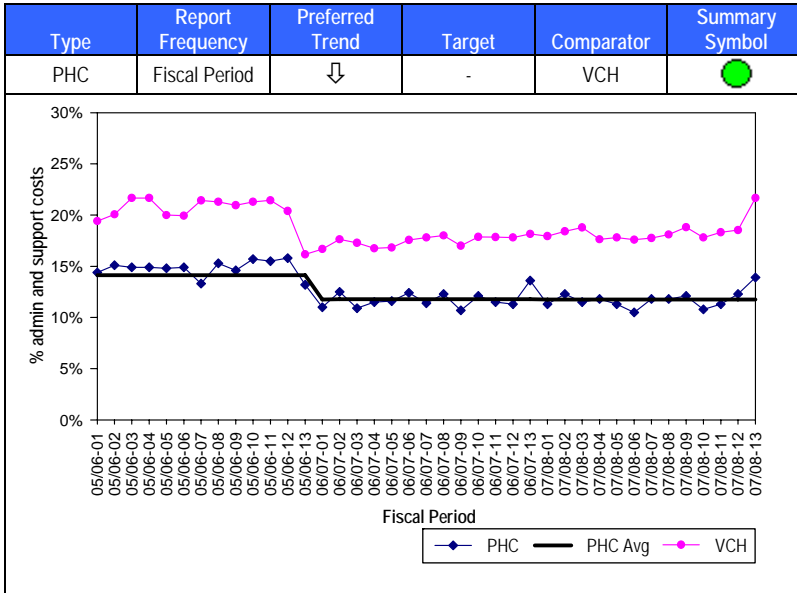
The proportion of total expenses incurred for administrative and support services (excludes Information Systems).

Analysis

For FY 07/08 administrative and support costs as a % of total expenses is 13.9%. PHC has been outperforming VCH.

Next Steps

Continue to monitor the progress of this indicator.



Effectiveness

1.38. Non-Ministry of Health Services revenues as % of total revenues

Definition

The proportion of total revenues derived from non-Ministry of Health Services sources.

Analysis

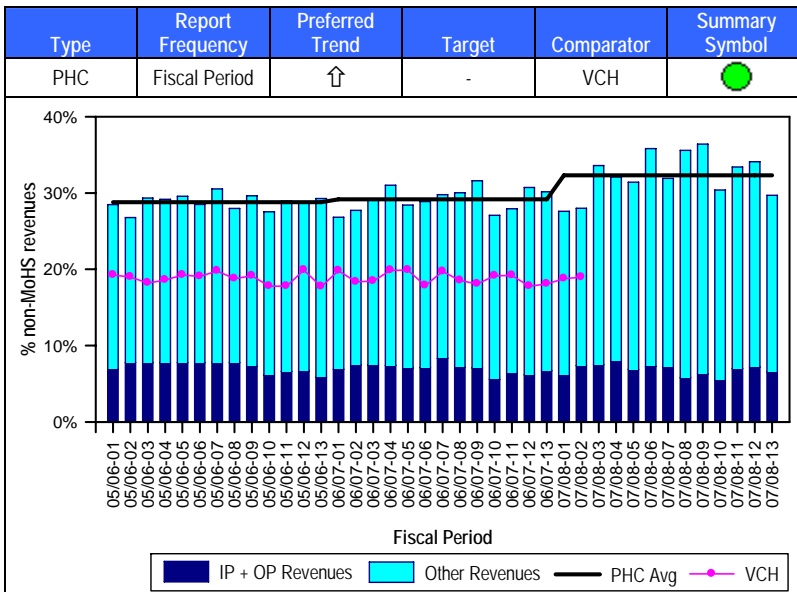
The non-Ministry of Health (MoH) revenues as a % of total revenues for FY 07/08 is on average 32.3%. This constitutes an increase from the proportion achieved in the previous fiscal year (29.1% in FY 06/07).

VCH data unavailable from P2-07/08 onwards.

Note: Some of the revenues from other sources (i.e., non-MOHS revenues) are flow-through revenues in that they are offset by a similar amount in expenditures.

Next Steps

Continue to monitor the progress of this indicator.



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1.39. Occupancy rate



Definition

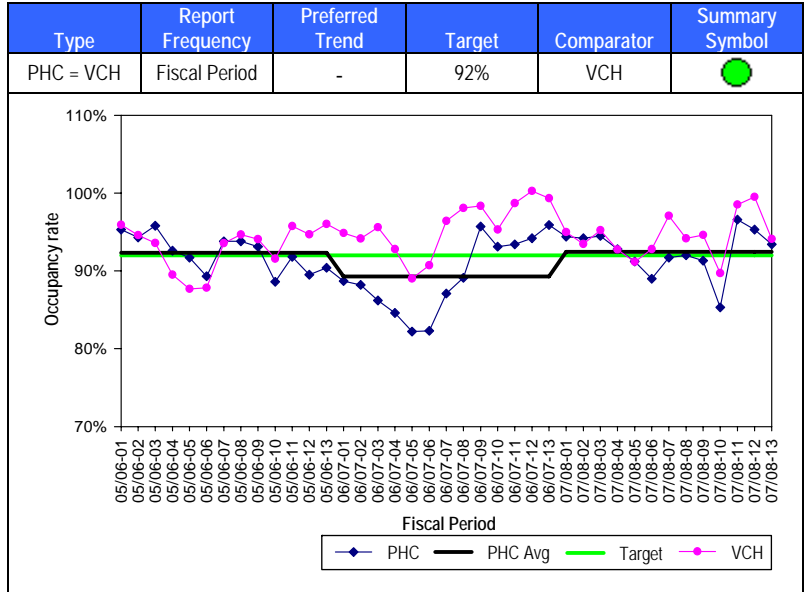
The number of inpatient days divided by the number of available bed days (as calculated by multiplying the number of inpatient beds available by the number of days in the fiscal period). Excludes HFH and newborns.

Analysis

The average occupancy rate for FY 07/08 is 92.5%, which is around the target of 92%. The average occupancy rate for VCH for FY 07/08 is 94.5%, which is above the target. The decrease in P10-07/08 is due to extended closures for Christmas.

Next Steps

Continue to monitor the progress of this indicator.



1.40. % actual inpatient days to planned inpatient days



Definition

The actual inpatient days compared to planned inpatient days for SPH, SVH, MSJ, and HFH, expressed as a percentage. This excludes newborns and stillbirths. Planned inpatient days have been adjusted for seasonal bed closures.

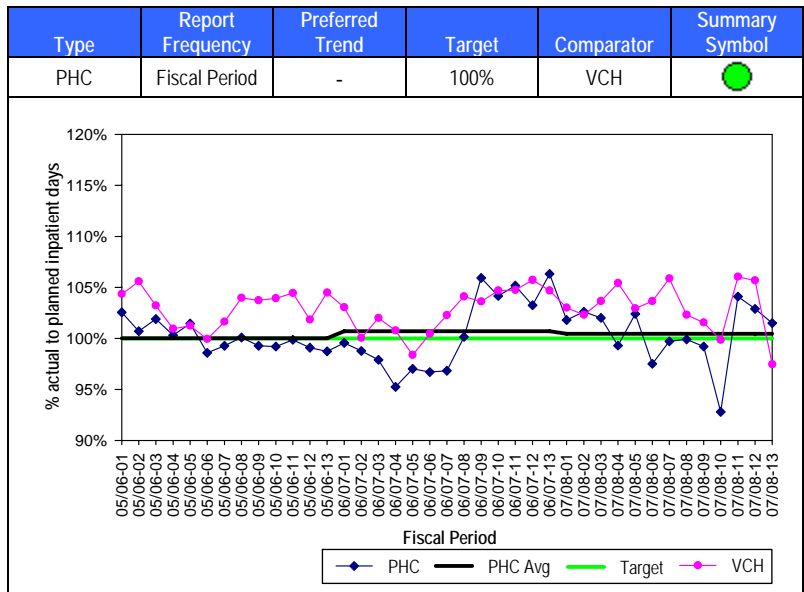
Analysis

The % actual inpatient days to planned inpatient days is 100.4% for FY 07/08, which is slightly above target of 100%. The decrease in P10-07/08 is due to extended closures for Christmas.

VCH's rate of 103.5% is also slightly above the target within the most recent 13 periods.

Next Steps

Continue to monitor the progress of this indicator.



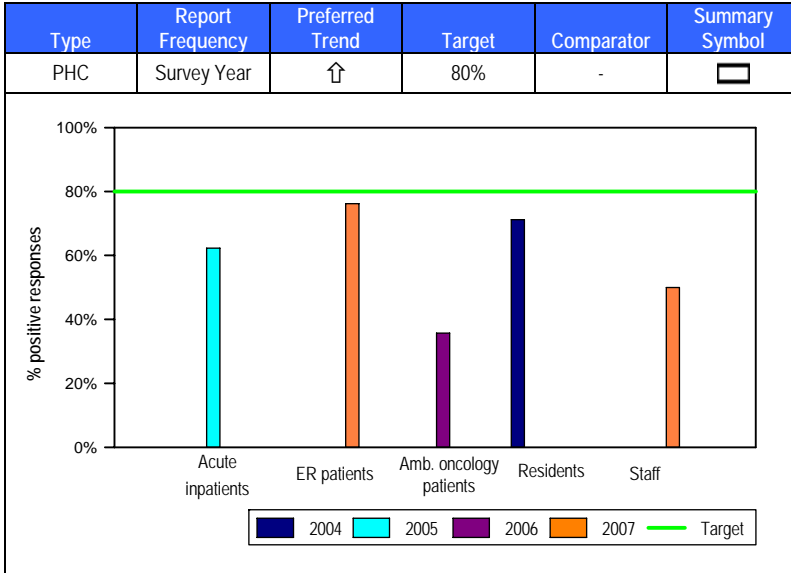
2

Live our mission every day

2.1. % positive responses to survey items related to Spirituality

Definition

Proportion of responses that were positive for selected items on the Employee Engagement, Acute Inpatient, Emergency Department, Ambulatory Oncology, Long Term Care Resident, Long Term Care Resident Family, and Living Our Mission Every Day Staff Surveys.



Analysis

On the 2007 Employee Engagement Survey, 50% of staff responded positively that spirituality is nurtured within PHC. In the ED survey in 2007, 76.2% of ED patients responded positively that their spiritual needs were met. This represents a significantly better performance over the BC average.

Next Steps

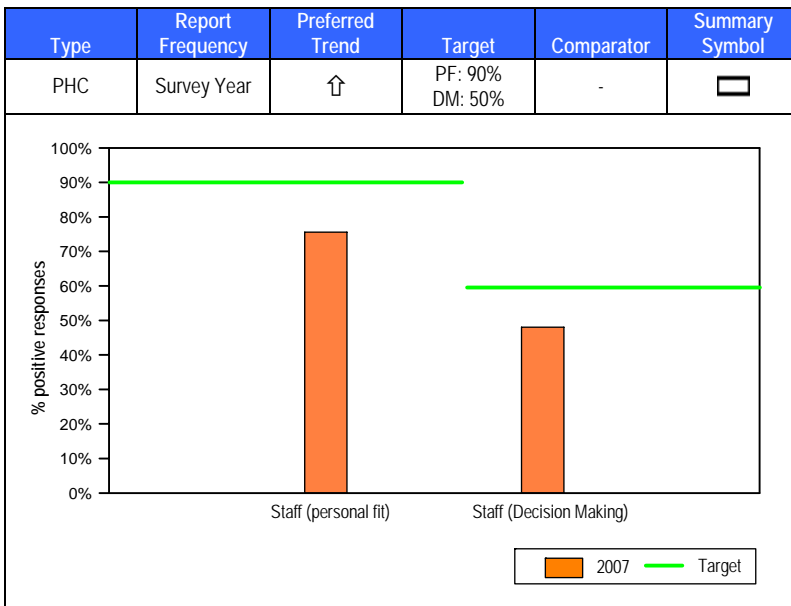
Revise target (originally set at 90%) in consultation with internal experts. Continue to monitor the progress of this indicator.

PHC is implementing a values-based behavioural expectations framework for staff.

2.2. % positive responses to survey items related to Integrity

Definition

Proportion of responses that were positive for selected items on the Employee Engagement, Acute Inpatient, Emergency Department, Ambulatory Oncology, Long Term Care Resident, Long Term Care Resident Family, and Living Our Mission Every Day Staff Surveys.



Analysis

On the 2007 Employee Engagement Survey, 48% of staff responded positively that the values of PHC impact decision-making in their area of work. In Living the Mission workshop surveys, 75.6% responded positively to the personal fit question.

Next Steps

Revise target (originally set at 90%) in consultation with internal experts. Develop integrity related question for inclusion in future patient and resident surveys. Continue to monitor the progress of this indicator.

PHC is implementing a values-based behavioural expectations framework for staff.

Live our mission every day



2.3. % positive responses to survey items related to Trust

Definition

Proportion of responses that were positive for selected items on the Employee Engagement, Acute Inpatient, Emergency Department, Ambulatory Oncology, Long Term Care Resident, Long Term Care Resident Family, and Living Our Mission Every Day Staff Surveys.

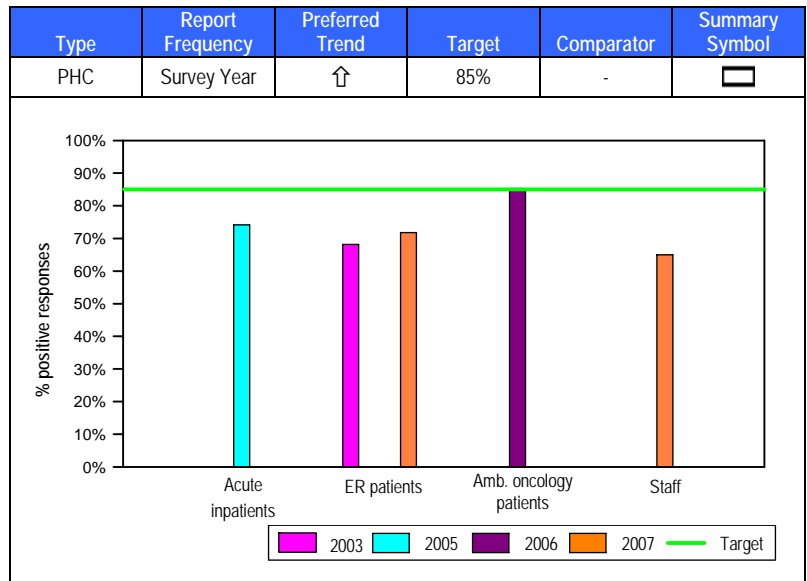
Analysis

On the 2007 Employee Engagement Survey, the confidence and trust of staff in people they work with accounted for 65%. In Living the Mission workshop surveys, 71.8% of ED patients said they had confidence and trust in ED doctors and nurses. This is a similar result to 2003 ED survey.

Next Steps

Revise target (originally set at 90%) in consultation with internal experts. Continue to monitor the progress of this indicator.

PHC is implementing a values-based behavioural expectations framework for staff.



2.4. % positive responses to survey items related to Respect

Definition

Proportion of responses that were positive for selected items on the Employee Engagement, Acute Inpatient, Emergency Department, Ambulatory Oncology, Long Term Care Resident, Long Term Care Resident Family, and Living Our Mission Every Day Staff Surveys.

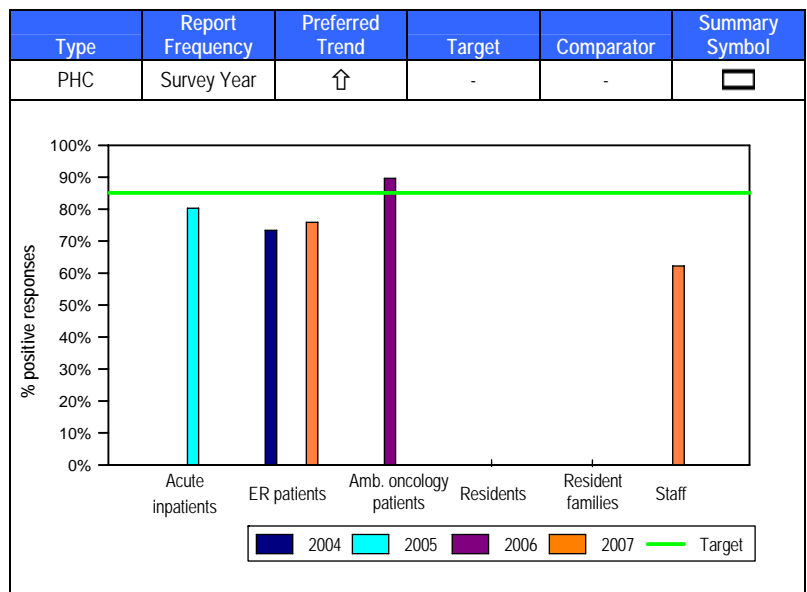
Analysis

On the 2007 Employee Engagement Survey, 59.5% of staff responded positively that they were treated with respect at work. %. In Living the Mission workshop surveys, 75.9% of ED patients felt they were being treated with dignity and respect. This is a similar result to 2003 ED survey.

Next Steps

Revise target (originally set at 90%) in consultation with internal experts. Continue to monitor the progress of this indicator.

PHC is implementing a values-based behavioural expectations framework for staff.



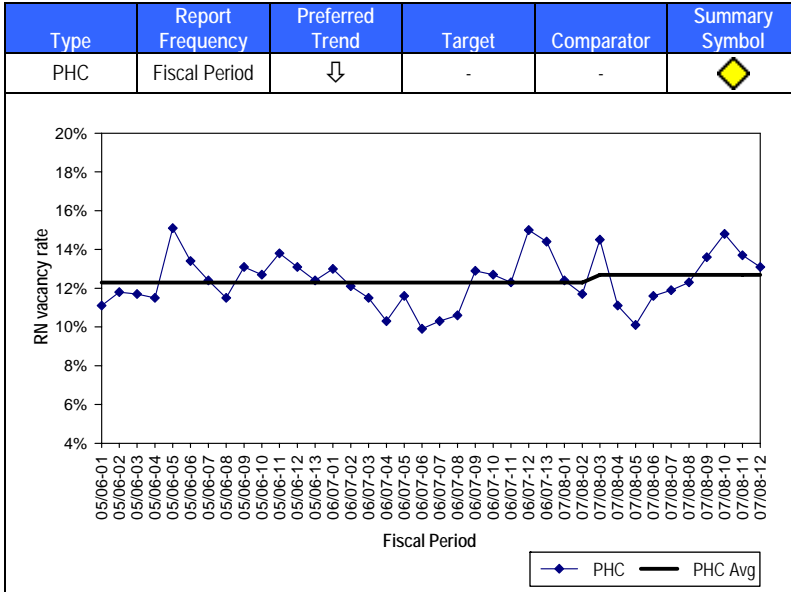
3

Create an environment that attracts & retains the best people

3.1. RN vacancy rate

Definition

The number of unfilled posted RN positions, including full time, part time, temporary full time, and temporary part time positions, on the last day of the fiscal period, expressed as a proportion of annual budgeted RN FTEs.



Analysis

The average RN vacancy rate is 12.4% for the time period shown. The target of 5% has not been reached in any period.

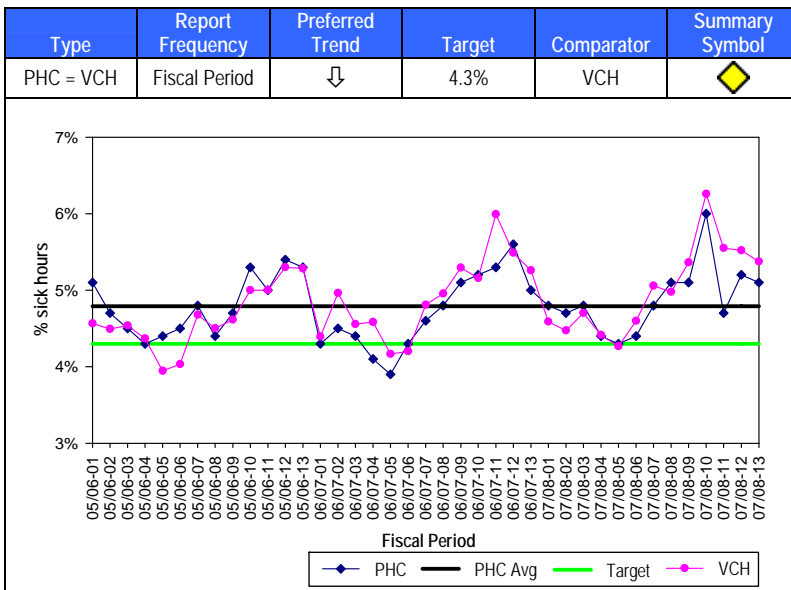
Next Steps

The target for this indicator is currently under review.

