2020-2021 ANNUAL REPORT

Centre for Prehospital Care

Health Sciences North

www.hsnsudbury.ca/prehospitalcare

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Centre for Prehospital Care

Health Sciences North

INTRODUCTION

On behalf of the staff, including the Medical Directors and Advisors, of Health Sciences North Centre for Prehospital Care (HSN CPC), it is our pleasure to present the annual report for fiscal year 2020-2021.

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.

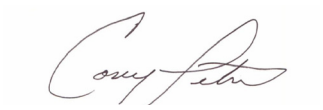
We have completed another productive and successful year. Some key achievements during this fiscal year include:

- We certified **123** new paramedics
- We provided advice and online medical direction during **561** patch calls
- We electronically audited **34,857** ambulance calls

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

COREY PETRIE
INTERIM REGIONAL MANAGER



OUR PURPOSE, COMMITMENTS AND VALUES

Our Purpose

To provide high quality health services, support learning and generate research that improves health outcomes for the people of Northeastern Ontario.

Our Commitments

We will carry out our patient care, teaching and research responsibilities with integrity, ensuring patients and families remain the focus of all we do.

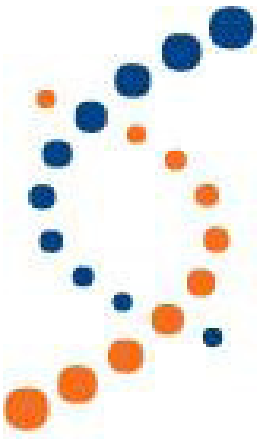
We will partner with humility, valuing each person's and each community's strengths and ideas to bring the best care, education and research solutions forward.

We will provide a physically, psychologically and culturally safe environment that promotes a positive care, working and learning experience

Our Values

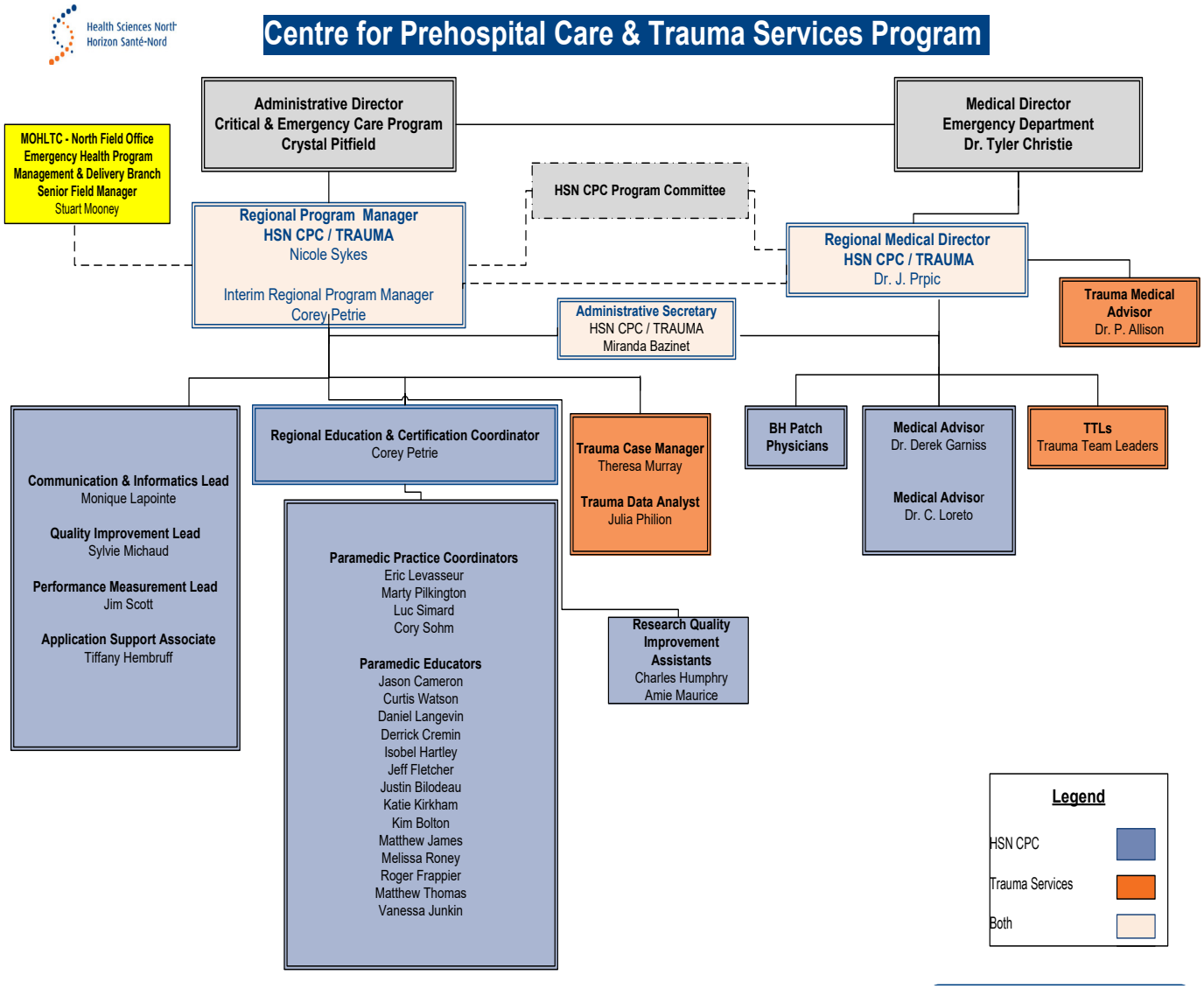
We believe in and will model:

Respect	Showing positive regard for each person's strengths, qualities and values
Quality	Providing patient and family-focused services that are safe, reliable, accessible (timely), efficient, effective and equitable
Transparency	Sharing information that is timely and truthful, working within the limits of law and policy
Accountability	Taking personal responsibility for our actions, behaviours and decisions
Compassion	Responding to the needs of others, showing kindness and empathy



ORGANIZATION CHART

As of March 31, 2021



MEET THE TEAM

Nicole Sykes,
Regional Manager

Eric Levasseur,
Paramedic Practice
Coordinator

Corey Petrie,
Regional Education
and Certification
Coordinator

Sylvie Michaud,
Quality Improvement
Lead

Dr. J. Prpic, Regional
Medical Director

Luc Simard,
Paramedic Practice
Coordinator

Centre for Prehospital Care

Health Sciences North

Monique Lapointe,
Communication &
Informatics Lead

Tiffany Hembruff,
Applications Support
Associate

Jim Scott,
Performance
Measurement Lead

Marty Pilkington,
Paramedic Practice
Coordinator

Cory Sohm,
Paramedic Practice
Coordinator

Miranda Bazinet,
Administrative
Secretary

HIGHLIGHTS

Our Response to COVID-19

In response to the increased number of confirmed novel coronavirus (COVID-19) globally, the World Health Organization declared a pandemic on March 11, 2020, which continued throughout the 2020-21 Fiscal Year. As a result, the Ontario Base Hospital Group (OBHG) established a provincial working group to develop an alternate certification process that aligns with the business continuity principles:

- Protect the public;
- Minimize OBHG business disruptions
- Provide flexible, Performance Agreement based response to Paramedic Services' and stakeholders' needs;
- Use technology to avoid face-to-face gatherings
- Provide necessary services and support to Paramedic Services who will need all available paramedics to respond to the COVID-19 plan which includes an amended Certification Process to allow Paramedic Services to hire staff if required,
- Availability of paramedics to complete online/technology-based activities;
- Availability of base hospital staff and resources;
- Increased infection prevention and control measures;
- Coordinate a return to normal operations as soon as possible post pandemic

Alternate Certification Process

The alternate certification process used during the 2020-21 fiscal year was conducted in four specific phases:

1. **Pre-Course Material:** Updated precourse materials completed by paramedics, and the addition of a standardized written knowledge assessment of ALS PCS medical directives.
2. **Orientation to the Base Hospital and the Remote OSCE Process:** We facilitated an online session which included an orientation to the base hospital, introduction to the base hospital staff, review of policies and procedures, quality assurance, auxiliary directives skills demonstration and evaluation, and introduction to the remote OSCE process and the evaluation tools.
3. **Remote OSCE Process:** This included video-based clinical cases where candidate competency is evaluated. Some domains, such as Stuational Awareness, Resource Utilization, and Procedural skills were removed from the Global Rating Scale (GRS) evaluation forms, Definitions were adjusted to meet the remote encounter concept for the remaining domains: History Gathering, Patient Assessment, Decision-Making and Communication.
4. Certification with the Following Condition: Each successful candidate was granted certification with a 6 month period of mandatory consolidation, where a new paramedic works with a certified Paramedic with the same or higher level of certification and authorization with a minimum of 6 months experience.

Remote Virtual Certification Process as a Result of COVID-19

In February of 2021 after 3 months of development the OBHG COVID-19 Certification working group were proud to present and share with the province the newly updated 2021 PCP Virtual Objective Structured Clinical Evaluation (VOSCE) content. Paramedic Practice Coordinator Marty Pilkington and Paramedic Educator Derrick Cremin were members of the working group.

The following updates to the VOSCE certification process were accomplished by the group:

- Written assessment
- 17 new and modified PCP scenarios.
- Added: visual aids and photos (screenshots of vital signs, images of patients, background, 12 leads, and more)
- Training material: Rater presentation, Candidate orientation, and Training video
- Updated electronic GRS forms for live scoring and data analysis.
- Updated post VOSCE surveys for candidates and raters.

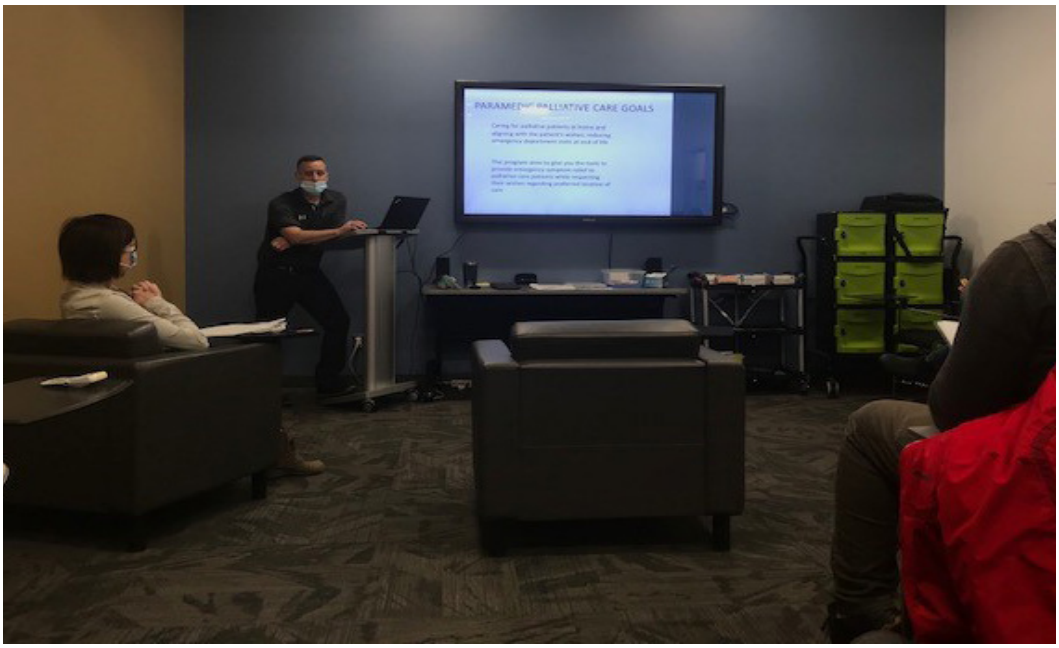
Centre for Prehospital Care Offices Move to a New Office Location

Effective June 2020 the Centre for Prehospital Care moved their offices from 7 Cedar Street to 2037 Long Lake Road- Unit 15, Sudbury, ON. The new location has a dedicated classroom, rater Room and 7 Studios for the purpose of conducting Base Hospital certifications, mandatory learning, continuing medical education and remediation.

