2017-2018

ANNUAL REPORT

Centre for Prehospital Care

Health Sciences North

CONTENTS

Centre for Prehospital Care

Health Sciences North

INTRODUCTION

On behalf of the staff and Medical Directors of Health Sciences North Centre for Prehospital Care (HSN CPC), it is our pleasure to present the annual report for fiscal year 2017-2018.

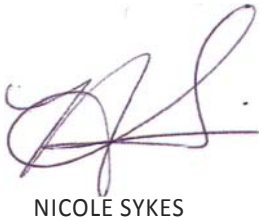
This report follows the template provided by the Emergency Health Regulatory and Accountability Branch, and demonstrates how our organization addresses the key performance indicators listed in the performance agreement.

We have completed another productive and successful year. Some key achievements during this fiscal year include:

- We certified 71 new paramedics
- We provided advice and on-line medical direction during 475 patch calls
- We audited 25,978 ambulance calls
- We facilitated 136 educational sessions

We acknowledge the exceptional work of all our staff as we continue to seek new and innovative methods of delivering our services to our stakeholders while meeting and, in some cases, exceeding the expectations defined in our performance agreement.

DR. JASON PRPIC
REGIONAL MEDICAL DIRECTOR



NICOLE SYKES
REGIONAL MANAGER

OUR MISSION AND VISION

Our Mission

The HSN Centre for Prehospital Care fosters exceptional prehospital care to improve the health and wellbeing of our communities by supporting paramedics through:

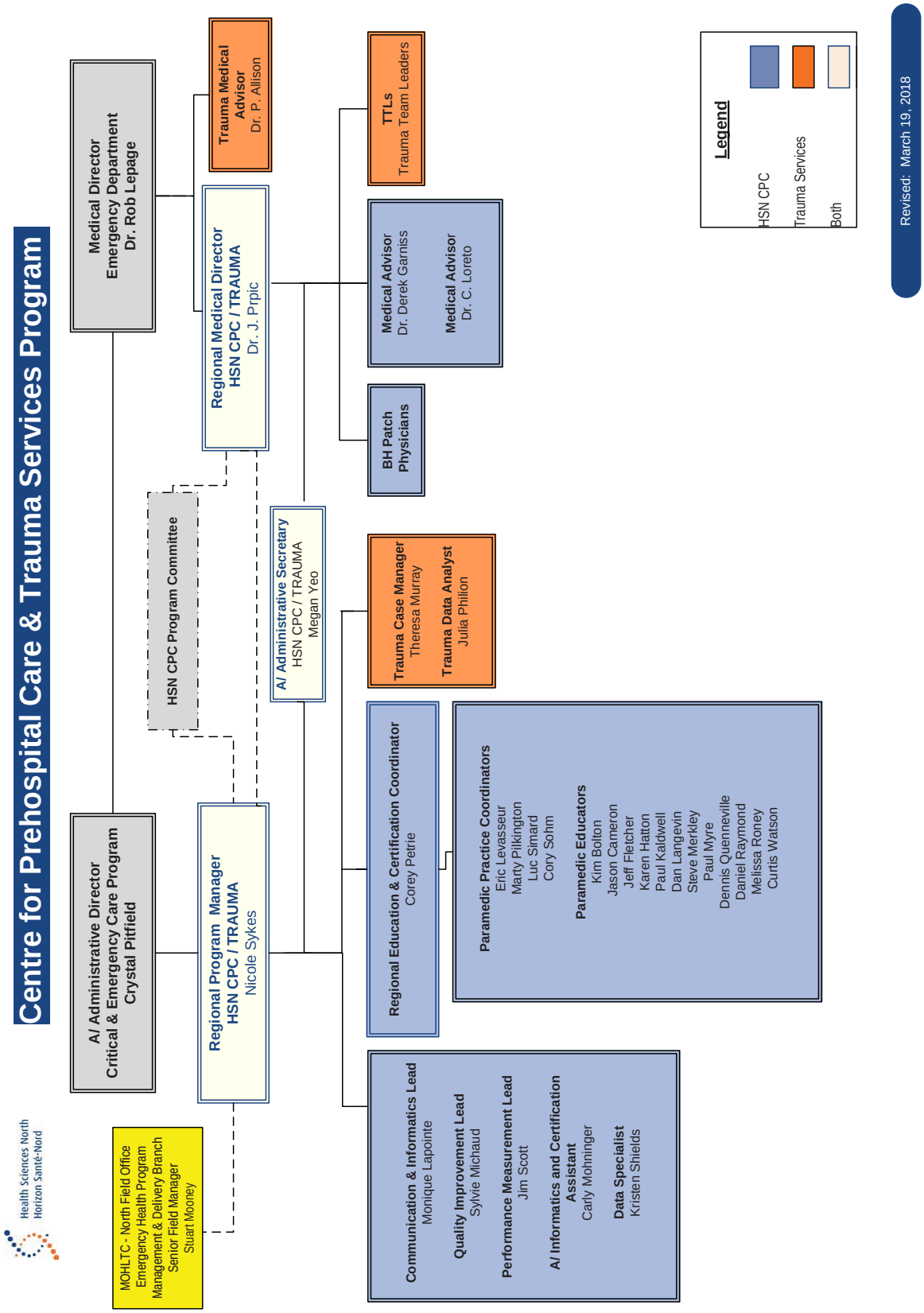
- Innovative education delivery;
- Research;
- Responsive quality programming; and,
- Medical delegation and oversight consistent with approved standards and expert practices.

Our Vision

Leading advancements in prehospital medicine through innovation, research, and education.

ORGANIZATION CHART

As of March 31, 2018



MEET THE TEAM

Nicole Sykes,
Regional Manager

Dr. J. Prpic, Regional
Medical Director

Jim Scott,
Performance
Measurement Lead

Megan Yeo,
Administrative
Secretary

Paul Myre, Regional
Education and
Certification
Coordinator
April 2017-November 2017

Corey Petrie,
Regional Education
and Certification
Coordinator
November 2017- Current

Sylvie Michaud,
Quality Improvement
Lead

Monique Lapointe,
Communication &
Informatics Lead

Eric Levasseur,
Paramedic Practice
Coordinator

Luc Simard,
Paramedic Practice
Coordinator

Marty Pilkington,
Paramedic Practice
Coordinator

Cory Sohm,
Paramedic Practice
Coordinator

Carly Mohninger,
Informatics and
Certification
Assistant

Kristen Shields,
Data Specialist

HIGHLIGHTS

Collaboration

Working with our colleagues from the Ontario Base Hospital Group (OBHG), the program has had a strategic focus on enhancing the quality of programming delivered, avoiding duplication in the system, and the sharing of knowledge among programs. The goal is to standardize and find efficiencies in processes wherever possible. The Health Sciences North, Centre for Prehospital Care (HSN CPC) team is involved in both formal and informal activities designed to accomplish these goals. These examples illustrate the significant degree to which the program supports a culture of collaboration when considering any new initiatives.

In May of 2017, work began to culminate on a formal Collaboration Agreement designed to provide a framework for implementing and overseeing the various collaboration initiatives occurring in the province. While work on this legal agreement began in 2016-2017, this meeting in May of 2017 brought together leaders from the Regional Base Hospitals along with legal counsel for three of the programs to work collectively through a draft document. Based upon this work, redrafting of the architecture continued during this reporting period. The next collaborative session planned for May 2018 is expected to launch this project forward to producing an executable version during the 2018-2019 reporting period. The culmination of this work will result in the first formal governance structure among the 8 Regional Base Hospital programs to enable and oversee several collaboration initiatives.

Informal Activities

1. Creating new PCP and ACP scenarios for use with initial certification events through a Provincial Working Group in collaboration with Sunnybrook Centre for Prehospital Medicine, London Health Sciences Centre, Hamilton Health Sciences, Northwestern Ontario Regional Base Hospital, ORNGE Base Hospital. This activity has produced 34 new scenarios in the 17/18 fiscal year
2. Ad hoc sharing of educational materials among Base Hospital programs. In all 41 skill sheets have been collaboratively created and edited amongst all base hospitals with future plans on capturing skills on video.
3. Ad hoc sharing of information and resources among Base Hospital Programs.
4. Progress on the alignment of key procedural documents intended to support standardized implementation of the Certification Standard.

Formal Activities

Emergency Childbirth Medical Directive

A joint business case for the delivery of the emergency childbirth medical directive education was submitted by all eight Base Hospital Programs in 2016. With the support of the Ministry, this resulted in an agreement with the Association of Ontario Midwives (AOM) who developed the OBHG MAC endorsed curriculum and evaluation tools to measure competency related to the ALS PCS medical directive that came into force in December 2017. All ~9000 paramedics in Ontario received standardized education, created by out-of-hospital childbirth experts, prior to the Medical Directive implementation date.

To date the Emergency Childbirth education is still being well received by newly hired paramedics that graduated prior to 2018 as well as working paramedics that are returning to the workforce from a prolonged absence. This spring a short review of Emergency Childbirth has been ongoing in our region as a means of supplementary spring education to all paramedics in the Northeast who had completed the formal training last year.

New Certification

Dates and available spots during PCP and ACP performance based evaluation events are being shared with neighboring Base Hospital Programs. This has resulted in occasions where paramedics requiring evaluation are able to be accommodated on dates or in locations that enable quicker response times to the given need, or to avoid significant human resource investment to duplicate an already offered service in response to a necessary evaluation event for a single paramedic.

In early 2018 our staff started preparations for our eventual migration towards the Global Rating Scale (GRS) for new paramedic certifications. Combined with a traditional OSCE (objective structured clinical evaluation), the Global Rating Scale is utilized in the assessment of paramedic clinical competence. Global Rating Scales are very different from checklists. GRSs do not use an "either/or "format to record whether a procedure was done or not; rather, they use a scale or range of values to record the quality of the procedure being evaluated. This characteristic is important to properly address the complexities of simulations that emulate real-life cases where, for example, patient priorities change rapidly and paramedics need to be highly efficient. An example GRS would look like this:

1-Unsafe

2-Unsatisfactory

3-Poor/weak

4-Marginal

5-Competent

6-Highly Competent

7-Exceptional

Our colleague from Sunnybrook Centre for Prehospital Medicine Reuven Dichter, was enlisted to provide a one day refresher training to our staff on the utilization of the Global Rating Scale as it applies to new paramedic certifications. As manager of paramedic practice at Sunnybrook, Reuven hosts approximately 20 certification sessions yearly and is considered exceedingly knowledgeable in the domains of GRS. This refresher training proved to be invaluable as it gave our staff the support and confidence needed in preparation for hosting our very own GRS certification.

(Scoring Methods for Objective Structured Clinical Examinations (OSCEs) Sunnybrook Regional Base Hospital Bulletin – March 2018)

IQ EMS

Health Sciences North Centre for Prehospital Care, London Health Sciences Centre, Southwest Ontario Regional Base Hospital Program and Sunnybrook Centre for Prehospital Medicine continue to work collaboratively pursuing standardization of quality assurance software and working toward the delivery of a centralized data quality management solution using Intelligent Quality Evaluation & Management Suite (IQ EMS), originally developed by Sunnybrook Centre for Prehospital Medicine. This web based software supports the management of many base hospital continuing quality improvement endeavors including data mining, peer review and compliance auditing, secure communication with stakeholders, investigation and self-reporting, efficient work flow and document management, statistical reporting and data visualization. The IQEMS suite is being modified to support the additional base hospitals participating in this large-scale project.

IQEMS go live date was in October of 2017 however all auditing activities were retroactive to April 1, 2017. IQEMS was moved to the centralized infrastructure in the Summer of 2017 to facilitate the centralized solution in accordance with the requirements of the Privacy Impact Assessment (PIA) and Threat Risk assessment (TRA). Work continues on completing the actions resulting from the PIA and TRA.

The following committee structure was formalized in 2017 to continue ongoing support and development of IQEMS

- IQEMS Executive Committee
- IQEMS Operational working group
- IQEMS Technical working group
- IQEMS Policy and Privacy Working Group

Paramedic Portal Ontario (PPO)

The Paramedic Portal of Ontario (PPO) completed another phase of development which included upgrades to reflect our current work and future vision. This phase included the launch of the paramedic transcript, checklists, enhanced reporting, additional educational tools as well as resources for paramedics, and finalizing the document manager. The next phase will include the launch of the document manager, new demographic and certification functionality, enhanced roles for the service operator and educators as well as incorporating a new look and feel.

Certification Standard Project

All eight Base Hospital programs continue to develop and refine procedures and processes to support implementation of the ALS PCS Certification Standard in a consistent fashion across Ontario. Several Base Hospitals have taken the lead on a specific component of the project and all have signed on to a broader Project Charter.

Paramedic App: Ontario Paramedic Clinical Guide

All eight Base Hospital Programs participated in an App working group to establish and enhance an electronic clinical reference platform. The App was deployed in January 2017 with positive anecdotal feedback. In response to a follow-up on-line survey, the Companion Document as well as a search function have been added. Additionally, the content has been updated to support ALS PCS version 4.3 and 4.4, and will be updated to support version 4.5, which comes into effect May 1, 2018.

Further development will occur based on the feedback received and requirements identified by the App working group.

Professional Development

Health Care Management Diploma-Ontario Hospital Association (OHA)

Congratulations to Eric Levasseur, Paramedic Practice Coordinator who successfully obtained a diploma in Health Care Management through the Ontario Hospital Association. This certification covered 8 core courses covering all essential topic areas of health care management systems including:

- Financial Management and Budgeting
- Leadership Essentials for the Emerging Leader
- Lean Health Care Yellow Belt
- Managing Human Resources
- Patient Safety-Quality Risk
- Principles and Applications of Health Law
- Understanding Data & Analytics: Making Sense of Data in Your Organization
- A Primer on Ontario's Health Care System

Council of Licensure, Enforcement and Regulation (CLEAR)

Congratulations to Corey Petrie, Regional Education and Certification Coordinator who successfully completed the CLEAR National Certified Investigator & Inspector Training Specialized Program which was held on November 14-16th 2017 in Brampton Ontario. The NCIT Basic and Specialized programs are intensive, hands-on training and certification programs in investigation, inspection techniques and procedures which have earned wide respect in the regulatory community.The NCIT Specialized Program was built upon the NCIT Basic program which provides a core curriculum for certification. Having this enhanced knowledge will be of great benefit to the program as investigating clinical cases is one of the core deliverables of the program under the Performance Agreement.

During the three-day, hands-on training and certification program , the NCIT Specialized program offers advanced certification in individual subject areas including:

- Advanced Interviewing Techniques: This module delves into the fundamentals on memory recall as it pertains to reconstructing the original event. Also covered in the interview technique module is behavior analysis interviewing and behavioral questioning.
- Advanced Investigative Analysis: Focuses on expanding the way investigators view, analyze and review an event. Also covered in this module is investigator written statement analysis.
- Advanced Investigative Report Development: This module contains three other important sections besides introduction to investigative report development. They are collecting, organizing and processing information, developing report formats and obtaining written statements.

Corey adds his new skills to HSN CPC staff members certified in the NCIT Basic program: Sylvie Michaud, Marty Pilkington, Dan Langevin and Jim Scott.

Advanced Cardiovascular Life Support for Experienced Providers (ACLS EP) Instructor Level

Congratulations to Corey Petrie, Regional Education and Certification Coordinator who successfully completed the Advanced Cardiovascular Life Support for Experienced Providers Instructor Course, December 5-6th in Toronto.

The (ACLS EP) is a NEW ACLS renewal program designed primarily for seasoned healthcare providers such as physicians and other emergency care professionals who manage complex cardiovascular, respiratory, and other emergencies.

Scientific evidence has pointed the way toward better content, while educational research has led to improved design of the ACLS EP Course. Both the design and content of the Heart & Stroke ACLS EP Course are evidence based.