3.2. % sick hours

Definition

The number of paid sick hours expressed as a percentage of productive hours.



Analysis

The % sick hours for FY 07/08 is 4.9%. This is a slight increase from the sick hours rate of 4.7% in FY 06/07. PHC is performing on par with VCH.

Next Steps

Continue to enhance the consistent application of the attendance management program

Create an environment that attracts & retains the best people



3.3. % overtime hours

Definition

The proportion of total productive hours that are overtime hours.

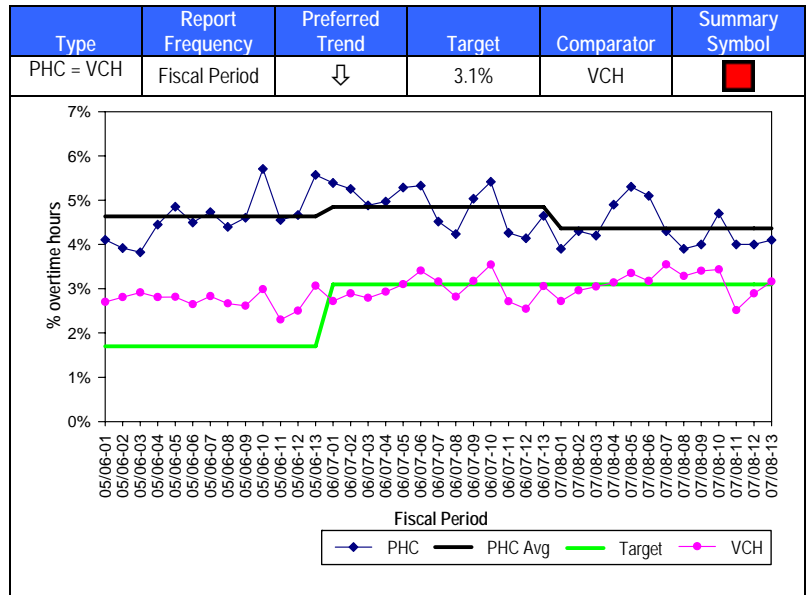
Analysis

The % overtime hours for FY 07/08 is 4.4%. This is a slight decrease from the overtime rate of 4.8% in the FY 06/07. The target of 3.1% is not being met in any fiscal period.

VCH is consistently outperforming PHC.

Next Steps

Continue to operationalize the OT management reduction plan



3.4. WCB musculoskeletal injury (MSI) incidence rate for direct care areas

Definition

The number of approved WCB musculoskeletal injury (MSI) incidents per 100 productive hour FTEs for direct care areas.

Analysis

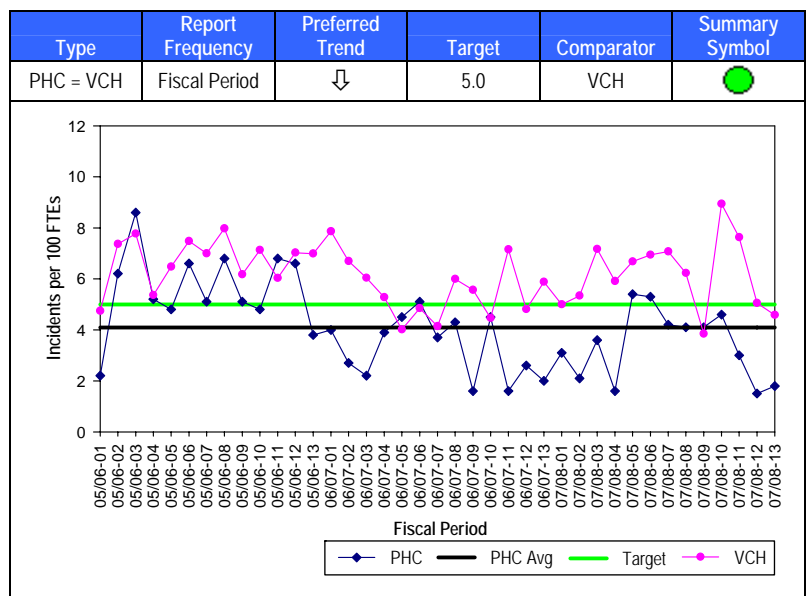
In FY 07/08 there were 3.4 incidents per 100 productive hour FTEs on average. The target of 5.0 is being met.

More ceiling lifts were installed in FY 07/08. Furthermore the Ceiling Lift Coaching Project was expanded to include Langara.

PHC has been outperforming VCH.

Next Steps

Add additional ceiling lifts once funding becomes available. Further expand the Ceiling Lift Coaching Project to another site.



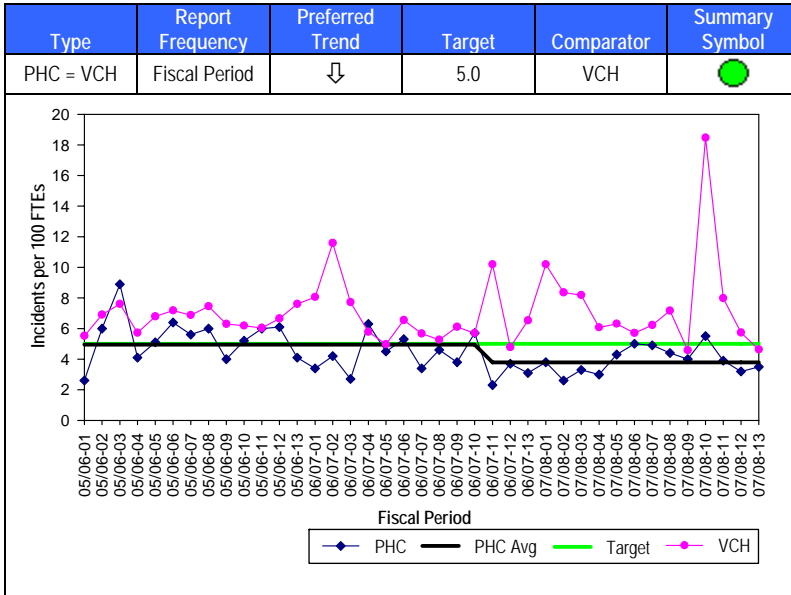
3

Create an environment that attracts & retains the best people

3.5. WCB incidence rate

Definition

The number of approved WCB time-loss injury incidents per 100 productive hour FTEs for all areas.



Analysis

A shift in the desired direction occurred in P11-06/07. The WCB incidence rate for FY 07/08 is 3.95 incidents per 100 FTEs

The target of 5.0 is being met in most periods.

PHC has been outperforming VCH.

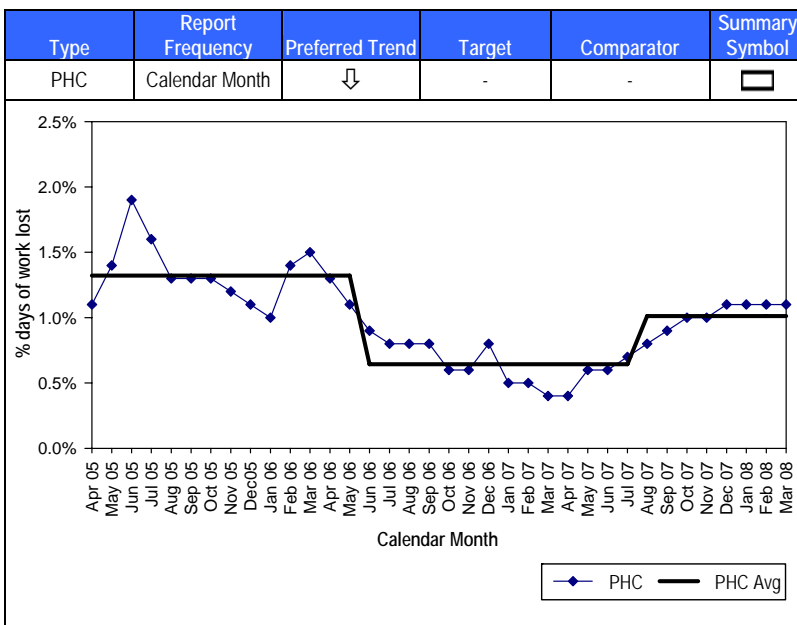
Next Steps

Continue to monitor the progress of this indicator.

3.6. % days of work lost due to injury for direct care areas

Definition

The number of approved WCB musculoskeletal injury (MSI) incidents per 100 productive hour FTEs for direct care areas.



Analysis

After a shift in the undesired direction in August 2007, the rate for the % days of work lost due to injury in direct care areas been 1.0% days lost.

The shift in the undesired direction in August 2007 is due to a small number of long-term cases that are responsible for a large number of days.

Next Steps

Continue to monitor the progress of this indicator.

Create an environment that attracts & retains the best people



3.7. WCB claims cost

Definition

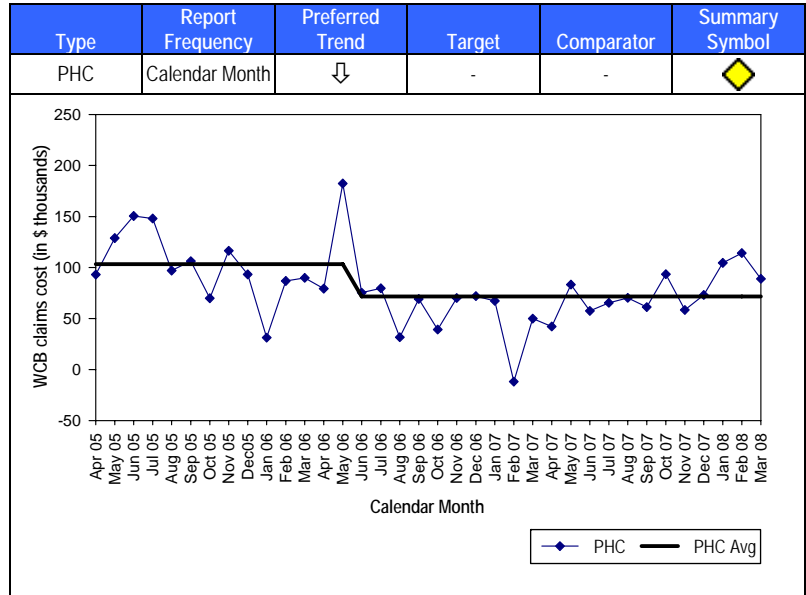
The total dollars invoiced for WCB claims, regardless of cause and area of work, during the month, adjusted to reflect a 30-day month.

Analysis

In FY 07/08 – 3,657 days were lost, accounting for \$1,006,167 in claim costs, which is an increase over the \$766,249 in claim costs in FY 06/07.

Next Steps

Continue to monitor the progress of this indicator.



3.8. WCB experience rating adjustment

Definition

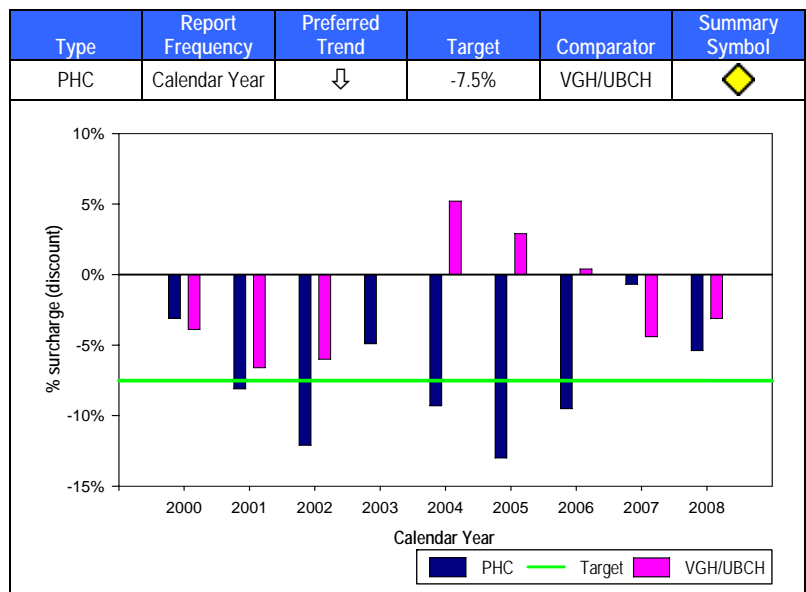
The surcharge/discount applied to the WCB base rate (amount charged per \$100 of assessable earnings) based on PHC's injury costs (for both acute care and residential care sites) relative to the provincial acute care classification unit average.

Analysis

The WCB discount achieved by PHC for 2008 is 5.4% for Acute Care, which is below the target of 7.5%. For 9 consecutive years PHC has achieved a discount to its WCB base rate, indicating that PHC has incurred lower injury costs relative to the acute care rate group average. PHC was outperformed by VGH/UBCH in the most recent year.

Next Steps

Continue to monitor the progress of this indicator.



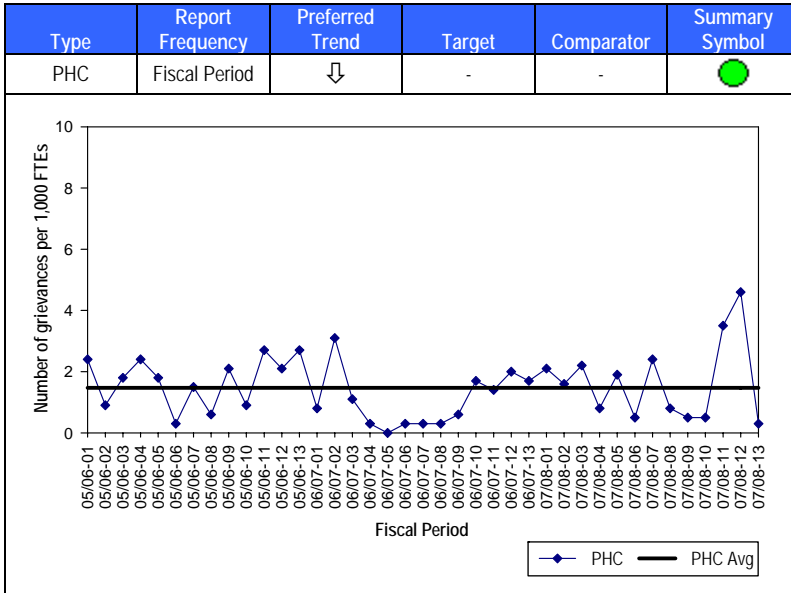
3

Create an environment that attracts & retains the best people

3.9. Grievances filed rate

Definition

The number of grievances filed by unionized staff per 1,000 annual budgeted FTEs. Includes HSA, BCNU, HEU and IUOE.



Analysis

For the time period shown, there has been an average of 1.5 grievances filed per 1,000 FTEs for unionized staff.

Periods 11 and 12 of FY 07/08 experienced an unusually high number of grievances due to an isolated incident in one department. Period 13 has returned back below average.

Next Steps

A proactive approach will be taken by ensuring awareness of initiatives that affect staff so issues can be addressed and resolved during the implementation process before grievances are filed. Continue to monitor the progress of this indicator.

Support research & new knowledge integration



4.1. Total annual research funding

Definition

Total research funding received through successful grant applications and industry-sponsored contracts by funding type (Contracts and agreements; CFI, KDF and matching funds; other grants; and peer-reviewed funding as per Michael Smith Foundation for Health Research (MSFHR) definition) by fiscal year.

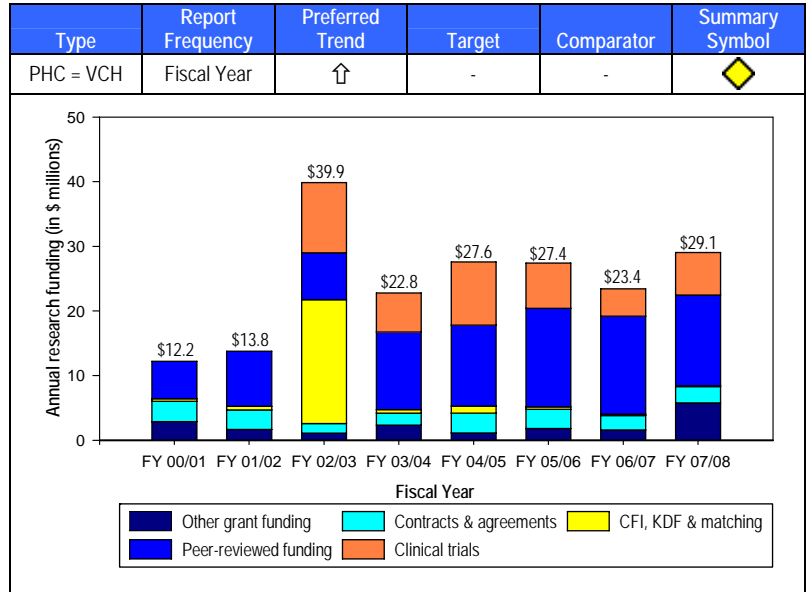
Analysis

The total annual research funding increased by 24% to \$29.1 million for FY 07/08 from \$23.4 million for the previous fiscal year. Most funding categories experienced an increase with the 'other grant funding' category experiencing the largest dollar amount increasing from \$1.6 million to \$5.8 million. Several large industry grants are the major factor contributing to this growth in funding for this category.

**Note: Clinical trial funding could not be broken out for FY 00/01 and FY 01/02 and thus these dollars are subsumed under the other funding categories for those fiscal years.*

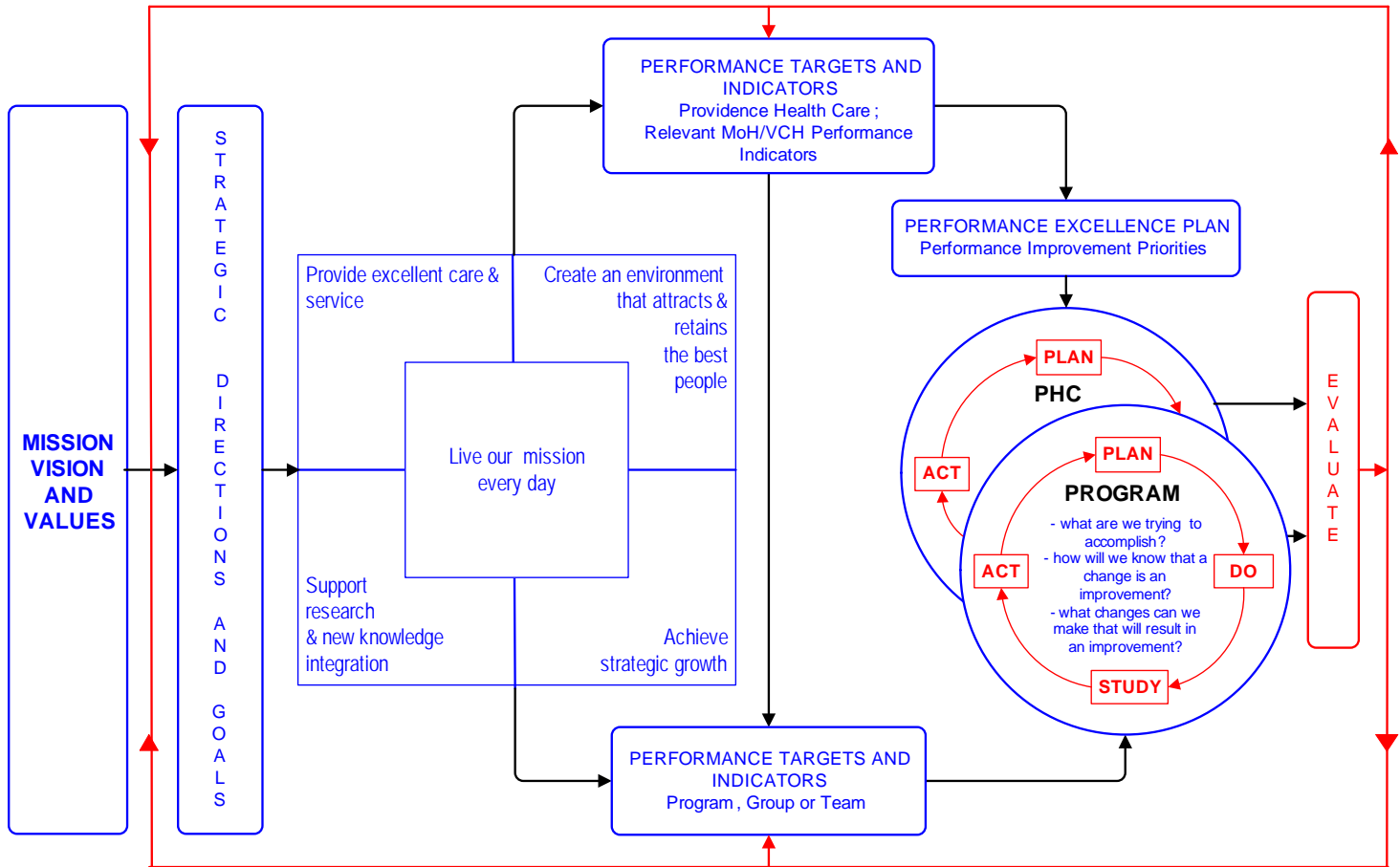
Next Steps

Continue to monitor the progress of this indicator annually.





