QUALITY PROGRAMMING OVERVIEW 2020

Centre for Prehospital Care

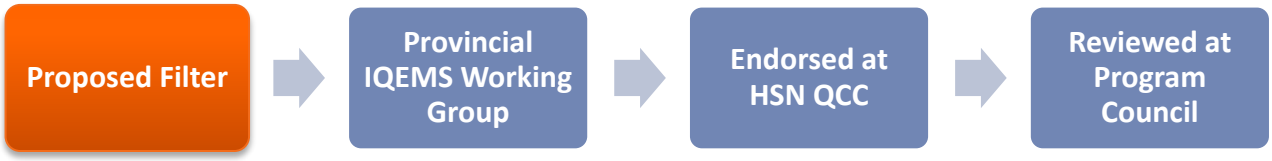
Health Sciences North

www.hsnsudbury.ca/portalen/basehospital

INTRODUCTION

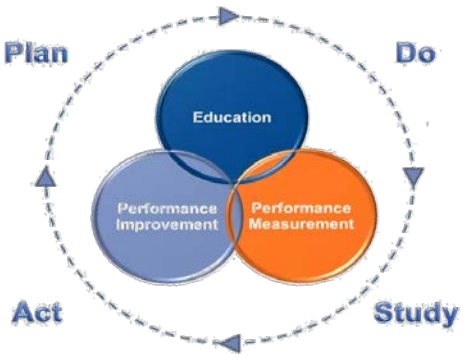
Quality is a multifaceted responsibility that requires the collective effort of varied focus areas. Within the Health Sciences North Centre for Prehospital Care (HSN CPC), this is attained through an integrated system of clinical measurements, quality improvement and continuing medical education within a broad based system of quality management and medical leadership. The need and importance of a wide overlap between these programs (Figure 1) is vital to ensure ongoing quality patient care as demonstrated in the Plan-Do-Study-Act cycle (Figure 2).

Performance Measurement is accomplished by utilizing the Integrated Quality Evaluation Management System (IQEMS). This clinical auditing system is fully web-based, and audits 100% of the data through the clinical filter identification system. Electronic Ambulance Call Reports (eACRs) received from the Service Operators are electronically sorted and filtered through computerized algorithms that are based on Medical Directives and/or Standards. The filters identified through the clinical filter identification system are developed and approved by the Provincial IQEMS Operational Working Group in consultation with Medical Directors then endorsed through HSN CPC Quality of Care Committee and reviewed at Program Council.



Continuous Quality Improvement (CQI) activities include continuously examining performance in the system to see where the personnel, system, and processes can continue to improve. Various databases currently exist which contain data relevant to CQI activities. These data systems are used to evaluate performance in the following ways:

- Prospectively identify areas of potential improvement
- Answer questions about patient related items within the EMS System
- Monitor changes once improvement plans are implemented
- Provide accurate information enabling data driven decisions
- Support research that will improve the system and potentially broaden EMS knowledge



QUALITY PROGRAMMING OVERVIEW 2020

Since transitioning to the Intelligent Quality Evaluation and Management Suite (IQEMS) in 2017, the following sections have been updated based on the new chart audit processes and reporting functionalities.

A. PERFORMANCE MEASUREMENT

CLINICAL AUDIT SYSTEM

The Clinical Audit process ensures:

1. Paramedics have 100% of their charts audited where a controlled act or advanced medical procedure was performed.
2. Newly certified Paramedics (defined as paramedics not having previous Base Hospital certification): The performance agreements states 80% of charts where a controlled act or advanced medical procedure must be audited however IQEMS allows for 100% of paramedic charts to be audited.
3. All cancelled calls that fail an IQEMS filter, where paramedics made patient contact, with or without controlled acts performed, are audited.

STANDARD REPORTS

Reports are generated to ensure compliance with the Performance Agreement and the ALS/BLS Patient Care Standards. These reports are shared with the Service Operators and the Ministry of Health and Long-Term Care (MOHLTC) as outlined below. Following receipt, the Service Operators are invited to discuss any findings within the reports.

A. MONTHLY REPORTS

Audit Variance Detail Report by Paramedic

This report is a summary of the audits by paramedic and by service where a variance was identified and is grouped by variance type, variance description and base hospital outcome.

B. QUARTERLY REPORTS

HSN CPC Audit Activities

The report is an overview of ALS calls that were filtered through the IQEMS computerized algorithm. It is summarized by paramedic and includes the number of ALS calls, electronic audits and manually reviewed audits. This report also includes a summary of audit activities by service operator.

Audit Variance Summary

This report provides a breakdown of variance rates and outcomes by Service Operator.

Audit Variance Detail

This report is a summary of the audits by service where a variance was identified. It is grouped by variance type, variance description and base hospital outcome.