The ACLS EP Course emphasizes 4 major concepts:

- The crucial importance of high-quality cardiopulmonary resuscitation (CPR) to patient survival
- The integration of effective BLS with ACLS interventions
- The importance of effective team interaction and communication during resuscitation
- Critical thinking and critical decision-making skills

The course is designed to give learners the opportunity to practice and demonstrate proficiency in the following skills used in resuscitation:

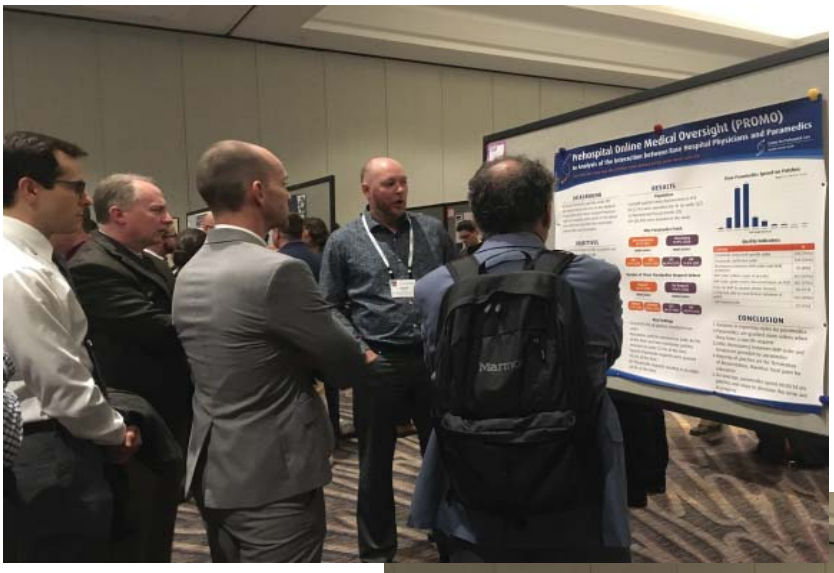
- Systematic approach: BLS, Primary, and Secondary Assessments
- High-quality BLS
- Airway management
- Rhythm recognition
- Defibrillation
- Intravenous/intraosseous access (information only)
- Use of medications
- Cardioversion
- Transcutaneous pacing
- Team resuscitation concept (Team Leader and team member)

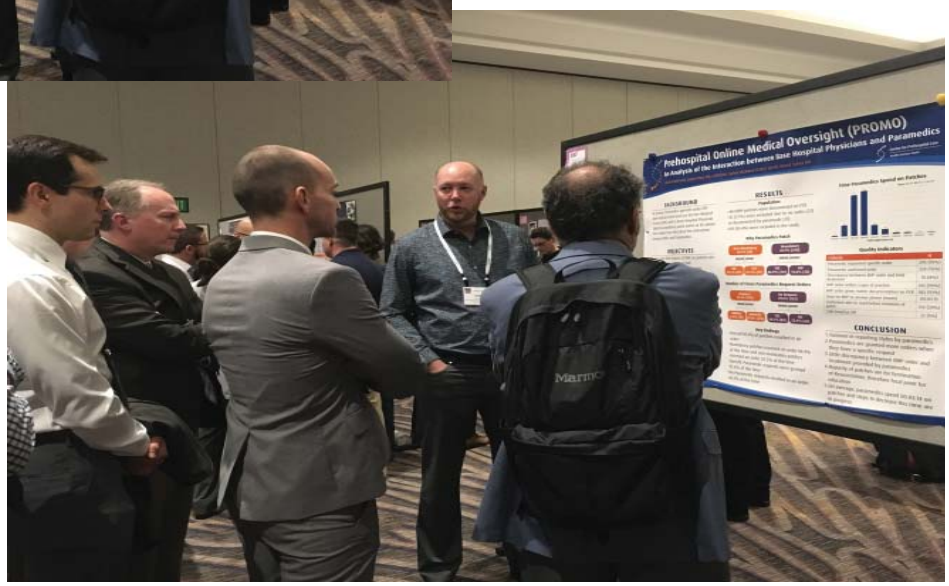
Corey has been teaching ACLS since 2013 primarily at Health Sciences North Simulation Lab. The addition of the (ACLS EP) course will be beneficial to any HSN staff member enrols into the program

National Association of Emergency Medical Services Physicians (NAEMSP)

The NAEMSP group impacts EMS internationally and HSN CPC has been an important participant in ensuring the Canadian perspective is considered. The number of Canadians that attend the conference has grown appreciably over the last several years to the point where we continue to have a distinct NAEMSP committee that represents EMS from across Canada. This committee discusses and advances EMS science as it relates to Canada including participation in the NIH and Health Canada funded Resuscitation Outcomes Consortium (ROC), STEMI care, and the Canadian Evidence-based Protocol Project through a “Distinctly Canadian” pre-conference workshop that is included again.

Dr. Prpic and Nicole Sykes attended the 2018 National Association of EMS Physicians (NAEMSP) Annual Meeting and Scientific Assembly, in San Diego, California where Dr Prpic presented research on the Prehospital Online Medical Oversight. (See Research section for further detail.)





The HSN CPC Team received Smile-A-Gram Cookies for Staff Appreciation Week!
September 2017

Marty Pilkington and Melissa Roney in Moosonee for Spring Rounds.
June 2017

Dr. Prpic presenting at the 2017 EMS Symposium
October 2017

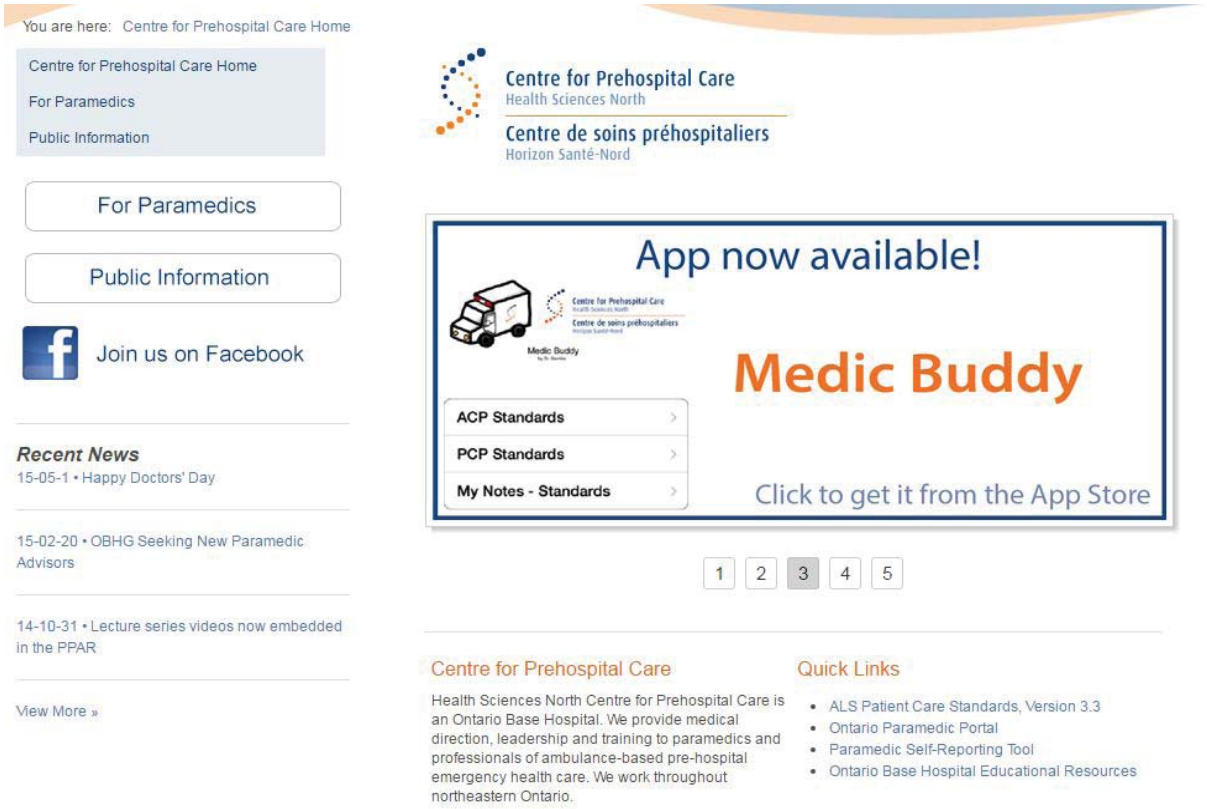
Dr. Prpic with North Bay Paramedics at the 2017 EMS Symposium
October 2017

IV Certification Course attended by both Cochrane and Timisikaming Paramedics
January 2018

Kirkland Lake Paramedics training for Emergency Childbirth during fall a training session
October 2017

Centre for Prehospital Care Website

The programs website located on the Health Sciences North platform, is a public repository for communication, policies and procedures, medication reference, forms, provincial medical directives, a library of training materials and archived presentations, upcoming events, current research activities, published research of interest and important links.



Web-Based Self-Reporting Continues

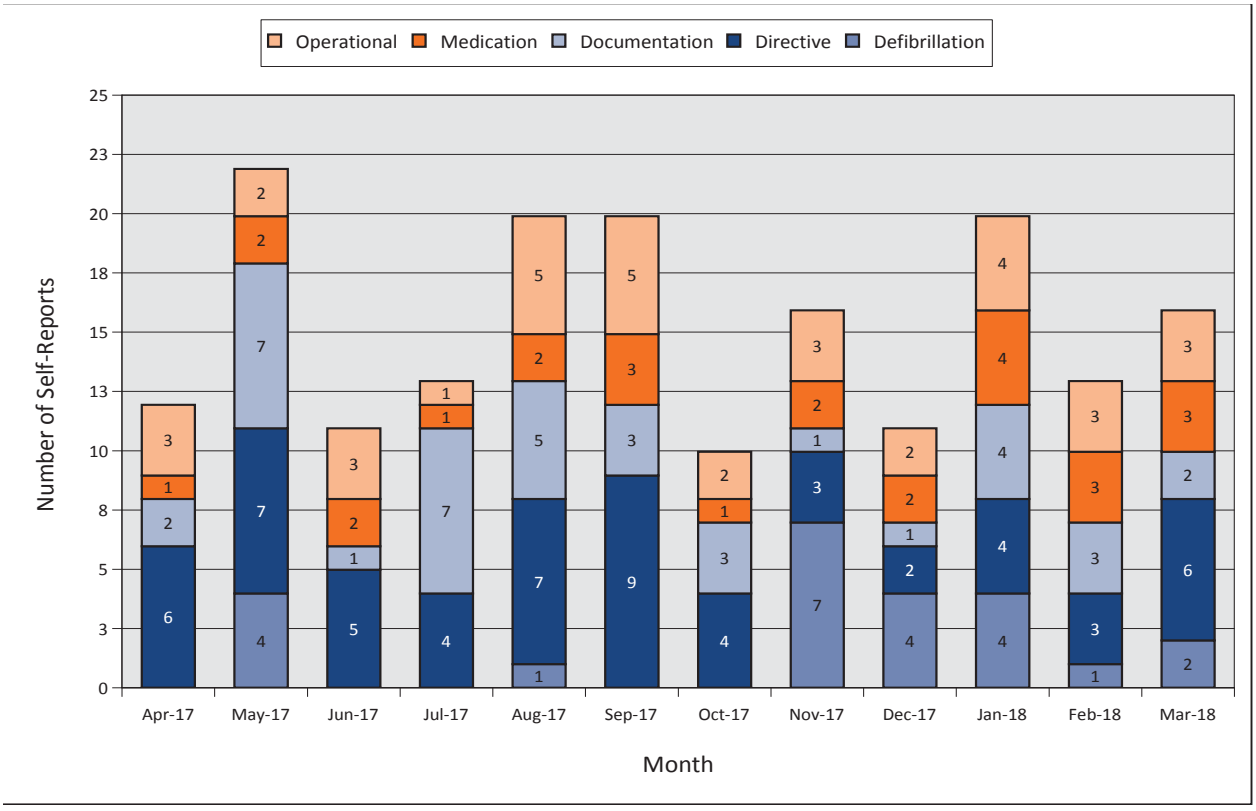
The HSN CPC strongly believes that self-reporting of adverse events is not only professional but developmental and has become part of our paramedics' standard of practice.

The simple fact of recognizing an event means that some form of self-remediation has taken place. From a program prospective, we look for trending issues and develop regional education based on actual needs. The link to access the self reporting tool via IQEMS is located on the HSN CPC website, the Paramedic Self-Reporting tool was launched in April 2014 and the activities continue to impress. There were 184 self-reports generated and reviewed in fiscal 2017/2018.

This report currently resides on the HSN Centre for Prehospital Care Program website and is updated on a monthly basis.

Self-reports may include, but are not limited to, medical directive variances, documentation omissions or any challenges a paramedic may encounter during a call. The Self-Report form does not replace the option of contacting a Paramedic Practice Coordinator (PPC) for discussion, however serves as a standardized method of reporting.

Self-Reports by Month/Identified Issue
April 1, 2017 to March 31, 2018
n = 184



STEMI Alert

The Heart and Stroke Foundation of Canada estimates 70,000 heart attacks occur in Canada every year which equates to one every seven (7) minutes. STEMI (ST Segment-Elevation Myocardial Infarction) is representative of the most severe type of heart attack involving a sudden blockage of one of the coronary arteries. The HSN Cardiodiagnostics and Emergency Department (ED), in collaboration with the HSN CPC, the City of Greater Sudbury Paramedic Service, and Manitoulin-Sudbury Paramedic Services utilize a protocol whereby when a STEMI is recognized in the pre-hospital setting, a “STEMI ALERT” is immediately declared by attending paramedics. This declaration triggers the pre-notification of the receiving department, either the ED or the Cardiac Catheterization Laboratory (Cath Lab), activating a series of intra-departmental processes where resources are rapidly deployed and focused on preparing for definitive interventions. This protocol drastically reduces diagnosis to intervention times by allowing the receiving departments to prepare for the patient's arrival and streamline the continuum of care.

The standard of care for patients receiving an urgent primary Percutaneous Coronary Intervention (PCI) in the Cath Lab is a door to balloon time of ninety (90) minutes. The door to balloon time is measured from the moment a STEMI positive patient enters a health care facility to the time the balloon in the Cath Lab is inflated.

Distance Education

We continue to provide education to approximately 769 paramedics across one of the largest geographical regions in Ontario. To meet the challenge, HSN CPC continues to experiment with different methods of education delivery such as via Adobe Connect, Personal Videoconferencing
(PC VC), Social Media and the Paramedic Portal of Ontario. The newer methods of delivery allow HSN CPC to enhance learning opportunities and facilitate the delivery of education allowing ease of access by paramedics. Educational pre-learning is now available for all new certification candidates on-line via the Paramedic Portal of Ontario. This gives the candidates an opportunity to arrive at a scheduled educational and/ or evaluation session with the didactic portion of the material completed. It also gives the HSN CPC Education and Certification Coordinator the ability to track the progress of the candidates in real time.

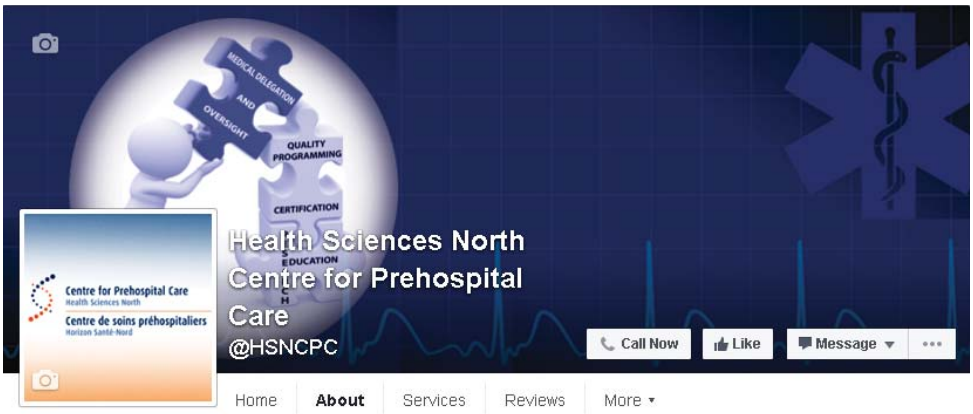
OTN videoconferencing continues to allow the connectivity by the Northeast Region Paramedics to the Base Hospital for real time educational, certification and administrative purposes. We currently have 25 archived presentations that paramedics can view from anywhere with an internet connection at any time.

HSN CPC continues to work on solutions to further reduce barriers of time and distance for paramedics to participate in a higher level of learning regardless of their location.

Social Media

At HSN CPC, we monitor our social media stats to ensure continuous engagement from our paramedics and community. Our page likes have increased by 7% from 2016-17 to 2017-18 fiscal years (Figure 1 & 2). Over half (57%) of our audience are between the ages of 25 to 44 years and 46% of our followers are women and 53% are men. The majority of our audience is from Northeastern Ontario. (Figure 3)

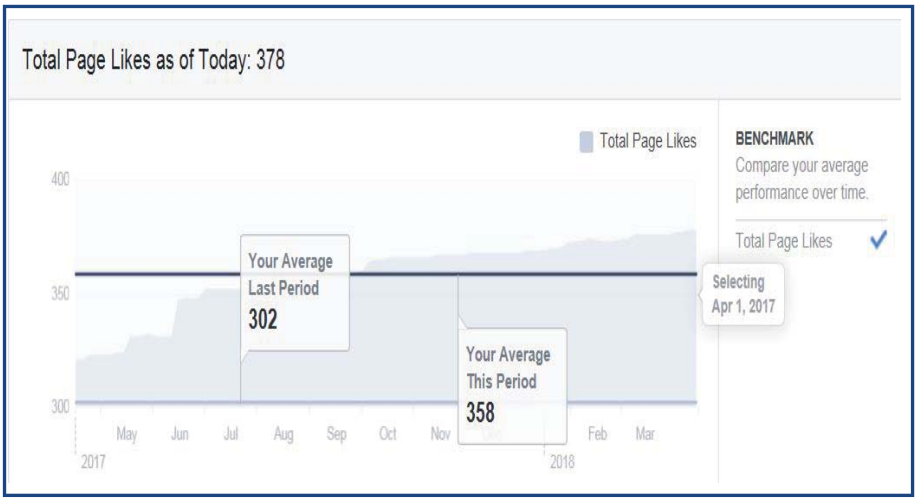
facebook.com/hsncpc



We continue to monitor and develop our Facebook site to ensure the highest engagement of our posts.

