

STEMI COVID-19 Provincial Planning Meeting Summary

This meeting included nearly 60 participants, with representation from the full spectrum of STEMI care in Ontario. The following is a summary of the key discussion points:

- A lot of work has been done through the years to build up a robust STEMI care system in Ontario. There is overall commitment from all to preserve the well-built STEMI system for as long and as safely as possible, in the face of COVID-19.
- **Continued PPCI vs. fallback to use of lytics:**
 - General agreement that the use of lytics comes with risks to patients, potential increased use of health system resources (e.g. complications and longer hospital stays)
 - Varying opinions on when/if/to what extent to use lytic therapy (e.g. last resort when PPE not available; to mitigate expected delays in interhospital paramedic transfer – i.e. increases in DIDO time)
 - Lytic therapy may need to come forward as a contingency plan when/if no longer able to keep cath lab open; facilities that are not prepared to implement lytic therapy should prepare
- **Opportunity for improved communication between pre-hospital and hospital settings**
 - Improved communication is needed from several perspectives (e.g. is the cath lab open/closed, COVID status, efforts to reducing false positive STEMIs).
 - In the presence of COVID-19, there is an opportunity to reduce the rate of false positive STEMIs. This can be accomplished through increased communication between pre-hospital and hospital services to confirm definitive STEMI cases.
 - Not all paramedic services are currently communicating with the interventional cardiologist before initiating EMS bypass – this may be an option to explore to increase specificity of STEMI transfers directly to cardiac centre.
 - Improving communication may mean ability of interventional cardiologist to see ECG reading (currently one or two systems are using ECG transmission from paramedic to interventional cardiologists: is there a way to share this method for other systems to adopt rapidly? It is strongly advised that ECG transmission not be performed through other open means such as cellphone)
 - Are there other ways to communicate to help determine a definitive STEMI status?

- **Paramedic Services Considerations**
 - Transmitting ECG readings via cell phones is not endorsed as an acceptable practice (balancing PHIPA concerns with current COVID-19 situation) .
 - Re-enforce indication for STEMI Bypass
 - Variations in how ECG's are currently transmitted. Recognize that this is not something that can be put into place quickly.
 - EHS to be included in all discussions and decision-making concerning paramedic services
 - Consideration regarding resource (PPE, staff) related to repatriate/transfer patients. Alternate strategies may need to be explored.

- **Emergency Department as Gatekeeper to Cath Lab**
 - Varied opinions from the group of when it is/is not appropriate and necessary for a COVID + or COVID-suspected patient who is also STEMI + to stop in the ED before proceeding to the cath lab.
 - Stopping in ED may give Cath Lab time to prepare to receive the COVID+ patient
 - Terminal clean of the rooms following COVID+ patient use takes time and resources.
 - Suggestions made:
 - COVID negative (based on current screening) and obvious STEMI + to send straight to the cath lab (this option may become irrelevant soon if unable to truly deem anyone COVID “negative”)
 - COVID positive or unknown (based on current screening) and unclear STEMI status – send to ED to confirm STEMI status
 - COVID positive or unknown (based on current screening) and obvious STEMI + to send to the cath lab (consider stopping in ED, if Cath Lab needs time to prep)
 - Concern that bringing all STEMIs to cath lab increases risk to cath labs' ability to continue operating

- **COVID-19 screening**
 - The screening tool as it stands - 4 questions, will likely become less relevant as community spread becomes more prevalent

- **Use of droplet precautions PPE and airborne precautions PPE (N95 masks)**
 - Guidelines around PPE use are in constant flux

- Recommendations around appropriate use of PPE (what type, and when) is out of scope for this group. Hospitals and Paramedic Services to follow the guidance offered locally.
- with PPE use for droplet precautions, and use of N95 only in those cases deemed high risk for aerosolization

Next Steps:

- CorHealth, with Dr. Madhu Natarajan, Dr. Steven Miner and members of the Ontario STEMI Network including Dr. Warren Cantor, Dr. Michelle Welsford, Dr. Michel Le May, Dr. Sheldon Cheskes to draft a provincial guidance document
- Circulation of the final version of the draft document to this group (recognizing the situation is dynamic)
- Share update of this meeting with the CorHealth Cardiac COVID-19 Forum on Thursday, March 26, 2020.