PHC accountability & performance improvement framework



Dimensions of quality matrix



DIMENSIONS OF QUALITY

Indicator Name		Effectiveness	Safety	Timeliness	Equitability	Patient-Centredness	Efficiency
Provide excellent care & service	1.1. Complication rate for diagnostic cardiac catheterization		★				
	1.2. Aspirin administration rate for AMI and suspected AMI	★					
	1.3. In-hospital mortality rate for community-acquired pneumonia		★				
	1.4. AMA rate for HIV/AIDS patients		★				
	1.5. Rate of receipt of adequate hemodialysis	★					
	1.6. Rate of adequate renal function at 6 months post-kidney transplant	★					
	1.7. Unplanned readmission rate for mental health & addictions	★					
	1.8. Residential care indicators – Placeholder						
	1.9. Resident overall satisfaction rate						★
	1.10. Resident family overall quality rate						★
	1.11. Emergency patient satisfaction rate						★
	1.12. Acute inpatient satisfaction rate						★
	1.13. Ambulatory oncology satisfaction rate						★
	1.14. HSMR (hospital standardized mortality ratio)		★				
	1.15. In-hospital deaths per 100 patients in CMGs with less than 1% mortality		★				
	1.16. In-hospital fracture rate per 1,000 patients aged 65 years and older		★				
	1.17. Influenza immunization rate for residents		★				
	1.18. Influenza immunization rate for staff		★				
	1.19. %ARO (antibiotic-resistant organism) positive census days		★				
	1.20. Housekeeping audits		★				
	1.21. Clean Hands for Life™ campaign		★				
	1.22. Average wait time in ED for admitted patients				★		
	1.23. % admitted patients who leave ED within 10 hrs of decision to admit time				★		
	1.24. Proportion of ED patients seen by physician within targets			★	★		
	1.25. % acute LOS (length of stay compared to ELOS (expected length of stay)						★
	1.26. % ALC census days				★		
	1.27. % mental health & addictions ALC discharge days				★		
	1.28. Surgical cancellation rate				★		
	1.29. % hip replacement patients receiving surgery within targeted wait time				★		
	1.30. % knee replacement patients receiving surgery within targeted wait time				★		
	1.31. % oncology mastectomy patients receiving surgery within targeted wait time				★		
	1.32. Median wait time for CABG (coronary artery bypass graft)				★		
	1.33. Unplanned readmission rate for CHF (congestive heart failure)	★					
	1.34. Unplanned readmission rate for diabetes	★					
	1.35. Budget Variance						★
	1.36. Current ratio						★
	1.37. Administrative and support costs as % of total expenses						★
	1.38. Non-Ministry of Health Services revenues as % of total revenues	★					
	1.39. Occupancy rate						★
	1.40. % actual inpatient days to planned inpatient days						★
Live our mission every day	2.1. % positive responses to survey items related to Spirituality	★					
	2.2. % positive responses to survey items related to Integrity	★					
	2.3. % positive responses to survey items related to Trust	★					
	2.4. % positive responses to survey items related to Respect	★					
Create an environment that attracts & retains the best people	3.1. RN vacancy rate	★	★				
	3.2. % sick hours		★				
	3.3. % overtime hours		★				★
	3.4. WCB MSI (musculoskeletal injury) incidence rate for direct care areas		★				
	3.5. WCB incidence rate		★				
	3.6. % days of work lost due to injury for direct care areas		★				
	3.7. WCB claims cost		★				
	3.8. WCB experience rating adjustment		★				
	3.9. Grievances filed rate	★					
Support research & new knowledge integration	4.1. Total annual research funding	★					

Technical notes



1.1. Complication rate for diagnostic cardiac catheterization

Rationale: The rate of complications arising from diagnostic cardiac catheterization, although dependent on the disposition of the patient, has been attributed largely to the skill and competence of the physician. Studies suggest that a proportion of those complications that do arise can be avoided through patient selection or technique.

Numerator: Number of inpatient and outpatient cases with an *isolated* diagnostic cardiac catheterization procedure and experienced a complication

Inclusion criteria:

The numerator is a subset of the denominator meeting the following conditions:

- Cases with one of the following ICD-10-CA codes in any diagnosis field:
 - Y840 - cardiac catheterization as the cause of abnormal reaction or later complication
 - Y605 - unintentional cut, puncture, perforation or hemorrhage during heart catheterization
 - Y575 - x-ray contrast media causing adverse effect in therapeutic use
 - Y842 - radiological procedure and radiotherapy as the cause of abnormal reaction

Denominator: Total number of inpatient and outpatient cases with an *isolated* diagnostic cardiac catheterization procedure

Inclusion criteria:

- Cases with CCI procedure code 3.IP.10

Exclusion criteria:

- Cases transferred to another acute care hospital (inpatient cases only)
- Cases ≤ 18 years
- Cases that also underwent open heart surgery, PTCA, or valvuloplasty on the same day of the catheterization (CCI procedure codes for these interventions are listed below):
 - 1IJ50
 - 1IJ57
 - 1IJ76
 - 1LZ37LAGB
 - 1HV90
 - 1HU90
 - 1HU80
 - 1HS80
 - 1HV80
 - 1HR80
 - 1HZ85

Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Data source: Health Records

Data limitations:

- Cases that underwent other major heart surgeries that were performed on the same date as the cardiac catheterization were excluded as these cases would be exposed to a greater risk of complications due to the nature of these procedures. As a result, those cases that underwent emergency CABGs or PTCAs in response to complications of the diagnostic cardiac catheterization are excluded.
- The coding of complications in the discharge abstract seems to vary with respect to the cause of the complication (e.g. cardiac catheterization) and the nature of the complication (e.g. ventricular fibrillation). Complications were included in the calculation of the indicator only if one of the Y diagnosis codes listed above was coded. It is possible that other codes not specific to cardiac catheterization were used to code for complications of cardiac catheterization.
- Complications experienced by outpatients may be underreported as patients are often discharged several hours after a procedure and the presence of a complication may become apparent only after discharge.

Target source: N/A

Action point source: N/A

Comparator source: N/A

References:

1. Ammann P et al. Procedural complications following diagnostic coronary angiography are related to the operator's experience and the catheter size. *Cathet Cardiovasc Intervent* 2003;59:13-18.
2. de Bono D, on behalf of the Joint Audit Committee of the British Cardiac Society and Royal College of Physicians of London. Complications of diagnostic cardiac catheterisation: results of 34 041 patients in the United Kingdom confidential enquiry into cardiac catheter complications. *Br Heart J* 1993;70:297-300.
3. Scanlon PJ, Faxon DP, Audet AM, et al. ACC/AHA guidelines for coronary angiography: report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on Coronary Angiography). Developed in collaboration with the Society for Cardiac Angiography and Interventions. *J Am Coll Cardiol* 1999;33:1756-824.

1.2. Aspirin administration rate for AMI and suspected AMI

Rationale:	The benefits of administering aspirin for the treatment of suspected myocardial infarction is well established in the literature. The immediate administration of aspirin (and continued administration for 5 weeks) has been shown to reduce vascular deaths by 23%. When all high-risk patients are considered together, there is about a 30% reduction in nonfatal MI, a 30% reduction in nonfatal stroke, and a 17% reduction in vascular death. For patients with prior infarction or stroke, aspirin is estimated to prevent between 35 and 40 events per 1000 patients treated.
Numerator:	Number of inpatient discharges with diagnosis of suspected or confirmed myocardial infarction with an order for a regular dose of aspirin during hospitalization.
Denominator:	Number of inpatient discharges with diagnosis of suspected or confirmed myocardial infarction. <i>Inclusion criteria:</i> <ul style="list-style-type: none">▪ Cases with one of the following ICD-10-CA codes designated as the most responsible, Type 1, or Type 2 diagnosis:<ul style="list-style-type: none">▪ Chest pain/angina: I200-I209, I2382, R071-R074▪ Myocardial infarction: I210-I229 <i>Exclusion criteria:</i> <ul style="list-style-type: none">▪ Holy Family Hospital▪ Cases with LOS = 1 day▪ Cases < 12 years▪ MCC 13 – obstetric discharges▪ MCC 14 – newborns and other neonates with conditions originating in the perinatal period
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	Health Records & Pharmacy System
Data limitations:	<ul style="list-style-type: none">▪ The calculated aspirin administration rate may be lower than the actual rate due to the following:<ul style="list-style-type: none">▪ STAT orders of aspirin are not consistently entered in the Pharmacy System and are thus excluded from the calculation of the indicator.▪ The denominator may include ineligible patients who have contraindications to aspirin due to: lack of specificity of coding contraindications to aspirin, incomplete documentation of aspirin contraindications in patient charts, and the incomplete coding of those aspirin contraindications that are documented.
Target source:	<ul style="list-style-type: none">▪ ACC/AHA 2002 Guideline Update for the Management of Patients With Unstable Angina and Non-ST-Segment Elevation Myocardial Infarction▪ ACC/AHA Guidelines for the Management of Patients With Acute Myocardial Infarction
Action point source:	N/A
Comparator source:	N/A
References:	<ol style="list-style-type: none">1. ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. Randomised trial of intravenous streptokinase, oral aspirin, both or neither among 17,187 cases of suspected acute myocardial infarction. <i>Lancet</i> 1988; ii: 349-60.2. Bing, M et al. Aspirin Administration for Cardiac-related Acute Chest Pain/Angina: Increased Use in Medicare Patients. <i>Southern Medical Journal</i> 1999; 92(1): 23-27.

1.3. In-hospital mortality rate for community-acquired pneumonia

Rationale: Community-acquired pneumonia has an annual incidence of 12 per 1000 adults and is the sixth most common cause of death. Studies have demonstrated that certain processes of care (e.g. early antibiotic administration upon hospital arrival, blood culture collection within 24 hours of hospital arrival, oxygenation assessment) can lead to decreased mortality associated with pneumonia.

Numerator: Number of cases with most responsible diagnosis of community-acquired pneumonia who die in hospital

Denominator: Total number of cases with most responsible diagnosis of community-acquired pneumonia

Inclusion criteria:

- Most responsible (Type M) diagnosis of pneumonia (one of following ICD-10-CA codes):

J120	Adenoviral pneumonia	J157	Pneumonia dt Mycoplasma pneumoniae
J121	Respiratory syncytial virus pneumonia	J158	Other bacterial pneumonia
J128	Other viral pneumonia	J159	Bacterial pneumonia unspecified
J129	Viral pneumonia unspecified	J160	Chlamydial pneumonia
J13	Pneumonia dt Streptococcus pneumoniae	J170	Pneumonia in bacterial diseases classified elsewhere
J14	Pneumonia due to Haemophilus influenzae	J171	Pneumonia in viral diseases classified elsewhere
J150	Pneumonia due to Klebsiella pneumoniae	J172	Pneumonia in mycoses
J151	Pneumonia due to Pseudomonas	J173	Pneumonia in parasitic diseases
J152	Pneumonia due to Staphylococcus	J168	Pneumonia dt oth spec infect organisms
J153	Pneumonia due to Streptococcus, group B	J180	Bronchopneumonia unspecified
J154	Pneumonia due to other streptococci	J181	Lobar pneumonia unspecified
J155	Pneumonia due to Escherichia coli	J188	Other pneumonia organism unspecified
J156	Pneumonia dt other aerobic gram neg bact	J189	Pneumonia unspecified

Exclusion criteria:

- Patients with one of the above ICD-10-CA diagnosis codes listed as both MRDx AND Type 2 (post-admit co-morbidity) on discharge abstract as this represents a hospital-acquired pneumonia
- Cases transferred to another acute care hospital
- Cases \leq 18 years

Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Data source: Health Records

Data limitations:

- In P9 and P10-06/07, SPH saw a marked increase in the number of cases of IPD (invasive pneumococcal disease) in patients from the downtown east side with compromised immune systems due to pre-existing health issues. Most of the patients with IPD were younger than 65 years and responded well to treatment. The number of pneumonia cases included in the calculation of this indicator doubled in these periods for patients less than 65 years old. A large number of these patients developed septicemia and a number of them were cared for in the ICUs.
- At the start of FY 04/05, Health Records implemented coding changes that affect how the most responsible diagnosis is determined for patients with both pneumonia and COPD (coronary obstructive pulmonary disease) in adherence with CIHI coding guidelines.

Target source: N/A

Action point source: N/A

Comparator source: American Thoracic Society (see reference below)

References:

- Bartlett JG, Mundy LM. Community-acquired pneumonia. *N Engl J Med* 1995; 333(24):1618-24.
- McGarvey RN, Harper JJ. Pneumonia Mortality Reduction and Quality Improvement in a Community Hospital. *Quality Review*

Technical notes



Bulletin (ORB) 1993; 19: 124-129.

3. Meehan TP et al. Process of care performance, patient characteristics, and outcomes in elderly patients hospitalized with community-acquired or nursing home-acquired pneumonia. *Chest* 2000; 117(5): 1378-85.
4. Neiderman MS et al. (American Thoracic Society) Guidelines for the Initial Management of Adults with Community-Acquired Pneumonia: Diagnosis, Assessment of Severity, and Initial Antimicrobial Therapy. *Am Rev Respir Dis* 1993; 148: 1418-26.

1.4. AMA rate for HIV/AIDS patients

Rationale:	Premature discharge is often associated with multiple readmissions, and often for the same (or related) diagnosis as the previous admission. Also lengths of stay in hospital have been found to be significantly longer during subsequent admissions for patients who left against medical advice.
Numerator:	Number of inpatient cases with HIV/AIDS who left hospital against medical advice (AMA)
Denominator:	Total number of inpatient cases with HIV/AIDS
	<i>Inclusion criteria:</i>
	<ul style="list-style-type: none">▪ Case with HIV/AIDS “alert”
	<i>Exclusion criteria:</i>
	<ul style="list-style-type: none">▪ Cases who died before discharge▪ Cases transferred to another acute care facility▪ Cases ≤ 18 years
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	Health Records
Data limitations:	<ul style="list-style-type: none">▪ The HIV/AIDS “alert” is a field that is downloaded from the ADT system. Health Records coders have identified errors in the assigning of this alert to patients. As this field is captured at the level of the patient, any errors would be replicated for each subsequent inpatient encounter that the patient experiences.
Target source:	N/A
Action point source:	N/A
Comparator source:	N/A
References:	1. Anis AH et al. Leaving hospital against medical advice among HIV-positive patients. <i>CMAJ</i> 2002; 167(6): 633.

1.5. Rate of receipt of adequate hemodialysis

Rationale:	Adequacy of dialysis is associated with morbidity and mortality of dialysis patients.
Numerator:	Number of hemodialysis patients receiving adequate dialysis <i>Inclusion criteria:</i> <ul style="list-style-type: none">▪ Hemodialysis patients with PRU ≥ 0.65 on last measurement within 2 months of the fiscal period end date
Denominator:	Number of hemodialysis patients with a PRU measurement within 2 months of the fiscal period end date
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Definitions of terms:	<i>Percent reduction of urea (PRU)</i> – An alternative measure of dialysis adequacy. It is a function of dialyzer urea clearance, length of dialysis, and urea distribution volume of the patient.
Data source:	Patient Record and Outcome Management Information System (PROMIS)
Data limitations:	None identified at this time.
Target source:	Consultation with internal experts.
Action point source:	N/A
Comparator source:	N/A
References:	<ol style="list-style-type: none">1. BCPRA/PHSA. Proposed Financial and Clinical Indicators by which to evaluate care and delivery. August 2002.2. Basile C, Casino F, Lopez T. Percent reduction in blood urea concentration during dialysis estimates Kt/V in a simple and accurate way. <i>Am J Kidney Dis</i> 1990; 15(1):40-5.

1.6. Rate of adequate renal function at 6 months post-kidney transplant

Rationale:	Early renal function has been shown to be a predictor of long-term kidney graft survival.
Numerator:	Number of kidney transplant recipients with adequate renal function at 6 months post-transplant <i>Inclusion criteria:</i> <ul style="list-style-type: none"> ▪ Glomerular filtration rate (GFR) \geq 50 mL/min. <p>*Note: for those transplant recipients who experience an acute rejection of the kidney, a creatinine clearance measurement of zero is imputed.</p>
Denominator:	Total number of kidney transplant recipients at 6 months post-transplant surgery.
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Definition of terms:	<i>Glomerular filtration rate (GFR)</i> – A standard of assessing kidney function. It is usually estimated by creatinine clearance, a test that compares the level of creatinine in urine with the creatinine level in the blood.
Data source:	PROMIS
Data limitations:	<ul style="list-style-type: none"> ▪ Meaningful analysis is made difficult due to the low case counts observed per fiscal quarter.
Target source:	Consultation with internal experts.
Action point source:	N/A
Comparator source:	N/A
References:	1. http://www.nlm.nih.gov/medlineplus/ency/article/003611.htm

1.7. Unplanned readmission rate for mental health & addictions

Rationale:	Readmission rate may be a measure of the effectiveness of in-hospital treatment and discharge planning.
Numerator:	Number of cases that were readmissions to the same facility in ≤ 28 days for a related diagnosis <i>Inclusion criteria:</i> <ul style="list-style-type: none">▪ Cases with readmission code = 2 or 3
Denominator:	Total number of mental health and addictions cases <i>Inclusion criteria:</i> <ul style="list-style-type: none">▪ Cases aged between 15 and 64 years, inclusive▪ Cases with one of the following ICD-10-CA codes as the most responsible diagnosis (MRDx): F0*, F1*, F2*, F3*, F4*, F50*, F51*, F52*, F530*, F531*, F6*, F840*, F841*, F843*, F844*, F845*, F848*, F849*, F9*, Z281*, Z55*, Z56*, Z57*, Z600*, Z601*, Z603*, Z604*, Z605*, Z608*, Z609*, Z61*, Z62*, Z63*, Z640*, Z641*, Z644*, Z65*, Z720*, Z721*, Z722*, Z723*, Z724*, Z725*, Z726*, Z729*, Z730*, Z731*, Z732*, Z733*, Z734*, Z735*, Z738*, Z739*, R410*, G312*, G442*
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	Health Records
Data limitations:	<ul style="list-style-type: none">▪ At the start of FY 04/05, the Ministry of Health Services changed its definition of mental health cases to those with a most responsible diagnosis in specific mental health and addictions codes. Additionally, it restricted its definition to those patients between the ages of 15 and 65. The definition of addictions is problematic as it relies on an addictions diagnosis being coded as the most responsible diagnosis, therefore use of this definition may lead to the underrepresentation of the true addictions population. All past data has been recompiled to reflect this new definition.▪ Due to changes made by CIHI in the coding of readmissions for fiscal year 03/04, data prior to this time are unavailable.
Target source:	Ministry of Health Performance Agreement
Action point source:	N/A
Comparator source:	VCH – VCH Balanced Scorecard
References:	1. Ministry of Health Services Service Plan 2003/04 – 2005/06.