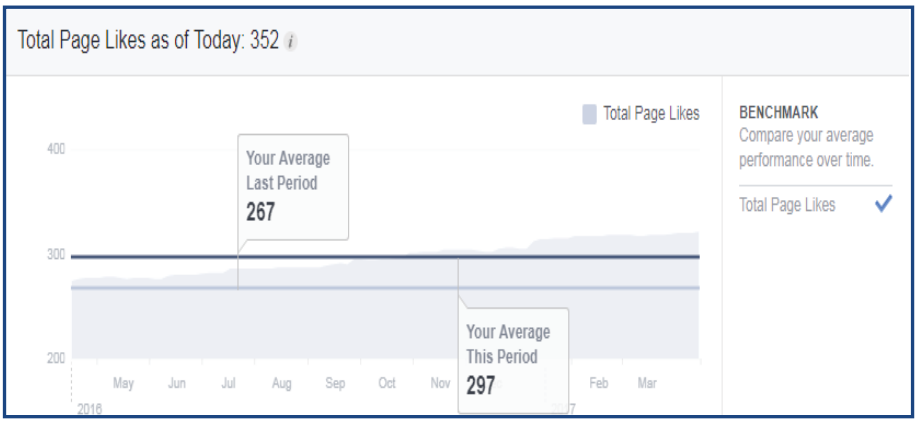
Trending 2017-2018

FIGURE 1



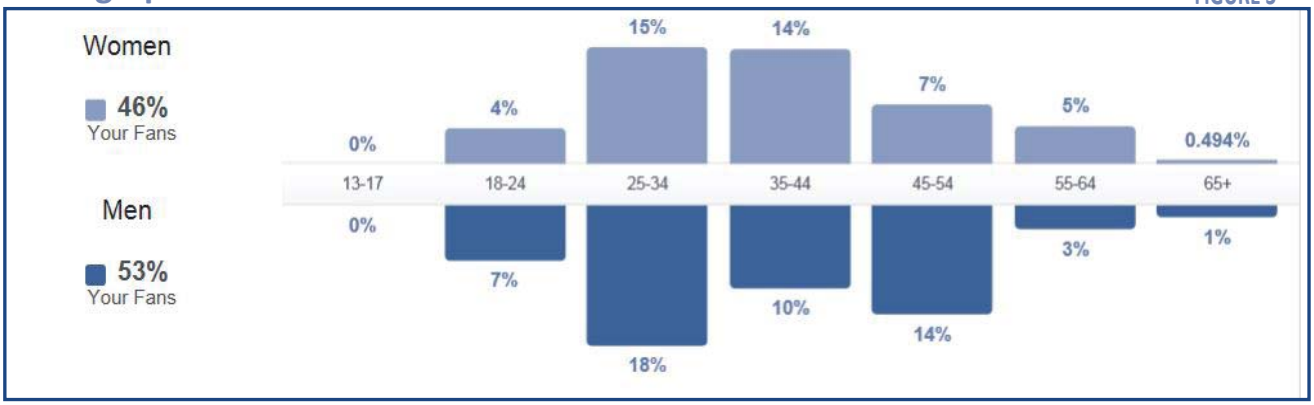
2016-2017

FIGURE 2



Demographics

FIGURE 3



COUNTRY	PEOPLE REACHED
CANADA	404
USA	1
HUNGARY	1

CITY	PEOPLE REACHED
GREATER SUDBURY, ON	137
NORTH BAY, ON	28
SAULT STE. MARIE, ON	25
TIMMINS, ON	16
PARRY SOUND, ON	10
ESPANOLA, ON	8
OTTAWA, ON	8
NEW LISKEARD, ON	7
LIVELY, ON	6
BARRIE, ON	5
KIRKLAND LAKE, ON	5
TORONTO, ON	5
WINDSOR, ON	5
AZILDA, ON	4
CHAPLEAU, ON	4
CHELMSFORD, ON	4
ELLIOT LAKE, ON	4
GARSON, ON	4
HEARST, ON	4
LONDON,ON	4
POWASSAN, ON	4
THUNDER BAY, ON	4
WIKEMIKONG, ON	3
GORE BAY, ON	3
NOELVILLE, ON	3
STURGEON FALLS, ON	3
MANITOULIN ISLAND, ON	2
ATTAWAPISKAT, ON	2
BELLEVILLE, ON	2
BURK'S FALLS, ON	2

LANGUAGE	PEOPLE REACHED
ENGLISH (US)	371
ENGLISH (UK)	27
ENGLISH (INDIA)	1
FRENCH (CANADA)	5
FRENCH (FRANCE)	1
HUNGARIAN	1

CITY CONT..	PEOPLE REACHED
COCHRANE, ON	2
EARLTON, ON	2
ENGLEHART, ON	2
FORT FRANCES. ON	2
HAMILTON, ON	2
IROQUOIS FALLS	2
MOOSONEE, ON	2
WHITEFISH, ON	2
CALLANDER, ON	2
CHELSEY, ON	1
CAMBRIDGE, ON	1
COBALT, ON	1
SOUTH RIVER, ON	1
BANCROFT, ON	1
LARDER LAKE	1

RESEARCH

Prehospital Online Medical Oversight (PROMO)

Alicia Violin BSc, Jason Prpic, Sylvie Michaud, Nicole Sykes, Health Sciences North Centre for Prehospital Care

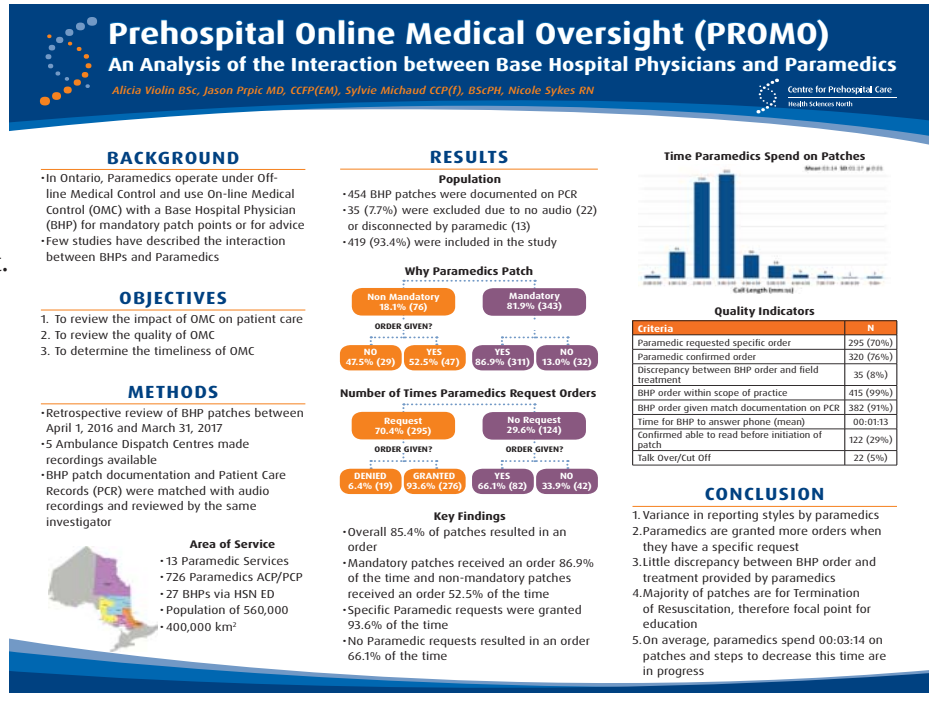
Background. In Ontario, paramedics operate mainly under off-line medical direction, however they may use online medical control when it is mandatory according to provincial medical directives or if a patient presents with a condition that does not fit into their protocols. Literature that encompasses the interaction that occurs between base hospital physicians and paramedics is limited even though this interaction is critical to ensure patients receive appropriate prehospital care.

Objective. To describe the quality of online medical control in northeastern Ontario and to use the study findings in a quality assurance program which will enhance the use of online medical control in the region.

Methods. A retrospective review of written and audio records of base hospital contacts from April 1, 2016 to March 31, 2017 in northeastern Ontario. Audio recordings were assessed by a single reviewer to evaluate predetermined criteria which gauged the efficiency of communication that occurred during each base hospital contact.

Results. There were 454 base hospital contacts in the fiscal year but only 413 audios were assessed since 14 did not have audio available and 27 were not available due to technology failure. Three hundred thirty eight patches (81.8%) were mandatory with 289 (85.5%) regarding cardiac arrest. Analgesia administration made up 30.7% of the non-mandatory calls, and all resulted in medication orders. In 100% of patches additional information was requested by the BHP and in 131 (31.7%) patches no request was made by the paramedic. The average length of patch was 0:02:03 (SD=0:01:07) and the paramedic had to wait on average 0:01:11 (SD=0:00:44) before talking to a BHP.

Conclusion. Implementing standardization of information handover from paramedic to physician will allow for patch calls to be quicker and more efficient, ensuring all pivotal information is communicated. This will allow base hospital physicians to make informed clinical decisions optimizing the care provided to patients. To further enhance the medical control provided by base hospital physicians it would be beneficial to determine the most efficient way to provide EMS training to base hospital physicians and how to safely increase analgesia indications.



Epistry Epidemiologic Registry

Epistry is an epidemiologic databank intended to help understand the burden of out-of-hospital cardiac arrest and life-threatening traumatic injury and to shed light on whether and how EMS process and geographic, socioeconomic and periodic variation may be associated with differences in outcome. The Epistry is designed to collate high-quality comprehensive Emergency Medical System (EMS) based data using uniform standardized criteria for consecutive cases of cardiac arrest and traumatic injury within the Resuscitation Outcomes Consortium (ROC). Epistry data collection commenced December 1, 2005. An approximate 20,000 episodes were enrolled in Epistry in the first year alone. The aims of Epistry include

1. Establish a comprehensive ongoing data infrastructure to facilitate the design, implementation, and interpretation of ROC interventional trials.

Define the incidence and outcome of out-of-hospital cardiac arrest and traumatic injury.

2. Describe the relationships between resuscitation performance and EMS structure, adjusting for episode-specific factors.
3. Evaluate the relationships between outcome and patient, EMS, regional, and periodic factors.

MEDICAL DELEGATION

Q1 The Host Hospital shall ensure that Emergency Medical Attendants and Paramedics are qualified to perform the Controlled Acts and/or other medical procedures as recommended by the Provincial Medical Advisory Committee (PMAC) and the Director. Describe the process.

The HSN CPC is mandated by the Ambulance Act (Ontario Reg. 257/00) to ensure that paramedics are competent to practice. The method by which paramedics are certified is strongly influenced by the Delegation of Controlled Acts policy developed by the College of Physicians and Surgeons of Ontario. In short, it is the responsibility of the Regional Base Hospital Programs to provide an ongoing process by which the "Providers" are continuously informed of best practice guidelines and new trends and are competent to practice in the prehospital environment. As no single process can accomplish these goals, the HSN CPC combined various methodologies and techniques to be utilized as part of a comprehensive continuing education program. The goal of the CME program is to prepare paramedics to respond appropriately to a wide range of patient situations both routinely and infrequently encountered in the field. Paramedics who do not meet these requirements may be subject to a performance review by the Medical Director or delegate and may have their certification temporarily suspended until such a time that all mandatory CME credit hours are accumulated.

Paramedic Services present paramedics who have, at minimum, an offer of employment at the requested paramedic level to the Base Hospital for certification. Primary Care Paramedics (PCP) complete an orientation process to ensure that they are properly prepared for the evaluation process. They demonstrate competency through a process of scenarios and written questions mapped to their respective scope of practice. During the certification event, they are required to demonstrate competency through a series of scenarios, skills stations and oral questions. In addition to the requirements of a PCP, all Advanced Care Paramedic (ACP) candidates are required to have written the MOH ACP exam prior to attending.

Q2 The Host Hospital shall ensure that the Base Hospital Program establishes and maintains a procedure whereby Paramedics already certified under the authority of another Base Hospital Program Medical Director are recognized by the Base Hospital Program.

2.1 Describe the procedure used to ensure paramedics already certified under the authority of another Base Hospital Program Medical Director are recognized by the Base Hospital Program.

Cross Certification applies to paramedics already certified by an Ontario Base Hospital who are seeking certification from another Base Hospital. Once the paramedic is deemed eligible for cross-certification, the Paramedic must complete the Certification Request Form which includes:

- Certification from previous Ontario Base Hospitals.
- A declaration of any deactivation and/or decertification.
- Current certification status from previous Base Hospitals under which the paramedic is certified.
- Permission for the prospective Base Hospital to obtain information from other Base Hospitals regarding paramedic competencies and skills.

Following this, the Paramedic must successfully complete a Base Hospital orientation and/or evaluation process for any or all Auxiliary Medical Directives required which may include an interview/clinical evaluation with the medical director or delegate. It may also include an evaluation using written, scenario based, and oral examinations. But this is reserved only for skills the paramedic was not certified in with their previous Base Hospital.

After completion of these steps, the Base Hospital Medical Director will certify the paramedic.

2.2 Total number of paramedics that work for more than one employer.

As of March 31, 2018, HSN Centre for Prehospital Care had 72 paramedics who worked for more than one employer.

Q3 Provide a list of affiliated Ambulance Services with whom the Base Hospital has signed agreements.

Algoma District Paramedic Services
City of Greater Sudbury Paramedic Services
Cochrane District Social Services Administration Board

- Cochrane District EMS
- Sensenbrenner Hospital Ambulance Service

City of Sault Ste. Marie Fire Services – EMS Division
Nipissing Paramedic Services

- North Bay EMS
- Mattawa EMS
- Temagami EMS

Manitoulin-Sudbury DSB Paramedic Services
Parry Sound District Emergency Medical Service
Timiskaming District EMS
Weeneebayko Area Health Authority Paramedic Service

3.1/3.2 Total number of PCPs for this reporting year; Total number of ACPs for this reporting year.

