

Ministry of Health and
Long-Term Care

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October 3, 2016

MEMORANDUM TO: Paramedic Service Chiefs, First Nations and Ornge

FROM: Tarmo Uukkivi
Director
Emergency Health Services Branch

RE: **STEMI Hospital Bypass Agreements**

As you know the *STEMI Hospital Bypass Protocol* was released earlier this year as an amended subsection to the *Chest Pain – Non-Traumatic Standard* found in *Section 2* of the current *Basic Life Support Patient Care Standards* (BLS PCS) and comes into force February 1, 2017. The protocol assists paramedics in identifying patients who meet the indications of a STEMI and transporting that patient to a specialized centre to receive treatment which helps to increase their chances of survival.

Recognizing that established Regional STEMI programs already exist in many communities, the provincial protocol was developed to complement those agreements already in place and sets a standard for further development of such programs in other communities.

The role of Ambulance Services is critical to ensure that STEMI patients are receiving the appropriate care in the field and are being transported to the right centre within the prescribed timeframe for treatment. A more accurate identification of acute myocardial infarctions (such as a STEMI) can be done through assessment and interpretation of a diagnostic 12-lead ECG. When 12-lead acquisition and interpretation became mandatory for all paramedics on February 1, 2016, it meant that paramedics could make a more accurate identification of acute myocardial infarctions (such as a STEMI) in the field. It allows paramedics to identify STEMIs and other possible cardiac emergencies in the prehospital environment.

As more patients are identified as positive for STEMI, there will be more hospital bypasses for PCI centres under the protocol. In preparation of the February 1, 2017 in force date of the *STEMI Hospital Bypass Protocol*, Ambulance Services are encouraged to work with their local PCI-capable centres to develop agreements and so PCI centres

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are prepared to receive patients from more communities utilizing the bypass protocol within their catchment area. Agreements will also need to include repatriation plans for when a patient may need to be transported from a PCI centre to a community hospital for extended care.

Ambulance Services should also seek the assistance of their MOHLTC Field Managers to assist with the development of these agreements. Field Management will be communicating and updating Senior Field Management at the Branch to facilitate and ensure consistent practices are being established across the province in regards to managing STEMI patients.

As bypass agreements are developed and patients are transported to a PCI centre (which may not be the closest facility), Ambulance Services should be liaising with their local CACC/ACS so that dispatch procedures can be updated as required and they are made aware of any new PCI-centres that become active.

After the release of the *STEMI Hospital Bypass Protocol*, the Branch received some questions regarding its content and implementation. We have included some of the questions and answers as an appendix to this memo for your reference (please see Appendix A).

Having all components of our health care system working together in this coordinated manner will help to reduce STEMI patient mortality and provide the optimal standard of care in Ontario for this patient population.

If you have any questions regarding the *STEMI Hospital Bypass Protocol*, please contact Denise D'Souza, Paramedic Standards and Certification Coordinator, at (416) 327-1580 or denise.dsouza@ontario.ca.



Tarmo Uukkivi

- c: Senior Managers/Managers, EHSB
- N. Roberts, President, OAPC
- Dr. M. Lewell, Chair, OBHG-MAC
- S. Kriening, Chair, OBHG-Executive
- Regional Training Coordinators
- Paramedic Program Coordinators

Enclosure

Appendix A

Questions and Answers

- 1. How is the *STEMI Hospital Bypass Protocol* enforced? Is it MOHLTC through the training bulletin or the local PCI center?**

The *Basic Life Support Patient Care Standards* (BLS PCS) establishes paramedic practice in the province. The *STEMI Hospital Bypass Protocol* is an amendment to the BLS PCS and has been incorporated in the latest version of the BLS PCS, which comes into force February 1, 2017. In accordance with clause 11(a) of O. Reg. 257/00 every Ambulance Service and every paramedic shall ensure that patient care is provided in accordance with the BLS PCS.

