

Centre for Prehospital Care

Health Sciences North

Continuous quality improvement (CQI) is a complex responsibility that requires the collective effort of varied focus areas. Within the Health Sciences North Centre for Prehospital Care (HSN CPC), CQI is attained through an integrated system of performance measurement, performance improvement and continuing medical education within a broad based system of quality management and medical leadership.

Performance measurement is accomplished primarily by collecting and randomly reviewing ambulance call reports (ACRs) where Advanced Life Support (ALS) skill sets were performed and/or not performed when they should have been. Skills and specific patient conditions are categorized as either high or low risk procedures by the Health Sciences North Centre for Prehospital Care (HSN CPC) Quality of Care Committee (QCC). Tables 1 and 2 from Appendix N of the HSN CPC Performance Agreement (PA) are then applied to determine the total number of calls to be reviewed through the ambulance call evaluation (ACE) process.

Performance improvement endeavours are essential in the development of a strong system that allows the HSN CPC to examine how the overall patient care system is working and identifies general areas of weakness or concern to enable wide spread change. The HSN CPC continues to develop benchmarks that we measure against and develop continuing medical education (CME), which is disseminated to our paramedics and services, as a means to improving overall system and practitioner quality.

The need and importance of a wide overlap between performance measurement, performance improvement and continuing medical education (Figure 1) is vital to ensure ongoing quality patient care as demonstrated in the well-known and widely used Plan-Do-Study-Act cycle (Figure 2).



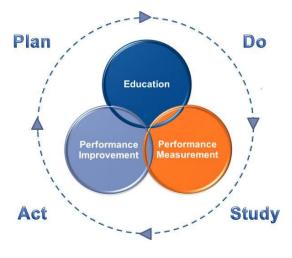
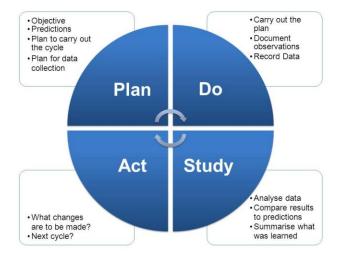


Fig. 2



A. PERFORMANCE MEASUREMENT

CHART AUDIT PROCESSES

The cases that must be audited fall into 3 categories.

1. Medical Directives/Protocols & Cases

- a) Higher level auditing based on the call type.
- b) Uses a sampling model that addresses both Lower and High Risk call types.
- c) The lower risk (as determined by the HSN CPC Quality of Care Committee) model provides a sampling error of +/- 5% (CI 95%). Refer to PA, Appendix N, Page 80, Table 1.
- d) In cases of higher risk (as determined by the HSN CPC Quality of Care Committee) where a smaller sampling error is desired, a model that provides a sampling error of +/- 2.5% (CI 95%) is used. Refer to PA, Appendix N, Page 81, Table 2.

2. Paramedics

- a) Each Paramedic will have a minimum of 5 charts audited where a controlled act was performed.
- b) If a Paramedic has done < 5 calls where a controlled act was performed, 100% of the calls with controlled acts performed will be audited.
- c) Newly certified Paramedics (defined as paramedics not having previous Base Hospital certification) will have 80% of their charts audited, for the first six (6) months, where a controlled act was performed.

3. Cancelled Calls

- a) A selection of cancelled calls where Paramedics made patient contact, with or without controlled acts performed, will be audited.
- b) Table 1 with the sampling error of +/- 5% (CI 95%) is used for those without controlled acts performed.
- c) Table 2 with the sampling error of +/- 2.5% (CI 95%) is used for those where a controlled act was performed and appropriate refusal occurred.

STANDARD REPORTS

Numerous reports are generated to ensure compliance with the PA Chart Audit Process as well as with the ALS/BLS Patient Care Standards. These reports will be shared with the Service Operators and the Ministry of Health and Long-Term Care (MOHLTC) as outlined below. Following receipt, we invite service operators to contact the Performance Measurement Lead to discuss all or any aspects of their service findings within the reports.

1. HSN CPC Audit Requirements and Activities Report

a) All call types are categorized and the potential skill sets used for each category are listed.

- b) These are then reviewed by the Quality of Care Committee (QCC) and assigned levels of risk.
- c) A database search is developed, based on call type and skill sets and generated on a weekly basis to identify the call activities throughout each respective area and the appropriate auditing activity is then completed.
- d) This is also a live document and the estimate of call activities and auditing requirements are based on the previous year's activity.
- e) This document is regularly updated and evaluations/comparisons of previous year versus current year call activities are done to ensure compliance with the PA.

Report Distribution:

- Service Operator
 - Semi-annually for data up to and including September 30 and March 31. Reports will be distributed within the ensuing six weeks.
- MOHLTC:
 - Annually by June 30.

2. HSN CPC Auditing Requirements - Results

- a) This is a living process that provides up-to-date auditing requirements and activities on a service-by-service and paramedic-by-paramedic basis.
- b) The PPC will update the live document as to the current call activities and ensure appropriate auditing activities are completed.
- c) This live document will then be forwarded to the Performance Measurement Lead who will compile all the data into a service wide report to be shared within as a compliance check.

Report Distribution:

- Service Operator:
 - Quarterly for data up to and including June 30, September 30, December 31 and March 31. Reports will be distributed within the ensuing six weeks.