Total Number of Paramedics: 769

Total number of ACP: 74 Total number of PCP: 695

REPORTING PERIOD	TOTAL ACPS	TOTAL PCPS	TOTAL
April 1, 2017 to March 31, 2018	74	695	769

SERVICE	ACP	PCP	TOTAL
ALGOMA DISTRICT PS	–	68	68
COCHRANE DISTRICT EMS	–	80	80
GREATER SUDBURY PS	63	78	141
MANITOULIN-SUDBURY DSB PS	–	111	111
MATTAWA	–	11	11
NORTH BAY	11	63	74
PARRY SOUND EMS	–	76	76
SAULT STE. MARIE FS	–	57	57
SENSENBRENNER HOSPITAL AS	–	21	21
TEMAGAMI	–	14	14
TIMISKAMING DISTRICT EMS	–	48	48
WAHA PS	–	68	68

3.3 A list of the delegated Controlled Acts

Note: Not all components of the scope of practice are Controlled Acts

SCOPE OF PRACTICE FOR PARAMEDICS (* = SELECT AREAS OF THE REGION)

MEDICATIONS CARRIED	PRIMARY CARE	ADVANCED CARE
Acetaminophen	✓	✓
Adenosine		✓
Amiodarone (North Bay ACP)		✓
ASA	✓	✓
Atropine		✓
Calcium Gluconate		✓
50% Dextrose in water	*	✓
Dimenhydrinate (Gravol)	✓	✓
Diphenhydramine (Benadryl)	✓	✓
Dopamine		✓
Epinephrine 1:1,000	✓	✓
Epinephrine 1:10,000		✓
Glucagon	✓	✓
Ibuprophen	✓	✓
Ketorolac	✓	✓
Lidocaine (Sudbury ACP)		✓
Midazolam		✓
Morphine		✓
Naloxone	✓	✓
Nitroglycerin	✓	✓
Oxygen	✓	✓
Salbutamol (MDI and Nebulization)	✓	✓
Sodium Bicarbonate		✓
Xylometaxoline HCL (Otrivin)		✓

3.3 A list of the delegated Controlled Acts *continued*

SCOPE OF PRACTICE FOR PARAMEDICS (* = SELECT AREAS OF THE REGION)

AIRWAY/VENTILATORY COMPROMISE SKILLS	PRIMARY CARE	ADVANCED CARE
CPAP	✓	✓
Endotracheal Intubation (Oral/Nasal)	✓	✓
Endotracheal Suctioning		✓
King LT Insertion	✓	✓
Magill Forceps Utilization		✓
Needle Thoracostomy		✓
Oral/Nasal Airway	✓	✓
Oximetry	✓	✓
Positive Pressure Ventilation with BVM	✓	✓
Suctioning Mouth and Nose	✓	✓
CARDIOVASCULAR COMPROMISE	**PRIMARY CARE**	**ADVANCED CARE**
12 Lead Acquisition	✓	✓
12 Lead Interpretation	✓	✓
ECG Interpretation (PCP-five basic rhythms only)	✓	✓
Pacing		✓
Fluid Bolus Initiation	*	✓
Intravenous Cannulation	*	✓
Intraosseous Access		✓
Manual Defibrillation	✓	✓
Synchronized Cardioversion		✓
Emergency Home Dialysis Disconnect	✓	✓
OBSTETRICAL/NEONATAL TRANSFER	**PRIMARY CARE**	**ADVANCED CARE**
Assess and Recognize Obstetrical Emergencies	✓	✓
Delivery of the Neonate	✓	✓
DRUG ADMINISTRATION	**PRIMARY CARE**	**ADVANCED CARE**
Administer Drugs via SL; SC; PO; IM; IN, MDI and Nebulized Routes	✓	✓
Administer Drugs via ETT; IO		✓
Administer Drugs via IV	*	✓
Administer Drugs via PR		✓
PICC Line Access		✓

PRIMARY CARE PROGRAM	Greater Sudbury Paramedic Service	Manitoulin Sudbury EMS	Sault Ste Marie EMS	Algoma EMS	Nipissing DSSAB[1]	West P.S. Health Centre A.S.	District of Timiskaming EMS	Cochrane District EMS[2]	James Bay Ambulance Service
Medical Cardiac Arrest (Defibrillation, Termination of Resuscitation)	X	X	X	X	X	X	X	X	X
Trauma Cardiac Arrest (Defibrillation, Termination of Resuscitation)	X	X	X	X	X	X	X	X	X
Hypothermia Cardiac Arrest (Defib)	X	X	X	X	X	X	X	X	X
Foreign Body Airway Obstruction Cardiac Arrest (Defibrillation)	X	X	X	X	X	X	X	X	X
Neonatal Resuscitation	X	X	X	X	X	X	X	X	X
Return of Spontaneous Circulation	X	X	X	X	X	X	X	X	X
Cardiac Ischemia (ASA, Nitroglycerin SL)	X	X	X	X	X	X	X	X	X
Acute Cardiogenic Pulmonary Edema (Nitroglycerin SL)	X	X	X	X	X	X	X	X	X
Hypoglycemia (Dextrose IV, Glucagon IM)	X	X	X	X	X	X	X	X	X
Bronchoconstriction (Salbutamol MDI/neb, Epinephrine 1:1000 IM)	X	X	X	X	X	X	X	X	X
Moderate to Severe Allergic Reaction (Epinephrine IM, Diphenhydramine IV/IM)	X	X	X	X	X	X	X	X	X
Croup (Epinephrine 1:1000 nebulized)	X	X	X	X	X	X	X	X	X
12 Lead ECG Acquisition & Interpretation	X	X	X	X	X	X	X	X	X
Adult Analgesia (Ibuprophen, Acetaminophen, Ketorolac)	X	X	X	X	X	X	X	X	X
Opioid Toxicity (Naloxone SC/IM/IV)	X	X	X	X	X	X	X	X	X
Auxiliary Intravenous & Fluid Therapy (0.9% NaCl)	X		X		X	X	X	X	
PCP Manual Defibrillation	X	X	X	X	X	X	X	X	X
Home Dialysis Emergency Disconnect	X	X	X	X	X	X	X	X	X
Emergency Childbirth	X	X	X	X	X	X	X	X	X
Suspected Adrenal Crisis	X	X	X	X	X	X	X	X	X
Endotracheal Tube and Tracheal Suctioning	X	X	X	X	X	X	X	X	X
Auxiliary Cardiogenic shock	X	X	X	X	X	X	X	X	X
Auxiliary Continuous Positive Airway Pressure	X	X	X	X	X	X	X	X	
Auxiliary Supraglottic Airway (King LT)	X	X	X	X	X	X	X	X	X
Auxiliary Nausea and Vomiting (Dimenhydrinate IV/IM)	X	X	X	X	X	X	X	X	X
Auxiliary Chemical Exposure Medical Directive (CYANOKIT)							X	X	
Auxiliary Special Events Medical Directives			X		X	X			
Auxiliary Electronic Control Device Probe Removal									

[1] Nipissing DSSAB includes Mattawa and Temagami Ambulance Services

[2] Cochrane District EMS includes Sensenbrenner and Notre Dame Ambulance Services

ADVANCED CARE PROGRAM	Greater Sudbury Paramedic Service	North Bay & District Ambulance Service
Medical Cardiac Arrest (Epinephrine 1:10,000 IV/IO/ETT, Lidocaine/Amiodarone IV/IO)[3]	X	X
Trauma Cardiac Arrest	X	X
Hypothermia Cardiac Arrest	X	X
Foreign Body Airway Obstruction Cardiac Arrest (Laryngoscopy and Magill forceps)	X	X
Neonatal Resuscitation (Epinephrine 1:10,000 IV/IO/ETT)	X	X
Return of Spontaneous Circulation (Dopamine IV)	X	X
Cardiac Ischemia (ASA, Nitroglycerin SL, Morphine IV)	X	X
12 Lead ECG Acquisition & Interpretation	X	X
Acute Cardiogenic Pulmonary Edema (Nitroglycerine SL)	X	X
Cardiogenic Shock (Dopamine IV)	X	X
Symptomatic Bradycardia (Atropine IV, Transcutaneous Pacing, Dopamine IV)	X	X
Tachydysrhythmias (Valsalva Maneuver, Adenosine IV, Lidocaine/Amiodarone IV, Synchronized Cardioversion)	X	X
Intravenous & Fluid Therapy (0.9% NaCl IV/IO)	X	X
Pediatric Intraosseous (IO) Infusion	X	X
Hypoglycemia (Dextrose IV, Glucagon IM)	X	X
Seizure (Midazolam IV/IM)	X	X
Opioid Toxicity (Naloxone SC/IM/IV)	X	X
Endotracheal Intubation – oral, nasal (Xylometazoline, Lidocaine spray)	X	X
Bronchoconstriction (Salbutamol MDI/neb, Epinephrine 1:1000 IM)	X	X
Moderate to Severe Allergic Reaction (Epinephrine 1:1000 IM, Diphenhydramine IV/IM)	X	X
Croup (Epinephrine 1:1000 neb)	X	X
Tension Pneumothorax – (Needle Thoracostomy)	X	X
Hyperkalemia (Calcium Gluconate and Salbutamol)	X	X
Adult Analgesia (Ibuprophen, Acetaminophen- PO Ketorolac IM/IV and Morphine IV)	X	X
Pediatric Analgesia (Morphine IV/SC)	X	X
Home Dialysis Emergency Disconnect	X	X
Emergency Childbirth	X	X
Suspected Adrenal Crisis	X	X
Endotracheal Tube and Tracheal Suctioning	X	X
Auxiliary Adult Intraosseous (IO) Infusion	X	X
Auxiliary Central Venous Access Device (CVAD access)	X	X

[3] Greater Sudbury Paramedic Service – Lidocaine
North Bay and District Ambulance Service - Amiodarone

Auxiliary Continuous Positive Airway Pressure	X	X
Auxiliary Supraglottic Airway	X	X
Auxiliary Nausea and Vomiting (Dimenhydrinate IM/IV)	X	X
Auxiliary Combative Patient (Midazolam IM/IV)	X	X
Auxiliary Procedural Sedation (Midazolam IV)	X	X
Auxiliary Home Dialysis Emergency Disconnect	X	X
Auxiliary Special Events Medical Directives		X
Auxiliary Electronic Control Device Probe Removal		

Timelines for Medical Directive/Skill Implementation/Removal

Year	Month	Service	Modifications
2017	December	ALL	Emergency Child Birth
2017	July	ALL	Addition of Endotracheal Tube Suctioning
2017	July	ALL	Addition of Suspected Adrenal Crisis
2017	July	ALL	Home Dialysis move to core directives
2016	November	Temiskaming	Addition of Auxiliary Chemical Exposure Medical Directive – Administration of Antidotes for Cyanide Exposures (CYANOKIT)
2016	October	Temiskaming, Algoma, WAHA, Parry Sound, & Cochrane.	Addition of PCP Auxiliary Home Dialysis Emergency Disconnect
2016	May	SSM	Addition of PCP Auxiliary Home Dialysis Emergency Disconnect
2016	April	ALL	Addition of PCP 12 Lead ECG Interpretation
2016	April	Greater Sudbury & Sault Ste Marie	Addition of PCP Auxiliary Home Dialysis Emergency Disconnect
2016	January	Greater Sudbury	Addition of Autonomous PCP IV
2015	December	Manitoulin-Sudbury	Addition of PCP Auxiliary Home Dialysis Emergency Disconnect
2015	December	Algoma	Addition of 12 Lead ECG Acquisition
2015	June	Greater Sudbury & North Bay	Addition of ACP Hyperkalemia Medical Directive (Calcium Gluconate and Salbutamol)
2015	June	ALL	Addition of PCP Opioid Toxicity Medical Directive (Naloxone)
2015	June	ALL	Addition Adult Analgesia Medical Directive
2014	November	ALL	Addition PCP Manual Defibrillation
2014	August	Greater Sudbury & North Bay	Addition of ACP Auxiliary Home Dialysis Emergency Disconnect
2014	July	ALL	Addition of Auxiliary Analgesia Medical Directive
2014	June	Manitoulin Sudbury	Addition of 12 Lead ECG Acquisition
2014	April	Cochrane	Addition of Auxiliary Chemical Exposure Medical Directive – Administration of Antidotes for Cyanide Exposures (CYANOKIT)
2014	May	Sault Ste Marie	Addition of Special Events Medical Directives
2014	February	North Bay	Removal of Nasal Tracheal Intubation
2013	December	Greater Sudbury	Addition of Pediatric Pain Medical Directive
2013	December	North Bay	Addition of Pediatric Pain Medical Directive
2013	July	North Bay	Addition of Auxiliary Central Venous Access Device (CVAD access)
2013	April	Timiskaming	Addition of 12 Lead ECG Acquisition
2013	April	James Bay	Addition of 12 Lead ECG Acquisition
2013	March	Sensenbrenner	Addition of Autonomous PCP IV
2013	March	Notre Dame	Addition of Autonomous PCP IV
2013	March	Cochrane	Addition of Autonomous PCP IV
2012	November	North Bay	Addition of Adult Intraosseous (IO)

2012	June	Manitoulin Sudbury	Addition of CPAP
2012	June	Cochrane	Addition of CPAP
2012	June	Notre Dame	Addition of CPAP
2012	June	Sensenbrenner	Addition of CPAP
2012	May	North Bay	Addition of 12 Lead ECG Acquisition
2012	May	Temagami	Addition of 12 Lead ECG Acquisition
2012	May	Mattawa	Addition of 12 Lead ECG Acquisition
2011	November	All	Transition to ALS PCS Version 3.0
2011	June	Parry Sound	Addition of 12 Lead ECG Acquisition
2011	May	Temagami	Addition of CPAP
2011	April	Algoma	Addition of CPAP
2011	May	ALL	Removal of Auxiliary Taser Probe Removal
2010	January	Greater Sudbury	Addition of 12 Lead ECG Interpretation to Scope of Practice for Sudbury ACP
2010	March	North Bay	Addition of 12 Lead ECG Interpretation to Scope of Practice for North Bay ACP
2010	April	Greater Sudbury	Addition of 12 Lead ECG Acquisition to Scope of Practice for PCPs
2010	April	Greater Sudbury	Addition of CPAP
2010	April	North Bay	Addition CPAP
2010	April	Parry Sound	Addition CPAP
2010	July	Sault Ste Marie	Pediatric Attenuator Cables
2010	August	North Bay	Removal of Lasix
2009	December	North Bay	Removal of Flumazenil
2009	September	James Bay	Pediatric Attenuator Cables
2009	August	Parry Sound	Removal of PCP Rectal Valium
2009	April	All	Addition of King LT

References and Related Documents

Emergency Health Services Branch Ministry of Health and Long Term Care –Advanced Life Support Patient Care Standards ALS PCS

3.4 A list of the Controlled Acts that have been removed this reporting year.

There have been no Controlled Acts removed from April 1, 2017- March 31, 2018.

Q4 Does the Host Hospital adhere to the Provincial Medical Directives recommended by the PMAC and approved by the Director?

HSN Centre for Prehospital Care adheres to the latest version of the ALS PCS Version 4.4 as well as the latest Version 4.5 which came into effect on May 1, 2018.

Q5 The Host Hospital shall adhere to Provincial Certification, Recertification, Change in Certification and Remediation policies, as recommended by PMAC within recommended timelines.

5.1 Have the provincial Certification, Recertification, Change in Certification and Remediation policies, as recommended by PMAC within recommended timelines been adhered to?

HSN CPC adheres to the Provincial Maintenance of Certification Policy, Appendix 6 in the Advanced Life Support Patient Care Standards, Version 4.4, as well as the latest Version 4.5 which came into effect on May 1, 2018.

5.2 Total number of initial PCP and ACP certification awarded in the reporting year.

PERIOD	TOTAL ACPS	TOTAL PCPS	TOTAL
April 1, 2017 to March 31 2018	7	64	71

SERVICE	ACP	PCP	TOTAL
ALGOMA DISTRICT PS	–	5	5
COCHRANE DISTRICT EMS	–	8	8
GREATER SUDBURY PS	6	7	13
MANITOULIN-SUDBURY DSB PS	–	4	4
MATTAWA	–	-	-
NORTH BAY	1	4	5
PARRY SOUND EMS	–	10	10
SAULT STE. MARIE FS	–	5	5
SENSENBRENNER	–	-	-
TEMAGAMI	–	-	-
TIMISKAMING DISTRICT EMS	–	3	3
WAHA PS	–	18	18

5.3 Total number of PCP and ACP reactivations in the reporting year.

REPORTING PERIOD	TOTAL ACPS	TOTAL PCPS	TOTAL
April 1, 2017 to March 31 2018	7	23	30

SERVICE	ACP	PCP	TOTAL
ALGOMA DISTRICT PS	–	1	1
COCHRANE DISTRICT EMS	–	1	1
GREATER SUDBURY PS	5	4	9
MANITOULIN-SUDBURY DSB PS	–	6	6
MATTAWA	–	1	1
NORTH BAY	2	2	4
PARRY SOUND EMS	–	3	3
SAULT STE. MARIE FS	–	2	2
SENSENBRENNER	–	1	1
TEMAGAMI	–	–	-
TIMISKAMING DISTRICT EMS	–	2	2
WAHA PS	-	-	-

5.4 Total number of PCP and ACP deactivations in the reporting year.

REPORTING PERIOD	TOTAL ACPS	TOTAL PCPS	TOTAL
April 1, 2017 to March 31, 2018	10	95	105

SERVICE	ACP	PCP	TOTAL
ALGOMA DISTRICT PS	–	5	5
COCHRANE DISTRICT EMS	–	15	15
GREATER SUDBURY PS	7	8	15
MANITOULIN-SUDBURY DSB PS	–	20	20
MATTAWA EMS	–	2	2
NORTH BAY EMS	3	6	9
PARRY SOUND EMS	–	3	3
SAULT STE. MARIE FS	–	6	6
SENSENBRENNER	–	1	1
TEMAGAMI	–	2	2
TIMISKAMING DISTRICT EMS	-	7	7
WAHA PS	-	20	20

Q6.1 Does the Medical Director practice emergency medicine full-time or part-time in the hospital emergency unit?

The medical director currently works in the HSN Emergency Department and exceeds the minimum requirement of 250 clinical hours.

6.2 Does the Medical Director hold recognized medical specialty credential(s) in emergency medicine?

The Medical Director is credentialed in Emergency Medicine as CCFP (EM).

Q7.1 Do all Base Hospital physicians have knowledge of paramedic practice and provincial medical directives?

HSN CPC has centralized all BHP patching to the Health Sciences North Emergency Department. Base Hospital Physicians are all Emergency Department Physicians and final year Residents credentialed through Health Sciences North.