1.8. Residential care indicators - Placeholder

Residential care indicators are currently under review for inclusion in the corporate BSC.

1.9. Resident overall satisfaction rate

Rationale: This indicator measures the extent to which residents of PHC residential care facilities are satisfied with the care and service that is being provided to them.

Numerator: Number of positive responses for each of the questions/dimensions specified under Denominator:

- Overall Satisfaction: Good + Excellent
- Dignity: Varies by survey question
- Living Environment: Varies by survey question
- Staff: Varies by survey question
- Food: Varies by survey question
- Autonomy: Varies by survey question
- Activity: Varies by survey question

Denominator: Total number of responses for each of the following questions/dimensions:

- Overall Satisfaction: Overall, how would you rate the quality of care and services you receive here?
- Dignity
- Living Environment
- Staff
- Food
- Autonomy
- Activity

*Note: Dimensions are comprised of several specific survey questions.

Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Data source: NRC+Picker Long Term Care Resident Survey

Data limitations:

- None identified at this time.

Target source: VCH Residential Care Performance Measurement Framework

Action point source: N/A

Comparator source: Comparator represents the average score across Canadian sites in the 2003 database.

References: 1. Providence Health Care – Long Term Care Resident Evaluation Survey. Resident Results January 2000. Prepared by Smaller World Communications Inc.

1.10. Resident family overall quality rate

Rationale:	This indicator measures the extent to which residents of PHC residential care facilities are satisfied with the care and service that is being provided to them.
Numerator:	<p>Number of positive responses for each of the survey questions specified under Denominator:</p> <ul style="list-style-type: none"> ▪ Overall Quality: Good + Very Good + Excellent ▪ Resident Needs: Good + Very Good + Excellent ▪ Dignity: Good + Very Good + Excellent ▪ Tender Loving Care: Good + Very Good + Excellent ▪ Family Needs: Good + Very Good + Excellent ▪ Likely to Recommend: Probably Recommend + Definitely Recommend
Denominator:	<p>Total number of responses for each of the following survey questions:</p> <ul style="list-style-type: none"> ▪ Overall Quality: Overall, how would you rate the quality of care and services provided? ▪ Resident Needs: How would you rate the facility at taking care of your family member's needs? ▪ Dignity: How would you rate the facility at maintaining your family member's dignity? ▪ Tender Loving Care: How would you rate the staff at providing tender, loving care? ▪ Family Needs: How would you rate the facility at taking care of YOUR needs? (see Data Limitations) ▪ Recommend to Others: If this type of care were required for another family member or friend, would you recommend this facility?
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	NRC+Picker Long Term Care Family Survey
Data limitations:	<ul style="list-style-type: none"> ▪ For the survey year 2003, the question pertaining to Family Needs was excluded.
Target source:	VCH Residential Care Performance Measurement Framework
Action point source:	N/A
Comparator source:	Comparator represents the average score across Canadian sites in the 2003 database.
References:	<ol style="list-style-type: none"> 1. Providence Health Care – Long Term Care Resident Evaluation Survey. Resident Results January 2000. Prepared by Smaller World Communications Inc.

1.11. Emergency patient satisfaction rate

Rationale:	This indicator measures the extent to which patients visiting PHC's EDs are satisfied with the care and service that is being provided to them.
Numerator:	Number of positive responses for each of the questions/dimensions specified under Denominator: <ul style="list-style-type: none">▪ Overall Quality: Good + Very Good + Excellent▪ Access & Coordination: Varies by survey question▪ Respect: Varies by survey question▪ Physical Comfort: Varies by survey question▪ Continuity & Transition: Varies by survey question▪ Information & Education: Varies by survey question▪ Emotional Support: Varies by survey question▪ Likely to Recommend: Yes, Probably + Yes, Definitely
Denominator:	Total number of responses for each of the following survey questions/dimensions: <ul style="list-style-type: none">▪ Overall Quality: Overall, how would you rate the care you received in the Emergency Department?▪ Access & Coordination▪ Respect▪ Physical Comfort▪ Continuity & Transition▪ Information & Education▪ Emotional Support▪ Likely to Recommend: Would you recommend this Emergency Department to family and friends? <p>*Note: Dimensions are comprised of several specific survey questions.</p>
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	NRC+Picker Emergency Department Patient Satisfaction Survey
Data limitations:	None identified at this time.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	Comparator represents the average score across all ED sites in the survey database.

1.12. Acute inpatient satisfaction rate

Rationale: This indicator measures the extent to which inpatients are satisfied with the care and service that is being provided to them.

Numerator: Number of positive responses for each of the questions/dimensions specified under Denominator:

- Overall Quality: Good + Very Good + Excellent
- Access to Care: Varies by survey question
- Respect for Patient Preferences: Varies by survey question
- Physical Comfort: Varies by survey question
- Continuity & Transition: Varies by survey question
- Information & Education: Varies by survey question
- Emotional Support: Varies by survey question
- Involvement of Family: Varies by survey question
- Coordination of Care: Varies by survey question
- Likely to Recommend: Yes, Definitely + Yes, Probably

Denominator: Total number of responses for each of the following survey questions/dimensions:

- Overall Quality: Overall, how would you rate the care you received at the hospital?
- Access to Care
- Respect for Patient Preferences
- Physical Comfort
- Continuity & Transition
- Information & Education
- Emotional Support
- Involvement of Family
- Coordination of Care
- Likely to Recommend: Would you recommend this hospital to your friends and family?

*Note: Dimensions are comprised of several specific survey questions.

Method of calculation:

$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Data source: NRC+Picker Acute Inpatient Satisfaction Survey

Data limitations: None identified at this time.

Target source: N/A

Action point source: N/A

Comparator source: Comparator represents the average score across all Canadian sites in the survey database.

1.13. Ambulatory oncology satisfaction rate

Rationale:	This indicator measures the extent to which ambulatory oncology patients are satisfied with the care and service that is being provided to them.
Numerator:	Number of positive responses for each of the survey questions/dimensions specified under Denominator: <ul style="list-style-type: none">▪ Overall Quality: Good + Very Good + Excellent▪ Access to Care: Varies by survey question▪ Respect for Patient Preferences: Varies by survey question▪ Physical Comfort: Varies by survey question▪ Continuity & Transition: Varies by survey question▪ Information & Education: Varies by survey question▪ Emotional Support: Varies by survey question▪ Involvement of Family: Varies by survey question▪ Coordination of Care: Varies by survey question▪ Likely to Recommend: Yes, Definitely + Yes, somewhat
Denominator:	Total number of responses for each of the following survey questions/dimensions: <ul style="list-style-type: none">▪ Overall Quality: Overall, how would you rate the quality of all your care in the past 6 months?▪ Access to Care▪ Respect▪ Physical Comfort▪ Coordination & Continuity▪ Information & Education▪ Emotional Support▪ Surgery Specific▪ Likely to Recommend: Would you recommend your health care providers to your family and friends? <p>*Note: Dimensions are comprised of several specific survey questions.</p>
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	NRC+Picker Ambulatory Oncology Satisfaction Survey
Data limitations:	None identified at this time.
Target source:	N/A
Action point source:	N/A
Comparator source:	Comparator represents the average score across all Canadian sites in the survey database.

1.14. HSMR (hospital standardized mortality ratio)

Rationale: This indicator tracks how PHC's mortality rate compares to the national rate for conditions accounting for 80% of inpatient mortality.

Numerator: The actual number of deaths for SPH and MSJ

Inclusion criteria:

- Discharged in one of the diagnosis groups (based on most responsible diagnosis – exceptions are noted below) that account for 80% of acute care in-hospital mortality (based on FY 04/05 data in the Discharge Abstract Database):

A04	Other bacterial intestinal infections	I61*	Intracerebral haemorrhage
A41*	Other septicaemia	I62*	Other nontraumatic intracranial haemorrhage
C16	Malignant neoplasm of stomach	I63*	Cerebral infarction
C18	Malignant neoplasm of colon	I64*	Stroke, not specified as haemorrhage or infarction
C22	Malignant neoplasm of liver and intrahepatic bile ducts	I71	Aortic aneurism and dissection
C25	Malignant neoplasm of pancreas	J18*	Pneumonia, organism unspecified
C34	Malignant neoplasm of bronchus and lung	J44*	Other chronic obstructive pulmonary disease
C50	Malignant neoplasm of breast	J69	Pneumonitis due to solids and liquids
C61	Malignant neoplasm of prostate	J80	Adult respiratory distress syndrome
C67	Malignant neoplasm of bladder	J84	Other interstitial pulmonary diseases
C71	Malignant neoplasm of brain	J90	Pleural effusion, not elsewhere classified
C78	Secondary malignant neoplasm of respiratory and digestive systems	J95	Postprocedural respiratory disorders, not elsewhere classified
C79	Secondary malignant neoplasm of other sites	J96	Respiratory failure, not elsewhere classified
C80	Malignant neoplasm without specification of site	K55	Vascular disorders of intestine
C83	Diffuse non-Hodgkin's lymphoma	K56	Paralytic ileus and intestinal obstruction without hernia
C85	Other and unspecified types of non-Hodgkin's lymphoma	K57	Diverticular disease of intestine
C90	Multiple myeloma and malignant plasma cell neoplasms	K63	Other diseases of intestine
C91	Lymphoid leukaemia	K65	Peritonitis
C92	Myeloid leukaemia	K70	Alcoholic liver disease
E11	DM type 2	K72	Hepatic failure
E86	Volume depletion	K74	Fibrosis and cirrhosis of liver
F03	Unspecified dementia	K85	Acute pancreatitis
G30	Alzheimer's disease	K92	Other diseases of digestive system
G93*	Other disorders of brain	N17	Acute renal failure
I20	Angina pectoris	N19	Unspecified renal failure
I21*	AMI	N39	Other disorders of urinary system
I25	Chronic ischaemic heart disease	R57	Shock, not elsewhere classified
I26	Pulmonary embolism	S06*	Intracranial injury
I46	Cardiac arrest	S72	Fracture of femur
I48	Atrial fibrillation and flutter	T81	Complications of procedures, not elsewhere classified
I50	Heart failure	Z54	Convalescence
I60*	Subarachnoid haemorrhage		

- Exceptions:

- Cases with I125.0, I25.1, I25.8, I25.9 as MRDx AND I21 or I22 as type 1, W, X, Y diagnosis AND 11J76, 11J50, 11J57GQ in any procedure code field (excluding abandoned procedures) group to I21 diagnosis group
- Cases with Z50 as MRDx AND I60, I61, I62, I63, I64 as type 1, W, X, Y diagnosis group to the diagnosis group corresponding to the type 1, W, X, Y diagnosis (e.g. a case with Z50 as the MRDx and I62 as a type 1 diagnosis group to the I62 diagnosis group)
- Cases with J10.0, J11.0, J12-J16, J18 as MRDx AND J44 in any diagnosis field group to the J44 diagnosis group
- Cases with J12-J17 as MRDx group to the J18 diagnosis group
- Cases with septicaemia (A42.7, A22.7, A26.7, A28.2, A54.8, A32.7, A39.2, A39.3, A40, A39.4, A21.7, B00.7, B37.7) as MRDx group to the A41 diagnosis group

Technical notes



- Cases with concussion (S06.0) as MRDx are excluded from the S06 diagnosis group
- Age at admission between 0 and 120 years
- Gender recorded as male or female
- Length of stay of up to 365 days
- Admission category = elective or emergent/urgent
- Canadian resident

Exclusion criteria:

- Cadavers, stillborns, sign-outs (discharge disposition = '08', '09', '06')
- Palliative care patients:
 - Diagnosis code of ICD-10-CA Z51.5 as any diagnosis type
 - Main Patient Service = 58
 - Patient Service Transfer = 58
- Neonates, age of admission less than or equal to 28 days
- Records with brain death as most responsible diagnosis code (ICD-10-CA G93.81)

Denominator:

The expected number of deaths for SPH and MSJ

A logistic regression model was fitted with the following independent variables using FY 04/05 CIHI DAD (Discharge Abstract Database) data:

- Age
- Gender
- Length of stay group (1 day, 2 days, 3-9 days, 10-15 days, 16-21 days and 22-365 days)
- Diagnosis group (one of the 64 listed in the Numerator)
- Co-morbidity group (0, 1 or 2, or above 2), based on the Charlson Index Score (see below)
- Transfers in from an acute care institution (1 = transferred in; 0 = not transferred in)

$$\ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1\text{Age} + \beta_2\text{Male Gender} + \beta_3\text{LOS Group 1} \dots \beta_7\text{LOS Group 6} + \beta_8\text{Urgent Admission} + \beta_9\text{Diagnosis group A04} \dots \beta_{65}\text{Diagnosis group Z54} + \beta_{66}\text{Charlson Group 1} + \beta_{67}\text{Charlson Group 2} + \beta_{68}\text{Transferred}$$

where p = probability of death and the values for the intercept (β_0) and coefficients ($\beta_{1...68}$) are as follows:

Intercept	-10.02076635	C71	3.204330888	I50	2.318700053	K65	3.125238119
Age	0.049421589	C78	3.289504981	I60	4.13533699	K70	3.784710659
Male Gender	0.089877221	C79	2.845152688	I61	4.132785911	K72	3.578499341
LOS Group 1	1.30996391	C80	4.162747792	I62	3.268740335	K74	3.04992362
LOS Group 2	0.586673113	C83	3.526005334	I63	2.744590863	K85	1.625831174
LOS Group 4	0.008285513	C85	3.489361813	I64	2.904384482	K92	1.653789831
LOS Group 5	0.15369005	C90	3.328205462	I71	3.361110553	N17	2.888459684
LOS Group 6	0.41813118	C91	3.694611352	J18	2.592184929	N19	3.020324166
Urgent Admission	0.952870069	C92	4.128885546	J44	2.190318194	N39	3.022992139
A04	2.138329449	E11	1.709547075	J69	3.945210039	R57	1.054527292
A41	3.844419508	E86	1.645962024	J80	4.711810769	S06	4.921870748
C16	2.95151913	F03	1.089797666	J84	3.440907965	S72	3.525099349
C18	2.287913068	G30	1.387110241	J90	1.894110374	T81	1.708845213
C22	3.622149881	G93	1.786564441	J95	2.72834879	Z54	1.283373998
C25	3.250755755	I20	5.047277083	J96	4.105485506	Charlson Group1	0.667345993
C34	3.41883293	I25	2.492998275	K55	3.518642867	Charlson Group2	1.238605344
C50	1.178052132	I26	1.043129892	K56	1.61597973	Transferred	0.303674928
C61	1.719912821	I46	2.567307695	K57	1.111802134		
C67	1.275092169	I48	5.655223621	K63	3.053188043		

*The above intercept and coefficients are based on FY 04/05 data and applied to all reported years.

P (probability of death) is calculated for each case based on the above equation and the total expected number of deaths is the arithmetic sum of the all the case probabilities.

Calculation of the Charlson Comorbidity Group:

- The Charlson Index Score is calculated by summing the weights associated with each comorbidity type that is present as a Type 1, W, X, or Y diagnosis based on the following ICD-10-CA codes:

Comorbidity type	ICD-10-CA codes	Weight
Myocardial infarction	'I21','I22','I252'	1
Congestive heart failure	'I43','I50','I099','I110','I130','I132','I255','I420','I425','I426','I427','I428','I429','P290'	1
Peripheral vascular disease	'I70','I71','I731','I738','I739','I771','I790','I792','K551','K558','K559','Z958','Z959'	1
Cerebrovascular disease	'G45','G46','I60','I61','I62','I63','I64','I65','I66','I67','I68','I69','H340'	1
Dementia	'F00','F01','F02','F03','G30','F051','G311'	1
Chronic pulmonary disease	'J40','J41','J42','J43','J44','J45','J46','J47','J60','J61','J62','J63','J64','J65','J66','J67','I278','I279','J684','J701','J703'	1
Connective tissue disease – rheumatic disease	'M05','M32','M33','M34','M06','M315','M351','M353','M360'	1
Peptic ulcer disease	'K25','K26','K27','K28'	1
Mild liver disease	'B18','K73','K74','K700','K701','K702','K703','K709','K717','K713','K714','K715','K760','K762','K763','K764','K768','K769','Z944'	1
Diabetes without complications	'E100','E101','E106','E108','E109','E110','E111','E116','E118','E119','E120','E121','E126','E128','E129','E130','E131','E136','E138','E139','E140','E141','E146','E148','E149'	1
Diabetes with complications	'E102','E103','E104','E105','E107','E112','E113','E114','E115','E117','E122','E123','E124','E125','E127','E132','E133','E134','E135','E137','E142','E143','E144','E145','E147'	2
Paraplegia and hemiplegia	'G81','G82','G041','G114','G801','G802','G830','G831','G832','G833','G834','G839'	2
Renal disease	'N18','N19','N052','N053','N054','N055','N056','N057','N250','I120','I131','N032','N033','N034','N035','N036','N037','Z490','Z491','Z492','Z940','Z992'	2
Cancer	'C00','C01','C02','C03','C04','C05','C06','C07','C08','C09','C10','C11','C12','C13','C14','C15','C16','C17','C18','C19','C20','C21','C22','C23','C24','C25','C26','C30','C31','C32','C33','C34','C37','C38','C39','C40','C41','C43','C45','C46','C47','C48','C49','C50','C51','C52','C53','C54','C55','C56','C57','C58','C60','C61','C62','C63','C64','C65','C66','C67','C68','C69','C70','C71','C72','C73','C74','C75','C76','C81','C82','C83','C84','C85','C88','C90','C91','C92','C93','C94','C95','C96','C97'	2
Moderate or severe liver disease	'K704','K711','K721','K729','K765','K766','K767','I850','I859','I864','I982'	3
Metastatic carcinoma	'C77','C78','C79','C80'	6
HIV/AIDS	'B20','B21','B22','B24'	6

- The Index Score is then categorized into one of the following Comorbidity Groups: 0, 1 or 2 or more than 2.
- Multiple diagnoses that are present for the same comorbidity type are only counted once. For example, if a patient had two diabetes with complications diagnoses, the weight would be 2 and not 4.
- If one of the above type 1, W, X, or Y codes is used to group a case to a diagnosis group, then the diagnosis would NOT be included in the calculation of that case's Charlson Index Score (e.g. a case with MRDx of Z50 and I61 as a type 1 diagnosis would group to the I61 diagnosis group. The type 1 I61 diagnosis would not be used in the Charlson Index calculation as it was already used to assign the diagnosis group)

Method of calculation:

$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Confidence Interval:

- Lower control limit: $O/E * (1 - 1/(9 * O) - 1.96/(3 * \text{sqrt}(O)))^3 * 100$
- Upper control limit: $(O + 1)/E * (1 - (1/(9 * (O + 1)))) + 1.96/(3 * \text{sqrt}(O + 1)))^3 * 100$

O = actual number of deaths
E = expected number of deaths

Definition of terms:

Charlson Index score – The Charlson Index contains categories of comorbidity each of which is associated with a weight, which is based on the adjusted risk of one-year mortality. The overall score is the cumulative increased likelihood of one-year mortality.

Technical notes



Data source: Health Records Extract

Data limitations:

- Retrospective coding reviews for FY 03/04 for deaths in low-mortality CMGs occurred in FY 04/05. The reviews resulted in the regrouping of some cases that resulted in death into different CMGs. As CIHI was no longer accepting corrections for this fiscal year at the time of the reviews, it is likely that the number of deaths in the CMGs included in the calculation of HSMR is understated in the DAD (Discharge Abstract Database), and consequently, in the CIHI HSMR Quarterly Reports for this particular fiscal year.
- CIHI revised its methodology for HSMR calculation in May 2007.