"On July 31st 2020 the City of Timmins was honoured to have the Paramedic Memorial Bell visit the city. During a beautiful morning session the Bell visited the Timmins Airport Ornge Air Ambulance Base in part to recognize two local Base Paramedics who gave of their lives in Chapleau on November 29th 1988.

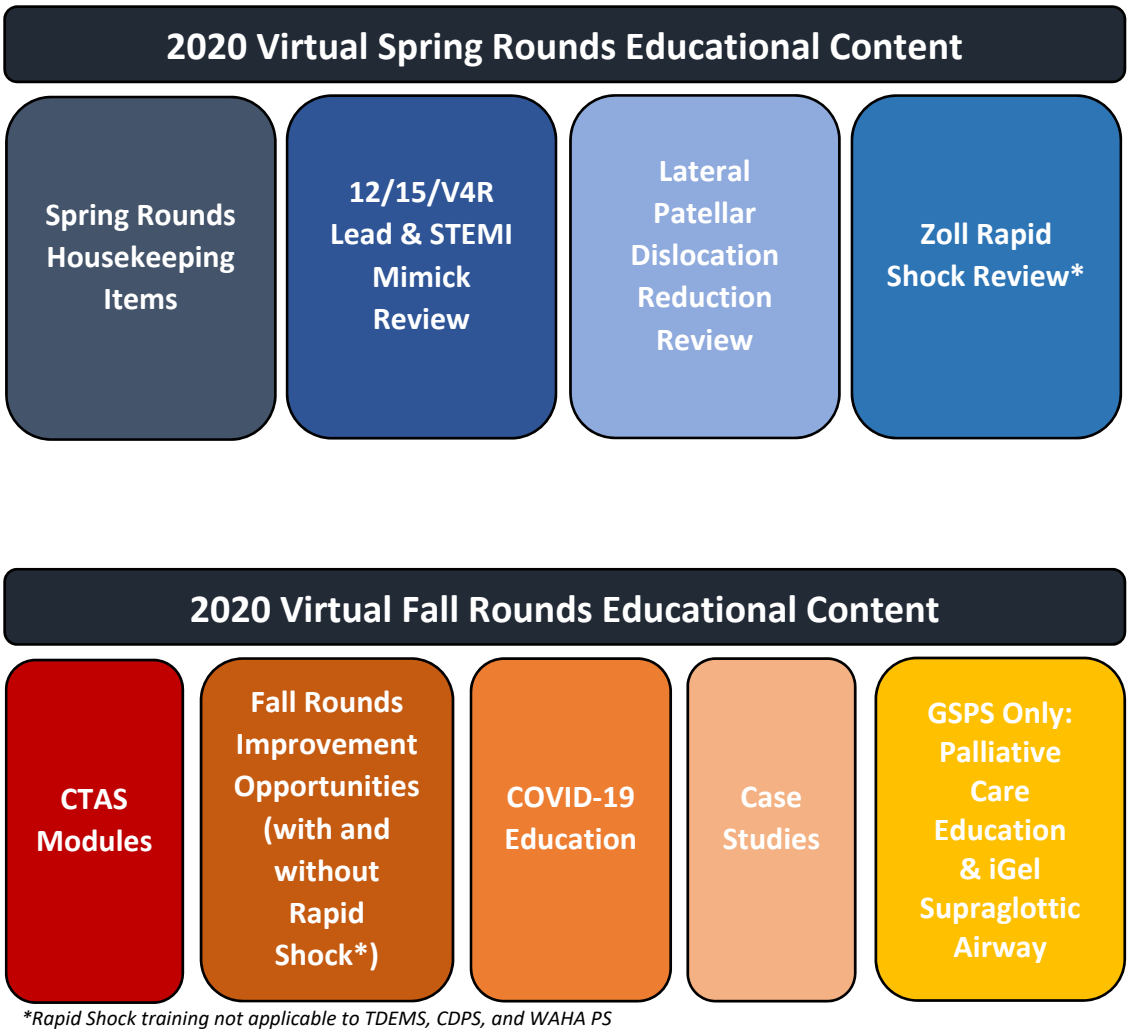
Having personally worked with both Paramedics it was my honour that morning to be asked to assist in the ringing of the Bell in recognition of the fifty Paramedics named who had lost their lives in the line of duty."
- Marty Pilkington, Paramedic Practice Coordinator

Virtual OSCE Day
July 22, 2020



Palliative Care Education for Greater Sudbury Paramedic Services - November 2020

Mandatory Continuing Medical Education (CME) Highlights 2020-21



**Rapid Shock training not applicable to TDEMS, CDPS, and WAHA PS*

The Centre for Prehospital Care offered/endorsed the following Elective Courses in 2020-21:

Session	Date of Live/Virtual Event	Available as an Archived Event with Video and Quiz?	Credits
Prehospital Covid-19 Education	April 7, 2020	✓	2
Covid-19 Town Hall	May 27, 2020	✓	1
Sim Days: Opiods & Airways	July 7, 2020	✓	2-4
STEMI Review	October 1, 2021	✓	1
Just Culture	December 2, 2021		1
LAMS Training	N/A	✓	1
Advanced 12 -lead and STEMI by Tim Phalen	February 16, 2021		2
Mitigating Covid/Compassion Fatigue	March 25, 2021	✓	2
2020 Summer CME (ACP)	August 20, 2020	✓	2

In addition to the above, paramedics are encouraged to also explore other educational opportunities related to their practice and submit as a request for CME Credits through the Paramedic Portal of Ontario. CPC Medical Advisors review these requests, along with course itineraries and learning objectives and approve for CME Credits.

Collaboration

Working with our colleagues from the Ontario Base Hospital Group (OBHG), the program continues to have a strategic focus on enhancing the quality of programming delivered, avoiding duplication in the system, and the sharing of knowledge amongst 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.

Primary Care Paramedic (PCP) and Advanced Care Paramedic (ACP) scenarios have been modified for use with the initial virtual objective structured clinical evaluation (VOSCE) certification process. This was possible through a Provincial Working Group in collaboration with other Base Hospitals. This group has modified the previously created 17 PCP scenarios and 8 ACP scenarios for a total of 25 scenarios in the 2020-21 fiscal year. Keeping in mind that towards the end of March 2020, the COVID-19 global pandemic brought this group together remotely to create a new temporary virtual certification process.

Collaborative sharing of educational materials between Base Hospital programs is ongoing and has resulted in the creation and revisions of over 40 skill sheets. Unfortunately the pandemic has halted the production of a few remaining videos to demonstrate these skills. All educational skill sheets have been finalized and most of the previously completed videos are currently being edited by the RPPEO base hospital. Ad hoc sharing of information and educational resources among Base Hospital Programs continues and has become a common occurrence with a centralized location created. Also formed in early 2020 was a working group dedicated to creating a multi-year educational curriculum. Unfortunately that work had been temporarily halted due to the pandemic but has recently resumed. It has been renamed the annual curriculum working group to better reflect the short and long term goals of the group.

Supporting the work of the annual curriculum working group is the OBHG storage working group. The storage working group has enabled a centralized location to house educational documents created by each base hospital. This site allows us to share and better organize the material within the secure site.

The Certification Standard working group was able to meet sporadically in 2020 but the group decided to pause so that all stakeholders could focus on the third wave of the pandemic. We hope to continue this work in late 2021 or early 2022.

Another collaborative effort which continues is the Autonomous Intravenous Working Group. The groups focus over the 20/21 year was to update and modernize the already created IV program.

In 2020-21 we continued collaborating with other base hospital groups to provide elective educational opportunities while making an effort to standardize the continuing education credit allotment.

IQEMS

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 and Management Suite (IQEMS). This web based software supports the management of many Base Hospital's 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 development of IQEMS as a collaborative and integrated quality solution continued through 2020-21 guided by the strategic work plan through remote work and virtual face to face meetings to further improve the system, develop additional capabilities such as the enhanced search functionality, bi-directional feedback and updating the clinical filters and audit forms.

Paramedic Portal of Ontario (PPO)

Health Sciences North Centre for Prehospital Care, Southwest Ontario Regional Base Hospital Program, ORNGE Base Hospital and Sunnybrook Regional Base Hospital continue to collaboratively pursue standardization of paramedic certification management as well as enhancing the delivery of education through its established Paramedic Portal of Ontario (PPO).

In February 2020, a new version of the PPO was launched which integrated the certification and education modules with a modernized look and feel. The enhancement to the paramedic demographics allows for multiple services to be listed under one paramedic profile and includes service specific certification level, status and dates as well as medical directives and a certification letter by service. Each service now has the ability to submit new certification requests, reactivations and clinical inactivity requests through the system. During this fiscal year, we developed and enhanced the Training and Compliance report which now allows service operators to also track the progress of their paramedics' education and certification through the system. The document management system was also enhanced to facilitate paramedics requesting education to be considered for Continuing Medical Education credits through the system.

In 2021-22, our focus will continue on enhancing the reporting requirements to show the certification status history by medic and the medical directives applied/removed by medic as well as enhancing the application/removal of medical directives administrative processes. Other enhancements include the launch of our auto generated system notifications, request for cross certifications and certification level changes through the PPO.

Quality Programming

CorHealth Ontario - Prehospital STEMI Data

ST-segment elevation myocardial infarction (STEMI) is a form of heart attack that can cause death if not treated quickly. Approximately one-third of acute coronary syndromes are classified as STEMI. Data from the Canadian Institute for Health Information (CIHI) Discharge Abstract Database (DAD) suggest that the incidence of STEMI in Ontario is approximately 68 of every 100,000 adult residents, a total of about 7,000 STEMIs per year. Working with key stakeholders, including Base Hospital Programs and Paramedic Services, CorHealth is responsible for the Ontario Cardiac and Vascular Registries. The data collected include specific clinical parameters required to evaluate key components of care and determine risk-adjusted outcomes. In order to facilitate the inclusion of prehospital data, the Base Hospital coordinates their efforts with the Paramedic Services to ensure important key information is forwarded.
(source: https://www.corhealthontario.ca/)