The Emergency Department Physicians receive an orientation program which includes an overview of their roles and responsibilities as base hospital physicians and an introduction to the ALS Patient Care Standards. Dr. Prpic, Medical Director, regularly reviews the directives and/or amendments with the emergency physicians and shares CQI findings. The latest revision to the orientation manual relevant to the 2017-2018 fiscal year was in August 2017.

Emergency Department meetings have a standing Prehospital Care Section where changes in practice/directives can be addressed.

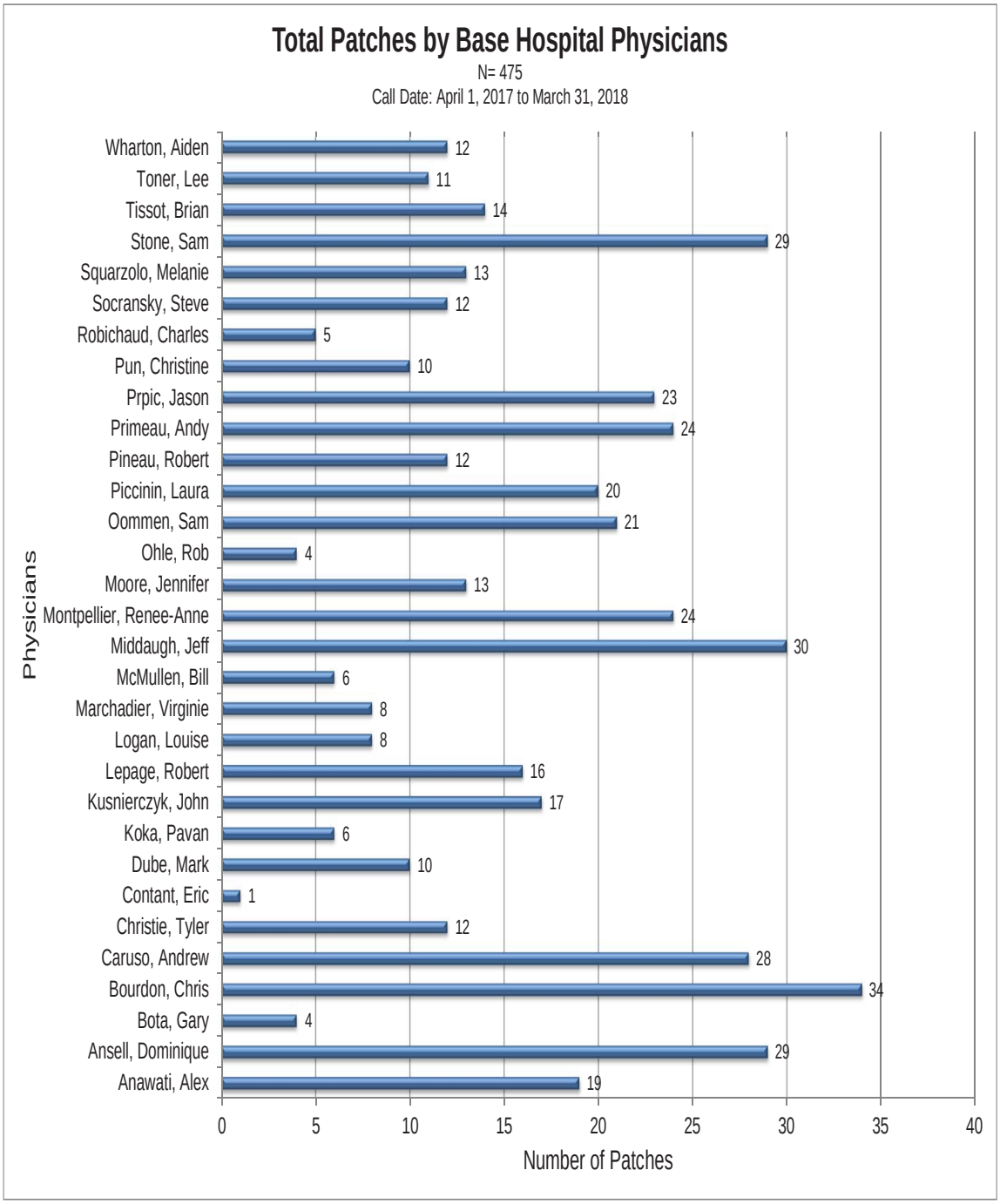
7.2 Total number of emergency physicians engaged as a Base Hospital Physician (list names).

31 emergency physicians were engaged as Base Hospital Physicians

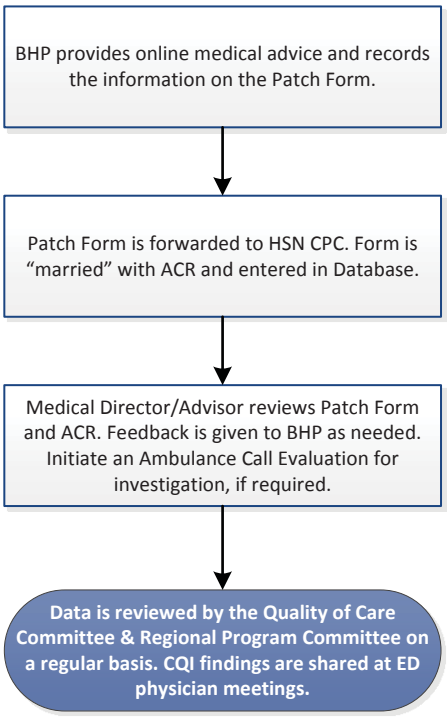
BASE HOSPITAL PHYSICIANS		
Dr. Alex Anawati	Dr. Louise Logan	Dr. Jason Prpic
Dr. Dominique Ansell	Dr. Virginie Marchadier	Dr. Christine Pun
Dr. Gary Bota	Dr. Bill McMullen	Dr. Charles Robichaud
Dr. Christopher Bourdon	Dr. Jeff Middaugh	Dr. Steve Socransky
Dr. Andrew Caruso	Dr. Renee-Anne Monpellier	Dr. Melanie Squarzolo
Dr. Tyler Christie	Dr. Jennifer Moore	Dr. Sam Stone
Dr. Eric Contant	Dr. Robert Ohle	Dr. Brian Tissot
Dr. Mark Dube	Dr. Sam Oommen	Dr. Lee Toner
Dr. Pavan Koka	Dr. Laura Piccinin	Dr.Aiden Wharton
Dr. John Kusnierczyk	Dr. Robert Pineau	Dr. Lee Toner
Dr. Robert Lepage	Dr. Andy Primeau	

Q8.1 Total number of Base Hospital physician and paramedic online interactions that have been reviewed for medical quality.

Total of 475 online interactions occurred between April 1, 2017 and March 31 2018, and 100% were reviewed for medical quality.



8.2 Describe the medical quality review process.



MEDICAL OVERSIGHT

Q9 List the dates of Provincial Medical Advisory Committee (PMAC) meetings attended by a member of the Base Hospital Program.

- May 9 2017
- September 27, 2017
- December 6, 2017
- February 6, 2018

Q10 Are Base Hospital Physicians available for on-line medical direction and control on a 24 hr/7 days a week basis?

Yes.

Q11 The Host Hospital shall ensure that the Base Hospital Program enters into and keeps in effect an agreement with each certified land ambulance service provider listed in Appendix D, with respect to the qualification, ongoing medical oversight, and re-qualification of Paramedics to deliver controlled medical acts under the authority of the Base Hospital Program Medical Director.

HSN CPC has an agreement with each land ambulance service in the Northeast.

Q12 The Host Hospital shall ensure that the Base Hospital Program monitors the delivery of patient care in accordance with the Advanced Life Support Patient Care Standards. Describe the actions taken to monitor the delivery of patient care in accordance with the Advanced Life Support Patient Care Standards.

Continuous Quality Improvement (CQI) is a complex responsibility that requires the collective effort of varied focus areas. Within the 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 by collecting and randomly reviewing ambulance call reports (ACRs) for the appropriateness and quality of advanced patient care. Skills and specific patient conditions are categorized as high or low risk procedures by HSN CPC Quality of Care Committee (QCC). Tables 1 & 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.

Quality Improvement is an inclusive, multidisciplinary process that focuses on identification of system wide opportunities for improvement. Our efforts focus on identification of the root causes of problems through Event Analyses, Self-Reports, and Clinical Audit Reports to reduce or eliminate these causes and develop steps to correct inadequate or faulty processes. The need and importance of a wide overlap between performance measurement, performance improvement and Continuing Medical Education (Figure 4) is vital to ensure ongoing quality patient care as demonstrated in the well-known and widely used Plan-Do-Study-Act cycle (Figure 5).

FIGURE 4

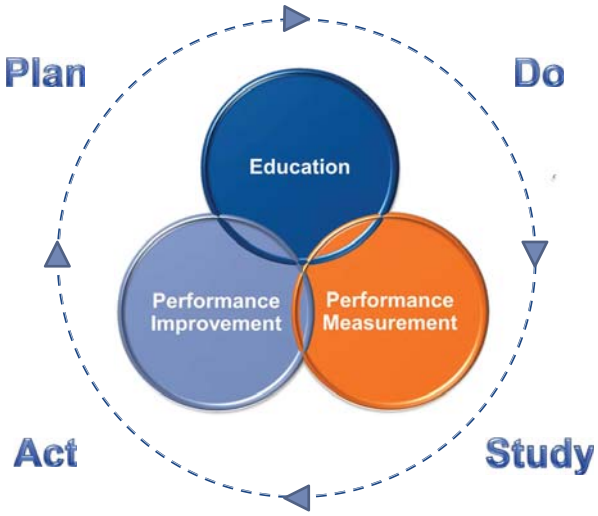


FIGURE 5

Q13 The Host Hospital shall ensure that the Base Hospital Program monitors the delivery of patient care in accordance with the Basic Life Support Patient Care Standards, if such monitoring is contained in the agreement with the Upper Tier Municipality and Designated Delivery Agent for land Ambulance Services as set out in Appendix D.

HSN Centre for Prehospital Care has an agreement with Manitoulin-Sudbury DSB and Algoma District Paramedic Service that requires monitoring of the delivery of patient care in accordance with the Basic Life Support Patient Care. A novel model for sampling calls of significant interest was collaboratively developed to perform this work. All other audit activities centre around the ALS PCS. Where a BLS issue is noted during the regular ALS auditing processes, service operators are notified for their follow up.

Q14/14.1 The Host Hospital shall ensure that timely advice is provided to each Upper Tier Municipality and Designated Delivery Agent for Land Ambulance Services as set out in Appendix D regarding medical issues in prehospital care. Provide the total number of prehospital medical care issues raised by the UTM or DDA that required advice from the Base Hospital. Total number of prehospital medical care issues raised by the UTM or DDA that required advice from the Base Hospital.

Inquiries received by the UTM or DDA involving medical issues in prehospital care are logged in the Ambulance Call Evaluation Data Base.

54 requests were received. After October 13th, 2017 the auditing system migrated to IQEMS which does not currently track this. This Functionality will be developed in a future phase of IQEMS.

14.2 List the top 5 subject areas that advice was requested from UTMs and DDAs (i.e. medical equipment, medical acts, policies, etc).

1. Medical Directives and Auxiliary Skills
2. ePCR audits
3. BLS advice
4. Patient Care Equipment
5. Policy and Procedures

Q15 The Host Hospital shall ensure participation in provincial, regional and community planning that affects prehospital care such as emergency planning, where the Host Hospital has the authority to do so. The total number and dates of provincial, regional, and community planning meetings, indicate the meeting hosts are listed below.

REGIONAL	PROVINCIAL	COMMUNITY	NATIONAL
40	50	39	2

REGIONAL	PROVINCIAL	COMMUNITY	NATIONAL
HSN CPC Council (Sudbury/ Videoconference) - Monthly	Base Hospital Managers/Directors Business Meeting - Monthly	Manitoulin-Sudbury District Services Board- Community Paramedicine	Trauma Association of Canada- Performance Improvement Subcommittee- Biannual
HSN CPC Quality of Care Committee (Sudbury/ Videoconference) - Monthly	Ontario Base Hospital Medical Advisory Group (MAC) (Toronto) - Quarterly	Sudbury Paramedic Service Quality of Care Committee - Quarterly	
Cambrian College Paramedic and Advanced Care FLight Paramedic Programs Advisory Committee- Biannual	OAPC Fall AGM & Conference - Annual	HSN Emergency Preparedness Committee- Bi-monthly	
HSN CPC NEO Regional Data Advisory Group (Teleconference) - 3 times/year	OBHG Education Sub-Committee - Quarterly	Parry Sound Ambulance Communications Services Advisory Committee- 3 times/ year	
Regional Trauma Network Committee(HSN - Sudbury) - Quarterly	OBHG Data Quality Management (DQM) - Quarterly	HSN Annual General Meeting	
Sudbury CACC Advisory Committee	OBHG Standardization Working Group (SWAG) (Toronto) - Quarterly & Ad hoc	COAT Committee(Clinical Oversight and Assessment Team)- Monthly	
HSN CPC Program Committee (Sudbury/Teleconference) - Quarterly	Ontario Trauma Advisory Committee (OTAC) Quarterly Meeting (Toronto) - Quarterly	Medicine and Emergency Care Program Council- Monthly	
Nipissing EMS Annual Symposium (North Bay) - Annual	Ontario Trauma Care Network (OTCN) (Teleconference) - Monthly		
STEMI Bypass Steering Committee	Ontario Trauma Advisory Committee- Medical Directors Working Group		
	OBHG Annual General Meeting(Toronto)		
	Sunnybrook/HSN Joint Medical Council Meeting (Toronto) - Bi-Annual		
	CCSO Town Hall Meeting - Annual		

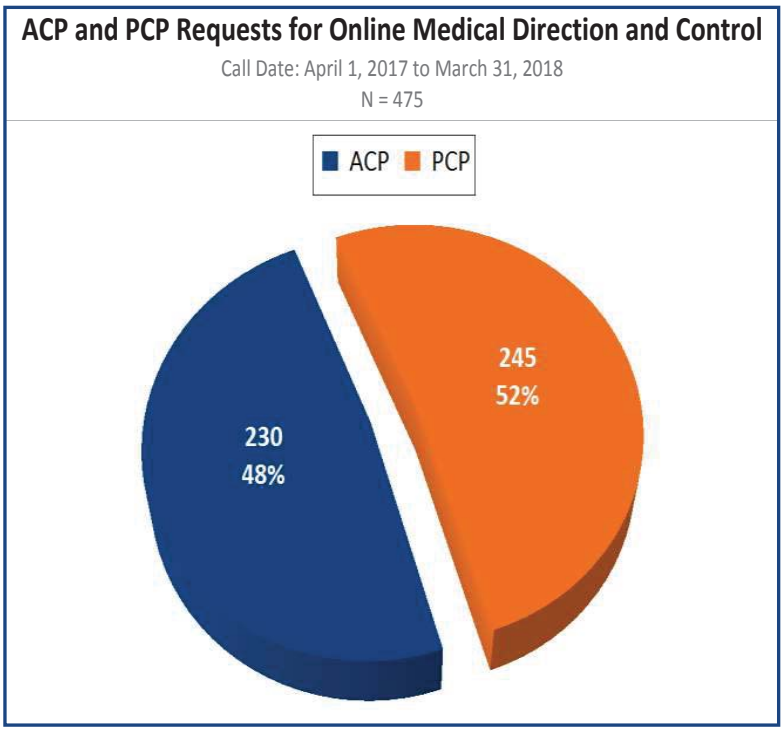
Q16 The Host Hospital shall make every reasonable effort to ensure that each request for medical advice, direction, or assistance received from an Emergency Medical Attendant, paramedic or communications officer is provided expeditiously and that performance standards are set out in this Agreement are met.