Target source: N/A

Action point source: N/A

Comparator source: A ratio of 100 indicates that the organization's mortality rate is no different than the national average rate.

References:

1. http://www.umanitoba.ca/centres/mchp/concept/dict/comorb_compl/charlson_index.html
2. Charlson ME, Pompei P, Ales KL, McKenzie CR (1987). A new method of classifying prognostic comorbidity in longitudinal studies: development and validation. *J Chron Dis*, 40(5): 373-383.

1.15. In-hospital deaths per 100 patients in CMGs with less than 1% mortality

Rationale:	This indicator measures the number of deaths among patients with a low likelihood of dying during their hospitalization. The assumption is that when patients being cared for a condition that is associated with a low risk of mortality die in hospital, the death may be the result of substandard care.
Numerator:	Number of in-hospital deaths in CMGs with less than 1% mortality
Denominator:	Total number of inpatient cases in CMGs with less than 1% mortality based on FY 02/03 data from hospitals participating in the HayGroup Benchmarking Reports

Inclusion criteria:

- Cases coded under one of the following CMGs:

Medical:

- 029 Transient Ischemic Attack
- 034 Other Disorder of Nerve
- 040 Seizure Disorder
- 041 Migraine/Other Headache
- 063 Inflammation of Orbit
- 064 Major Ophthalmology Disorder
- 065 Other Ophthalmology Disorder
- 095 Sleep Apnea
- 096 Epiglottitis
- 097 Influenza/Acute Upper Respiratory Infection
- 098 Dysequilibrium/Hearing Loss
- 099 Epistaxis
- 100 Sinusitis
- 101 Disease of Oral Cavity/Salivary Gland/Jaw
- 103 Tonsillitis/Pharyngitis
- 105 Miscellaneous Ear/Nose/Throat Disorder
- 141 Upper/Lower Respiratory Infection
- 147 Asthma
- 198 Congenital Cardiac Disorder
- 201 Arrhythmia with Cardiac Catheter
- 203 Unstable Angina/Atherosclerotic Heart Disease with Cardiac Cath
- 205 Syncope
- 206 Benign Hypertension
- 207 Angina (except Unstable)/Chest Pain with Cardiac Catheter
- 208 Angina (except Unstable)/Chest Pain without Cardiac Catheter
- 249 Enteritis
- 252 Uncomplicated Ulcer
- 253 Inflammatory Bowel Disease
- 256 Esophagitis/Gastritis/Miscellaneous Digestive Disease
- 257 Symptom/Sign of Digestive System
- 258 Other Gastrointestinal Disorder
- 360 Vertebral/Disc Disease
- 362 Arthritis
- 364 Back Pain/Strain
- 365 Pain/Stiffness, except Back
- 368 Orthopedic Aftercare
- 369 Strain/Sprain/Joint/Tendon Disorder
- 405 Cellulitis
- 406 Abscess
- 407 Other Disease/Disorder of Skin/Subcutaneous Tissue
- 408 Trauma of Skin/Subcutaneous Tissue/Breast
- 481 Other Disorder of Urinary System
- 482 Other Disorder of Kidney/Ureter
- 483 Disease/Disorder of Male Reproductive System
- 484 Symptom/Sign of Urinary System
- 485 Urinary Obstruction with Percutaneous Drainage
- 486 Urinary Obstruction without Percutaneous Drainage
- 488 Upper Urinary Tract Infection
- 521 Fibroid/Prolapse/Fistula/Other Disorder
- 522 Inflammatory Disorder of Female Reproductive System
- 524 Disorder of Menstruation/Endometriosis/Non-inflammatory Disorder of Female Reproductive System
- 634 Hemoglobinopathy
- 637 Other Disease/Disorder of Blood/Lymphatic System
- 638 Chemotherapy/Radiotherapy Session for Neoplasm
- 639 Other Chemotherapy

Technical notes



- 659 Chickenpox/Herpes Zoster/Cytomegaloviral Disease
- 661 Other/Unspecified Viral Illness
- 662 Fever
- 701 Psychoactive Substance Use, Withdrawal State
- 767 Other Fracture Dislocation of Leg
- 768 Fracture of Patella/Upper Tibia/Fibula
- 770 Other Fracture/Dislocation of Arm/Shoulder
- 775 Fracture of Skull/Facial Bone
- 776 Open Wound/Other/Unspecified Minor Injury
- 777 Other/Unspecified Fracture/Dislocation
- 778 Poisoning/Toxic Effect of Drug
- 779 Concussion
- 782 Post-Operative Hemorrhage
- 783 Fracture/Dislocation of Wrist/Hand/Ankle/Foot
- 813 Follow-Up Treatment/Examination
- 814 Observation/Evaluation
- 815 Cancelled Intervention
- 993 Diagnosis Not Generally Hospitalized
- Surgical:*
- 008 Other Site/Non-Major Intervention on Spine/Spinal Canal/Vertebra
- 012 Open Carotid Endarterectomy
- 013 Major Nerve Intervention or Intervention on other Site
- 014 Non-Major Intervention on Nerve
- 050 Orbit/Eyeball Intervention
- 053 Extraocular Intervention except Lacrimal System
- 073 Oropharynx Excision
- 075 Larynx/Trachea Intervention with Ear/Nose/Throat Diagnosis
- 077 Partial Excision Musculoskeletal Tissue of Head
- 081 Hard/Soft Palate/Gingiva Intervention
- 083 Ear/Nose/Throat Gland Intervention
- 084 Sinus Intervention
- 086 Oral Cavity/Pharynx Intervention
- 161 Implantation of Cardioverter/Defibrillator
- 172 Coronary Artery Bypass Graft without Cardiac Catheter without MI/Shock/Arrest with/without Pump
- 176 Percutaneous Coronary Intervention without MI/Shock/Arrest/Heart Failure
- 226 Non-Major Excision/Repair of Upper Gastrointestinal Tract, Planned
- 227 Endoscopic Large Intestine/Rectum Resection without Colostomy
- 228 Complex Hernia Repair
- 229 Non-Complex Hernia Repair
- 230 Repair/Fixation & Other Moderate Intervention on Lower Gastrointestinal Tract
- 232 Minor Lower Gastrointestinal Intervention
- 233 Complicated Appendectomy
- 234 Simple Appendectomy
- 235 Intervention on Anus Excluding Reconstruction
- 236 Simple Removal of Upper Gastrointestinal Foreign Body
- 278 Laparoscopic Cholecystectomy with/without Common Bile Duct Exploration
- 281 Extraction/Destruction of Calculus Common Bile Duct
- 304 Other Lower Limb Intervention with Malignant Neoplasm
- 312 C1/C2/Thoracic Spine Intervention
- 313 Spinal Vertebrae Intervention
- 314 Other Intervention on Back/Neck
- 317 Revised Hip Replacement without Infection
- 318 Revised Knee Replacement with Infection
- 319 Revised Knee Replacement without Infection
- 320 Unilateral Hip Replacement
- 321 Unilateral Knee Replacement
- 323 Open Knee Intervention except Fixation without Infection
- 325 Closed Knee Intervention except Fixation without Infection
- 326 Shoulder Replacement
- 331 Osteotomy of Lower Limb except Foot
- 332 Other Repair Bone of Leg except Ankle/Foot
- 336 Resection/Amputation/Fixation of Upper Limb except Shoulder/Hand
- 337 Hand Intervention
- 340 Elbow Intervention
- 341 Shoulder/Rotator Cuff Intervention
- 342 Biopsy/Invasive Inspection of Bone
- 343 Other Musculoskeletal Intervention except Soft Tissue
- 344 Soft Tissue Intervention of Upper Limb
- 345 Soft Tissue Intervention of Lower Limb
- 347 Craniofacial Bone Intervention with Musculoskeletal Diagnosis
- 348 Skin Intervention with Musculoskeletal Diagnosis
- 349 Nerve Intervention with Musculoskeletal Diagnosis
- 382 Muscle/Tendon/Soft Tissue Intervention with Skin Diagnosis
- 384 Other Non-Skin Intervention without Skin Graft
- 387 Unilateral Total/Radical Excision of Breast
- 388 Partial Excision Breast with Malignant Breast Diagnosis
- 390 Other Breast Intervention

391 Lymphatic System Intervention with Skin Diagnosis
 392 Other Skin/Subcutaneous Tissue Intervention
 423 Size Reduction of Skin/Soft Tissue
 424 Thyroid/Parathyroid/Thymus Gland Intervention
 450 Kidney Transplant
 454 Major Intervention on Upper Urinary Tract
 455 Minor Intervention on Upper Urinary Tract, Percutaneous Endoscopic Approach
 456 Minor Intervention on Upper Urinary Tract, External/Per Orifice Approach
 457 Major Intervention on Lower Urinary Tract
 459 Non-Major Intervention on Lower Urinary Tract, Planned
 460 Major Intervention on Male Reproductive System
 461 Non-Major Intervention on Male Reproductive System
 462 Radical Excision of Prostate
 463 Partial Excision of Prostate, Open Approach
 464 Partial Excision/Destruction of Prostate, Closed Approach
 466 Intervention related to Dialysis, Planned Admission
 501 Hysterectomy with Malignancy
 502 Hysterectomy with Non Malignant Diagnosis
 506 Bladder Fixation
 507 Repair/Brachytherapy/Other Intervention on Female Reproductive System except Tube/Ovary
 510 Diagnostic Laparoscopy with/without Biopsy
 511 Vulva/Perineum Intervention
 512 Dilation & Curettage/Other Minor Intervention on Uterus
 711 Non-Extensive Burn with Skin Graft
 728 Other Intervention on Hip/Lower Limb with Trauma/Complication of Treatment
 729 Replacement/Fixation/Repair of Tibia/Fibula/Knee
 735 Skull Intervention with Trauma/Complication of Treatment
 736 Skin/Soft Tissue Intervention with Trauma with Flap/Graft
 737 Skin/Soft Tissue Intervention with Trauma without Flap/Graft
 738 Fixation/Repair of Shoulder Joint
 739 Reduction/Fixation/Repair Upper Body/Limb except Fixation/Repair of Shoulder
 740 Internal Fixation of Facial Bone
 742 Ear/Nose/Throat Intervention with Trauma/Complication of Treatment
 743 Other Intervention on Bone of Upper Body with Trauma/Complication of Treatment
 744 Muscle/Tendon/Minor Joint Intervention with Trauma/Complication of Treatment, Lower Limb
 745 Nerve Intervention with Trauma
 747 Reduction/Fixation/Repair of Ankle/Foot
 748 Other Intervention for Trauma/Complication of Treatment
 749 Eye Intervention with Trauma/Complication of Treatment
 750 Muscle/Tendon/Minor Joint Intervention with Trauma/Complication of Treatment, Upper Limb

Exclusion criteria:

Patients transferred to palliative care: Main patient service = 58 or service transfer = 58 or any diagnosis of "other aftercare" = Z51.5

Patients transferred to an acute care facility- Transfer to facility = 1

Patients with any code for trauma ICD-10-CA:

S01^A-S03.3, S05.2-S05.7, S06^A-S08^A, S09.0, S09.2-S09.9, S11^A-S13.3, S14.0-S14.38, S15^A, S17^A-S18, S21^A-S23.2, S24.0-S24.28, S25^A-S28^A, s29.7, S31^A-S33.4, S34.0-S34.48, S35^A-S38^A, S39.6-S39.7, S41^A-S43.391, S45^A, S46.00, S46.10, S46.20, S46.70, S46.80, S46.90, S47^A-S48^A, S51^A-S53.1, S55^A, S56.20, S56.50, S56.70, S56.80, S57^A-S58^A, S61.2, S61.70-S61.71, S61.80-S61.81, S61.90-S61.91, S62.000-S62.001, S62.100-S62.191, s62.200-S62.291, S62.300-S62.391, S62.400-S62.401, S62.800-S62.801, S63.000-S63.091, S65^A, S66.60, S66.70, S66.80, S66.90, S67^A, S68.3-S68.9, S71^A-S72^A, S73.000-S73.091, S75^A, S76.00, S76.10, S76.20, S76.30, S76.40, S76.70, S77^A-S78^A, S81^A-S82^A, S83.000-S83.3, S85^A, S86.10, S86.20, s86.30, S86.70, S86.80, S86.90, S87^A-S88^A, S91.00-S91.01, S91.30-S91.72, S92.000-S92.301, S92.700-S92.901, S93.000-S93.111, S93.300-S93.311, s95^A, S97^A, S98.0, S98.3-S98.4, T01.00-T01.91, T02-T05, T06^A, T08^A, T09.1, T10^A, 11.1-T11.2, T11.4, T11.6, T12^A, T13.1-T13.2, T13.4, T13.6, T14.1-T14.3, T14.5, T14.7, T20^A-T32^A, T79^A

Patients with any code for cancer

ICD-10-CA: C00^A-C43^A, C45^A-C49^A, C50^A-C97, Z51.0-Z51.1, D00^A-D09^A, D37^A-D48^A

Patients with an immunocompromised state (identified by procedure)

CCI: 1.GT.85.LA-XX-J, 1.GT.85.LA-XX-K, 1.HY.85.LA-XX-K, 1.HZ.85.LA-XX-K, 1.HZ.85.LAXX-L, 1.WY.19.HH-XX-A, 1.WY.19.HH-XX-I, 1.WY.19.HH-XX-M, 1.PC.85.LA-XX-J, 1.PC.85.LAXX-K, 1.OJ.83.WK-XX-A, 1.OJ.85.WK-XX-K, 1.OJ.83.LA-XX-A, 1.OJ.85.GR-XX-K, 1.OJ.85.HAXX-L, 1.OK.85^A

Patients with any code for an immunocompromised state (identified by diagnosis)

ICD-10-CA: B24, B59, D80^A-D89^A, T86.000, T86.001, T86.100-T86.101, T86.200-T86.201, T86.300-T86.301, T86.400-T86.401, T86.800-T86.801, T86.810-T86.811, T86.9, Z94.0-Z94.4, Z94.80-Z94.88

Technical notes



Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Data source: Health Records

- Data limitations:
- This indicator, in its original form, was developed by Stanford University and the University of California under a contract with the Agency for Healthcare Research and Quality (AHRQ). CIHI/HayGroup adapted the methodology to a Canadian context for its Patient Safety Developmental Indicators Supplement to its Benchmarking reports. The first edition of the Supplement was released in August 2004.
 - Each patient death in a low-mortality CMG is flagged as a “sentinel event” and triggers a review of the patient’s chart, and where necessary, recoding of the chart. Due to this review procedure, there is a lag of 1 to 2 fiscal periods from the time a fiscal period has finished coding and the time the review and recoding process has been completed. For the periods shown, approximately 50% of the deaths were eventually excluded from the indicator as a result of recoding (i.e., regrouped in a non-low-mortality CMG or met an exclusion criterion). Due to the impact of the review process on the indicator result and the fact that corrections to the DAD are no longer being accepted by CIHI for fiscal years 02/03 and 03/04, the rates published in the benchmarking reports for these years will not coincide with those reported on the PHC BSC.
 - The new CMG grouper and adjustments in the criteria was installed in January 2008 and cases from P1-07/08 onwards were regrouped. This may have had some impact on the indicator result.

Target source: VCH Balanced Scorecard

Action point source: N/A

Comparator source: VCH – VCH Balanced Scorecard

- References:
1. <http://www.qualityindicators.ahrq.gov/data/hcup/psi.htm>
 2. 2003 Patient Safety Developmental Indicators Supplement, Benchmarking Comparison of Canadian Hospitals. HayGroup/CIHI.

1.16. In-hospital fracture rate per 1,000 patients aged 65 years and older

Rationale:	This indicator measures the extent to which we are engaging in processes to prevent or minimize the risk of in-hospital injuries for our patients aged 65 years and older.
Numerator:	<p>Number of discharges with at least one of the following diagnoses coded as a Type 2 diagnosis:</p> <ul style="list-style-type: none"> ▪ S02^^ Fracture of skull and facial bones ▪ S12^^ Fracture of neck ▪ S22^^ Fracture of rib(s), sternum and thoracic spine ▪ S32^^ Fracture of lumbar spine and pelvis ▪ S42^^ Fracture of shoulder and upper arm ▪ S52^^ Fracture of forearm ▪ S62^^ Fracture at wrist and hand level ▪ S72^^ Fracture of femur ▪ S82^^ Fracture of lower leg, including ankle ▪ S92^^ Fracture of foot, except ankle ▪ T02^^ Fractures involving multiple body regions ▪ T08^^ Fracture of spine, level unspecified ▪ T10^^ Fracture of upper limb, level unspecified ▪ T12^^ Fracture of lower limb, level unspecified ▪ T142^^ Fracture of unspecified body region, closed <p><i>Exclusion criteria:</i></p> <ul style="list-style-type: none"> ▪ Minor fractures (including those of the teeth, fingers, and toes) ▪ M96.6 – fracture bone following orthopaedic implant
Denominator:	<p>Total number of discharges aged ≥ 65 years</p> <p><i>Inclusion criteria:</i></p> <ul style="list-style-type: none"> ▪ Acute discharges from SPH, MSJ, SVH, and HFH <p><i>Exclusion criteria:</i></p> <ul style="list-style-type: none"> ▪ S02580 Fracture of tooth, closed ▪ MCC 13 – obstetric discharges ▪ MCC 14 - newborns and other neonates with conditions originating in the perinatal period
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 1,000$
Data source:	Health Records Extract
Data limitations:	None identified at this time.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	VCH – VCH Balanced Scorecard

1.17. Influenza immunization rate for residents

Rationale:	This indicator measures the extent to which we are taking precautions to reduce the risk of influenza-related morbidity and mortality among residents.
Numerator:	Number of residents who received an influenza vaccination
Denominator:	Total number of residents *Note: The denominator is not adjusted for residents who refuse immunization
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	Residential care facilities (data is submitted to Infection Control for reporting)
Data limitations:	<ul style="list-style-type: none">▪ Currently, there are no standards for data collection for both the numerator and denominator:<ul style="list-style-type: none">▪ There is an annual immunization “blitz”. Residents are also immunized if they are admitted after the annual blitz. Some facilities included only those residents who were immunized during the blitz.▪ For the denominator, some residential care facilities reported the total number of beds, others reported the number of residents at the time the data was collected.▪ Data on immunization refusals began to be collected in FY 06/07. There are no data on refusals available for previous fiscal years.
Target source:	Performance Agreement between the Ministry of Health Services and the Vancouver Coastal Health Authority
Action point source:	N/A
Comparator source:	N/A
References:	1. Performance Agreement between the Ministry of Health Services and the Vancouver Coastal Health Authority. April 1, 2005 to March 31, 2006

1.18. Influenza immunization rate for staff

Rationale:	This indicator measures the extent to which we are taking precautions to reduce the risk of influenza transmission to residents and patients and reduce the risk of absenteeism due to illness in staff.
Numerator:	The number of full-time, part-time, and casual staff who received an influenza immunization
Denominator:	Total number of full-time, part-time, and casual employees at the time of the annual immunization campaign
	<p><i>Exclusion criteria:</i></p> <ul style="list-style-type: none"> ▪ Staff who have already been immunized (e.g. at their doctor's office or other place of work) ▪ Employees on LTD ▪ Non-employees whose pay is managed by PHC (Paymasters) ▪ Physicians and contracted services employees
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	ESP & PeopleSoft
Data limitations:	<ul style="list-style-type: none"> ▪ Data may not be directly comparable between fiscal years due to changes in data collection procedures. ▪ The definition will be changed in FY 07/08 to adhere to the definition used by the BC Centre for Disease Control.
Target source:	Performance Agreement between the Ministry of Health Services and the Vancouver Coastal Health Authority
Action point source:	N/A
Comparator source:	N/A
References:	1. Performance Agreement between the Ministry of Health Services and the Vancouver Coastal Health Authority. April 1, 2005 to March 31, 2006

1.19. %ARO (MRSA or VRE) Positive Patient Days

Rationale: Antibiotic-resistant organisms (AROs), such as Methicillin-Resistant *Staphylococcus aureus* (MRSA) and Vancomycin-Resistant Enterococci (VRE), are known to be transmitted in health care settings and can cause infections that are sometimes difficult to treat. More recently, transmission of AROs in community settings has been widely reported. High-risk patients admitted to PHC facilities are screened for AROs. Many of the cases identified are community-acquired cases and are simply colonized with an ARO rather than infected. Once a patient has tested positive for an ARO (whether colonization or infection) they are alerted in the ADT system so that contact precautions can be implemented which reduces the risk of further transmission. This alert-in the vast majority of cases-is never deactivated given that patients often carry AROs for extended periods of time; moreover, no reliable method currently exists for permanent decolonization.