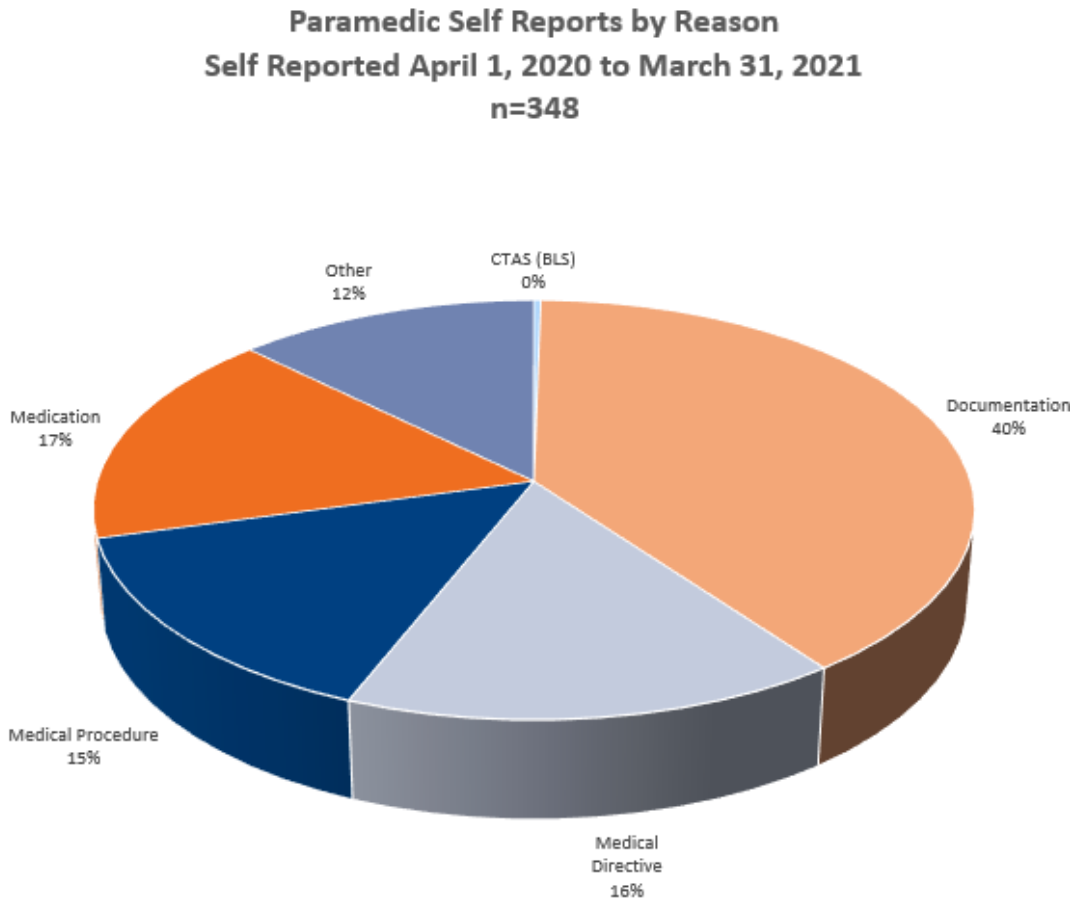
Opioid-related harms in Canada – Provincial Reporting

The Government of Canada works closely with the provinces and territories to collect and share data on apparent opioid-related deaths. Accurate information about the crisis is needed to help guide efforts to reduce opioid-related harms, including deaths. Emergency Medical Services data in this report is collected by the Ontario Base Hospital Group, updated four times a year and have been shared through the Special Advisory Committee on the Epidemic of Opioid Overdoses.
Source: https://www.canada.ca

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 integrated into IQEMS in 2018 and the activities continue to impress. There were 348 self-reports generated and reviewed in 2020-21 fiscal year. Aggregate reports are routinely shared with Service Operators.

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.



Distance Education

We continue to provide education to approximately 750 paramedics across one of the largest geographical regions in Ontario. To meet the challenge, especially during the Covid-19 pandemic, HSN CPC continues to experiment with different methods of education delivery such as Microsoft Teams, Adobe Connect, Zoom, Turning Point (anywhere polling), 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 with instantaneous feedback. Educational pre-learning is available for all new certification candidates online via the Paramedic Portal of Ontario. This gives the candidates an opportunity to arrive at a virtual or in-person 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.

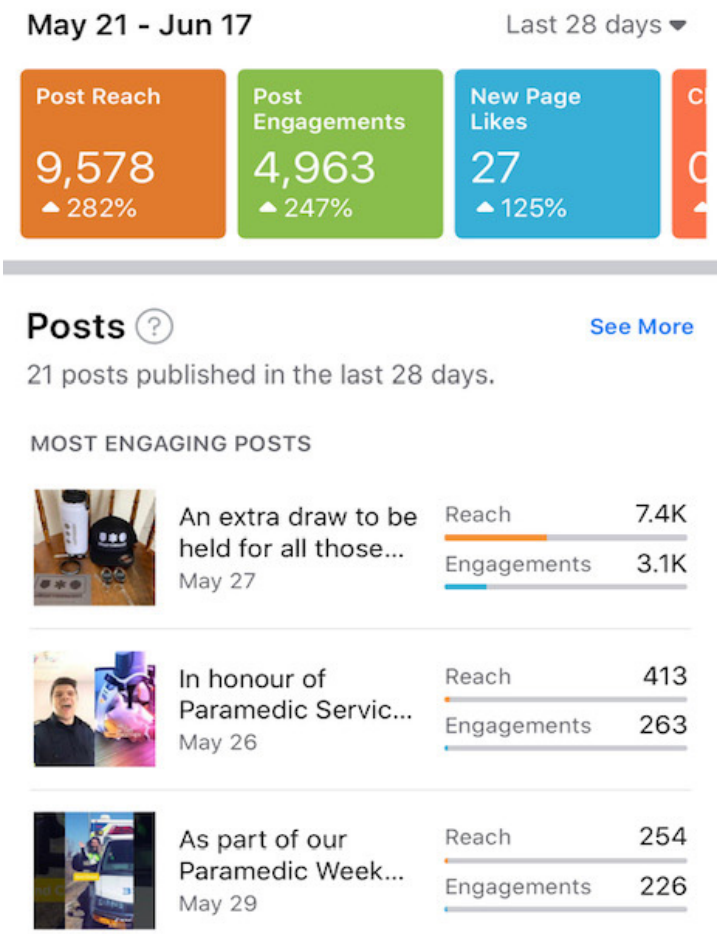
OTN videoconferencing continues to allow the connectivity by the Northeast Region Paramedics to the Base Hospital for real time educational, certification and administrative purposes, while the Paramedic Portal of Ontario currently houses all our archived continuing education lectures. We currently have 67 archived presentation that Paramedics can view from anywhere and anytime with an internet connection. As mentioned above, we also liaise with our provincial colleagues to provide educational opportunities in alternate areas of the province. This has been especially beneficial during the Covid-19 pandemic as paramedics can connect from almost anywhere.

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

facebook.com/hsncpc

Highest Post Reach, Post Engagement and New Page Likes of 2020-21



Centre for Prehospital Care Celebrates Paramedic Week 2020

Health Sciences North Centre for Prehospital Care
Like This Page · April 27 ·

In recognition of our hard working and dedicated medics and in celebration of the upcoming Paramedic Week scheduled for May 24-30, 2020, we have some fun activities planned. Last week we announced a video challenge and this week we are happy to announce a schedule of gift card draws during the month of May.

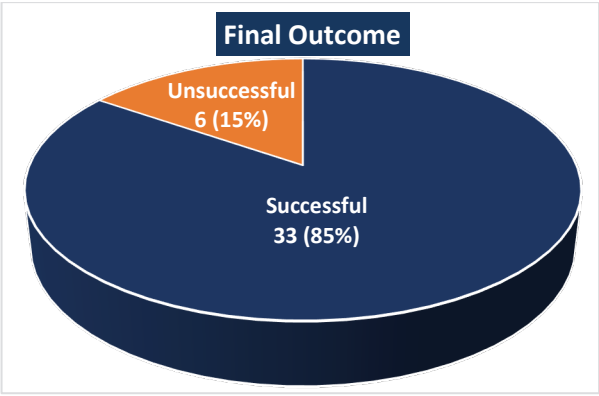
RESEARCH

Patellar Reduction in the Prehospital Setting (PRPS)

Patellar dislocation reduction is a simple procedure that can easily be performed by both Primary and Advanced Care Paramedics. Based on the epidemiology of patellar dislocation and the relative safety profile, we anticipate patients who undergo the procedure in the prehospital setting, will receive prompt pain relief without the need for large doses of pain medication, allowing expedited transport. For these reasons, the Emergency Health Services Branch of the Ministry of Health Long Term Care approved this research pilot study. Should our data show improved patient care, the procedure will be incorporated provincially. The study is currently enrolling patients and will take approximately 2 years to complete.

	Number of Cases
Met inclusion criteria	37 (95%)
Did not meet inclusion criteria	2 (5%)
Grand Total	**39 (100%)**

SERVICE	Number of Cases
Sudbury Paramedic Service- 747	12
DSSMPS (751)	8
Cochrane District EMS-741	4
North Bay Ambulance Service (469)	4
Mattawa Ambulance Service (285)	3
Parry Sound District E.M.S.	3
Timiskaming District EMS-750	2
Temagami Ambulance Service (287)	1
Algoma District Paramedic Services (740)	1
Manitoulin-Sudbury DSB Paramedic Services	1
Grand Total	**39**



Effect of Rapid Shock Implementation on Perishock Pause in Out of Hospital

In 2016, Zoll Medical Corporation received Health Canada approval for a new and improved RapidShock software that is able to analyze cardiac rhythms in as little as 3 seconds in automated mode. Because of this new technology, the program approached Zoll Medical with a proposal to trial the new software under a quality assurance research project. Our study objective is to determine the effect of Rapid Shock implementation on CPR fraction and perishock pause. This is an observational retrospective review of patients who received at least one shock using the Rapid Shock software. No hospital data will be abstracted. This group will be compared to a pre-implementation group of patients who received at least one shock using the standard software. The study has completed the enrollment phase and is currently undergoing statistical analysis. The study will involve six Paramedic Services in the northeast region including:

1. Algoma District Paramedic Services
2. Greater Sudbury Paramedic Services
3. Manitoulin-Sudbury Paramedic Services
4. Nipissing Paramedic Services (Including Mattawa and Temagami)
5. Parry Sound Paramedic Services
6. Sault Ste Marie Paramedic Services

Pre Analysis Phase	Count of Analysis
Excluded	43
Manual No Shock	391
Manual Shock	436
SAED No Shock	30
SAED Shock	13
Grand Total	**913**

Post Analysis Phase	Count of Analysis
Excluded	37
Manual No Shock	22
Manual Shock	35
SAED No Shock	590
SAED Shock	395
Grand Total	**1079**

Epistry Epidemiologic Registry

Cardiac Arrest Registry

The Cardiac Arrest Registry captures data for every out-of-hospital cardiac arrest patient within the CanROC catchment area. The Cardiac Arrest Registry collects data on cardiac arrest events, including patient demographics, bystander interventions (such as CPR or defibrillator use), emergency response times, treatments provided by emergency medical responders (including drug therapy and CPR quality), and patient outcomes. By analyzing this data CanROC is able to look for trends, best practices, and guide future protocol development, all of which can help increase survival. Additionally, participating services have access to this data to determine areas that can be improved locally to help give patients the best chance at surviving cardiac arrest. Data collection is currently ongoing at three Canadian sites representing a population of approximately 15 million people in the provinces of Ontario and British Columbia.

****179 cases have been submitted between Jan 1 - Dec 31, 2020**

Canadian Sudden Cardiac Arrest Network (C-SCAN)

The overall aim of the Canadian Sudden Cardiac Arrest Network (C-SCAN) is to measure the disease burden of sudden cardiac arrest (SCA) and enable the prediction and prevention of these events by identifying key symptoms, risk factors, and triggers. Data from emergency medical services (EMS) ambulance call reports is combined with data from administrative databases such as the National Ambulatory Care Reporting System Metadata (NACRS) and the Discharge Abstract Database Metadata (DAD), as well as data from coroners' reports, and survivor interviews. The specific objectives include:

1. Identify and classify all cases of SCA across Canada in 10 provinces
2. Measure the incidence of reported causes of SCA, categorized by sex, gender and age
3. Identify key triggers and symptoms related to SCA, categorized by sex, gender, and age
4. Determine if/what elements of a patient's past medical history are predictive of future SCA

For more information, see https://c-scan.org/

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 combines various methodologies and techniques to be utilized as part of a comprehensive continuing medical education program (CME). 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 the requirements as laid out in the Certification Standard may be subject to a skills review by the Medical Director or delegate. In rare cases, a Paramedic 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 a 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 Ministry of Health Advanced Care Paramedic (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, 2021, HSN Centre for Prehospital Care had 48 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 Paramedic Services
- District of Sault Ste. Marie Paramedic Services
- Nipissing District Paramedic Services
- Manitoulin-Sudbury DSB Paramedic Services
- Parry Sound District Emergency Medical Services
- Timiskaming District Emergency Medical Services
- Weeneebayko Area Health Authority Paramedic Services

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

REPORTING PERIOD	TOTAL ACP	TOTAL PCP	TOTAL # OF PARAMEDICS
April 1, 2020 to March 31, 2021	80	770	850

*Includes multi-service medics (i.e. a single medic who works in Service A and Service B count as 2 in the above numbers)

SERVICE	ACP	PCP	TOTAL
ALGOMA DISTRICT PS	-	82	82
COCHRANE DISTRICT PS	-	95	95
GREATER SUDBURY PS	66	100	166
MANITOULIN-SUDBURY DSB PS	-	138	138
NIPISSING PS	14	82	96
PARRY SOUND DISTRICT EMS	-	75	75
DISTRICT OF SSM PS	-	73	73
TIMISKAMING DISTRICT EMS	-	58	58
WAHA PS	-	67	67

* These numbers include multi-service medics, therefor one paramedic may be represented twicefor PCP and ACP under different services.