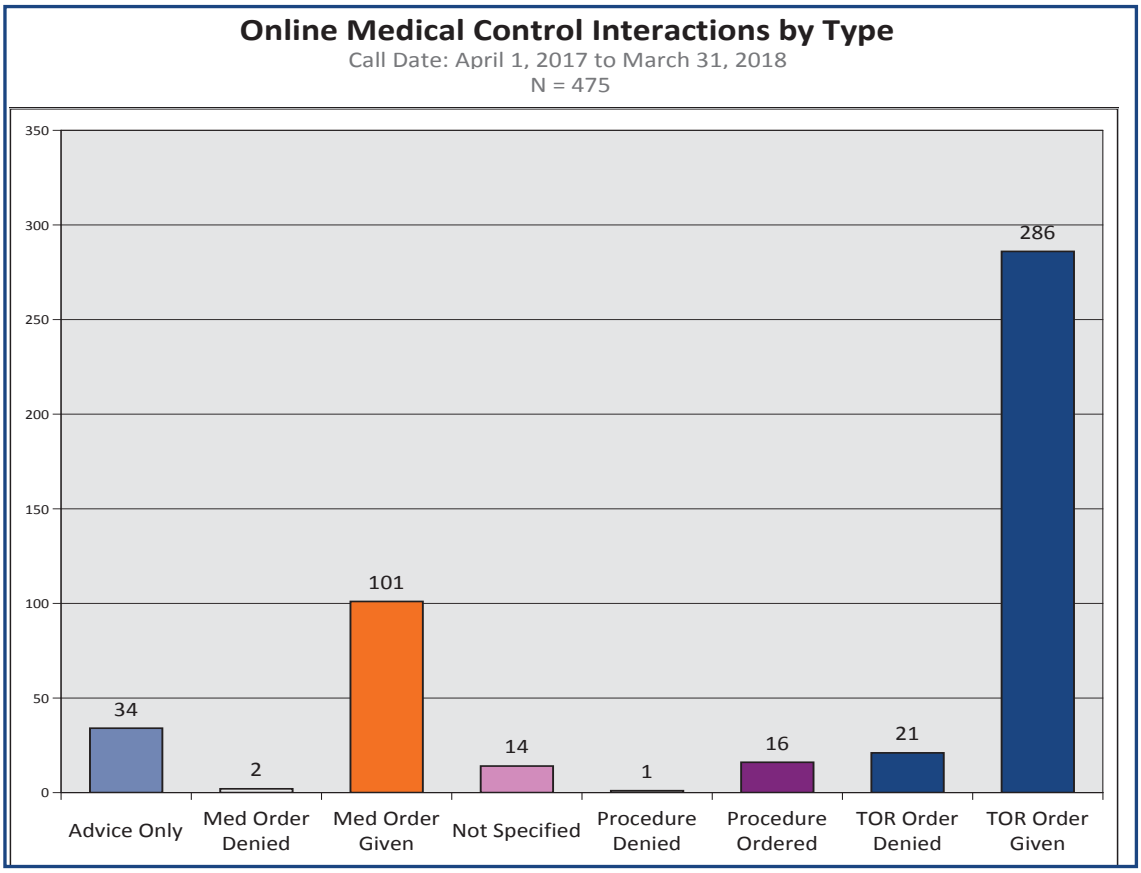
16.1 How are requests for medical advice, direction or assistance from an emergency medical attendant, paramedic or communications office provided?

The following are primary methods of communication:

- 24/7 Online Medical Direction and Control through the Base Hospital Physicians
- IQEMS/ Zoll which is used to discuss audit findings and patient care dialogues
- Email which is used for the communication of general information and notifications
- Live chats during webcasts are a means for paramedics to ask questions and interact with their medical directors
- Twice annual (at minimum) in person sessions with Paramedic Practice Coordinators in an interactive education setting

16.2 Total number of formal requests for medical advice direction or assistance from an Emergency Medical Attendant, Paramedic or communications officer provided.





Q17 Where a Host Hospital has not been available to expeditiously provide medical advice (eg. Radio patch), direction, or assistance to an Emergency Medical Attendant, Paramedic, or communications officer, the Host Hospital shall document the circumstances of the event in an incident report that will be provided to the Senior Field Manager within 48 hours of the event.
The total number and nature of incident reports provided to the senior Field Manager related to medical advice delays.

All patch failures identified during the ACE process or escalated to the QI Lead are further analyzed to determine root cause and to recommend system improvements.

There were 8 cases reviewed and of those, 2 had cellular connection issues on the first attempt with subsequent contact with the BHP, and 3 were disconnected by the paramedic intentionally. There were no cases where the BHP was unable to be contacted. All were reported to the Field Office.

Q18.1 Describe the process used to assist operators with request for assistance and information regarding direct patient care components and elements of local policy and procedures.

Once a request for assistance and/or information has been received in writing by the program, it is triaged by the receiver to determine if its nature is Medical, Educational, CQI, Research, Operational or Other.

- Medical advice and/or inquiries are reviewed by the applicable Medical Advisor or the Regional Medical Director and, when required, forwarded to the Quality of Care Committee (QCC) to be reviewed by the Medical Program as a whole. Minutes of this committee are available to all staff and a report from this committee is provided at Regional Program Committee meetings.
- Educational advice and/or inquiries are assigned to the Regional Education & Certification Coordinator for review and, when required, brought to monthly Council or QCC meetings. A Medical Advisor or the Regional Medical Director may be consulted, as needed.
- Quality Improvement advice and/or inquiries are forwarded to the Quality Improvement Lead for review. A Medical Advisor or the Regional Medical Director may be consulted, as needed.
- Assistance or information related to reportable program metrics are forwarded to the Communication and Informatics Lead or Performance Measurement Lead for review.
- Operational advice and/or inquiries are forwarded to the applicable Paramedic Practice Coordinator and, when required, forwarded to the monthly Council meetings for review.
- Research inquiries are forwarded to the Performance Improvement Lead or Regional Manager and when required, the Regional Medical Director is consulted.

18.2 List the top 5 subject areas that information was requested from operators (i.e. medical equipment, medical acts, policies, etc).

1. Initial certification / Return to work requests
2. ePCR Audit requests / ACE reviews
3. Investigation and Remediation
4. Medical equipment purchase advice
5. Continuing Medical Education

EDUCATION

Q19 The Host Hospital will provide a process to confirm and/or ensure the education and standard of practical skills necessary for certification and delegation of specific controlled acts approved by the Provincial Medical Advisory Committee (PMAC) to Emergency Medical Attendants and Paramedics.

HSN Centre for Prehospital Care develops a yearly CME program that covers the paramedic scope of practice as per the ALS PCS. The goal of the CME program is to prepare paramedics to respond appropriately to a wide range of patient situations both routinely and infrequently encountered in the field.

The MOHLTC-EHSB has mandated that PCPs receive a minimum of 8 hours of CME and that ACPs receive a minimum of 24 hours of CME annually. To meet the needs of the service operators, the paramedics and the Regional Base Hospital Programs, these hours have been converted to credit hours. In order for Northeast Paramedics to remain in good standing and maintain certification, ACPs must accumulate 24 credit hours while PCPs must accumulate 8 credit hours by the first week in December of each calendar year. Paramedics who do not meet these requirements are subject to a performance review by the Medical Director or delegate and may have their certification temporarily suspended until such a time that all mandatory CME credit hours are accumulated.

19.1 List the topic, date and length of each continuing medical education program offered to and held for medical, nursing and other allied health staff of the Host Hospital and receiving hospitals in the Ministry-approved geographic coverage area.

DATE	TOPIC/INSTRUCTOR	HOURS
June 29, 2017	Prehospital Pot Pourri/ Dr. Jason Prpic	2
September 5, 2017	CPR/ Eric Levasseur	3
October 11, 2017	Extended Field Trauma Triage Guidelines / Nicole Sykes	1
October 11, 2017	Prehospital Online Medical Oversight (PrOMO)/Nicole Sykes	1
October 11, 2017	Patient Based Performance Metrics/ Nicole Sykes	1
October 12, 2017	Extended Field Trauma Triage Guidelines / Dr. Jason Prpic	1
October 12, 2017	Prehospital Online Medical Oversight (PrOMO)/Dr. Jason Prpic	1
October 12, 2017	qSOFA Sepsis Alert Protocol/ Dr. Jason Prpic	1
November 23, 2017	Hyperkalemia/ Dr. Chris Loreto	2
November 27, 2017	Analgesia for all things not Cardiac/ Dr. Derek Garniss	2
November 30, 2017	BHP Patching and Sepsis/ Dr. Jason Prpic	2
February 27, 2018	Non-STEMI/ Dr. Derek Garniss	2

Q20 The Host Hospital shall ensure that prehospital patient care education is provided in accordance with education standards approved by the Minister as may be implemented and amended from time to time. Provide the topics and time allotted for each educational session delivered this year to paramedics.

DATE	TOPIC/INSTRUCTOR	HOURS
April- June 2017	Spring Paramedic Practice Rounds	4
June 29, 2017	Prehospital Pot Pourri/ Dr. Jason Prpic	2
June- September 2017	Summer CME Series M & M Rounds with Dr. Jason Prpic (ACP only)	6
September- November 2017	Fall Paramedic Rounds (Emergency Child Birth)	4
November 23, 2017	Hyperkalemia/ Dr. Chris Loreto	2
November 27, 2017	Analgesia for all things not Cardiac/ Dr. Derek Garniss	2
November 30, 2017	BHP Patching and Sepsis/ Dr. Jason Prpic	2
February 27, 2018	Non-STEMI/ Dr. Derek Garniss	2

Q21 The Host Hospital shall ensure the development and implementation of an educational plan for the Region linked to Continuous Quality Improvement initiatives.

Q22 The Host Hospital shall ensure the provision of the mandated hours of education per year for both PCPs and ACPs.

22.1 Total number of hours of CME delivered per PCP.

In this fiscal year, 8 hours minimum were delivered per PCP.

22.1 Total number of hours of CME delivered per ACP.

In this fiscal year, 24 hours minimum were delivered per ACP.

CONTINUOUS QUALITY IMPROVEMENT (CQI)

Q23 The Host Hospital shall ensure the implementation of a CQI program for each Paramedic employed or engaged by land ambulance service operators as set out in Appendix D, and ensure the provision of regular commentary to each Paramedic and operator.

23.1 Total number of paramedics that have been provided with commentary by the host hospital and a brief description of their program.

All paramedics certified under the Program receive commentary on a regular basis, generally via the applicable Paramedic Practice Coordinator for their area. Commentary may include electronic distribution of memos, policies and other documents. As part of auditing activities, paramedics are provided commentary on all of their ACRs with a possible variance from the standard. Additionally, paramedics receive positive commentary via IQEMS.

23.2 Total number of commentary provided to all paramedics.

During the fiscal year 2017/2018, HSN CPC made available approximately 2, 397 commentaries to paramedics via the Ambulance Call Evaluation process. This means that commentary was made available to paramedics for 100% of all calls audited.

The program also distributed various correspondence including 9 memos/letters to paramedics via email and the HSN CPC website. In addition, 6 MOH EHRAB memos with attachments such as training bulletins and standard documentation were distributed and posted to the website.

23.3 Was a minimum of one chart review commentary provided to each paramedic?

Paramedics will receive access to their commentary via IQEMS utilizing the credentials provided in their notification email, 100% of paramedics who completed a call with an identified potential variance received feedback.

Q25 The Host Hospital shall include a report on all CQI activities and findings as part of the annual report submitted to the Ministry.

Refer to Appendix A: Performance Measurement Standard Reports, Section 1 for the overall Audit Activities Summary Report and Section 2 for Patient Care Variance Report.

Q26 The Host Hospital shall collaborate with Emergency Medical Services System Stakeholders to share relevant CQI data, as appropriate. How and when was CQI data shared with Emergency Medical Services System stakeholders?

WHAT	WHO	FREQUENCY	HOW
AMBULANCE CALL REPORT AUDIT Notification of any event or circumstance which appears as a variance from the standard.	Paramedics Service Providers	Upon review and closure	IQEMS
EVENT ANALYSIS Sharing of information and outcomes during and post analysis.	Service Providers MOH Field Office	Upon discovery and closure	Event Analysis Report
AUDIT ACTIVITIES REPORT Number of audits completed by Paramedics	Service Providers	Quarterly	IQEMS
AUDIT VARIANCE DETAIL AND SUMMARY REPORTS Breakdown of variances rates an outcomes by Service	Service Providers	Monthly Quarterly	IQEMS
PARAMEDIC SELF REPORTS This report identifies the number of self-reports submitted by Paramedics. The summary categorizes self-reports by Service	Service Providers	Quarterly	IQEMS
BLS OMISSIONS/COMMISSIONS BLS issues discovered during an ALS audit are reported to the Service Operator during the auditing process.	Service Providers	Upon discovery	IQEMS
PARAMEDIC SKILLS INVENTORY Number of calls where a particular ALS skill was used as part of the overall patient care plan	Service Providers	Quarterly	iMedic
CLINICAL AUDITS Measures of current practice against a defined (desired) standard with the intent to improve systems vs individual practice.	Service Providers	3 times a year	Clinical Audit Reports
AD HOC FINDINGS	Service Providers	HSN CPC Program Committee	Discussion Minutes
REGIONAL DATA ADVISORY COMMITTEE	Service Providers Hospital Representatives CACC Representatives	Quarterly	Discussion Minutes
ONLINE MEDICAL CONTROL INTERACTIONS REPORTS	Service Providers	Quarterly	Report
BHP PATCH PROCESS DOCUMENTATION OMISSIONS	Paramedics Service Providers	Upon Discovery	IQEMS

Q27 The Host Hospital shall ensure that Host Hospital physicians will be available to provide "online" continuous quality improvement and advice on a continuous basis.

All HSN Emergency Physicians and 3rd year Residents are oriented by the Base Hospital Regional Medical Director prior to providing on-line Medical Control. Ongoing education is delivered during face-to-face departmental meetings and via email updates.

Dedicated patch phones are located in the HSN Emergency Department (ED). All Registered Nurses in the ED have been trained, through the ED Nurse Clinician, to answer the patch telephone and advise paramedics that a BHP will be on the line shortly. The RN answering the telephone is responsible for notifying the BHP of the call and advising the paramedic if there will be any delay. HSN CPC has also provided formal education to the paramedics on patching. Reminder emails are sent on a regular basis to help keep this process consistent.

Q28 The Host Hospital shall ensure the establishment of a mechanism to track customer inquiries and organizational responsiveness to these inquiries and survey land ambulance stakeholder groups on a regular basis, and that all consumer feedback will be reviewed and integrated into quality management planning.

All inquiries related to quality management are addressed in the same manner in which they were received i.e. an email is responded to with an email. Any inquiries/feedbacks relative to the quality management or education activities under the purview of the Base Hospital are incorporated into the Annual CME Plan and/or the Annual Quality Programming Overview. Each of these plans is provided to relevant stakeholders in draft form and feedback is actively solicited on each plan on an annual basis. All findings related to activities as laid out in the plan are distributed to key stakeholders and available upon request.

Refer to:

Appendix A: Performance Measurement Standard Reports, Sections 3-7
Appendix B: Quality Programming Overview 2017
Appendix C: Quality Programming Overview 2018

Q29 The Host Hospital shall ensure the conduct of clinically-focused audits of controlled acts performed on or indicated for a patient by a Paramedic employed or retained by an operator covered by this Agreement, to monitor paramedic compliance with Provincial Medical Directives, in accordance with the following chart audit process:

29.1 Total number of Ambulance Call Reports (ACRs) requiring auditing.

Utilization of IQEMS enables auditing of 100% of selected call types, exceeding the minimum requirements. In 2017-2018 25,978 calls were audited compared to 6,053 in 2016-2017.

29.2 Total number of medical directive/protocols and cases that have been audited.

There were 25,978 ambulance call reports that were electronically audited. Of these audited calls, 2,397 (9.22%) were identified as having a variance and required further action; and 23, 589(90.80%) were closed with no further action.

29.3 Have all paramedics that have performed at least 5 acts within the ALS PCS had a minimum of 5 ACR audited this year?

All Paramedics with at least 5 acts within the ALS PCS had a minimum of 5 ACRs audited this year.

Refer to Appendix A: Performance Measurement Standard Reports, Section 2

29.4 Total number of new paramedics (less than 6 months) and total number who had 80% of their charts audited

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.

There were 71 new ACP and PCPs in 2017-2018.

29.5 Number of cancelled calls where paramedics made patient contact that were audited.

There were 9,178 cancelled calls electronically sorted and audited in IQEMS and 215 cancelled calls electronically sorted and audited in Zoll. Of these, 514 were manually reviewed by an auditor.

AUDIT TYPE	NO VARIANCE FOUND	FURTHER REVIEW REQUIRED	NO FOLLOW UP REQUIRED	PARAMEDIC FEEDBACK RECEIVED/ REMEDIATED	TOPIC REVIEW AT RECENT/ UPCOMING CME	TOTAL AUDITS
Cancelled Calls	1	1	440	15	57	514

* Lower Risk Skills - Audit Requirements as per the Performance Agreement Table 1

APPENDIX A: PERFORMANCE MEASUREMENT STANDARD REPORTS

Performance Measurement Standard Reports
April 1, 2017 – March 31, 2018

Centre for Prehospital Care

Health Sciences North

www.hsnsudbury.ca/portalen/basehospital

APPENDIX A

Performance Measurement Standard Reports
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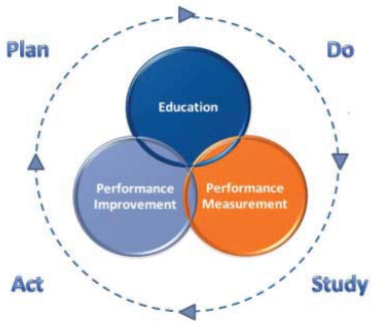

Performance Measurement Standard Reports
April 1, 2017 – March 31, 2018

SECTION 1

HSN CPC AUDIT ACTIVITIES REPORT

This section is a breakdown of auditing results by service operator and by paramedic and is based on the following paramedic auditing requirements as per the Regional Base Hospital Performance Agreement:

- Annually, each paramedic will have a minimum of 5 audited calls where a controlled act was performed.
- If a paramedic has less than 5 calls where a controlled act was performed, 100% of these calls will be audited.
- Newly certified paramedics will have 80% of calls where a controlled act was performed audited for the first six (6) months. Newly certified paramedics are those who have never been certified by a base hospital.