This indicator informs decision makers as to the percentage of patient days that have a positive alert for an ARO in an attempt to gauge resources that are consumed in caring for these patients.

Numerator: Number of acute inpatient census days where the patient has an active MRSA/VRE alert

Denominator: Total number of census days for all acute patients

Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Data source: ADT Census

Data limitations:

- No differentiation is made between cases acquired in the community and cases associated with admission to PHC
- No differentiation is made between cases of MRSA colonization and infections in the ADT system
- Given the increasing prevalence of community-acquired MRSA (CA-MRSA), changes in this indicator are more likely to be a reflection of CA-MRSA cases rather than PHC-associated MRSA cases
- Changes in, and compliance with, screening practices for MRSA and VRE may influence the number of cases detected

Target source: N/A

Action point source: N/A

Comparator source: N/A

References:

1.20. Housekeeping Audit Scores

Rationale:	<p>As part of the contracting out of housekeeping services at Providence Healthcare and Vancouver Coastal Health, an auditing system was put in place to ensure that a high level of cleanliness was maintained. Under that audit system rooms and areas in healthcare facilities are scored. The overall score for a room is based on up to 19 inspection elements that have different weights associated with them, depending on the risk category. The overall percentage score for a facility is based on the average score for all rooms audited in that facility. The overall percentage score for a health authority is based on the average of all the facilities audited within that health authority. 85% is a threshold that each facility must achieve; otherwise remedial action must take place.</p> <p>This indicator informs decision makers as to the general cleanliness of facilities and is considered an indirect measure of safety.</p>
Numerator:	Arithmetic mean of scores for all of PHC
Denominator:	N/A
Method of calculation:	Arithmetic mean of scores for all of PHC
Data source:	Contract Services
Data limitations:	Data for this indicator is only available in months (rather than periods)
Target source:	N/A
Action point source:	N/A
Comparator source:	Vancouver Coastal Health Authority (excluding PHC)

1.21. Clean Hands for Life™ campaign

Rationale: Hand hygiene (hand-washing with soap and water or using a hand gel/foam) is likely the most important measure for preventing the spread of microorganisms in health care settings. However, overall compliance with hand hygiene is known to be low. Monitoring hand hygiene is an essential component of programs aimed at improving compliance. Direct observation is known as a reliable method to measure trends in hand hygiene practices.

In October 2005, Providence Health Care launched a one-year hand hygiene campaign called *Clean Hands for Life™*, in collaboration with Vancouver Coastal Health and sponsored by Bayer HealthCare (Canada). The goal of the campaign was to improve hand hygiene compliance by promoting awareness through posters, promotional materials, and educational sessions. Access to hand gel was greatly improved by distributing portable hand gel bottles and mounting additional wall-mounted gel dispensers. Front-line nurses and doctors measured hand hygiene compliance by direct observation of staff before the campaign started, at the mid-point of the campaign, and after the campaign was over using the following formula:

This indicator shows hand hygiene compliance at PHC in relation to the *Clean Hands for Life™* campaign, as part of an evaluation of the campaign's effectiveness in meeting its objectives.

Numerator: Number of compliant hand hygiene events. This includes any type of hand hygiene (washing with soap and water or using hand gel/foam) before or after patient contact or putting on new gloves before patient contact.

Denominator: Number of hand hygiene opportunities. This includes hand hygiene opportunities before or after any staff to patient contact.

Method of calculation:

$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Data source: Hand hygiene audits conducted by front-line nurses and doctors as part of the *Clean Hands for Life™* campaign. Audits were conducted before the campaign (September 21 – October 19, 2005), at the mid-point of the campaign (February 8 – March 22, 2006) and after the campaign (November 9, 2006 – July 19, 2007).

Data limitations:

- Hand hygiene compliance rates may not be comparable to those reported in the literature due to differences in case definitions and audit methodology.
- Staff members may have changed their hand hygiene behaviour if they knew they were being observed. This typically results in falsely elevated compliance rates.
- Selection of hand hygiene events and opportunities was not randomized which may have introduced selection bias. Therefore, events and opportunities included in the audits may not be entirely representative of hand hygiene compliance across PHC.
- Proper hand hygiene technique was not included in the definition of a compliant hand hygiene event, and therefore, could not be evaluated.
- Hand hygiene compliance after contact with the environment was not evaluated.
- Audits were conducted by multiple front-line staff, which may have led to inter-observer differences in reporting. Training was provided to staff conducting the audits in order to minimize this bias.

Target source: N/A

Action point source: N/A

Comparator source: N/A

References:

1.22. Average wait time in ED for admitted patients

Rationale:	This indicator measures the extent to which patients admitted via the ED are able to access the level of care they require in a timely fashion.
Numerator:	Sum of (time of leave ED – time of triage) for all cases admitted via ED, in hours
Denominator:	Total number of cases admitted via ED, including those cases that are not transferred to a unit (i.e., discharged from ED)
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}}$
Data source:	ADS NED extract
Data limitations:	<ul style="list-style-type: none">▪ As of November 21 2005, the definition of the indicator was revised to include patients admitted via the ED who are not transferred to a unit in the calculation of the indicator. This revision was made to be consistent with the Ministry of Health's definition. For SPH, due to the large number of Mental Health patients who are admitted in ED but never transferred to a unit and their relatively long wait times, this definition change has resulted in an increase in the overall ED wait time for SPH of approximately 3 hours.▪ ED wait time data for MSJ is only available from Period 10, 2002/2003 due to complications that arose during implementation of ADT and Triage systems at this site.▪ Time from triage to transfer to unit encompasses the treatment time in ED so the actual amount of time spent waiting is overstated.▪ A patient is discharged from the ED and admitted as an inpatient simultaneously. Transfer from the ED to an inpatient bed may occur at this time, or after some time has elapsed.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	Vancouver Acute – VCH Balanced Scorecard

1.23. % admitted patients who leave ED within 10 hrs of decision to admit time

Rationale:	This indicator measures the extent to which patients admitted through ED are able to access the level of care they require in a timely fashion.
Numerator:	Subset of the denominator who were transferred to an inpatient unit or discharged from ED within 10 hours of their decision to admit time
Denominator:	Total number of inpatient cases admitted from ED, including those cases that were not transferred to a unit (i.e., discharged from ED)
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	ADS NED extract
Data limitations:	<ul style="list-style-type: none">▪ As of November 21 2005, the definition of the indicator was revised to include patients admitted via the ED who are not transferred to a unit in the calculation of the indicator. This revision was made to be consistent with the Ministry of Health's definition. For SPH, due to the large number of Mental Health patients who are admitted in ED but never transferred to a unit and their relatively long wait times, this definition change has resulted in an increase in the overall ED wait time for SPH of approximately 3 hours.▪ ED wait time data for MSJ is only available from Period 10, 2002/2003 due to complications that arose during implementation of ADT and Triage systems at this site.▪ A patient is discharged from the ED and admitted as an inpatient simultaneously. Transfer from the ED to an inpatient bed may occur at this time, or after some time has elapsed.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	Vancouver Acute – VCH Balanced Scorecard

1.24. Proportion of ED patients seen by physician within targets

Rationale:	This indicator measures the extent to which ED patients are able to access appropriate assessment and treatment in a timely manner.
Numerator:	<p>Number of Emergency cases that are seen by physician within the recommended time:</p> <ul style="list-style-type: none"> ▪ CTAS Level 2 – 15 minutes or less ▪ CTAS Level 3 – 30 minutes or less
Denominator:	<p>Total number of Emergency cases for CTAS levels 2 and 3</p> <p><i>Exclusion criteria:</i></p> <ul style="list-style-type: none"> ▪ Patients with no recorded time seen by physician ▪ MSJ
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Definition of terms:	<i>Canadian Emergency Department Triage & Acuity Scale (CTAS)</i> – A tool that enables Emergency Departments prioritize patient care requirements and examine patient care processes, workload, and resource requirements relative to case mix and community needs.
Data source:	ADS NED Treatment Cube
Data limitations:	<ul style="list-style-type: none"> ▪ The CTAS level used for reporting of this indicator is automatically generated by NERD based on a patient's presenting complaint. However, this may not correspond to the CTAS level that is manually assigned and used by the triage nurse in the prioritization of patients. As a result, the physician response time is often based on the triage nurse's assigned CTAS level and not the automatically generated CTAS level. To address this issue, a review of emergency room processes is expected to occur in the near future. ▪ For FY 2003/04, between 8 - 10% of records had no time to physician recorded. For the calculation of the indicator these records have been excluded.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	Vancouver Acute – VCH Balanced Scorecard

Technical notes



1.25. % acute LOS (length of stay) compared to ELOS (expected length of stay)

Rationale: This indicator informs us how PHC length of stay compares with that of our national peer hospitals, represented by ELOS.

Numerator: Sum of actual acute portion of LOS for inpatient cases discharged within time period

Exclusion criteria:

- Newborn/stillborn cases
- Atypical cases
- Acute rehabilitation cases (HFH)
- ALC days

Denominator: Sum of ELOS for inpatient cases discharged within time period

Exclusion criteria:

- Newborn/stillborn cases
- Atypical cases
- Acute rehabilitation cases (HFH)
- ALC days

Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Definition of terms: Expected length of stay (ELOS) - A predicted LOS for a typical CMG. Each complexity level and age group within a CMG has its own unique ELOS value.

Data source: Health Records

Data limitations:

- In December 2002, CIHI suspended the use of the complexity overlay as a refinement to the CMG methodology. Data quality studies conducted by CIHI have concluded that variations in coding practices render the use of the complexity overlay unreliable for comparative purposes. After consulting with stakeholder groups, the decision was made to retain complexity overlay until a revised ICD-10-CA/CCI-based methodology can be introduced (fiscal year 2005/06).
- Due to the introduction of the new ICD-10-CA diagnostic classification system, many problems have arisen related to the grouping of cases into Case Mix Groups (CMGs). These issues affect fiscal years 01/02, 02/03, and 03/04. In June 2004, Health Records data for these years was regrouped after the installation of the new 3M CMG grouper.
- The new CMG grouper was installed in February 2005 and cases from FY 01/02 onwards were regrouped. This may have had some impact on the indicator result.
- New CMG+ grouper was installed in April 2007 and cases from FY 04/05 onwards were regrouped. This may have had some impact on the indicator result.

Target source: VCH Balanced Scorecard

Action point source: VCH Balanced Scorecard

Comparator source: VCH – VCH Balanced Scorecard

1.26. % ALC census days

Rationale:	This indicator measures the extent to which patients are in the appropriate care setting and the extent to which the community is able to respond to the needs of patients waiting in hospital for further care/accommodation in alternate care settings.
Numerator:	Number of acute and rehab inpatient census days that have been identified as ALC (alternative level of care) within time period
Denominator:	Total number of acute and rehab inpatient census days within time period
	<p><i>Inclusion criteria:</i></p> <ul style="list-style-type: none"> ▪ SPH, MSJ, SVH, and HFH <p><i>Exclusion criteria:</i></p> <ul style="list-style-type: none"> ▪ Newborns
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Definition of terms:	<i>Alternate Level of Care (ALC)</i> – A designation given to a patient whose acute and subacute phase of inpatient treatment has ended but who still remains in an acute care bed (see <i>Data limitations</i>)
Data source:	ADS ADT Census Cube
Data limitations:	<ul style="list-style-type: none"> ▪ The way in which ALC designation has occurred in PHC acute and rehab sites has changed over time. When ALC designation and data collection commenced in PHC hospitals in 1998 following a ministerial mandate, there were no explicit criteria provided by CIHI to guide the ALC designation process and thus resulted in multiple and often conflicting interpretations of the definition of ALC. Therefore, the application of the InterQual acute and subacute criteria sets in determining ALC status commenced: <ul style="list-style-type: none"> ▪ December 2003 – PHC began piloting the application of InterQual in determining ALC status on 4 Medicine nursing units at MSJ and SPH. ▪ January 2005 – The Transition Services Team (TST) of Vancouver Community began assuming the responsibility for ALC designation at PHC's acute and acute rehab sites. By March 31, 2005, the TST had been implemented on all inpatient units across PHC with the exception of HFH rehab and psychiatric units at SPH. ▪ May 2005 – The TST was implemented at HFH rehab. ▪ May 2006 – The TST began piloting the use of the InterQual mental health criteria on psychiatric units. By April 2007, the criteria had officially been adopted in determining ALC status on psychiatry units.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	Vancouver Acute – VCH Census Cubes

1.27. % mental health & addictions ALC discharge days

Rationale: In the Ministry of Health Services Service Plan 2003/04 – 2005/06, a target of a 2% reduction over the prior year for the next two fiscal years was established.

Numerator: Total number of ALC days experienced by mental health and addictions cases discharged within time period

Denominator: Total number of inpatient days experienced by mental health and addictions cases discharged within time period

Inclusion criteria:

- Cases aged between 15 and 64 years, inclusive
- Cases with one of the following ICD-10-CA codes as the most responsible diagnosis (MRDx):
F0*, F1*, F2*, F3*, F4*, F50*, F51*, F52*, F530*, F531*, F6*, F840*, F841*, F843*, F844*, F845*, F848*, F849*, F9*, Z281*, Z55*, Z56*, Z57*, Z600*, Z601*, Z603*, Z604*, Z605*, Z608*, Z609*, Z61*, Z62*, Z63*, Z640*, Z641*, Z644*, Z65*, Z720*, Z721*, Z722*, Z723*, Z724*, Z725*, Z726*, Z729*, Z730*, Z731*, Z732*, Z733*, Z734*, Z735*, Z738*, Z739*, R410*, G312*, G442*

Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Definition of terms: *Alternate Level of Care (ALC)* – A designation given to a patient whose acute and subacute phase of inpatient treatment has ended but who still remains in an acute care bed (see *Data limitations*)

Data source: Health Records

Data limitations:

- At the start of FY 04/05, the Ministry of Health Services changed its definition of mental health cases to those with a most responsible diagnosis in specific mental health and addictions codes. Additionally, it restricted its definition to those patients between the ages of 15 and 65. The definition of addictions is problematic as it relies on an addictions diagnosis being coded as the most responsible, therefore its use may lead to an underrepresentation of the true addictions population.
- A large amount of variability in % ALC days exists from fiscal period to period. Most of the variability can be attributed to a few long stay cases with a high proportion of their days of stay designated as ALC. This effect can be magnified for % mental health ALC days due to the lower total case counts observed in a given fiscal period.
- The way in which ALC designation has occurred at PHC acute and rehab sites has changed over time. When ALC designation and data collection commenced in PHC hospitals in 1998 following a ministerial mandate, there were no explicit criteria provided by CIHI to guide the ALC designation process and thus resulted in multiple and often conflicting interpretations of the definition of ALC. Therefore, the application of the InterQual criteria sets in determining ALC status commenced:
 - December 2003 – PHC began piloting the application of InterQual in determining ALC status on 4 Medicine nursing units at MSJ and SPH.
 - January 2005 – The Transition Services Team (TST) of Vancouver Community began assuming the responsibility for ALC designation at PHC's acute and acute rehab sites. By March 31, 2005, the TST had been implemented on all inpatient units across PHC with the exception of HFH rehab and psychiatric units at SPH.
 - May 2005 – The TST was implemented at HFH rehab.
 - May 2006 – The TST began piloting the use of the InterQual mental health criteria on psychiatric units. By April 2007, the criteria had officially been adopted.

Target source: VCH Balanced Scorecard

Action point source: N/A

Comparator source: VCH – VCH Balanced Scorecard

References: 1. Ministry of Health Services Service Plan 2003/04 – 2005/06.

1.28. Surgical cancellation rate

Rationale:	This indicator is a measure of the responsiveness to accommodate emergency cases without detriment to booked cases and the availability of inpatient and critical care resources. Ultimately, this indicator reflects the extent to which we are able to minimize the occurrence of inconvenience and distress on the part of patients that may result from cancelled surgeries.
Numerator:	The number of cases cancelled after publication of the final slate due to one of the following reasons: <ul style="list-style-type: none">▪ bumping by an urgent/emergent case▪ lack of an inpatient bed▪ lack of a critical care bed
Denominator:	The total number of scheduled inpatient and same day care cases
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	ORMIS
Data limitations:	<ul style="list-style-type: none">▪ This indicator is currently under review by RSEC (Regional Surgical Executive Council).
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	VCH – VCH Balanced Scorecard

1.29. % hip replacement patients receiving surgery within targeted wait time

Rationale: Lengthy waitlists for elective joint replacement surgery have been found to be associated with loss of health-related quality of life related to pain and worsening mobility. In a Canadian study of patients awaiting elective total hip arthroplasty for osteoarthritis, researchers found that patients waiting longer than 6 months for surgery experienced clinically important losses in health-related quality of life and mobility during their wait.

Numerator: Number of hip replacement surgeries performed within a wait time of 26 weeks.

*Note: Wait time is defined as the time elapsed from the booking card receipt date to the surgery date.

Denominator: Total number of hip replacement surgeries performed

Inclusion criteria:

- Only scheduled cases, defined as elective or urgent cases as “surtype”
- One of the following procedure codes as the first booked procedure (i.e. Procedure number = 1):
 - ORT051, ORT053, ORT054, ORT156, ORT181 or 93.51

Exclusion criteria:

- To identify only those surgical cases performed in the main OR, the following cases were excluded:
 - Cases performed in the following rooms: SJENDO, SVHCYS, SVHFLEX, or SPHFLEX
 - Cases with the following main service: PAIN, ANAESTHESIOLOGY, or PSYCHIATRY
- Cases with blank booking card receipt date

Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Data source: ORMIS

Data limitations:

- Meaningful analysis is made difficult due to the low case counts observed per fiscal period.
- The definition of wait time was changed in P6-05/06 to use the booking card receipt date instead of the decision for surgery date. Data has been retrospectively restated according to the new definition.
 - PHC did not start capturing booking card receipt date in ORMIS until P13-03/04, therefore data prior to this period are unavailable.
 - Also, due to the high proportion of cases with a blank booking card receipt date in ORMIS in FY 04/05, data for this fiscal year have been excluded.

Target source: VCH Balanced Scorecard

Action point source: N/A

Comparator source: VCH – ORMIS

References:

1. Williams JI et al. The burden of waiting for hip and knee replacements in Ontario. *J Eval Clin Pract* 1997 Feb; 3(1): 59-68.
2. Mahon J et al. Health-related quality of life and mobility of patients awaiting elective total hip arthroplasty: a prospective study. *CMAJ* 2002; 167(10): 1115-1121.

1.30. % knee replacement patients receiving surgery within targeted wait time

Rationale:	Lengthy waitlists for elective joint replacement surgery have been found to be associated with loss of health-related quality of life related to pain and worsening mobility.
Numerator:	Number of knee replacement surgeries performed within a wait time of 26 weeks. *Note: Wait time is defined as the time elapsed from the booking card receipt date to the surgery date.
Denominator:	Total number of knee replacement surgeries performed <i>Inclusion criteria:</i> <ul style="list-style-type: none"> ▪ Only scheduled cases, defined as elective or urgent cases as "surtype" ▪ One of the following procedure codes as the first booked procedure (i.e. Procedure number = 1): <ul style="list-style-type: none"> ▪ ORT056, ORT090, or 93.41 <i>Exclusion criteria:</i> <ul style="list-style-type: none"> ▪ To identify only those surgical cases performed in the main OR, the following cases were excluded: <ul style="list-style-type: none"> ▪ Cases performed in the following rooms: SJENDO, SVHCYS, SVHFLEX, or SPHFLEX ▪ Cases with the following main service: PAIN, ANAESTHESIOLOGY, or PSYCHIATRY ▪ Cases with blank booking card receipt date
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	ORMIS
Data limitations:	<ul style="list-style-type: none"> ▪ Meaningful analysis is made difficult due to the low case counts observed per fiscal period. ▪ The definition of wait time was changed in P6-05/06 to use the booking card receipt date instead of the decision for surgery date. Data has been retrospectively restated according to the new definition. <ul style="list-style-type: none"> ▪ PHC did not start capturing booking card receipt date in ORMIS until P13-03/04, therefore data prior to this period are unavailable. ▪ Also, due to the high proportion of cases with a blank booking card receipt date in ORMIS in FY 04/05, data for this fiscal year have been excluded.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	VCH – ORMIS
References:	1. Williams JI et al. The burden of waiting for hip and knee replacements in Ontario. <i>J Eval Clin Pract</i> 1997 Feb; 3(1): 59-68.