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		✓
Fentanyl		✓
Glucagon	✓	✓
Ibuprophen	✓	✓
Ketorolac	✓	✓
Ketamine		✓
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**
V4R/15 Lead ECG Acquisition and Interpretation	✓	✓
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	*	✓
CVAD Access		✓

PRIMARY CARE PROGRAM	Greater Sudbury Paramedic Service	Manitoulin-Sudbury DSB Paramedic Services	District of SSM Paramedic Service	Algoma District Paramedic Services	Nipissing Paramedic Services[1]	Parry Sound District EMS	Timiskaming District EMS	Cochrane District Paramedic Services[2]	WAHA Paramedic 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
Patellar Dislocation Research Protocol	X	X	X	X	X	X	X	X	X
Zoll Rapid Shock Research Protocol	X	X	X	X	X	X			
Endotracheal and Tracheostomy Suctioning and Reinsertion	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	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	X	
Auxiliary Special Events Medical Directives			X		X	X			
Auxiliary Electronic Control Device Probe Removal									

[1] Nipissing Paramedic Services includes Mattawa and Temagami Ambulance Services
[2] Cochrane District EMS includes Sensenbrenner and Notre Dame Ambulance Services

ADVANCED CARE PROGRAM	Greater Sudbury Paramedic Service	Nipissing Paramedic Services
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/SC and Fentanyl IV/IN)	X	X
Home Dialysis Emergency Disconnect	X	X
Emergency Childbirth	X	X
Suspected Adrenal Crisis	X	X
Endotracheal Tube and Tracheal Suctioning	X	X
Patellar Dislocation Research Protocol	X	X
Zoll Rapid Shock Research Protocol	X	X
Auxiliary Adult Intraosseous (IO) Infusion	X	X
Auxiliary Central Venous Access Device (CVAD access)	X	X
Auxiliary Continuous Positive Airway Pressure	X	X

[3] Greater Sudbury Paramedic Service – Lidocaine
Nipissing Paramedic Services - Amiodarone

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		
Auxiliary Emergency Tracheostomy Tube Reinsertion Medical Directive	**X**	**X**
Auxiliary Chemical Exposure Medical Directive (CYANOKIT)	**X**	

Timelines for Medical Directive/Skill Implementation/Removal

Year	Month	Service	Modifications
2019	December	ALL	Addition of V4R & 15 Lead ECG Acquisition & Interpretation
2019	June	WAHA	Addition of Auxiliary CPAP Medical Directive
2019	December	ALL	Addition of Patellar Dislocation Research Protocol
2019	January	Manitoulin-Sudbury	Addition of Zoll Rapid Shock Research Protocol
2018	December	SSM, Algoma, Greater Sudbury, Nipissing, Parry Sound	Addition of Zoll Rapid Shock Research Protocol
2018	December	Greater Sudbury	Addition of Auxiliary Chemical Exposure Medical Directive – Administration of Antidotes for Cyanide Exposures (CYANOKIT)
2018	December	Nipissing & Greater Sudbury	Addition of ACP Auxiliary Medication Ketamine for Combative Patient Medical Directive
2018	December	All except Manitoulin-Sudbury	Addition of ACP/PCP Auxiliary Analgesia Medical Directive
2018	June	All	Addition of ACP/PCP Auxiliary Emergency Tracheostomy Tube Reinsertion Medical Directive
2018	June	Manitoulin-Sudbury	Addition of PCP Auxiliary Analgesia Medical Directive
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 & Nipissing	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.

In November of 2020 the ALS PCS was updated to remove Endotracheal and Tracheostomy Suctioning Medical Directive as well as the Emergency Tracheostomy Tube Reinsertion Medical Directive. These were replaced with Endotracheal and Tracheostomy Suctioning & Reinsertion Medical Directive.

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 4.8 which came into effect on November 23, 2020.

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 4.8.

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

PERIOD	TOTAL ACP	TOTAL PCP	TOTAL
April 1, 2020 to March 31, 2021	4	119	123

SERVICE	ACP	PCP	TOTAL
ALGOMA DISTRICT PS	-	16	16
COCHRANE DISTRICT PS	-	13	13
GREATER SUDBURY PS	2	29	31
MANITOULIN-SUDBURY DSB PS	-	13	13
DISTRICT OF NIPISSING PS	2	9	11
PARRY SOUND DISTRICT EMS	-	9	9
DISTRICT OF SAULT STE. MARIE PS	-	6	6
TIMISKAMING DISTRICT EMS	-	8	8
WAHA PS	-	16	16

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

REPORTING PERIOD	TOTAL ACP	TOTAL PCP	TOTAL
April 1, 2020 to March 31, 2021	9	48	57

SERVICE	ACP	PCP	TOTAL
ALGOMA DISTRICT PS	-	6	6
COCHRANE DISTRICT PS	-	2	2
GREATER SUDBURY PS	6	14	20
MANITOULIN-SUDBURY DSB PS	-	11	11
DISTRICT OF NIPISSING PS	3	5	8
PARRY SOUND DISTRICT EMS	-	3	3
DISTRICT OF SAULT STE. MARIE PS	-	5	5
TIMISKAMING DISTRICT EMS	-	1	1
WAHA PS	-	1	1

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

REPORTING PERIOD	TOTAL ACP	TOTAL PCP	TOTAL
April 1, 2020 to March 31, 2021	5	47	52

SERVICE	ACP	PCP	TOTAL
ALGOMA DISTRICT PS	-	5	5
COCHRANE DISTRICT PS	-	2	2
GREATER SUDBURY PS	4	12	16
MANITOULIN-SUDBURY DSB PS	-	11	11
DISTRICT OF NIPISSING PS	1	3	4
PARRY SOUND DISTRICT EMS	-	5	5
DISTRICT OF SAULT STE. MARIE PS	-	4	4
TIMISKAMING DISTRICT EMS	-	2	2
WAHA PS	-	3	3

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 Base Hospital (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. The Medical Director regularly reviews the directives and/or amendments with the emergency physicians and shares CQI findings.

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

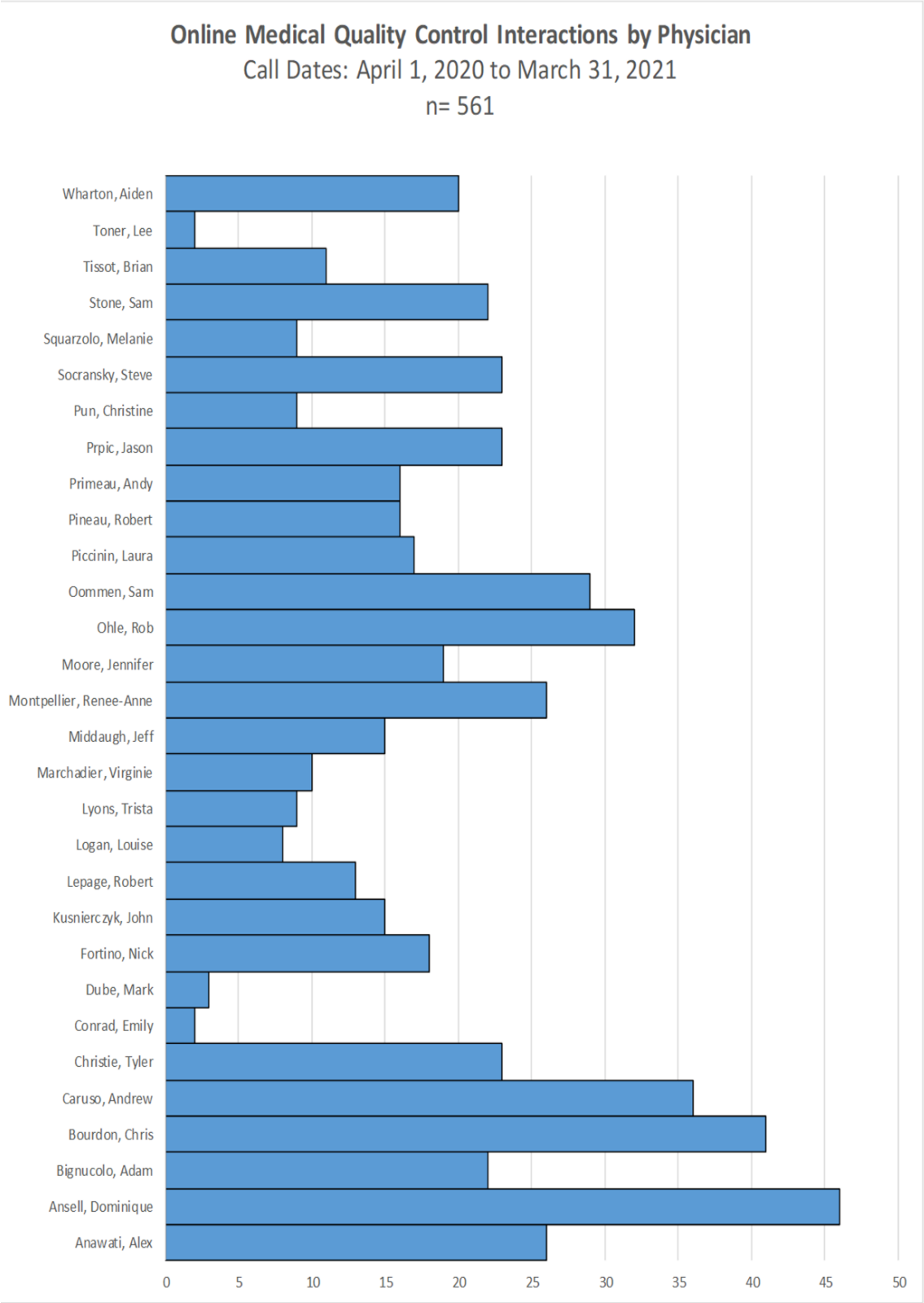
7.2 Total number of emergency physicians engaged as a Base Hospital Physician (list names).