Audit Activities Summary Report
April 1, 2017 to March 31, 2018

CPC Audit Activities		Total #		# Medics with ALS Calls			
		Audits	Medics	< 10	≥ 5	1 - 4	0
	N =	25978	779	121	697	35	47
	% =			16%	89%	4%	6%
Audit Activities By Service		Total #			# Medics with ALS Calls		
		Audits	Medics	< 10	≥ 5	1 - 4	0
Algoma District Paramedic Services (740)	N =	1961	74	10	69	2	3
	% =			14%	93%	3%	4%
Cochrane District Paramedic Services (741)	N =	2174	79	9	74	2	3
	% =			11%	94%	3%	4%
Manitoulin-Sudbury DSB Paramedic Services (782/752)	N =	2622	133	37	117	10	6
	% =			28%	88%	8%	5%
Nipissing Paramedic Services (285/287/469)	N =	3012	86	6	81	3	2
	% =			7%	94%	3%	2%
Parry Sound District EMS 745	N =	1849	71	6	66	2	3
	% =			8%	93%	3%	4%
Sault Ste. Marie EMS (262)	N =	4265	61	6	56	0	5
	% =			10%	92%	0%	8%
Sensenbrenner Hospital Ambulance Service (275)	N =	319	20	2	18	1	1
	% =			10%	90%	5%	5%
Greater Sudbury Paramedic Service (747)	N =	8269	152	22	134	5	13
	% =			14%	88%	3%	9%
Timiskaming District EMS (750)	N =	991	48	6	42	2	4
	% =			13%	88%	4%	8%
Weeneebayko Area Health Authority Paramedic Service (263)	N =	516	55	17	40	8	7
	% =			31%	73%	15%	13%

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SECTION 2

AUDIT VARIANCE SUMMARY

This section provides a summary of the types of variances and the Base Hospital (BH) outcomes identified during the auditing process and include a breakdown by service operator and paramedic.

Audit Variance Summary Report

April 1, 2017 - March 31, 2018

		Total Audits *	Variances					BH Outcomes**					
			Minor	Major	Critical	Other	Total	Open	No Follow-Up Required / No Variance Found	Paramedic Acted Appropriately	Paramedic Feedback Received/ Remediated	Paramedic Interviewed/ Remediated	Topic Review at Recent / Upcoming CME
Algoma District Paramedic Services (740)	N =	1961	136	121	12	138	407	7	1013	4	62	0	88
	% of Total Audits =		7%	6%	1%	7%	21%	0.4%	51.7%	0.2%	3.2%	0.0%	4.5%
Cochrane District Paramedic Services (741)	N =	2174	88	27	15	48	178	7	305	3	60	2	9
	% of Total Audits =		4%	1%	1%	2%	8%	0.3%	14.0%	0.1%	2.8%	0.1%	0.4%
Manitoulin-Sudbury DSB Paramedic Paramedic Services (782/752)	N =	2622	42	54	19	614	729	5	15	0	773	0	0
	% of Total Audits =		2%	2%	1%	23%	28%	0.2%	0.6%	0.0%	29.5%	0.0%	0.0%
Nipissing Paramedic Services (285/287/469)	N =	3012	64	50	26	62	202	5	15	7	120	2	32
	% of Total Audits =		2%	2%	1%	2%	7%	0.2%	0.5%	0.2%	4.0%	0.1%	1.1%
Parry Sound District EMS (745)	N =	1849	27	16	13	27	83	5	361	1	57	1	8
	% of Total Audits =		1%	1%	1%	1%	4%	0.3%	19.5%	0.1%	3.1%	0.1%	0.4%
Sault Ste. Marie EMS (262)	N =	4265	91	39	24	62	216	22	425	1	81	0	42
	% of Total Audits =		2%	1%	1%	1%	5%	0.5%	10.0%	0.0%	1.9%	0.0%	1.0%
Sensenbrenner Hospital Ambulance Service (275)	N =	319	7	3	1	4	15	2	41	1	8	0	4
	% of Total Audits =		2%	1%	0%	1%	]	0.6%	12.9%	0.3%	2.5%	0.0%	1.3%
Greater Sudbury Paramedic Service (747)	N =	8269	153	84	51	165	453	10	1041	8	178	6	99
	% of Total Audits =		2%	1%	1%	2%	5%	0.1%	12.6%	0.1%	2.2%	0.1%	1.2%
Timiskaming District EMS (750)	N =	991	29	15	6	27	77	106	18	26	0	0	1
	% of Total Audits =		3%	2%	1%	3%	8%	10.7%	1.8%	2.6%	0.0%	0.0%	0.1%
WAHA Paramedic Service (263)	N =	516	11	7	4	15	37	65	18	11	0	1	0
	% of Total Audits =		2%	1%	1%	3%	7%	12.6%	3.5%	2.1%	0.0%	0.2%	0.0%
Total	N =	25978	648	416	171	1162	2397	234	3252	62	1339	12	283
	% of Total Audits =		2%	2%	1%	4%	9%	0.9%	12.5%	0.2%	5.2%	0.0%	1.1%

* Total Audits include total calls electronically sorted and audited.
** Includes outcome for all calls manually reviewed by an auditor.

NOTE: These totals do not include 373 calls audited prior to migration to IQEMS. Of these, 323 were identified as having no variance.

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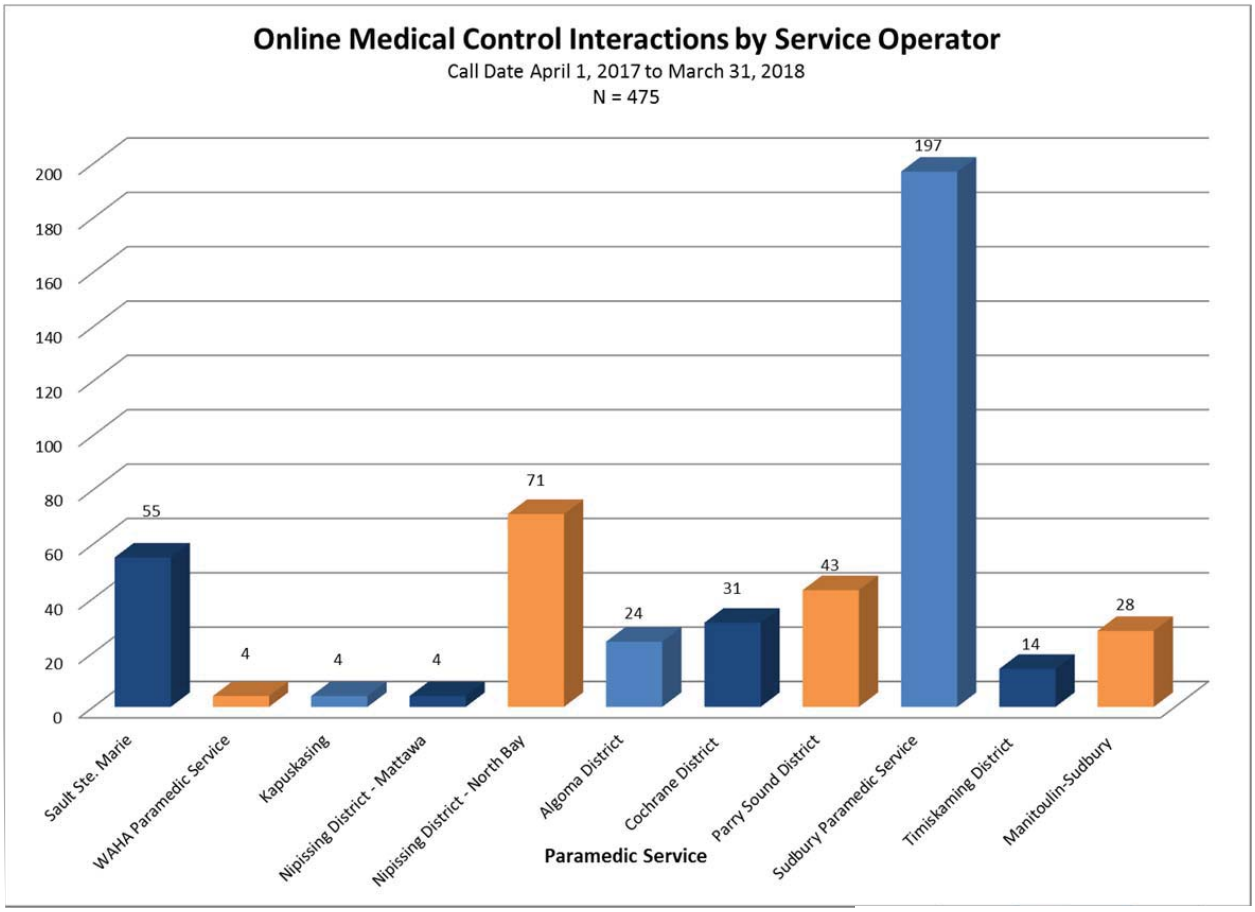
SECTION 3

ONLINE MEDICAL CONTROL INTERACTION REPORTS

This section provides a summary of "Patch" interactions by service and by interaction type. As of September 24, 2014, 100% of all identified online medical control interactions are audited.

TOTAL CPC AUDITING ACTIVITIES	25,978
	# of Audited Calls
On-Line Medical Control Interactions	475



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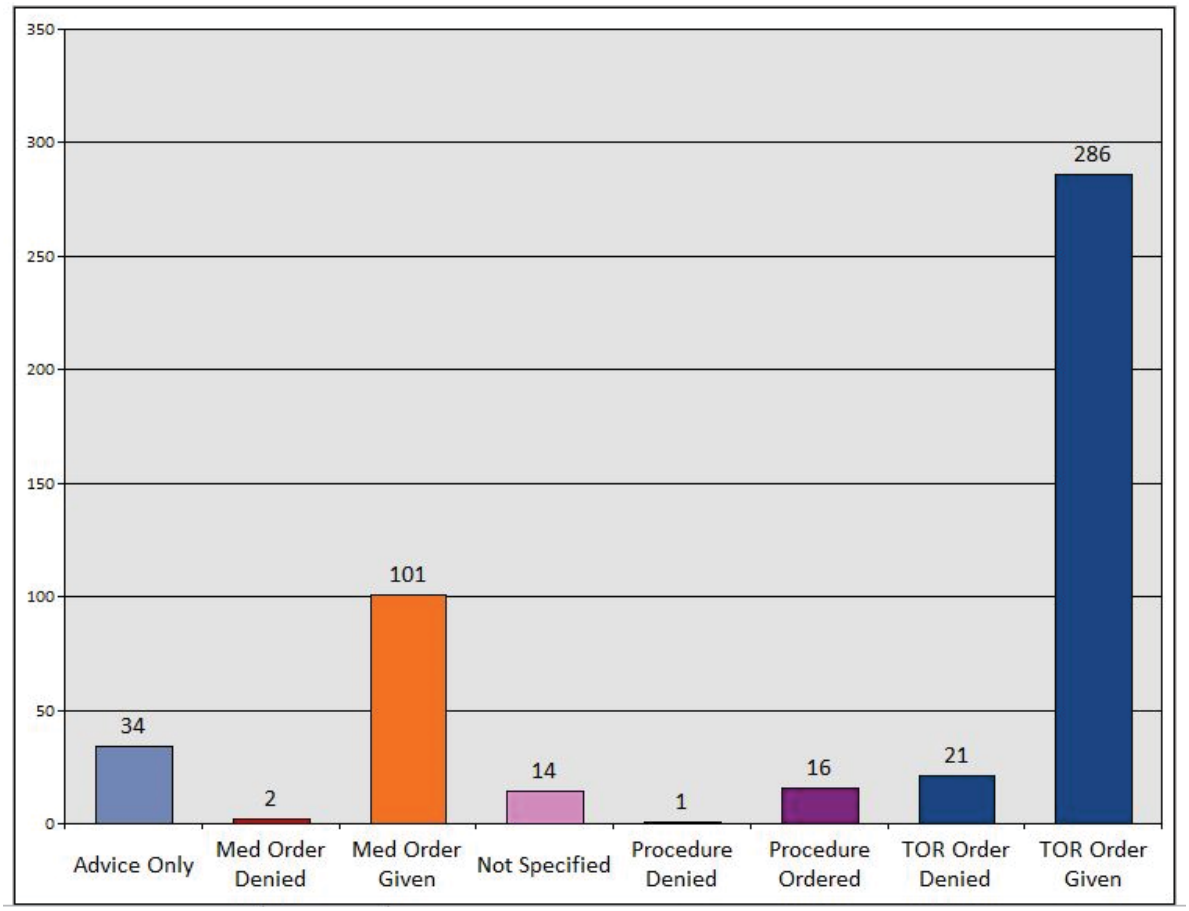
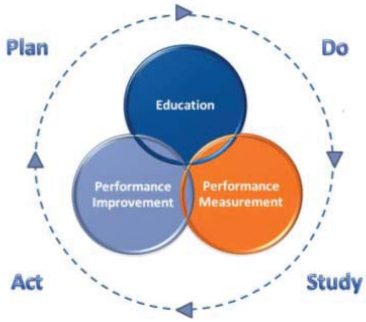
Online Medical Control Interactions by Type

Call Date: April 1, 2017 to March 31, 2018
N = 475





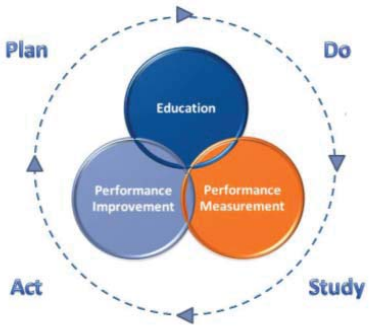
Performance Measurement Standard Reports
April 1, 2017 – March 31, 2018

SECTION 4

SERVICE OPERATOR RELATED AUDIT REPORTS

This section provides a summary of specific audits completed upon the request of the service operator.

TOTAL CPC AUDITING ACTIVITIES	25,978
	# of Audited Calls
Service Operator Requests for Auditing	54



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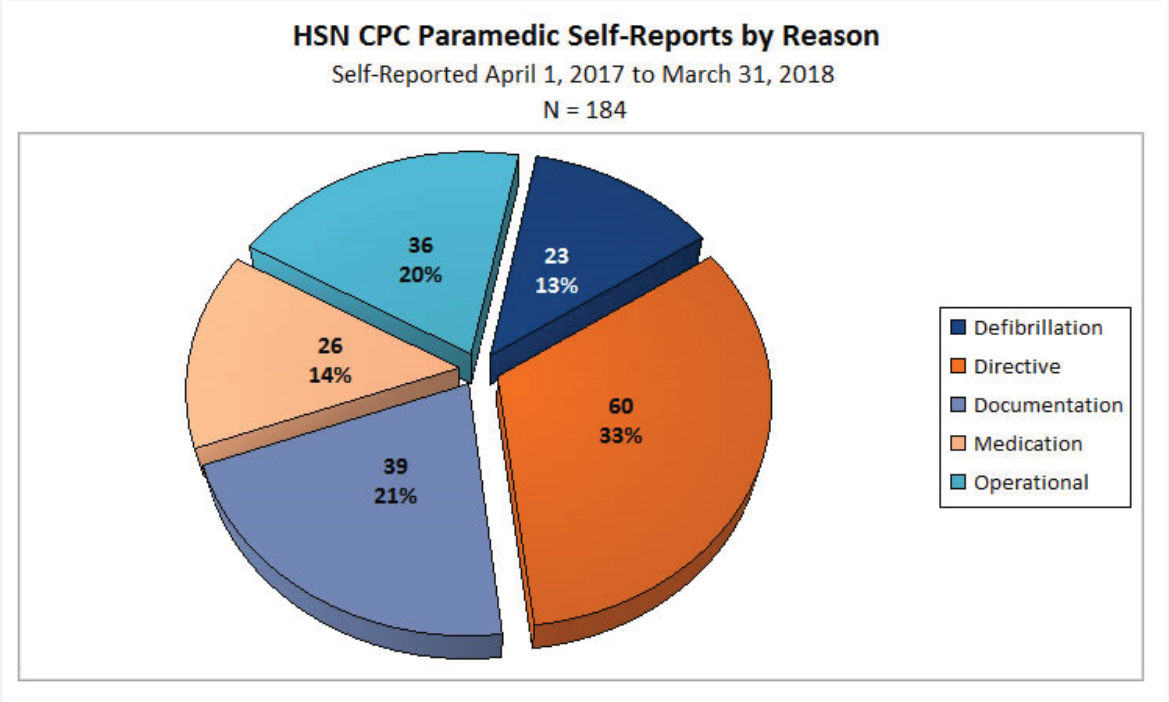
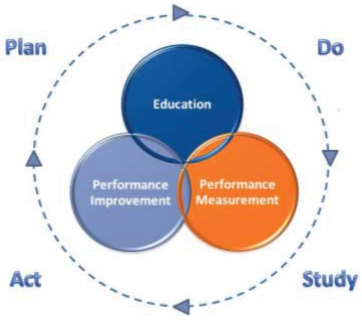
SECTION 5

PARAMEDIC SELF-REPORTS

This section is based on paramedic self-reports received during this time period and are related to identified omissions and/or commissions in patient care or documentation.