Online Medical Quality Control Interactions

This report is a summary of the interactions between the Paramedic and Base Hospital Physician. It is categorized by Service Operator, reason for patch and identified variances.

Service Operator Audit Requests

This report identifies the number of audits requested by a Service Operator. It is categorized by reason for request and service.

Paramedic Self Reports

This report identifies the number of self-reports submitted by Paramedics related to identified omissions and/or commissions in patient care or documentation. This is recognized as a very important component of paramedic practice. It is categorized by reason for request and service.

BLS Issues Reported to Service Operators

Subsequent to the transition to IQEMS, we are no longer able to provide the total number of BLS issues discovered during an ALS audit and reported to the Service Operator. Service Operators are notified of any BLS issues discovered during an audit. This process continues to be developed with a goal of implementation in 2021.

C. BIANNUAL REPORTS

Paramedic Skills Inventory

This report is the total number of calls (by call #) where a particular ALS skill was used as part of the overall patient care plan. Paramedic 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. These counts are based on the total number of ALS skills performed by the entire responding crew. For example, a call with multiple crew members identified on the ACR will each receive credit for their active participation in the assessed need and delivery of the identified ALS skill.

Reports are distributed as follows unless otherwise noted in this document:

REPORTING PERIOD	DISTRIBUTION TIMELINE
Service Operator	***Delays in reporting timelines may occur due to IQEMS development.***
Monthly Reports	4-6 weeks following reporting period
Quarterly Reports	6-8 weeks following reporting period
Biannual	6-8 weeks following reporting period
MoHLTC	
April 1 – March 31	Annually by June 30

CLINICAL PERFORMANCE MEASURES

Clinical Performance Measures are defined measurements that are part of a process. They are evidence-based measures that optimally guide the improvement of the quality of patient care and practice. These indicators are evaluated on a regular basis by running standardized data queries and subsequently reviewing outlier data to provide accurate treatment rates for specific clinically relevant indicators. These indicators are reviewed and endorsed by the Quality of Care Committee.

Current indicators include: (Currently under review)

- Rate of ASA administration in patients who present with ischemic chest
- Rate of Glucagon/Dextrose administration in patients who present in hypoglycemia
- Rate of epinephrine/Benadryl administration in patients who present in Anaphylaxis
- ECG Acquisition (<10 minutes) for patients receiving PCI. This is a northeast metric (CorHealth).

REPORTING PERIOD	DISTRIBUTION TIMELINE
Service Operator*	
TBD	

B. CONTINOUS QUALITY IMPROVEMENT

QUALITY IMPROVEMENT ACTIVITIES

Continuous Quality Improvement (CQI) provides a method for understanding the system processes and allows for their revision using data obtained from those same processes. HSN CPC uses a number of approaches and models of problem solving and analysis to ensure and demonstrate the required standards are being met through valid measurement tools.

1. Clinical Audit Reports

A clinical audit is a cyclical process where an element of clinical practice is measured against a standard. The results are then analysed and an improvement plan is implemented. Once implemented, the clinical practice is measured again to identify improvements, if any.

The Quality of Care Committee will lead the planning of the audit and determine the population as it directly relates to existing protocols (i.e. chest pain, stroke, multi-system trauma, etc.) and/or Standards. A random statistical sample will be calculated and reviewed. The cases will be compared to the associated treatment protocol algorithm and scored based on documentation and adherence to protocols. Based on the findings, improvement opportunities will be developed, disseminated and monitored.

FREQUENCY	
Service Operators	
3 reports per year	3 times annually
MOHLTC	
April 1 – March 31	June 30

2. Focused Reports

Focused reports are ad hoc reports responsive to needs as they arise. Content may be driven from the HSN CPC Quality of Care Committee, HSN CPC Program Committee, HSN CPC Program Council, or Ontario Base Hospital Data Quality Committee. Examples include repetitive errors reported by performance measurements, implementation of a new or changed directive, request for data from the Ministry of Health (MoH), etc.

The process to request a Research / Quality Project is identified in Appendix A.

REPORTING PERIOD	DISTRIBUTION DATE
Service Operator	
April 1- March 31	As required
MOHLTC	
April 1 – March 31	June 30

3. Event Analysis

Analysing incidents, through an established framework, can serve as a catalyst for enhancing the safety and quality of patient care.

Recommendations and corrective actions will be formalised and have an evaluation plan to determine if the recommendations are implemented and what impact they had on the system.

REPORTING	DISTRIBUTION DATE
Service Operator / MOH	
Preliminary Findings	14 days post event analysis
Final Report	30 days post event analysis
Annual Synopsis (April 1 – March 31)	June 30