33 Emergency Physicians were engaged as Base Hospital Physicians

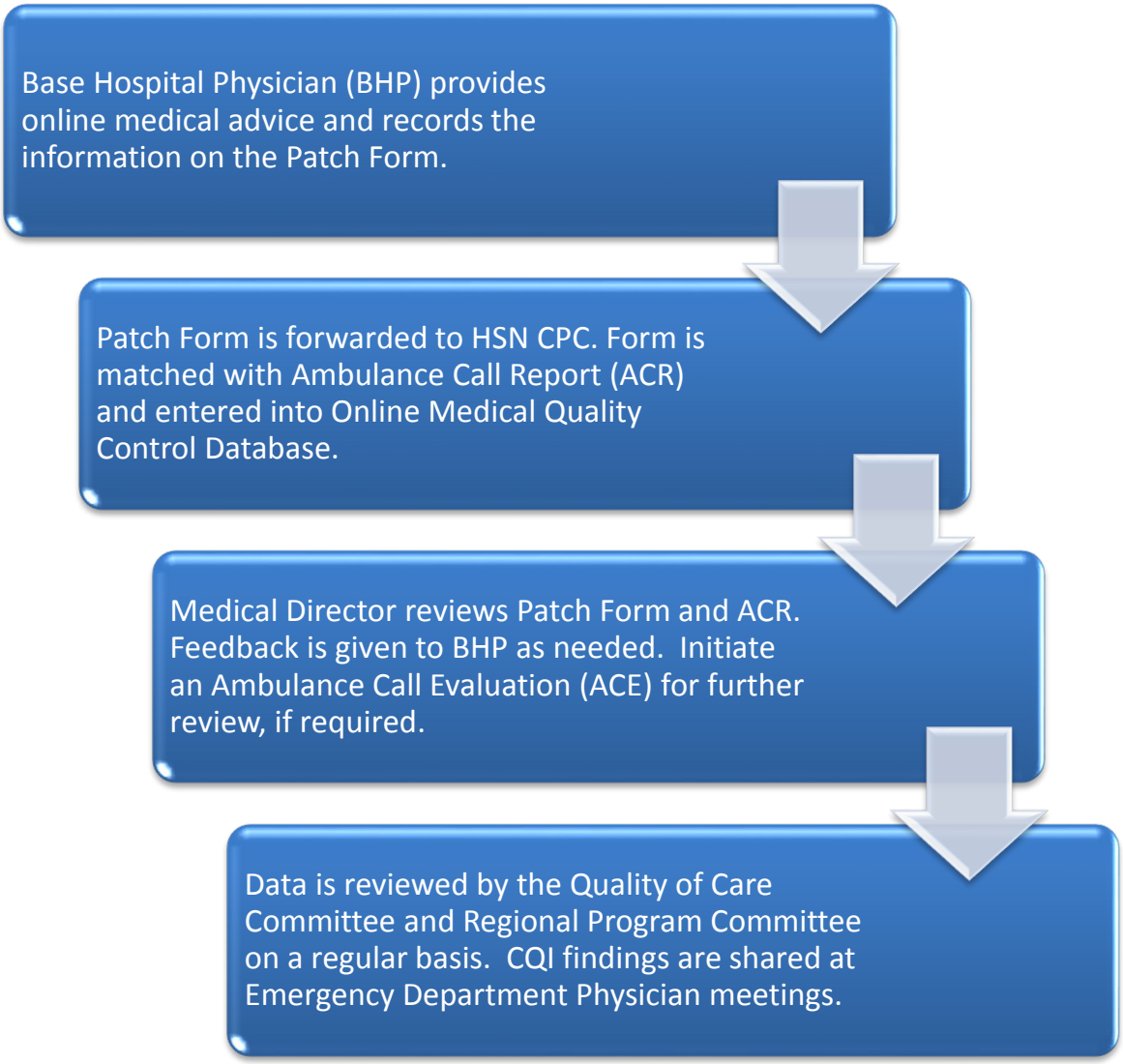
BASE HOSPITAL PHYSICIANS	
Dr. Alex Anawati	Dr. Jeff Middaugh
Dr. Dominique Ansell	Dr. Renee-Anne Montpellier
Dr. Adam Bignucolo	Dr. Jennifer Moore
Dr. Gary Bota	Dr. Robert Ohle
Dr. Christopher Bourdon	Dr. Sam Oommen
Dr. Andrew Caruso	Dr. Laura Piccinin
Dr. Tyler Christie	Dr. Robert Pineau
Dr. Emily Conrad	Dr. Andy Primeau
Dr. Mark Dube	Dr. Jason Prpic
Dr. Nicholas Fortino	Dr. Christine Pun
Dr. Pavan Koka	Dr. Steve Socransky
Dr. John Kusnierczyk	Dr. Melanie Squarzolo
Dr. Robert Lepage	Dr. Sam Stone
Dr. Louise Logan	Dr. Brian Tissot
Dr. Trista Lyon	Dr. Lee Toner
Dr. Virginie Marchadier	Dr. Aidan Wharton
Dr. Bill McMullen	

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

Total of 561 online interactions occurred between April 1, 2020 and March 31 2021, 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 13, 2020
- September 29, 2020
- December 9, 2020
- March 24, 2021

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. These agreements include details related to qualification, ongoing medical oversight and requalification of paramedics to deliver controlled medical acts under the authority of the Base Hospital.

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 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).

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

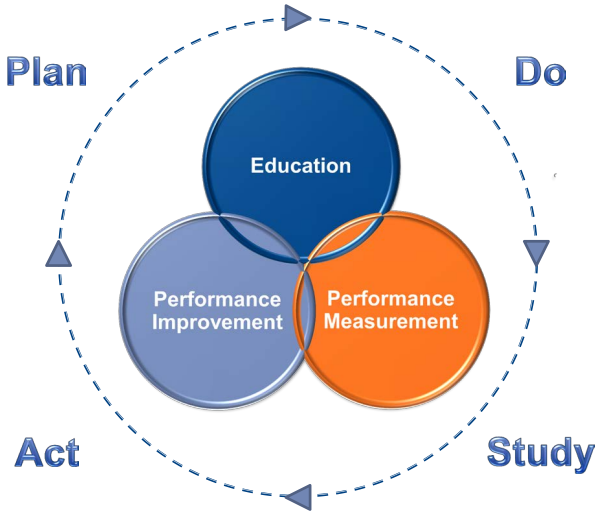


FIGURE 5

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 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 The Host Hospital shall ensure that timely advice is provided to each Upper Tier Municipality (UTM) and Designated Delivery Agent (DDA) for Land Ambulance Services as set out in Appendix D regarding medical issues in prehospital care

Advice may be provided formally through either the HSN CPC Quality of Care Committee proceedings that are reported back to Paramedic Services or through the HSN CPC Program Committee. Discussions and resulting action items are tracked through the meeting minutes. Ad hoc advice is provided frequently via conversation, email and non-standing meetings.

14.1 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

When an official request is made by a Paramedic Service or the Ministry of Health and Long Term Care (MOHLTC) to review a specific occurence, all information related to the call is tracked in the IQEMS database. It is forwarded to a Paramedic Practice Coordinator for review and may be analyzed by the QI Lead and the applicable Medical Director/Advisor. All reviews are completed via either the standard call review process or via a formal Event Analysis report in accordance with program policies.

For further information on the outcomes of program audit activites or event analyses, see Appendix B.

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 Companion Documents
2. Auxillary Skills
3. ePCR/IQEMS audits
4. BLS Advice/BLS 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
HSN CPC Council (Sudbury/ Videoconference) - Monthly	Base Hospital Managers/Directors Business Meeting - Monthly	Sudbury CACC Advisory Committee	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	National Association of EMS Physicians - Canadian Relations Sub-Committee - Annual/Adhoc
Cambrian College Paramedic and Advanced Care Flight Paramedic Programs Advisory Committee- Biannual	Trauma Registry Advsory Committee- Quarterly	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) - Bi-Annual	OBHG Data Quality Management (DQM) - Quarterly	HSN Annual General Meeting	
HSN CPC Program Committee (Sudbury/Teleconference) - Quarterly	OBHG Collaboration Working Group (Toronto) - Quarterly & Ad hoc	Critical and Emergency Care Program Council- Monthly	
Acute Stroke Protocol Improvement Team - Adhoc	Ontario Trauma Advisory Committee (OTAC) Quarterly Meeting (Toronto) - Quarterly		
STEMI Bypass Steering Committee - Adhoc	Ontario Trauma Coordinators Network (OTCN) (Teleconference) - Monthly		
HSN EVT Program Development - Adhoc	Ontario Trauma Advisory Committee- Medical Directors Working Group - Adhoc		
	OBHG Annual General Meeting		
	Sunnybrook/HSN Joint Medical Council Meeting (Toronto & Sudbury) - Bi-Annual		
	CCSO Town Hall Meeting - Annual		
	IQEMS Technical Working Group - Bi-weekly		
	IQEMS Operational Working Group- Bi-weekly		
	PPO Technical Working Group - Bi-weekly		
	PPO Operational Working Group - Weekly		

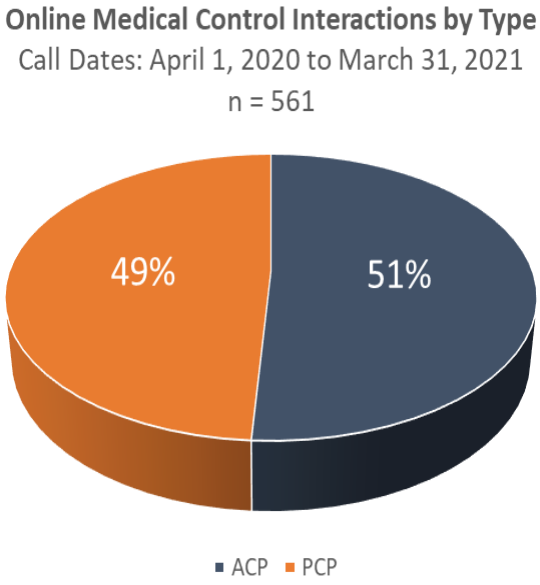
Q16 The Host Hospital shall make every reasonable effort to ensure that each request for medical advice, direction, or assistance received from an Emergency Medical Attendant, paramedic or communications officer is provided expeditiously and that performance standards are set out in this Agreement are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

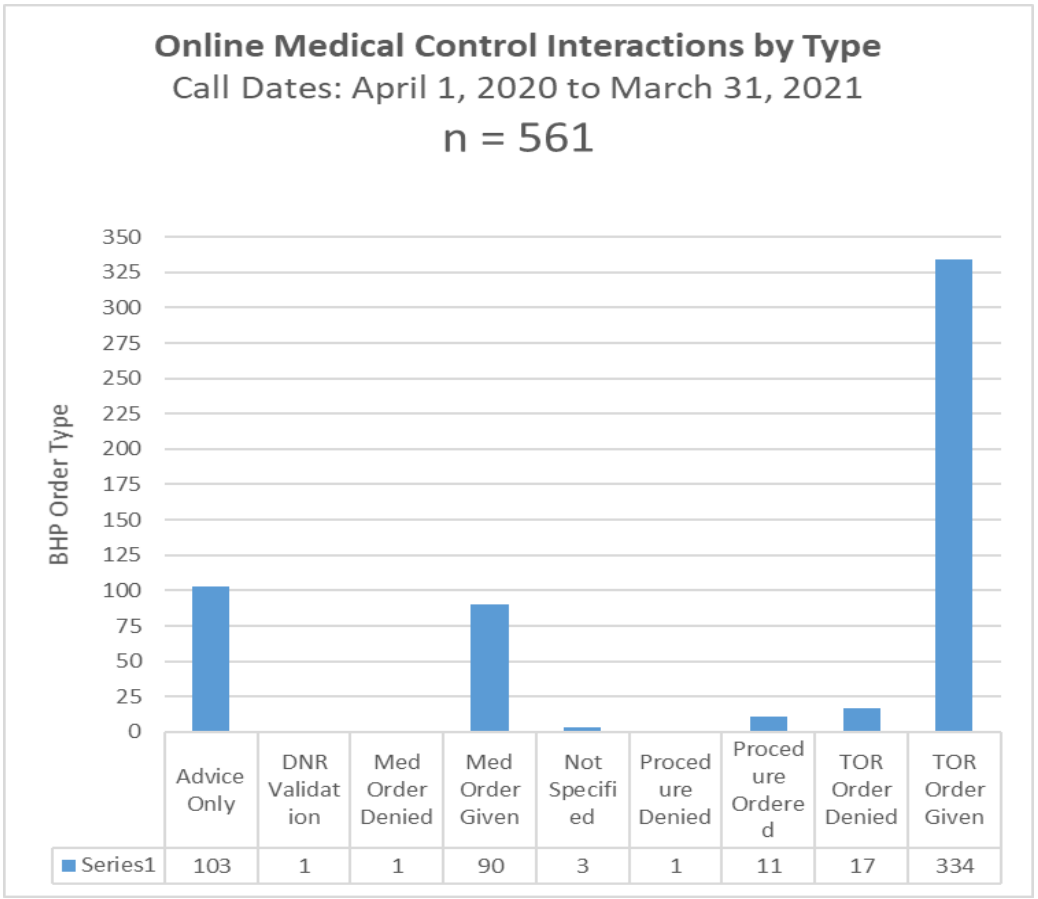
16.1 How are requests for medical advice, direction or assistance from an emergency medical attendant, paramedic or communications office provided?