1.31. % oncology mastectomy patients receiving surgery within targeted wait time

Rationale: In a systematic review of 87 studies linking breast cancer treatment delay and survival, patients with delays of 3 to 6 months or more had 7 - 12% lower 5-year survival than those with shorter delays. There is also evidence that treatment delays result in increased psychosocial morbidity for patients diagnosed with cancer.

Numerator: Number of mastectomy surgeries performed within a wait time of 21 days.

*Note: Wait time is defined as the time elapsed from the booking card receipt date to the surgery date.

Denominator: Total number of mastectomy surgeries performed

Inclusion criteria:

- Only scheduled cases, defined as elective or urgent cases as “surtype”
- One of the following procedure codes as the first booked procedure (i.e., Procedure number = 1):
 - GEN 125 Breast lumpectomy
 - GEN 41A Mastectomy
 - GEN 41B Mastectomy modified radical
 - GEN 41C Mastectomy radical
 - GEN 41D Mastectomy partial
 - GEN 41E Mastectomy segmental resection
 - GEN 072 Mastectomy with axillary node dissection
 - GEN 064 Mastectomy with reconstruction
 - PLA 034 Mastectomy with Tram/ lat dorsi flap

Exclusion criteria:

- To identify only those surgical cases performed in the main OR, the following cases were excluded:
 - Cases performed in the following rooms: SJENDO, SVHCYS, SVHFLEX, or SPHFLEX
 - Cases with the following main service: PAIN, ANAESTHESIOLOGY, or PSYCHIATRY
- Non-oncology cases (as identified by the oncology flag in the Health Records Extract)
- Cases with blank booking card receipt date

Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Data source: ORMIS, Health Records Extract

Data limitations:

- The definition of wait time was changed in P6-05/06 to use the booking card receipt date instead of the decision for surgery date. Also, non-oncology cases were excluded from the indicator. Data was retrospectively restated according to the new definition.
 - PHC did not start capturing booking card receipt date in ORMIS until P13-03/04, therefore data prior to this period are unavailable.
 - Also, due to the proportion of cases with a blank booking card receipt date in ORMIS in FY 04/05, data for this fiscal year have been excluded.
- The target wait time for oncology mastectomies was revised by RSEC (Regional Surgical Executive Council) from 14 days to 21 days in P11-06/07. Data for PHC have been updated retrospectively to reflect the revised target. VCH, however, has opted to only apply the revised target to data from P11-06/07 onwards.

Target source: VCH Balanced Scorecard

Action point source: N/A

Comparator source: VCH – ORMIS

References:

1. Richards MA et al. Influence of delay on survival in patients with breast cancer: a systematic review. *Lancet* 1999 Apr 3; 353(9159): 1119-26.
2. Simunovic, M et al. A snapshot of waiting times for cancer surgery provided by surgeons affiliated with regional cancer centres in Ontario. *CMAJ* 2001 August 21; 165 (4): 421–425.

1.32. Median wait time for CABG (coronary artery bypass graft)

Rationale:	Lengthy waits for coronary artery bypass grafting (CABG) have been associated with an increased number of cardiac events, increased mortality, increased costs, and decreased quality of life. During their wait for surgery, patients may experience anxiety and depression, which have been found to persist after surgery.
Numerator:	Median wait time for coronary artery bypass grafting (CABG) *Note: Wait time is defined as the time elapsed from the surgery booking date to the surgery date. <i>Inclusion criteria:</i> <ul style="list-style-type: none">▪ All cases with coronary artery bypass grafting (CABG), including those with other procedures <i>Exclusion criteria:</i> <ul style="list-style-type: none">▪ Cases with no booking date, which include:<ul style="list-style-type: none">▪ Emergency or Priority I cases, which have no need for booking▪ Priority II or III cases identified as in-hospital transfer cases▪ Other Priority II or III cases that required booking but were done without booking▪ Cases with no Urgency/Appropriateness Scale code recorded; it is unknown if these cases required booking
Denominator:	N/A
Method of calculation:	= numerator
Data source:	Cardiac Registry
Data limitations:	None identified at this time.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	VGH – Cardiac Registry
References:	1. Samplis J et al. Impact of waiting time on the quality of life of patients awaiting coronary artery bypass grafting. <i>CMAJ</i> 2001; 165(4): 429-433.

1.33. Unplanned readmission rate for CHF (congestive heart failure)

Rationale:	Readmission rate may be a measure of the effectiveness of in-hospital treatment and discharge planning.
Numerator:	Number of CHF cases that were readmissions to the same facility in ≤ 28 days for a related diagnosis <i>Inclusion criteria:</i> <ul style="list-style-type: none">▪ Cases with readmission code = 2 or 3
Denominator:	Total number of CHF discharges <i>Inclusion criteria:</i> <ul style="list-style-type: none">▪ Cases with ICD-10-CA codes I50.0 and I50.1 as the MRDx
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	Health Records
Data limitations:	<ul style="list-style-type: none">▪ Due to changes made by CIHI in the coding of readmissions for fiscal year 03/04, data prior to this time are unavailable.▪ Meaningful analysis is made difficult due to the low case counts observed per fiscal period.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	VCH – VCH Balanced Scorecard

1.34. Unplanned readmission rate for diabetes

Rationale:	Readmission rate may be a measure of the effectiveness of in-hospital treatment and discharge planning.
Numerator:	Number of diabetes cases that were readmissions to the same facility in ≤ 28 days for a related diagnosis <i>Inclusion criteria:</i> <ul style="list-style-type: none">▪ Cases with readmission code = 2 or 3
Denominator:	Total number of diabetes discharges <i>Inclusion criteria:</i> <ul style="list-style-type: none">▪ Cases with an ICD-10-CA code E10.100 to E14.909, inclusive, as the MRDx
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	Health Records
Data limitations:	<ul style="list-style-type: none">▪ Due to changes made by CIHI in the coding of readmissions for fiscal year 03/04, data prior to this time are unavailable.▪ Meaningful analysis is made difficult due to the low case counts observed per fiscal period.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	VCH – VCH Balanced Scorecard

1.35. Budget Variance

Rationale:	This indicator measures the extent to which PHC is meeting its budget plan.
Numerator:	The actual cumulative year-to-date net surplus (deficit) variance from the budgeted net surplus (deficit) after retirement allowances
Denominator:	N/A
Method of calculation:	Sum of YTD surplus (deficit) actuals + Budgeted surplus (deficit)
Data source:	Finance (V&E report)
Data limitations:	None identified at this time.
Target source:	PHC Plan
Action point source:	N/A
Comparator source:	VCH – V&E Report

1.36. Current ratio

Rationale:	Current ratio is a measure of the organization's liquidity and immediate financial health. It indicates how the organization is able to meet its short-term obligations. The inability of the organization to meet its short-term liabilities can then compromise that organization's ability to deliver quality patient care services.
Numerator:	Current assets
Denominator:	Current liabilities
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}}$
Data source:	Finance
Data limitations:	<ul style="list-style-type: none">There are no data available for P1 of fiscal years 03/04 to 05/06 as budget data were not yet available for the production of financial reports.
Target source:	Consultation with internal experts
Action point source:	N/A
Comparator source:	National average (2003/04) – CIHI; VCH (excluding PHC and Louis Brier Home) - BC Ministry of Health Services

1.37. Administrative and support costs as % of total expenses

Rationale:	In the MoHS Performance Agreement 2002/03, the performance expectation of a reduction in annual expenditures for Support and Administrative Services by at least 7% of the costs incurred for the fiscal year 2001/2002 by 2004/2005 fiscal year was set.
Numerator:	Administration and support costs
Denominator:	Total expenses (includes retirement allowance)
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	BC Ministry of Health Services
Data limitations:	<ul style="list-style-type: none">▪ Data has been restated back to FY 03/04 to remap accounts under the current Ministry definition.▪ During FY 06/07 certain Referred Out accounts were removed from inclusion under Administrative and Support costs resulting in lower costs as a % of total expenses across all health authorities.
Target source:	N/A
Action point source:	N/A
Comparator source:	VCH (excluding PHC and Louis Brier Home) - BC Ministry of Health Services
References:	1. Performance Agreement between the Ministry of Health Services and the Vancouver Coastal Health Authority. April 1, 2002 to March 31, 2003

1.38. Non-Ministry of Health Services revenues as % of total revenues

Rationale:	In the PHC Health Service Redesign & Budget Management Plan (02/03 to 04/05) revenue generation was identified as a major initiative, with the goal of achieving \$1,000,000 of additional revenue through a variety of means.
Numerator:	Non-Ministry of Health Services revenues
Denominator:	Total revenues
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Definition of terms:	Non-Ministry of Health Services revenues – includes inpatient revenue, outpatient revenue, Centre for Excellence revenue and other miscellaneous revenue
Data source:	Finance
Data limitations:	<ul style="list-style-type: none">▪ Non-Ministry of Health Services revenues are comprised of some flow-through revenues (i.e., revenues that are offset by a similar amount in expenses, e.g. Centre for Excellence Pharmacare) which are not the result of revenue-generating initiatives.
Target source:	N/A
Action point source:	N/A
Comparator source:	VCH – V&E Report
References:	1. PHC Health Service Redesign & Budget Management Plan (02/03 to 04/05)

1.39. Occupancy rate

Rationale:	This indicator measures the extent to which PHC is meeting the target occupancy rate.
Numerator:	The number of inpatient census days <i>Exclusion criteria:</i> <ul style="list-style-type: none"> ▪ HFH census days ▪ Newborn census days
Denominator:	The number of available days <i>Exclusion criteria:</i> <ul style="list-style-type: none"> ▪ HFH beds ▪ Newborn bassinets and SCN beds
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	<u>Available days</u> - Calculated by multiplying the number of beds available by the number of days in the fiscal period
Data source:	Finance
Data limitations:	<ul style="list-style-type: none"> ▪ This indicator was revised in 2006 to be consistent with the regional indicator that was developed for inclusion in the VCH Balanced Scorecard.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	VCH – VCH Balanced Scorecard

Technical notes



1.40. % actual inpatient days to planned inpatient days

Rationale:	This indicator measures the extent to which PHC is meeting its budgeted volumes for inpatient days as expressed by the planned inpatient days.
Numerator:	Number of actual inpatient days
Denominator:	Number of planned inpatient days
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	Finance (V&E Report)
Data limitations:	None identified at this time.
Target source:	PHC Performance Indicators Reporting Working Group
Action point source:	N/A
Comparator source:	VCH – V&E Report

2.1. % positive responses to survey items related to Spirituality

Rationale:	This indicator measures the extent to which we live the PHC values as measured by the experiences of the people we serve and the people who serve.
Numerator:	<p>Number of positive responses:</p> <ul style="list-style-type: none"> ▪ Acute inpatient: Yes, completely ▪ ER: <i>To be determined</i> ▪ Ambulatory oncology: Yes, completely ▪ Resident: Yes ▪ Staff: Strongly + Very Strongly
Denominator:	<p>Total number of nonblank responses to the following survey items:</p> <ul style="list-style-type: none"> ▪ Acute inpatient: "Were your spiritual needs met?" for those who also responded "Yes" to item: "Do you feel your spiritual needs are an important part of your overall care?" ▪ ER: <i>In development</i> ▪ Ambulatory oncology: "Were your spiritual needs met?" for those who also responded "Yes" to item: "Do you feel your spiritual needs are an important part of your overall care?" ▪ Resident: Are your spiritual or religious needs met here? ▪ Staff: We nurture spirituality within PHC <p>*Note: A survey item using the same wording as the Acute Inpatient Survey will be added to the Emergency Department Survey.</p>
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	<p><u>Acute inpatient</u>: NRC+Picker Acute Inpatient Satisfaction Survey <u>ER</u>: NRC+Picker Emergency Department Patient Satisfaction Survey <u>Ambulatory oncology</u>: NRC+Picker Outpatient Cancer Care Experience of Care Patient Survey <u>Resident</u>: NRC+Picker Long Term Care Resident Survey <u>Staff</u>: PHC Live Our Mission Every Day Staff Survey</p>
Data limitations:	<ul style="list-style-type: none"> ▪ The patient and resident surveys are commissioned by the Ministry of Health and the health authorities thus PHC does not have direct influence on the frequency and timing of the surveys. ▪ In 2007 PHC conducted an Employee Engagement Survey and is the basis for staff scores. As a result staff survey methodology is different from the methodology of other surveys for this indicator.
Target source:	N/A
Action point source:	N/A
Comparator source:	N/A

2.2. % positive responses to survey items related to Integrity

Rationale:	This indicator measures the extent to which we live the PHC values as measured by the experiences of the people we serve and the people who serve.
Numerator:	Number of positive responses: <ul style="list-style-type: none">▪ Acute inpatient: <i>To be determined</i>▪ ER: <i>To be determined</i>▪ Ambulatory oncology: <i>To be determined</i>▪ Resident: <i>To be determined</i>▪ Resident family: <i>To be determined</i>▪ Staff: Strongly + Very Strongly
Denominator:	Total number of nonblank responses to the following survey items: <ul style="list-style-type: none">▪ Acute inpatient: <i>In development</i>▪ ER: <i>In development</i>▪ Ambulatory oncology: <i>In development</i>▪ Resident: <i>In development</i>▪ Resident family: <i>In development</i>▪ Staff:<ul style="list-style-type: none">▪ Personal fit: The values of PHC fit with who I am as a person▪ Decision-making: The values of PHC impact how decisions are made where I work
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	<u>Acute inpatient</u> : NRC+Picker Acute Inpatient Satisfaction Survey <u>ER</u> : NRC+Picker Emergency Department Patient Satisfaction Survey <u>Ambulatory oncology</u> : NRC+Picker Outpatient Cancer Care Experience of Care Patient Survey <u>Resident</u> : NRC+Picker Long Term Care Resident Survey <u>Resident family</u> : NRC+Picker Long Term Care Resident Family Survey <u>Staff</u> : PHC Live Our Mission Every Day Staff Survey
Data limitations:	<ul style="list-style-type: none">▪ The patient and resident surveys are commissioned by the Ministry of Health and the health authorities thus PHC does not have direct influence on the frequency and timing of the surveys.▪ Different methodologies are applied in the staff surveys. The results from the question "The values of PHC impact how decisions are made where I work" are being obtained from the Employee Engagement Survey (approximately 2300 responses). The results from the question "The values of PHC fit with who I am as a person" are being obtained from the Living the Mission Workshop (approximately 300 responses in 2006 and 650 in 2007). Accordingly, the results between the two questions are not comparable. - There are survey items that are either under development or are being pursued for addition to the existing surveys.
Target source:	N/A
Action point source:	N/A
Comparator source:	N/A

2.3. % positive responses to survey items related to Trust

Rationale:	This indicator measures the extent to which we live the PHC values as measured by the experiences of the people we serve and the people who serve.
Numerator:	<p>Number of positive responses:</p> <ul style="list-style-type: none"> ▪ Acute inpatient: Yes, always ▪ ER: Yes, always ▪ Ambulatory oncology: Yes, always ▪ Resident: <i>To be determined</i> ▪ Resident family: <i>To be determined</i> ▪ Staff: Strongly + Very Strongly
Denominator:	<p>Total number of nonblank responses to the following survey items:</p> <ul style="list-style-type: none"> ▪ Acute inpatient: <ul style="list-style-type: none"> ▪ Do you have the confidence and trust in the doctors treating you? ▪ Do you have confidence and trust in the nurses treating you? ▪ ER: <ul style="list-style-type: none"> ▪ Do you have the confidence and trust in the doctors treating you? ▪ Do you have confidence and trust in the nurses treating you? ▪ Ambulatory oncology: <ul style="list-style-type: none"> ▪ Do you have the confidence and trust in the doctors treating you? ▪ Do you have confidence and trust in the nurses treating you? ▪ Resident: <i>In development</i> ▪ Resident family: <i>In development</i> ▪ Staff: I have confidence and trust in the people with whom I work
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	<p><u>Acute inpatient</u>: NRC+Picker Acute Inpatient Satisfaction Survey <u>ER</u>: NRC+Picker Emergency Department Patient Satisfaction Survey <u>Ambulatory oncology</u>: NRC+Picker Outpatient Cancer Care Experience of Care Patient Survey <u>Resident</u>: NRC+Picker Long Term Care Resident Survey <u>Resident family</u>: NRC+Picker Long Term Care Resident Family Survey <u>Staff</u>: PHC Live Our Mission Every Day Staff Survey</p>
Data limitations:	<ul style="list-style-type: none"> ▪ The patient and resident surveys are commissioned by the Ministry of Health and the health authorities thus PHC does not have direct influence on the frequency and timing of the surveys. ▪ The staff survey methodology is different from the methodology of other surveys displayed. As of 2007, staff feedback is being obtained from the Employee Engagement Survey with approximately 2300 responses. Acute Inpatients, ER Patients, Oncology Patients and Residents are being surveyed at the Living the Mission Workshop survey. - There are survey items that are either under development or are being pursued for addition to the existing surveys.
Target source:	N/A
Action point source:	N/A
Comparator source:	N/A

Technical notes



2.4. % positive responses to survey items related to Respect

Rationale: This indicator measures the extent to which we live the PHC values as measured by the experiences of the people we serve and the people who serve.

Numerator: Number of positive responses:

- Acute inpatient: Yes, always
- ER: Yes, always
- Ambulatory oncology: Yes, completely
- Resident: *To be determined*
- Resident family: *To be determined*
- Staff: Strongly + Very Strongly

Denominator: Total number of nonblank responses to the following survey items:

- Acute inpatient: Did you feel like you were treated with respect and dignity while you were in the hospital?
- ER: Did each hospital staff person treat you with respect and dignity
- Ambulatory oncology: Did your care providers treat you with dignity and respect?
- Resident: *In development*
- Resident family: *In development*
- Staff: A respect for the dignity for every person permeates PHC

*Note: Another survey item using the same wording as the Acute Inpatient Survey will be added to the Emergency Department Survey.

Method of calculation:

$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Data source: Acute inpatient: NRC+Picker Acute Inpatient Satisfaction Survey
ER: NRC+Picker Emergency Department Patient Satisfaction Survey
Ambulatory oncology: NRC+Picker Outpatient Cancer Care Experience of Care Patient Survey
Resident: NRC+Picker Long Term Care Resident Survey
Resident family: NRC+Picker Long Term Care Resident Family Survey
Staff: PHC Live Our Mission Every Day Staff Survey

Data limitations:

- The patient and resident surveys are commissioned by the Ministry of Health and the health authorities thus PHC does not have direct influence on the frequency and timing of the surveys.
- The staff survey methodology is different from the methodology of other surveys displayed. As of 2007, staff feedback is being obtained from the Employee Engagement Survey with approximately 2300 responses. Acute Inpatients, ER Patients, Oncology Patients and Residents are being surveyed at the Living the Mission Workshop survey

Target source: N/A

Action point source: N/A

Comparator source: N/A

3.1. RN vacancy rate

Rationale: This indicator measures the extent to which PHC is the employer of choice for registered nurses.