- 2. Is it the Ambulance Services' responsibility to establish agreements with the local PCI or have they been notified of this new Protocol by other communication?**

Regional bypass programs for STEMI are established between Ambulance Services and PCI centers. In regions in which STEMI bypass programs have already been established with an interventional cardiology program, the paramedic, in conjunction with the direction from their service, would be versed in the details of the program in regards to; where STEMI patients are to be transported; if the interventional cardiologist is contacted first, etc.

- 3. When the amendment to the BLS PCS, which includes the *STEMI Bypass Protocol*, comes into force February 1, 2017, will all primary care paramedics and advanced care paramedics in Ontario be required to acquire and interpret a 12-lead ECG?**

The expectation is that all paramedics, both primary care paramedics (PCPs) and advanced care paramedics (ACPs) are able to acquire and interpret a 12-lead ECG as of February 1, 2016. 12-lead ECG acquisition and interpretation was considered mandatory as of February 1, 2016 when the Advanced Life Support Patient Care Standards (ALS PCS), version 3.3 and Provincial Equipment Standards, version 2.3 came into force. In order to meet the indications listed in the STEMI protocol, paramedics need to be able to acquire and interpret the cardiac monitor report, and through their interpretation, determine if they agree with the findings.

4. Should the paramedic be completing the 12-lead interpretation themselves or should they rely on the cardiac monitor interpretation?

According to paragraph 1.d.(iii) of the *STEMI Hospital Bypass Protocol*, one of the indications is that the paramedic must agree with the 12-lead ECG computer interpretation. Accordingly, if the computer interpretation is that the patient has a STEMI, but the paramedic disagrees, the indication in the protocol is not met and the protocol is not engaged. Alternatively, if the computer interpretation is that the patient does not have a STEMI, but the paramedic recognizes they do (as per paragraphs 1.d.(i) or 1.d.(ii)), the indication has been met and protocol is engaged. Therefore in order to follow the protocol, the paramedic cannot rely on the cardiac monitor interpretation alone.

5. What is 12-lead interpretation?

12-lead interpretation is an advanced medical procedure and is listed in the Medical Directives within the ALS PCS.

6. Who is responsible for ensuring paramedic competency in 12-lead acquisition and interpretation?

Ambulance Services are responsible for ensuring quality assurance for the care provided by paramedics under the BLS PCS which outlines patient care and management.

The Regional Base Hospital Program (RBHP) is responsible for the training and oversight of controlled acts and advanced medical procedures. Paramedics must be certified by a Regional Base Hospital Medical Director to perform controlled acts and other advanced medical procedures (such as 12-lead ECG acquisition and interpretation) in order to practice. The ALS PCS outlines the controlled acts or Medical Directives and advanced medical procedures which paramedics follow to administer treatment.

7. Who is responsible for monitoring compliance with the *STEMI Hospital Bypass Protocol*?

The operator of an Ambulance Service is responsible for ensuring that patient care is provided in accordance with the patient care standards and procedures set out in the BLS PCS as per clause 11(a) of O. Reg. 257/00 under the *Ambulance Act*. The Inspection and Certification section of EHSB is responsible for ensuring Ambulance Services are compliant with the BLS PCS.

8. Can paramedics be deactivated if they do not demonstrate competence in 12-lead ECG acquisition and interpretation?

The current Provincial Maintenance of Certification Policy states that if a paramedic cannot demonstrate competency in the performance of all controlled acts and advanced medical procedures, at their level, the Medical Director may deactivate the paramedic. If a paramedic is deactivated they would not be authorized to perform controlled acts or patient care until the conditions for reactivation are met.

9. Is it possible to implement the protocol prior to the in force date?

Yes. The purpose of a provincial protocol is for all areas of the province to be providing the same level of care to all STEMI patients. Those areas which already have an established programs should ensure they meet the requirements of the protocol prior to the in force date. For those areas which do not have a program, they should begin to develop those programs (i.e. through consultations between Ambulance Services and PCI-centres) and put them into practice, when available, by the in force date.