Recognized as a very important component of paramedic practice, the number of self-reports continue to rise. Further expansion and development of this program continues as we strive to improve patient safety and outcomes.





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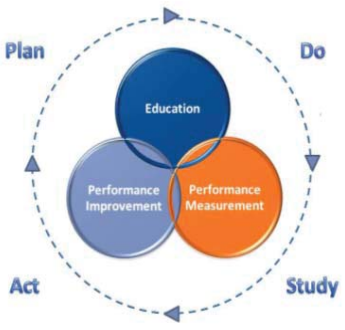
Paramedic Self-Reports by Service and Reason

Self-Reported April 1, 2017 to March 31, 2018

	Reason for Self-Report					
Service	Defibrillation	Directive	Documentation	Medication	Operational	Totals by Service
Algoma	0	1	1	1	2	5
Cochrane	3	9	2	4	4	22
James Bay	1	5	2	4	3	15
Kapuskasing	0	1	1	0	0	2
Manitoulin-Sudbury	1	8	8	1	1	19
North Bay	3	8	6	5	5	27
Parry Sound	5	8	9	1	16	39
Sault Ste. Marie	4	10	5	2	1	22
Sudbury	6	10	1	8	3	28
Temagami	0	0	2	0	1	3
Temiskaming	0	0	2	0	0	2
Totals by Reason	**23** **13%**	**60** **33%**	**39** **21%**	**26** **14%**	**36** **20%**	**184**



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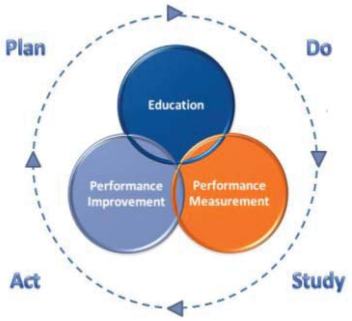
SECTION 6

BLS ISSUES REPORTED TO SERVICE OPERATORS

This section is based on BLS PCS Issues identified during auditing of ALS calls and reported to the service operator.

Note: Subsequent to the transition to IQEMS, we are no longer able to provide the total number of BLS issues reported quarterly by service. This will be developed in a future phase of IQEMS.



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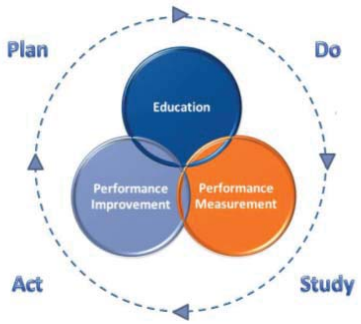
SECTION 8

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. For further clarity, the counts are based on the total number of ALS skills performed by the entire responding crew, e.g. calls may have anywhere from 1-4 crew members identified on the ACR, thereby each identified member would get credit for their active participation in the assessed need and delivery of the identified ALS skill.



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Paramedic Skills Inventory

April 1, 2017 - March 31, 2018

Skill	Code	Algoma District Paramedic Service (740)	Cochrane District Paramedic Service (741)	Sensenbrenner Hospital Ambulance Service (275)	Manitoulin-Sudbury DSB Paramedic Services (752/782)	Nipissing Paramedic Services (469/287/285)	Parry Sound EMS (745)	Sault Ste. Marie EMS (262)	Greater Sudbury Paramedic Service (747)	Timiskaming District EMS (750)	WAHA Paramedic Services (263	TOTAL
CPR	300	31	67	13	58	100	61	92	169	31	6	628
Cardioversion	302	0	0	0	0	3	0	0	5	0	0	8
Valsalva Manoeuvre	303	0	2	1	0	3	0	0	24	0	1	31
Defibrillation - Manual	306	5	13	2	0	25	18	14	52	12	1	142
Defibrillation - Semi-Automatic	307	0	0	0	4	1	0	2	2	1	0	10
Analyze - SAED	308	5	31	12	12	7	3	9	10	27	7	123
External Pacing	309	0	0	0	0	22	1	0	2	0	0	25
12 Lead Acquisition	313	338	1141	172	555	1168	515	1131	3992	292	190	9494
Supraglottic Alternate Airway	318	2	3	2	5	13	5	8	79	2	0	119
Supraglottic Alternate Airway Unsuccessful	319	1	1	0	0	3	1	1	13	2	0	22
Needle Thoracostomy	320	0	0	0	0	0	0	0	1	0	0	1
Needle Thoracostomy Unsuccessful	321	0	1	0	0	0	0	0	0	0	0	1
Naso-Tracheal Intubation	324	0	0	0	0	0	0	0	0	0	1	1
Naso-Tracheal Intubation Unsuccessful	325	0	0	0	0	0	0	0	3	0	0	3
Orotracheal Intubation	326	1	0	0	0	3	1	0	9	0	0	14
Orotracheal Intubation Unsuccessful	327	0	0	0	0	4	0	0	24	0	0	28
ETT Suctioning	328	0	0	0	0	0	0	0	4	0	0	4
Tracheostomy Tube Suctioning	329	0	1	0	0	1	0	0	0	0	0	2
Magill Forceps/Foreign Body Removal	331	0	0	0	0	1	0	0	3	0	0	4
Magill Forceps/Foreign Body Removal Unsuccessful	332	0	0	0	0	1	0	0	1	0	0	2
IV Cannulation	341	0	167	35	0	331	86	381	1282	31	0	2313
Lock	342	0	20	5	0	17	48	27	1093	13	0	1223
Normal Saline	345	0	27	6	0	336	69	51	161	43	2	695
IV Cannulation Unsuccessful	350	0	224	45	0	175	105	293	1000	46	0	1888
Fluid Bolus	351	3	19	3	0	82	28	71	361	9	0	576
Intraosseous Cannulation Successful	358	0	6	0	0	49	2	1	118	0	0	176
Intraosseous Cannulation Unsuccessful	359	0	4	0	0	12	3	0	19	0	0	38
Emergency Dialysis Disconnect	375	0	0	0	0	0	0	0	0	0	0	0
CPAP	383	9	18	4	23	27	26	31	74	15	0	227

Performance Measurement Standard Reports
April 1, 2017 – March 31, 2018

Paramedic Skills Inventory

April 1, 2017 - March 31, 2018

Skill	Code	Algoma District Paramedic Service (740)	Cochrane District Paramedic Service (741)	Sensenbrenner Hospital Ambulance Service (275)	Manitoulin-Sudbury DSB Paramedic Services (752/782)	Nipissing Paramedic Services (469/287/285)	Parry Sound EMS (745)	Sault Ste. Marie EMS (262)	Greater Sudbury Paramedic Service (747)	Timiskaming District EMS (750)	WAHA Paramedic Services (263	TOTAL
CPAP - unsuccessful	384	1	3	1	3	3	3	3	21	1	0	39
Acetaminophen	498	51	71	15	67	68	76	109	133	16	31	637
Adenosine	500	0	0	0	0	5	0	0	21	0	0	26
Amiodarone	502	0	0	0	0	0	0	0	0	0	0	0
ASA	504	179	290	37	270	424	258	465	937	162	79	3101
Calcium Gluconate	525	0	0	0	0	0	0	0	2	0	0	2
Dextrose D10W	528	0	1	0	0	1	1	1	3	0	0	7
Dextrose D50W	530	0	34	1	0	52	11	47	135	9	0	289
Dimenhydrinate	533	87	208	33	146	201	171	310	486	35	94	1771
Diphenhydramine	534	4	11	3	20	21	41	34	76	7	5	222
Dopamine	536	0	0	0	0	1	0	0	1	0	0	2
Epinephrine 1:1000	540	1	2	1	6	13	16	17	42	3	1	102
Epinephrine 1:10,000	541	0	0	0	1	43	2	0	125	1	0	172
Fentanyl	550	0	0	0	0	0	0	0	0	0	1	1
Glucagon	560	46	32	4	37	26	10	26	53	4	11	249
Lidocaine	593	0	0	0	0	0	0	0	18	0	0	18
Midazolam	603	0	0	0	0	14	1	0	64	0	0	79
Morphine	604	1	0	0	0	60	2	0	240	0	0	303
Naloxone	610	0	4	0	0	11	5	55	52	0	0	127
Nitroglycerin	615	59	151	20	94	235	123	263	574	81	26	1626
Salbutamol	650	77	188	26	124	252	123	163	610	88	24	1675
Sodium Bicarbonate	651	0	0	0	0	0	0	0	2	0	0	2
Ibuprofen	704	45	53	15	55	61	67	86	115	15	31	543
Ketorolac	706	20	18	12	30	54	46	48	114	12	2	356
TOTAL Skills by Service		966	2811	468	1510	3929	1928	3739	12325	958	513	29147

APPENDIX A

APPENDIX B: QUALITY PROGRAMMING OVERVIEW 2017

QUALITY PROGRAMMING OVERVIEW 2017

Centre for Prehospital Care

Health Sciences North

www.hsnsudbury.ca/portalen/basehospital

QUALITY PROGRAMMING OVERVIEW 2017

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. 1

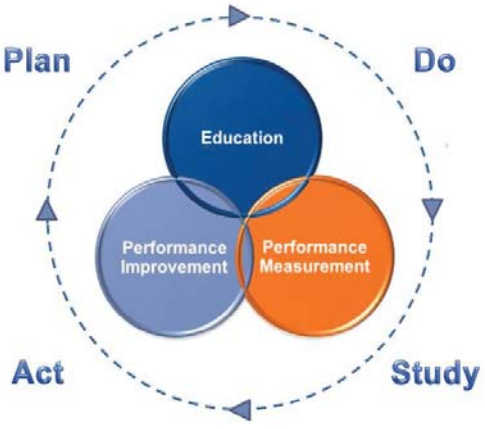


Fig. 2

QUALITY PROGRAMMING OVERVIEW 2017

As we begin our transition to the Intelligent Quality Evaluation and Management Suite (IQEMS) on April 1, 2017, the following sections will be affected based on the new chart audit processes and reporting functionalities. Reporting will be on hold beginning April 1, 2017 as we work through the various reporting functionalities and the new audit practices.

Since this is a living document, the following sections will be updated once the new enhanced auditing and reporting systems are finalized.

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.

QUALITY PROGRAMMING OVERVIEW 2017

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.

QUALITY PROGRAMMING OVERVIEW 2017

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.

  NOTE: 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.

Report Distribution:

- Internally:
  - As required.

QUALITY PROGRAMMING OVERVIEW 2017

- 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.

QUALITY PROGRAMMING OVERVIEW 2017

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.

Report Distribution:

- 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.

QUALITY PROGRAMMING OVERVIEW 2017

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.

Report Distribution:

- All necessary parties as required
- MOHLTC:
  - Annually by June 30.

APPENDIX C: QUALITY PROGRAMMING OVERVIEW 2018

APPENDIX C

QUALITY PROGRAMMING OVERVIEW 2018

Centre for Prehospital Care

Health Sciences North

www.hsnsudbury.ca/portalen/basehospital

QUALITY PROGRAMMING OVERVIEW 2018

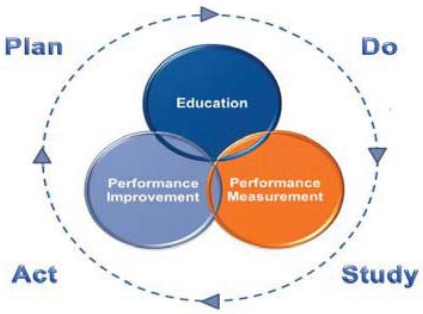
INTRODUCITON

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 in a timely and efficient way. 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 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 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



APPENDIX C

QUALITY PROGRAMMING OVERVIEW 2018

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

This report is a summary of the audits where a variance was identified. It is grouped by variance type and variance description by service. Drafts of the newly developed report will be provided for feedback in July.

B. QUARTERLY REPORTS

HSN CPC Audit Activities Report

The report is an individualized overview of ALS calls that were filtered through the IQEMS computerized algorithm. It is summarized by Paramedic and includes the number of ALS calls, audits and variances.

Audit Variance Summary

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

QUALITY PROGRAMMING OVERVIEW 2018

Online Medical 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.

Online Medical Control - Patch Failures

These reports will be available in a future phase of IQEMS.

Service Operator Driven Audit Reports

This report identifies the number of audits requested by a Service Operator.

Paramedic Self Reports

This report identifies the number of self-reports submitted by Paramedics. The summary categorizes self-reports by Service.

BLS Issues Reported to Service Operators

BLS issues discovered during an ALS audit are reported to the Service Operator during the auditing process. **Subsequent to the transition to IQEMS, we are no longer able to provide the total number of BLS issues reported quarterly by service. This will be developed in a future phase of IQEMS.

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. For further clarity, the counts are based on the total number of ALS skills performed by the entire responding crew, e.g. calls may have anywhere from 1-4 crew members identified on the ACR, thereby each identified member would get 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	
Monthly Reports	2 weeks following reporting period
Quarterly Reports	6 weeks following reporting period
MoHLTC	
April 1 – March 31	Annually by June 30

APPENDIX C

QUALITY PROGRAMMING OVERVIEW 2018

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:

- 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 LHIN metric (CorHealth).

REPORTING PERIOD	DISTRIBUTION TIMELINE
Service Operator*	
April 1- March 31	2 weeks following reporting period
MoHLTC	
April 1 – March 31	Annually by June 30

* Service operators receive service specific reports that compare rates to that of the region. Regional reports are presented at Program Committee.

QUALITY PROGRAMMING OVERVIEW 2018

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.

OPERATIONAL PERIOD	DISTRIBUTION DATE
Service Operators	
April – July	August 31
August – November	December 31
December – March	April 31
MOHLTC	
April 1 – March 31	June 30

APPENDIX C

QUALITY PROGRAMMING OVERVIEW 2018

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 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 (Specific, Measureable, Attainable, Realistic and Time-Sensitive (SMART) 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

APPENDIX D: EVENT ANALYSIS 2017-2018

APPENDIX D

EVENT ANALYSIS REPORT 2017-2018

Incident analysis is a structured process for identifying what happened, how and why it happened, what can be done to reduce the risk of recurrence and make care safer, and what was learned. (http://www.patientsafetyinstitute.ca). Ambulance Call Evaluations that require a more in-depth review are escalated to the Quality Improvement Lead for further analysis. For 2017-2018, 25 cases were reviewed.

No of Escalated Files	No of Closed Files
25	25

ACE Escalation by	Number of Cases (Note: Some cases were brought forth by more than 1 source)	%
Audit Process	8	**29%**
Audit Huddles	2	**7%**
Hospital Personnel	2	**7%**
Service Provider	10	**35%**
Self-Report	5	**18%**
Quality Improvement Lead	1	**4%**
Grand Total	**28**	**100%**

Result of Case Review - Base Hospital Outcome	Number of Cases	%
None	5	**20%**
Resolved Through Discussion	5	**20%**
Resolved Through Remedial Action	6	**24%**
Resolved with Directional and/or Educational Statement	4	**16%**
Referred to Base Hospital Physician	5	**20%**
Grand Total	**25**	**100%**

Medical Directive	Number of Cases	%
ACP Tachydysrhythmia	1	**4%**
ACP Medical Cardiac Arrest	3	**12%**
ACP Adult Intraosseous	1	**4%**
ACP Adult Ischemia	1	**4%**
Not Applicable	2	**8%**
PCP Adult Analgesia	1	**4%**
PCP Opioid Toxicity	1	**4%**
PCP Cardiac Ischemia	2	**8%**
PCP Hypoglycemia	1	**4%**
PCP Medical Cardiac Arrest	10	**40%**
PCP Moderate to Severe Allergic Reaction	2	**8%**
Grand Total	**25**	**100%**

Medication	Number of Cases	%
Amiodarone	1	**4%**
Benadryl	1	**4%**
Epinephrine	1	**4%**
Ketorolac	1	**4%**
Lidocaine	1	**4%**
Glucagon	1	**4%**
Grand Total	**6/25**	**24%**