Numerator: Total number of unfilled RN positions on the last day of the fiscal period

Inclusion criteria:

- Unfilled vacant positions and posted positions

Denominator: Total number of annual budgeted RN FTEs

Inclusion criteria:

RN positions encompasses the following job codes:

- 233 – Clinical Coordinator
- 235 – Clinical Care Analyst
- 236 – Clinical Nurse Leader
- 252 – Registered Nurse
- 261 – Nursing Instructor
- 726 – Registered Psychiatric Nurse
- 727 – Clinical Nurse Leader

Method of calculation:

$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

RN – Encompasses the following job codes:

- 233 – Clinical Coordinator
- 235 – Clinical Care Analyst
- 236 – Clinical Nurse Leader
- 252 – Registered Nurse
- 261 – Nursing Instructor
- 726 – Registered Psychiatric Nurse
- 727 – Clinical Nurse Leader

Vacancy – An unfilled posted full-time, part-time, temporary full-time, or temporary part-time position

Data source: Human Resources Posting System & Finance

Data limitations:

- Data for fiscal periods before P10-02/03 is unavailable as data collection systems were not in place to report this indicator. As a result, there are not enough data points to allow for adequate trend analysis.
- Comparator data is not available for this indicator. The VCH tracks RN vacancies as a raw number and does not express it as a rate, thus meaningful comparison is not possible.
- The denominator has been adjusted for the positions added for the opening of 9A as these positions were not included in the FY 05/06 budget.
- Starting in P12-06/07, the data collection method for capturing vacancies changed from a manual to automated process.

Target source: N/A

Action point source: N/A

Comparator source: N/A

Technical notes



3.2. % sick hours

Rationale:	This indicator measures the extent to which PHC employees are absent due to illness.
Numerator:	Number of paid sick hours
Denominator:	Total number of productive hours
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Definition of terms:	<u>Productive hours</u> - Total actual hours worked including regular, overtime, workload and absence relief, and excludes premium.
Data source:	PeopleSoft Extract
Data limitations:	None identified at this time.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	VCH – V&E Report

3.3. % overtime hours

Rationale:	This indicator measures the extent to which overtime workload is placed on PHC employees.
Numerator:	Number of overtime hours
Denominator:	Total number of productive hours
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Definition of terms:	<u>Overtime hours</u> - Total actual hours worked overtime <u>Productive hours</u> - Total actual hours worked including regular, overtime, workload and absence relief, and excludes premium.
Data source:	PeopleSoft Extract
Data limitations:	None identified at this time.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	VCH – V&E Report

3.4. WCB MSI (musculoskeletal injury) incidence rate for direct care areas

Rationale: This indicator measures the extent to which PHC is providing a safe working environment for its direct care employees.

Numerator: Number of approved WCB claims for time-loss musculoskeletal injuries for direct care area cost centres (see Denominator for list of cost centres)

Inclusion criteria:

- Musculoskeletal injuries correspond to any of the following codes in the Attributes field in the Parklane System:
 - Musculoskeletal injury
 - Sprain/strain
 - Tendonitis
 - Carpal tunnel
 - Overexertion – weight
 - Overexertion – effort
- Approved claims include those claims whose Claim Status is:
 - Approved
 - Blank or Pending AND have associated claims costs

Denominator: Number of productive hour FTEs (1 FTE = 1,875 productive hours) for direct care area cost centres

Inclusion criteria:

- The following cost centres constitute direct care areas:

Diagnostics:

7405000040	Radiology Nursing	7415400040	Nuclear Medicine
7415100035	Diagnostic Imaging RIS	7415550040	Cardiac Catheterization Lab
7415100040	Diagnostic Imaging RIS	7415700040	Magnetic Resonance Imaging
7415180035	Radiology	7415700140	MRI Magnet
7415180038	Radiology	7415990031	Diagnostic Imaging
7415180040	Radiology	7425100040	Electroencephalography (EEG)
7415180140	Diagnostic Imaging	7425200040	Electromyography (EMG)
7415230040	Vascular Angiography	7430202040	Echocardiography
7415250035	Computed Tomography	7430208040	Electrophysiology
7415250040	Computed Tomography	7430209040	Electrocardiography (ECG)
7415300035	Ultrasound	7430400040	Vascular Diagnostic Laboratory
7415300040	Ultrasound		

Inpatient:

7120990635	General Float Pool	7230000240	Nursing Casual Float Pool
7135406031	Sterile Processing Department	7230000431	3 East Medical Nursing Unit
7135406035	Sterile Processing Department	7230000435	3 East Medical Nursing Unit
7135406038	Sterile Processing Department	7230000635	DT Procedure Rooms
7135406040	Sterile Processing Department	7230000731	Nursing Floors General
7180600040	Emergency Admitting	7230000935	GATU
7182100040	Access Services	7230001040	Resource Centre
7205100240	Nursing Shortage	7230001140	GRU-RUFF
7205100340	Nursing Council	7230001235	Surgery-Medicine Relief
7210100035	Medical Nursing Unit	7240300031	Intensive Care Unit
7210100040	Medical Nursing Unit	7240300035	Intensive Care Unit
7210100140	Medical Nursing Unit	7240300040	Intensive Care Unit
7210100240	Medical Nursing Unit HUB	7240300140	Critical Care Relief (SPH)
7210100440	Medical Nursing Unit Geri-Rehb	7240400040	Cardiac Surgery ICU
7210100640	Fam Prac, Geri Psyc 10C	7240450040	Coronary Care Unit
7210100740	Medical Nursing Unit - 7AB	7250802040	Special Care Nursery
7210100840	Medicine Relief (SPH)	7250900040	Maternity-Delivery
7210450040	Med Unit - Resp, Fam Pract	7250900140	Delivery Room
7210700040	Nephrology, Urology (6B)	7260000240	Surgery Relief SPH
7220100031	Surgical Nursing Unit	7260200031	Operating Room
7220100035	Surgical Nursing Unit	7260200035	Operating Room
7220100140	Surgical Nursing Unit	7260200040	Operating Room
7220100240	General Surgery 9A	7260200140	OR - Cardiac
7220200040	Orthopedic Nursing Unit	7265200031	Post Anaesthesia Recovery Unit
7220200131	Geriatric Orthopedic Rehab Unit	7265200035	Post Anaesthesia Recovery Unit
7220402040	Cardiology Nursing Unit	7265200040	Post Anaesthesia Recovery Unit
7220402140	Heart Surgery Nursing Unit	7270990035	Paediatric Nursing Unit
7220750040	Urology Nursing Unit (6B)	7275201031	Geriatric Psych Inpatient 1
7230000131	GRU-GATU	7275201231	Geriatric Psych Inpatient 2

7230000140	GRU-GATU	7275201235	Geriatric Psych Inpatient 2
7275201340	Eating Disorders Inpatient	7340853040	Home Hemodialysis
7275201540	Psych Acute Long Stay	7350107540	Chronic Pain Program
7275201640	Psych Acute General (9A)	7435600040	Perfusion
7275350040	Psych Acute Short Stay	7445000031	Clinical Nutrition
7280100038	General Rehab Nursing Unit	7445000035	Clinical Nutrition
7280100040	General Rehab Nursing Unit	7445000038	Clinical Nutrition
7290000040	Palliative Care	7445000040	Clinical Nutrition
7290000140	Windermere Lodge Hospice	7470105031	Social Work
7307001640	Hematology CASC	7470105035	Social Work
7310200035	General Emergency	7470105040	Social Work
7310200040	General Emergency	7470105238	Social Work IP
7310250031	Urgent Care		
Outpatient:			
7195990140	Diabetes Nutrition Services	7350108040	Foot and Ankle Clinic
7205202040	Intravenous Therapy (9B)	7350108740	Cystic Fibrosis Specialty Clin
7210100340	Eating Disorders Community Prj	7350109540	Kidney Function Centre
7210310031	SARS Clinic	7350152540	Ear Nose and Throat Specialty
7210310040	SARS Clinic	7350154540	Pre-Admission Clinic
7230000835	Geriatric Unit	7350155540	Cardiac Transplant Clinic
7305000040	Eating Disorders Resource Ctr	7350155640	Renal Transplant Clinic
7340100040	Medical Short Stay Unit	7350170040	Ambulatory Care
7340200031	Surgical Day Care	7350170140	Rapid Access Clinic
7340200035	Surgical Day Care	7350201040	Heart Function Clinic
7340200040	Surgical Day Care	7350203040	Pacific Adlt Congenitl Hrt Clin
7340200140	SDC - Private Clinic Referrals	7350204040	Pacemaker Clinic
7340352040	CIU,Cardiac Short Stay (5CD)	7350206040	Cardiac Rehabilitation Clinic
7340500040	Diabetes Clinic	7350502040	Maternity Education Program
7340500140	Diabetic Weekend Clinic	7350601040	Ophthalmology Clinic
7340602031	Geri-Day Hospital	7350652031	Falls and Fracture Clinic
7340602135	Geri-Day Hospital	7350652040	Falls and Fracture Clinic
7340602240	Geriatric Outpatient Clinic	7350801040	General Outpatient Psychiatry
7340604031	Geriatric Outreach	7350807040	Eating Disorders Clinic
7340604140	Elder Care Central Intake	7350990035	Multi-Purpose Amb Care
7340851340	Comm Dialysis - Sechelt	7470105338	Social Work OP
7340851440	Comm Dialysis - Vancouver	7470200040	Domestic Violence
7340851540	Hemodialysis Unit	7510802040	HOME ENTERAL NUTRITION
7340851640	Comm Dialysis - Richmond	7510802140	HOME PARENTAL NUTRITION
7340851740	Comm Dialysis - Squamish	7510802240	HEMOSIDIROSIS
7340851840	Comm Dialysis - Powell River	7510802340	HEMOPHILIA
7340851940	Comm Dialysis - North Shore	7515500035	Lifeline
7340855040	Peritoneal Dialysis Unit	7515500038	Lifeline
7350101540	Infectious Diseases Clinic	7532300040	Home IV Antibiotic Pgm 9B
7350105040	GI Clinic	7532300140	Home IV - Closer to Home
7350108031	Foot and Ankle Clinic		
Rehabilitation Services:			
7350851038	General Rehabilitation Clinic	7455205035	Occupational Therapy
7435259935	Respiratory Services	7455205040	Occupational Therapy
7435259935	Respiratory Services	7455205238	Occupational Therapy IP
7435259935	Respiratory Services	7455205338	Occupational Therapy OP
7435259940	Respiratory Services	7460200038	Communication Disorders
7450005031	Physiotherapy	7460200038	Communication Disorders
7450005035	Physiotherapy	7460200038	Communication Disorders
7450005040	Physiotherapy	7460200040	Communication Disorders
7450005238	Physiotherapy IP	7460400040	Audiology
7450005338	Physiotherapy OP	7485000040	Recreation Therapy
7455205031	Occupational Therapy	7485000238	Recreation Therapy
7455205035	Occupational Therapy	7485100031	Music Therapy
Residential Care:			
7185400032	Inter-Hospital Transport	7295201232	Residential Care - Chronic 3
7185404031	External Patient Transport	7295201335	Residential Care Relief
7185404032	External Patient Transport	7295300036	Residential Care - Multilevel
7185404033	External Patient Transport	7450005032	Physiotherapy
7185404034	External Patient Transport	7450005033	Physiotherapy
7185404035	External Patient Transport	7450005034	Physiotherapy
7295201031	Residential Care - Chronic 1	7450005036	Physiotherapy
7295201032	Residential Care - Chronic 1	7450005138	Physiotherapy ECU
7295201033	Residential Care - Chronic 1	7455205032	Occupational Therapy
7295201034	Residential Care - Chronic 1	7455205033	Occupational Therapy
7295201035	Residential Care - Chronic 1	7455205034	Occupational Therapy
7295201038	Residential Care - Chronic 1	7455205036	Occupational Therapy
7295201132	Residential Care - Chronic 2	7455205138	Occupational Therapy Res
7295201134	Residential Care - Chronic 2	7470105032	Social Work
7295201135	Residential Care - Chronic 2	7470105033	Social Work

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7295201138	Residential Care - Chronic 2	7470105034	Social Work
7470105036	Social Work	7485000138	Recreation Therapy Res
7485000034	Recreation Therapy	7485100032	Music Therapy
7485000035	Recreation Therapy	7485100035	Music Therapy
Support Services:			
7185200035	Porters	7480000035	Pastoral Care
7185200040	Porters	7480000036	Pastoral Care
7480000030	Pastoral Care	7480000038	Pastoral Care
7480000031	Pastoral Care	7480000040	Pastoral Care
7480000032	Pastoral Care		

Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 100$$

Definition of terms: *Musculoskeletal injury (MSI)* – Includes all injuries as a result of strains or sprains, overexertion, repetitive movements, tendonitis, and carpal tunnel syndrome that result in time loss.
Direct care area – Any cost centre where the staff members have, as their primary role, interaction with patients, residents or clients.

Data source: Parklane System & PeopleSoft System

Data limitations:

- Concerns have been raised about the quality of the data captured by the Parklane System. Further investigation is required to assess data quality.
- Data were restated in 2006 due to data quality issues related to the Claim Status field. Not all approved claims are coded as such in this field thus a claim was previously considered approved if the claim status field = Approved, Pending, or Blank. The definition of an approved claim was revised to consider as approved: all claims coded as Approved, and claims coded as Pending or Blank with costs associated with them.

Target source: VCH Balanced Scorecard

Action point source: N/A

Comparator source: VCH – VCH Employee Engagement Cubes

3.5. WCB incidence rate

Rationale:	This indicator measures the extent to which PHC is providing a safe working environment for its employees.
Numerator:	The number of approved WCB claims for time-loss incidents
Denominator:	Number of productive hour FTEs (1 FTE = 1,875 productive hours) for all staff
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	Parklane System & Finance
Data limitations:	<ul style="list-style-type: none">▪ Concerns have been raised about the quality of the data captured by the Parklane System. Further investigation is required to assess data quality.▪ Data were restated in 2006 due to data quality issues related to the Claim Status field. Not all approved claims are coded as such in this field thus a claim was previously considered approved if the claim status field = Approved, Pending, or Blank. The definition of an approved claim was revised to consider as approved: all claims coded as Approved, and claims coded as Pending or Blank with costs associated with them.
Target source:	VCH Balanced Scorecard
Action point source:	N/A
Comparator source:	VCH – VCH Employee Engagement Cubes

3.6. % days of work lost due to injury for direct care areas

Rationale:	This indicator measures the extent to which PHC is providing a safe work environment for its direct care employees by tracking the amount of time lost due to injury over time.
Numerator:	Number of days of work lost due to injury in direct care areas that have been invoiced during the month *Note: See Technical Notes for the WCB musculoskeletal injury (MSI) incidence rate for direct care areas indicator for list of direct care cost centres.
Denominator:	Total number of budgeted days for direct care areas *Note: Number of budgeted days for each calendar month is estimated by dividing the total number of annual budgeted hours for direct care area cost centres by 7.2 hours, then dividing by 365 and multiplying by the number of days in each calendar month.
Method of calculation:	$= \frac{\text{numerator}}{\text{denominator}} * 100$
Data source:	Parklane System & Finance (TSI)
Data limitations:	<ul style="list-style-type: none">▪ Data is only available by calendar month, which is the time interval for which invoices are received from WCB.▪ At the time of this report's writing, the total number of budgeted productive hours were unavailable. The indicator will be restated in subsequent reports such that the denominator reflects only budgeted productive days. This change will not impact the indicator trend significantly, but will affect the level of performance, which will be higher as a result of using a smaller denominator.▪ Concerns have been raised about the quality of the data captured by the Parklane System. Further investigation is required to assess data quality.
Target source:	N/A
Action point source:	N/A
Comparator source:	N/A

3.7. WCB claims cost

Rationale:	This indicator measures the extent to which PHC is providing a safe working environment for its employees.
Numerator:	Total number of dollars invoiced for WCB claims, regardless of cause or area of work, during the month <i>Inclusion criteria:</i> Includes the following WCB costs: <ul style="list-style-type: none">▪ Health Care▪ Compensation▪ Rehabilitation *Note: The data have been adjusted to reflect a 30-day calendar month to account for the different number of days per calendar month to allow for time-series analysis.
Denominator:	N/A
Method of calculation:	= numerator
Data source:	Parklane System
Data limitations:	<ul style="list-style-type: none">▪ Data is only available by calendar month, which is the time interval for which invoices are received from WCB.▪ There is usually a delay of 6 to 8 weeks before claims cost data is received from WCB.▪ Retrospective adjustments to claims costs are applied to the month during which they were invoiced and not to the month(s) affected by the adjustment.▪ Concerns have been raised about the quality of the data captured by the Parklane System. Further investigation is required to assess data quality.
Target source:	N/A
Action point source:	N/A
Comparator source:	N/A

3.8. WCB experience rating adjustment

Rationale:	This indicator measures the extent to which PHC has been able to maintain a safe working environment for its employees relative to the rest of the provincial acute care sector.
Numerator:	WCB experience rating adjustment
Denominator:	N/A
Method of calculation:	= numerator
Definition of terms:	<p><u>Experience rating adjustment</u> – The discount/surcharge applied to an employer's base rate based on the employer's injury costs relative to the industry average (up to a maximum discount of 50% and a maximum surcharge of 100%)</p> <p><u>Base rate</u> – The amount charged per \$100 of assessable earnings. The same base rate applies for all employers within the same classification unit, or industry (i.e., Acute Care).</p>
Data source:	Payroll
Data limitations:	<ul style="list-style-type: none">▪ Data is only available from 2000 onward – data for previous years were based on a different methodology for calculating experience rating adjustment.▪ In the past, PHC as a whole has been classified by WCB as being part of the acute care rate group. However, a recent audit has seen PHC reclassified into 4 different rate groups: acute care, residential care, rehabilitation care, and community health support. Therefore, there will be no retrospective data available prior to 2008.
Target source:	Consultation with internal experts
Action point source:	N/A
Comparator source:	VGH/UBCH – VCH Finance

3.9. Grievances filed rate

Rationale: This indicator measures the extent to which PHC is maintaining a positive relationship with its unionized employees.

Numerator: Number of grievances filed by union employees

Denominator: Number of annual budgeted FTEs for union employees

Inclusion criteria:

- HSA, HEU, BCNU, and IUOE

*Note: Number of annual budgeted FTEs for Periods 1 and 13 have been adjusted to account for the different number of days in these fiscal periods. Additionally, due to the outsourcing of housekeeping and security services that commenced in November 2003, the annual budgeted FTEs for Periods 9 to 13 were replaced with actual FTEs for the job codes affected by the outsourcing.

Method of calculation:
$$= \frac{\text{numerator}}{\text{denominator}} * 1,000$$

Data source: Labour Relations Database & Finance (Revenue & Expense Report)

Data limitations:

- Employees may file more than one grievance related to the same incident at a given time. More analysis is required to determine the impact of this phenomenon on the indicator result.

Target source: N/A

Action point source: N/A

Comparator source: N/A

4.1. Total annual research funding

Rationale:	This indicator measures the extent to which PHC has been able to secure new research funding as compared to the previous fiscal year(s).
Numerator:	Total research funding by the following funding categories: <ul style="list-style-type: none">▪ Clinical trials▪ Contracts and agreements▪ CFI, KDF and matching funds▪ Other grant funding▪ Peer-reviewed funding
Denominator:	N/A
Method of calculation:	= numerator
Definition of terms:	<u>CFI</u> – Canadian Foundation for Innovation <u>KDF</u> – Knowledge Development Fund <u>MSFHR</u> – Michael Smith Foundation for Health Research <u>Peer-reviewed funding</u> – As per the Michael Smith Foundation for Health Research definition
Data source:	UBC ORSIL Database
Data limitations:	<ul style="list-style-type: none">▪ This funding information should be interpreted as approximate only. ORSIL does not capture all grant funding and thus total research funding is underreported. There are known omissions in the data reported. For example, ORSIL did not capture any graduate student salaries in 00/01 or 01/02. Data reported for 02/03 is more accurate than previous fiscal years, although some grant funding may be missing and/or underreported.▪ The breakdown for clinical trial funding is available only for fiscal years 02/03 and 03/04. For the other fiscal years, the clinical trial funding dollars are subsumed under other funding categories.
Target source:	N/A
Action point source:	N/A
Comparator source:	N/A

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