The following are primary methods of communication:

- 24/7 Online Medical Control through the Base Hospital Physicians
- IQEMS, 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
- Typically twice annual (at minimum) in person sessions with Paramedic Practice Coordinators in an interactive education setting, however this has been moved to a virtual platform for the duration of the pandemic
- Adhoc, all program staff provide support and advice to paramedics on a daily basis.

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 audit review process or escalated to the QI Lead are further analyzed to determine root cause and to recommend system improvements.

During the 2020-21 fiscal year there were 6 Base Hospital Physician (BHP) Patch Failures. Overall Paramedics were able to reach a BHP 99%. Of those 6, 2 patches were terminated by the paramedic, 3 were due to cell or radio failures and 1 was due to telephone failure at the dispatch centre. All failed patches were reported to the Ministry of Health as required by our Performance Agreement

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 CQI 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/IQEMS Audits
3. Event Analysis
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 necesary for certification and delegation of specific controlled acts approved by the Provincial Medical Advisory Committee (PMAC) to Emergency Medical Attendants and Paramedics.

HSN CPC 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 Ministry of Health and Long Term Care Emergency Health Regulatory and Accountability Branch (MOHLTC-EHRAB) 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. Paramedics must have the required number of credits based on their scope of practice logged within the Paramedic Portal of Ontario no later than the second Wednesday in December.

Failure to meet these requirements will result in a Paramedic review by the Medical Director or designate and may result in the temporary deactivation of the Paramedic's certification.. 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.

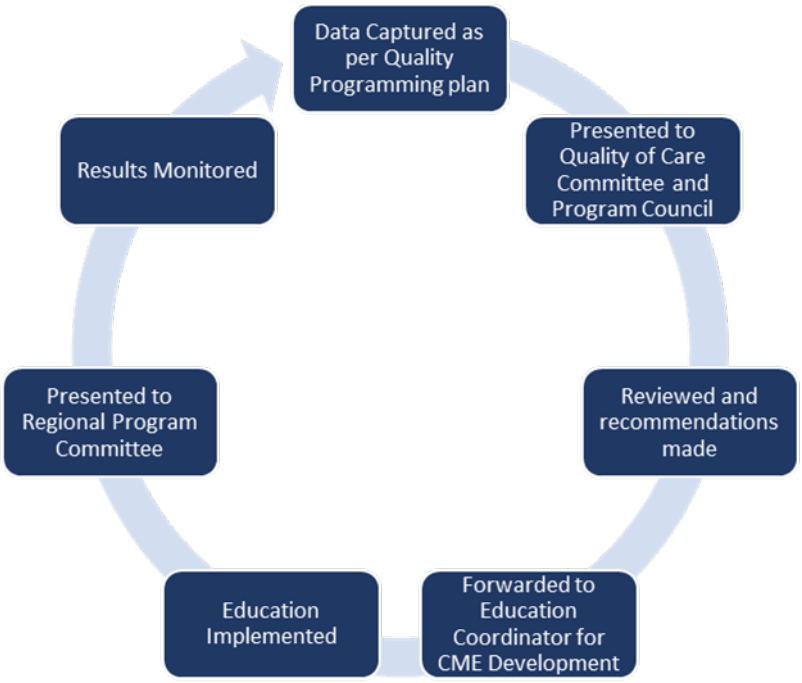
DATE	TOPIC/INSTRUCTOR	HOURS
April 7, 2020	Cardiac Arrest - Pit Crew Approach	2
May 27, 2020	COVID-19 Town Hall	1
June 25, 2020	Town Hall: Termination of Resuscitation with COVID-19 Updates by Dr. Jason Prpic, Medical Director	1
October 21, 2020	STEMI Review by Dr. Jason Prpic, Medical Director	1
December 2, 2020	Just Culture by Dr. Derek Garniss, Medical Advisor & Sylvie Michaud, QI Lead	1

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.

In addition to those noted above, the following Virtual sessions were provided specifically for the paramedics.

DATE	TOPIC/INSTRUCTOR	HOURS
April- June 2020	Spring Paramedic Practice Rounds	4
August 12 & 17, 2020	2020 Summer ACP M&M Rounds	4
September- November 2020	Fall Paramedic Practice Rounds	4

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.

22.2 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 C 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 2020-21, HSN CPC made available approximately 1407 commentaries to paramedics via the Ambulance Call Evaluation process. The Program also distributed various correspondence including 9 memos/letters to paramedics via email and the HSN CPC 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, for the Audit Activities Summary Report and for the 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 variance rates and outcomes by Service	Service Providers	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	Bi-annual	iMedic
CLINICAL AUDIT REPORTS Measures of current practice against a defined (desired) standard with the intent to improve systems vs individual practice.	Service Providers	2-3 times per 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

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
Appendix B: Event Analysis 2020-21
Appendix C: Quality Programming Overview 2020

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 2020-21, there were 34,857 calls audited, compared to 2019-20, where 33,521 calls were audited.

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

There were 34,857 ambulance call reports that were electronically audited. Of these audited calls, 3,553 (10.2%) were identified as having a variance and required further action; and 31,304 (89.8%) 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

There were 4 newly certified ACPs and 115 PCPs (defined as paramedics not having previous Base Hospital certification) in 2020-21. The Performance Agreement states 80% of charts where a controlled act or advanced medical procedure is performed must be audited, however IQEMS allows for 100% of paramedic charts to be audited.

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

Of the cancelled calls electronically sorted and audited in IQEMS, 3022 were manually reviewed by an auditor.

AUDIT TYPE	NO VARIANCE FOUND	OPERATIONAL ISSUE	NO FOLLOW UP REQUIRED	PARAMEDIC FEEDBACK RECEIVED/ REMEDIATED	TOPIC REVIEW AT RECENT/ UPCOMING CME	OTHER *	TOTAL AUDITS
Cancelled Calls	**18**	**96**	**2633**	**246**	**12**	**16**	**3022**

* Note: Other includes: Awaiting Feedback, Closed due to Insufficient Feedback, Review Completed by Service Manager, Self Remediation, and Unresolved.

APPENDIX A: PERFORMANCE MEASUREMENT STANDARD REPORT

Performance Measurement Standard Report
ANNUAL REPORT
April 1, 2020 to March 31, 2021

Centre for Prehospital Care

Health Sciences North

www.hsnsudbury.ca/portalen/basehospital

Performance Measurement Standard Report
April 1, 2020 to March 31, 2021

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Performance Measurement Standard Report
April 1, 2020 to March 31, 2021

SECTION 1
HSN CPC AUDIT ACTIVITIES REPORT

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

- Annually, each paramedic will have 100% of their calls audited, where a controlled act or advanced medical procedure was performed.
- The performance agreement states 80% of charts, where a controlled act or advanced medical procedure is performed, must be audited for all newly certified paramedics, however 100% of paramedic electronic Ambulance Call Reports (eACR) are audited through IQEMS where a controlled act is performed.

Audit Activities Summary Report
April 1, 2020 to March 31, 2021

CPC Audit Activities		Total #		# Medics with ALS Calls			
		Audits	Medics	< 10	≥ 10	1 - 9	0
	N =	34857	808	40	768	24	16
	% =			5%	95%	3%	2%
Audit Activities By Service		**Total #**			**# Medics with ALS Calls**		
		Audits	**Medics**	**< 10**	**≥ 10**	**1 - 9**	**0**
Algoma District Paramedic	N =	3680	73	8	65	5	3
Services (740)	% =	11%		11%	89%	7%	4%
Cochrane District Paramedic	N =	3594	95	2	93	2	0
Services (741)	% =	10%		2%	98%	2%	0%
Manitoulin-Sudbury DSB	N =	2784	137	3	134	2	1
Paramedic Services (752)	% =	8%		2%	98%	1%	1%
Nipissing Paramedic Services	N =	4038	90	2	88	1	1
(285/287/469)	% =	12%		2%	98%	1%	1%
Parry Sound District EMS	N =	2478	75	8	67	6	2
745	% =	7%		11%	89%	8%	3%
District of Sault Ste. Marie	N =	6124	69	1	68	0	1
Paramedic Service (751)	% =	18%		1%	99%	0%	1%
Greater Sudbury Paramedic	N =	10109	155	8	147	2	6
Service (747)	% =	29%		5%	95%	1%	4%
Timiskaming District EMS (750)	N =	960	49	2	47	1	1
	% =	3%		4%	96%	2%	2%
Weeneebayko Area Health	N =	1090	65	6	59	5	1
Authority Paramedic Service (263)	% =	3%		9%	91%	8%	2%

* Total Audits include total calls electronically sorted and audited

Performance Measurement Standard Report
April 1, 2020 to March 31, 2021

SECTION 2

AUDIT VARIANCE SUMMARY

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

Audit Variance Summary Report (Q4)

April 1, 2020 to March 31, 2021

		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	N =	3680	66	211	26	288	591	8	241	0	254	2	0
(740)	% of Total Audits =	10.6%	1.8%	5.7%	0.7%	7.8%	16.1%	5.8%	24.8%	0.0%	20.8%	0.0%	0.0%
Cochrane District Paramedic	N =	3594	72	169	63	92	396	1	100	2	132	0	0
Services (741)	% of Total Audits =	10.3%	2.0%	4.7%	1.8%	2.6%	11.0%	0.7%	10.3%	0.00%	10.8%	0.0%	0.0%
Manitoulin-Sudbury DSB Paramedic	N =	2784	62	91	44	91	288	17	75	0	97	0	0
Services (782/752)	% of Total Audits =	8.0%	2.2%	3.3%	1.6%	3.3%	10.3%	12.3%	7.7%	0.0%	7.9%	0.0%	0.0%
Nipissing Paramedic Services	N =	4038	54	100	52	155	361	4	93	0	147	3	0
(285/287/469)	% of Total Audits =	11.6%	1.3%	2.5%	1.3%	3.8%	8.9%	2.9%	9.6%	0.0%	12.0%	30.0%	0.0%
Parry Sound District EMS	N =	2478	28	46	19	62	155	0	47	0	76	0	0
(745)	% of Total Audits =	7.1%	1.1%	1.9%	0.8%	2.5%	6.3%	0.0%	4.8%	0.0%	6.2%	0.0%	0.0%
District of SSM Paramedic Service	N =	6124	97	181	61	97	436	60	137	0	115	0	1
(751)	% of Total Audits =	17.6%	1.6%	3.0%	1.0%	1.6%	7.1%	43.5%	14.1%	0.0%	9.4%	0.0%	5.6%
Greater Sudbury Paramedic	N =	10109	210	408	138	401	1157	47	235	5	332	5	17
Service (747)	% of Total Audits =	29.0%	2.1%	4.0%	1.4%	4.0%	11.4%	34.1%	24.2%	0.0%	27.2%	0.0%	94.4%
Timiskaming District EMS (750)	N =	960	11	38	19	18	86	0	18	0	41	0	0
	% of Total Audits =	2.8%	1.1%	4.0%	2.0%	1.9%	9.0%	0.0%	1.9%	0.0%	3.4%	0.0%	0.0%
WAHA Paramedic Service	N =	1090	17	33	17	16	83	1	24	0	28	0	0
(263)	% of Total Audits =	3.1%	1.6%	3.0%	1.6%	1.5%	7.6%	0.7%	2.5%	0.0%	2.3%	0.0%	0.0%
	N =	34857	617	1277	439	1220	3553	138	970	7	1222	10	18
Total	% of Total Audits =		1.8%	3.7%	1.3%	3.5%	10.2%	0.4%	2.8%	0.0%	3.5%	0.0%	0.1%