<u>NOTE:</u> HSN CPC reports are based on fiscal April 1, 2015 to March 31, 2016 as per Ministry requirements therefore providing calendar year reports, as per service operator requests, may result in incomplete data for the calendar year reports.

- ➤ MOHLTC:
 - Annually by June 30.

3. Patient Care Variances Report (ACE Outcomes)

- a) All ambulance call evaluations (ACE) with an identified documentation and/or patient care variance will be weighted and tracked.
- b) All variances and error severities will have an identified indicator.
- c) Repetitive errors and/or repetitive practitioners will be reported to the Performance Improvement Lead and Regional Education Coordinator for appropriate action.

Report Distribution:

- Service Operator:
 - Monthly for each calendar month throughout the year. These reports
 will consist of specific data related only to the identified month and
 every attempt will be made to have them distributed by the first
 Wednesday of the month following the reporting period.
 - Quarterly for data up to and including June 30, September 30, December 31 and March 31. Reports will be distributed within the ensuing six weeks.
- > MOHLTC:
 - Annually by June 30.

4. Online Medical Control Interaction Reports

- a) 'Patch' interactions broken down by service.
- b) 'Patch' interactions broken down by interaction type.
- c) Identified potential/actual failures.

- Internally:
 - As required.
- Service Operator:
 - Quarterly for data up to and including June 30, September 30, December 31 and March 31. Reports will be distributed within the ensuing six weeks.
- MOHLTC:
 - Patch failures reported upon discovery.
 - Annually by June 30.

5. Service Operator Driven Audit Reports

a) Identify all ACEs that are completed on request by the Service Operator.

Report Distribution:

- Service Operator:
 - Quarterly for data up to and including June 30, September 30, December 31 and March 31. Reports will be distributed within the ensuing six weeks.
- ➤ MOHLTC:
 - Annually by June 30.

6. Paramedic Self Reports

a) Identify number of paramedic self-reports regionally.

Report Distribution:

- Service Operator:
 - Quarterly for data up to and including June 30, September 30, December 31 and March 31. Reports will be distributed within the ensuing six weeks.
- > MOHLTC:
 - Annually by June 30.

7. BLS Issues Reported to Service Operators

a) Where BLS PCS issues are discovered during the normal auditing process.

- Service Operator:
 - As discovered
 - Quarterly for data up to and including June 30, September 30, December 31 and March 31. Reports will be distributed within the ensuing six weeks.
- MOHLTC:
 - Annually by June 30.

8. Paramedic Skills Activities Report

a) Skills activities are based on the number of times a paramedic was on a call where an ALS skill was used as part of a patient care plan.

Report Distribution:

- Service Operator:
 - Semi-annually for data up to and including September 30 and March 31. Reports will be distributed within the ensuing six weeks.
- > MOHLTC:
 - Annually by June 30.

B. PERFORMANCE IMPROVEMENT

PROCESSES AND REPORTING

1. Investigations

- a) The Performance Improvement Lead will lead and coordinate all patient care related investigations for the HSN CPC.
- b) Appropriate and timely notifications/reports will be shared with all necessary stakeholders.
- c) The Performance Improvement Lead will organize any and all follow-up with both the Performance Measurement Lead and Regional Education Coordinator to ensure outcome recommendations are adhered to.

- All necessary parties as required
- Service Operator:
 - Quarterly for data up to and including June 30, September 30, December 31 and March 31. Reports will be distributed within the ensuing six weeks.
- ➤ MOHLTC:
 - Annually by June 30.

2. Clinical Audit Reports

Large scale patient care activities audit reports will be undertaken three times per year to evaluate actual performance against predicted benchmarks.



Report Distribution:

- Service Operator, Regional and Provincial:
 - By April 30, August 31, and December 31.
- ➤ MOHLTC:
 - Annually by June 30.

3. Focused Reports

- a) Ad hoc reports responsive to needs as they arise.
- b) Content may be driven from the Quality of Care Committee, HSN CPC Program Committee or Program Council.
- c) Repetitive errors reported by the Performance Measurement Lead will drive to a system audit on specific skills and/or patient care activities.
- d) Implementation of a new or changed directive will lead to a system audit of pre implementation outcomes versus post. This will typically include three months of data on either side of the change.
- e) Results of these audits may be used to drive future year, large scale clinical audits depending on results.
- f) A comprehensive paramedic call review to determine patient care variances (PCV) looking at both commissions and omissions of care will be completed in conjunction with the Regional Education Coordinator to determine the educational needs of the next CME cycle.

- Internally
 - As required
- Service Operator, Regional and Provincial:
 - · As applicable and as completed.
- ➤ MOHLTC:
 - Annually by June 30

C. SUMMARY OF REPORT DISTRIBUTION

Service Operator

Quarterly

- ➤ HSN CPC Auditing Requirements/Results
- > Patient Care Variances
- > Investigations
- Clinical Audit Reports (3 dates per above)

Semi-annual

➤ Audit Requirements and Activities Report

As required

- Investigations
- ➤ Focused Audits
- ➤ On-Line Medical Control Interactions

MOHLTC

Annually and/or as Required

- > HSN CPC Auditing Requirements/Results
- ➤ Audit Requirements and Activities Report
- ➤ Patient Care Variances
- > Investigations
- Clinical Audit Reports
- > Focused Audits
- > On-Line Medical Control Interactions

All reports produced in accordance with Quality Programming will contain a watermark of the HSN CPC Quality model as illustrated here.