* Total Audits include total calls electronically sorted and audited

**Variances includes all identified variances for all calls manually reviewed by an auditor

*** Includes outcome for all calls manually reviewed by an auditor

****Algoma District Paramedic Services include BLS audits for this quarter

Performance Measurement Standard Report
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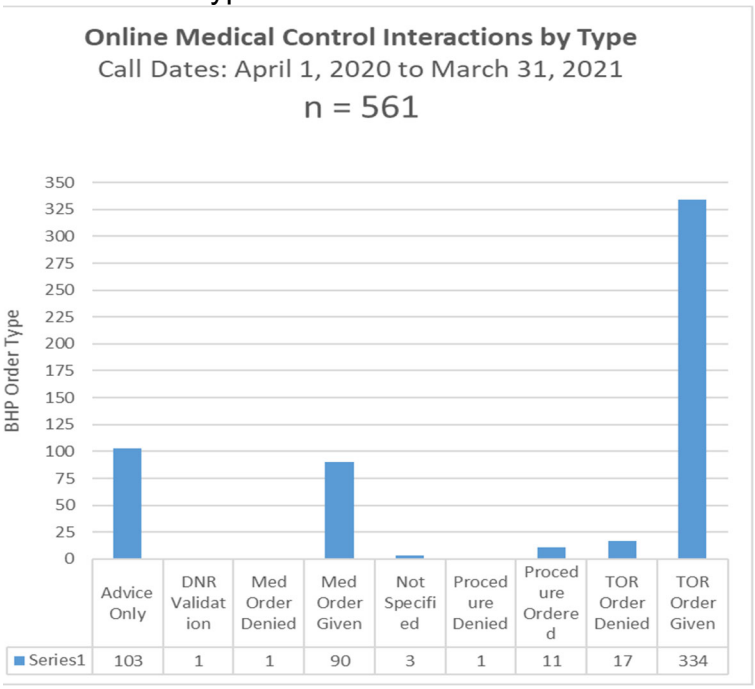
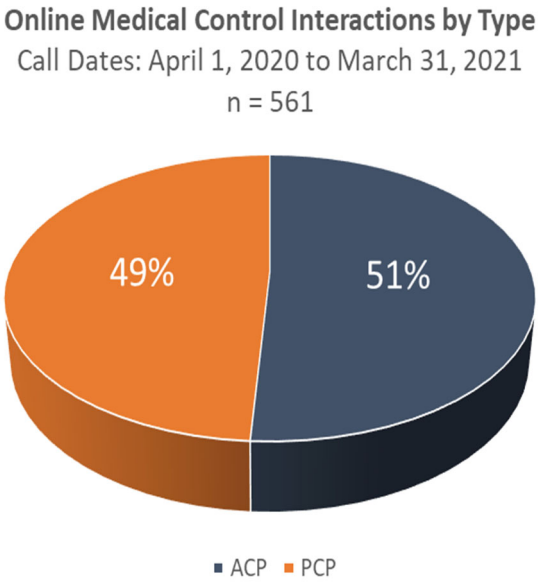
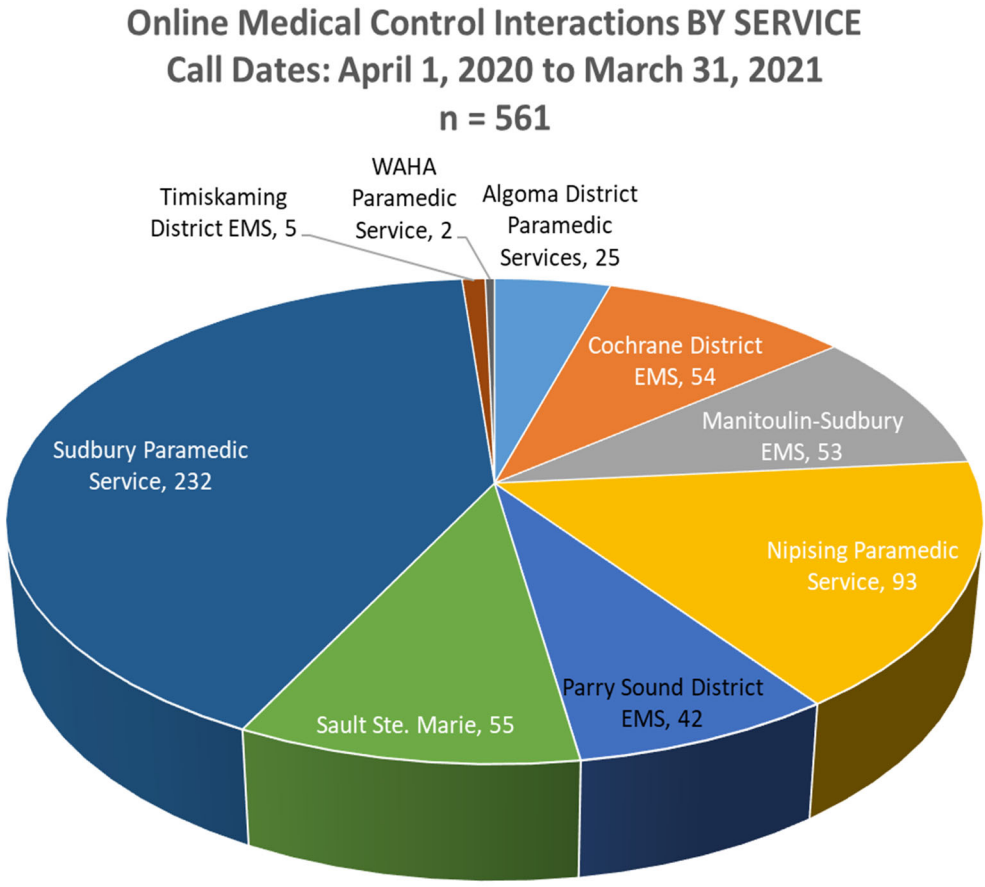
SECTION 3

ONLINE MEDICAL CONTROL INTERACTION REPORTS

This section provides a summary of “Patch” interactions by service operator and by interaction type.







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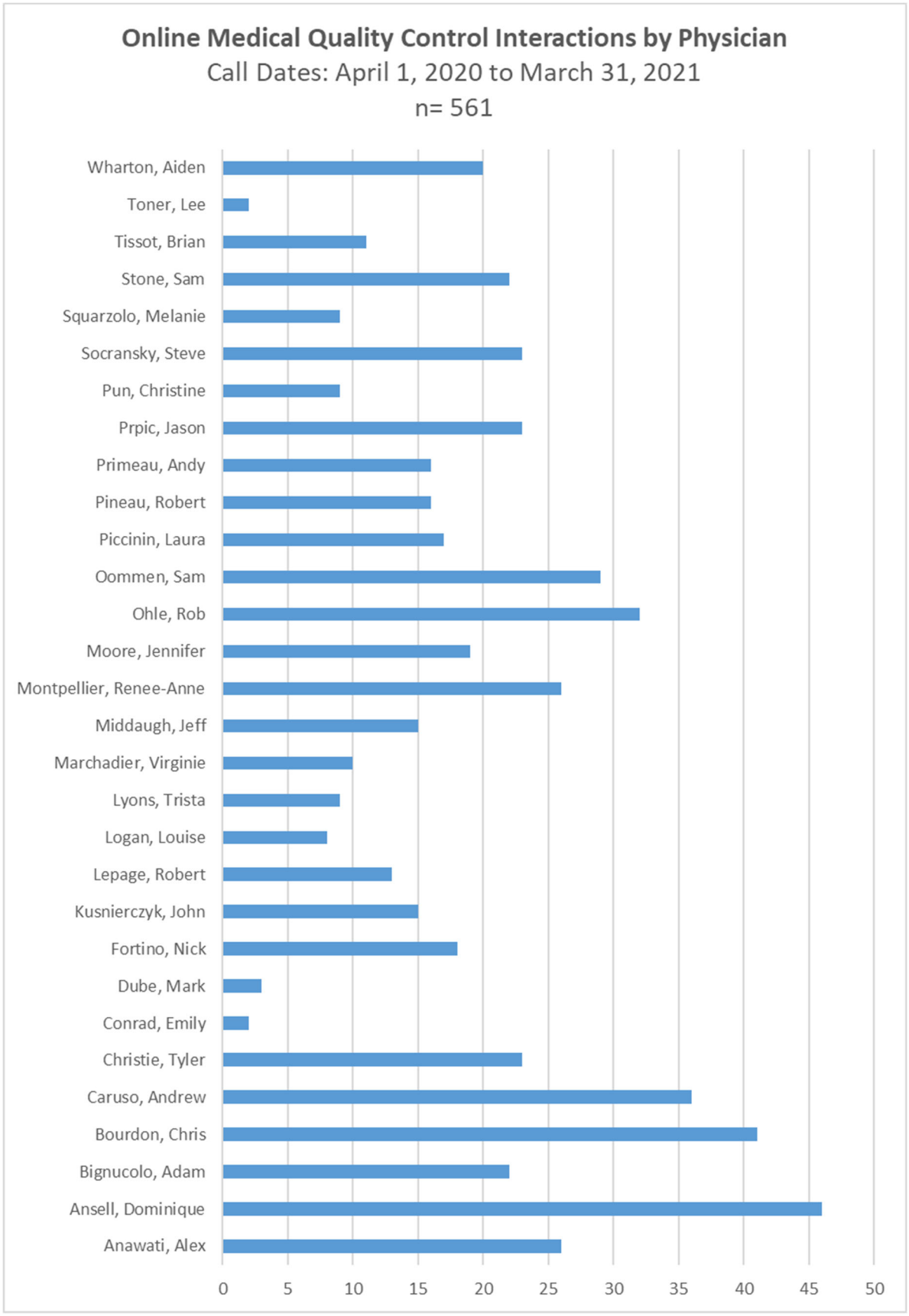

Performance Measurement Standard Report
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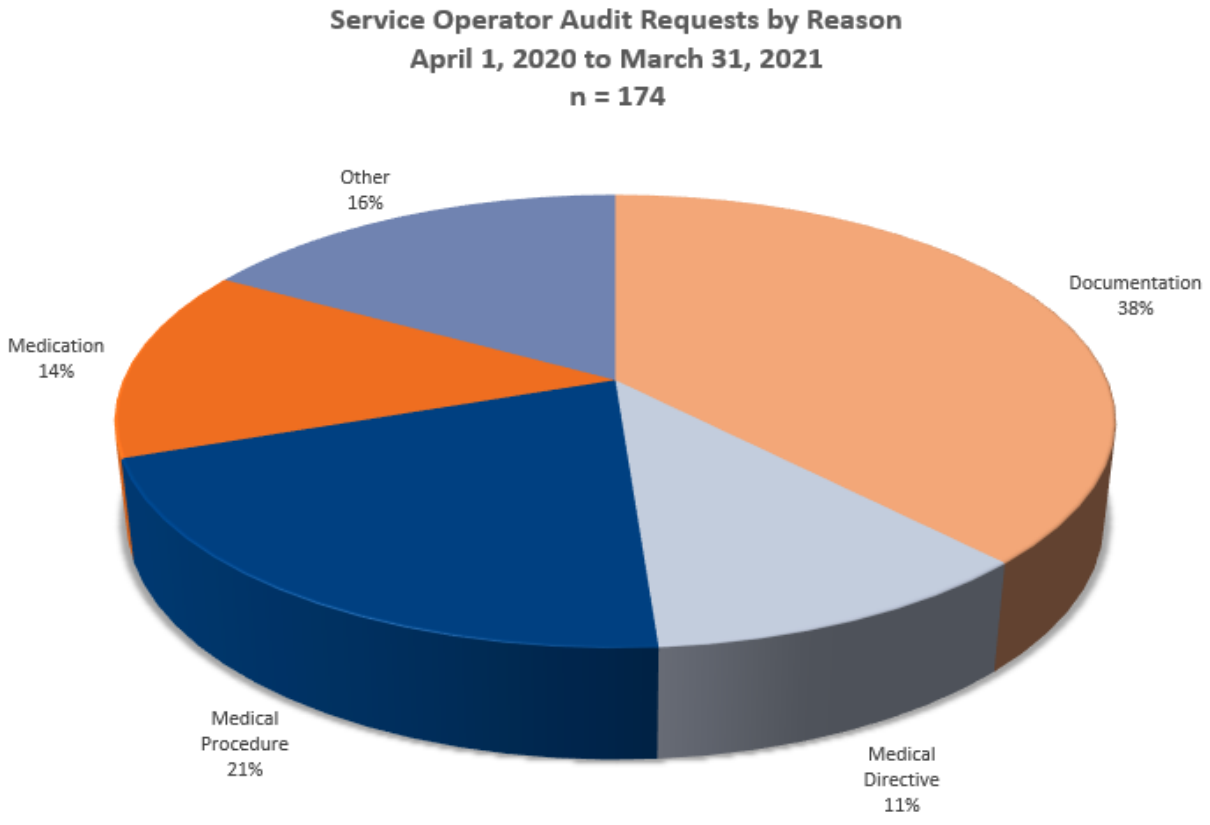
SECTION 4
SERVICE OPERATOR AUDIT REQUESTS

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

Service Operator Audit Requests by Reason April 1, 2020 to March 31, 2021						
Service	**Documentation**	**Medical Directive**	**Medical Procedure**	**Medication**	**Other**	**Grand Total**
Cochrane District Paramedic Service	**7**	**2**	**3**	**7**	**1**	**20**
Nipissing District Paramedic Service	2		3	4		**9**
Parry Sound District EMS	1	2	1	2	2	**8**
District of Sault Ste. Marie Paramedic Service	2	4	1	1		**8**
Sudbury Paramedic Service	54	11	28	10	26	**129**
Grand Total	**66**	**19**	**36**	**24**	**29**	**174**



Quarterly Service Operator Audit Requests	Total Requests
April 1, 2020 to June 30, 2020 (Q1)	53
July 1, 2020 to September 30, 2020 (Q2)	33
October 1, 2020 to December 31, 2020 (Q3)	23
January 1, 2021 to March 31, 2021 (Q4)	65
TOTAL	**174**

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SECTION 5

PARAMEDIC SELF-REPORTS

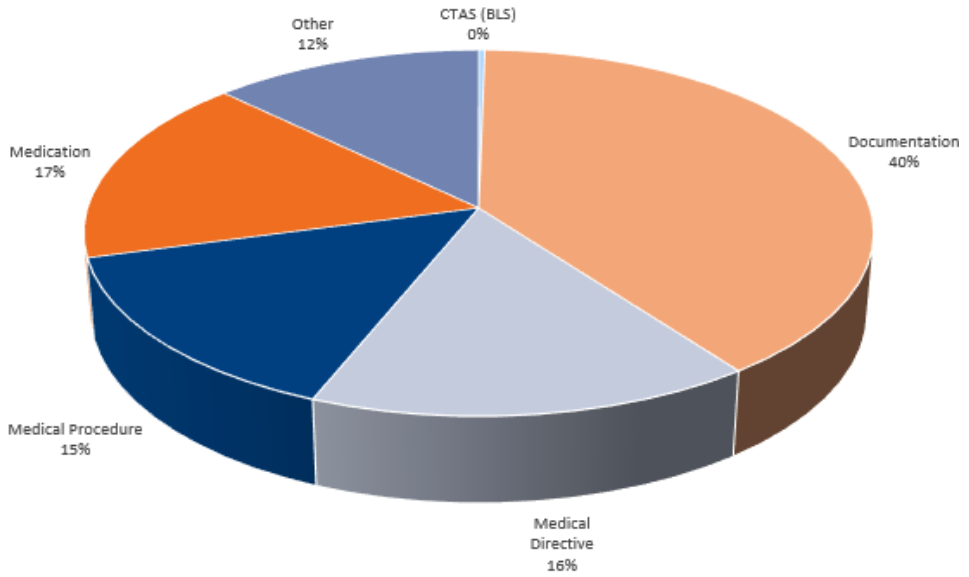
This section is based on paramedic self-reports received during this time period and are related to identified omissions and/or commissions in patient care or documentation.

This is recognized as a very important component of paramedic practice. Further expansion and development of this program continues as we strive to improve patient safety and outcomes.

Paramedic Self Reports by Reason
Self Reported April 1, 2020 to March 31, 2021

Service	CTAS (BLS)	Documentation	Medical Directive	Medical Procedure	Medication	Other	Grand Total
Algoma District Paramedic Service	1	12	1	2	1	5	22
Cochrane District Paramedic Service		10	11	4	7		32
Manitoulin Sudbury DSB Paramedic Service		11	5	4	2	6	28
Nipissing District Paramedic Service		28	5	10	6	8	57
Parry Sound District EMS		9	4	3	7	5	28
District of Sault Ste. Marie Paramedic Service		13	6	2	9	5	35
Greater Sudbury Paramedic Service		41	14	20	18	14	107
Timiskaming District EMS		1	1	1	1	1	5
WAHA Paramedic Service		13	9	5	7		34
Grand Total	**1**	**138**	**56**	**51**	**58**	**44**	**348**

Paramedic Self Reports by Reason
Self Reported April 1, 2020 to March 31, 2021
n=348



Quarterly Paramedic Self-Reports	Total Self-Reports
April 1, 2020 to June 30, 2020 (Q1)	60
July 1, 2020 to September 30, 2020 (Q2)	87
October 1, 2020 to December 31, 2020 (Q3)	94
January 1, 2021 to March 31, 2021 (Q4)	107
TOTAL	**348**

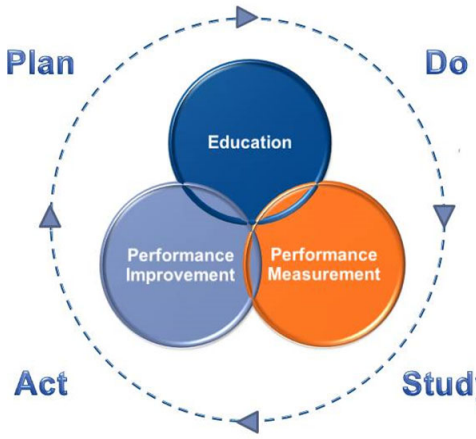
APPENDIX B: EVENT ANALYSIS 2020-2021

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 whas 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. **During the 2020-21 Fiscal Year, 47 Event Analysis were completed.**

Base Hospital Outcome Filter Type	Count of Call Number
Paramedic Interview Completed/Remediated	**15**
Allergic Reaction	1
Analgesia	3
Cardiac Arrest	6
Cardiac Ischemia	2
Hypoglycemia	1
Nausea & Vomiting	1
Sedation	1
No Further Action Required	**6**
Analgesia	1
Sedation	5
Patch Issue Resolved	**5**
Cardiac Arrest	5
Feedback Received/Remediated	**5**
Cancelled Calls	1
Cardiac Arrest	3
SOB (Asthma, Croup & Needle Thoracostomy)	1
Equipment Issue Reviewed/Resolved	**4**
Cardiac Arrest	4
Remediation Plan Completed	**3**
Cardiac Arrest	2
Cardiac Ischemia	1
Paramedic Feedback Received/Remediated	**3**
Cardiac Arrest	2
Tachydysrhythmia	1
Paramedic Acted Appropriately	**3**
Analgesia	1
Cardiac Arrest	1
Cardiac Ischemia	1
BHP Patch Issue Resolved	**2**
Cardiac Arrest	2
Multi-Incident Analysis	**1**
Sedation	1
Grand Total	**47**

APPENDIX C: QUALITY PROGRAMMING OVERVIEW 2020

QUALITY PROGRAMMING OVERVIEW 2020



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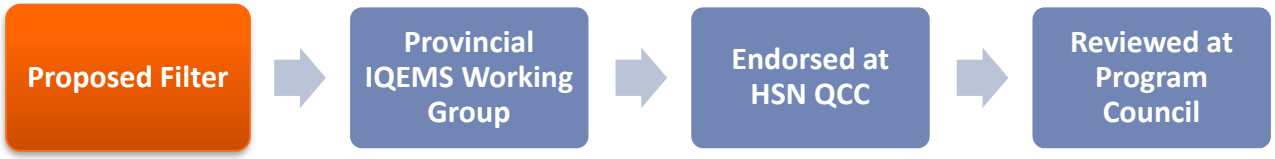
QUALITY PROGRAMMING OVERVIEW 2020

INTRODUCTION

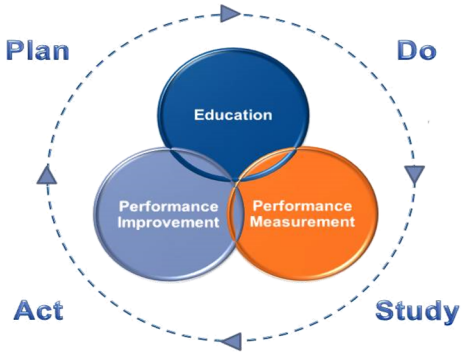
Quality is a multifaceted responsibility that requires the collective effort of varied focus areas. Within the Health Sciences North Centre for Prehospital Care (HSN CPC), this is attained through an integrated system of clinical measurements, quality improvement and continuing medical education within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

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



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

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



QUALITY PROGRAMMING OVERVIEW 2020

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

A. PERFORMANCE MEASUREMENT

CLINICAL AUDIT SYSTEM

The Clinical Audit process ensures:

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

STANDARD REPORTS

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

A. MONTHLY REPORTS

Audit Variance Detail Report by Paramedic

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

B. QUARTERLY REPORTS

HSN CPC Audit Activities

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

Audit Variance Summary

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

QUALITY PROGRAMMING OVERVIEW 2020

Audit Variance Detail

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

Online Medical Quality Control Interactions

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

Service Operator Audit Requests

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

Paramedic Self Reports

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

BLS Issues Reported to Service Operators

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

C. BIANNUAL REPORTS

Paramedic Skills Inventory

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

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

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

QUALITY PROGRAMMING OVERVIEW 2020

CLINICAL PERFORMANCE MEASURES

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

Current indicators include: (Currently under review)

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

REPORTING PERIOD	DISTRIBUTION TIMELINE
Service Operator*	
TBD	

QUALITY PROGRAMMING OVERVIEW 2020

B. CONTINOUS QUALITY IMPROVEMENT

QUALITY IMPROVEMENT ACTIVITIES

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

1. Clinical Audit Reports

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

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

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

QUALITY PROGRAMMING OVERVIEW 2020

2. Focused Reports

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

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

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

3. Event Analysis

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

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

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