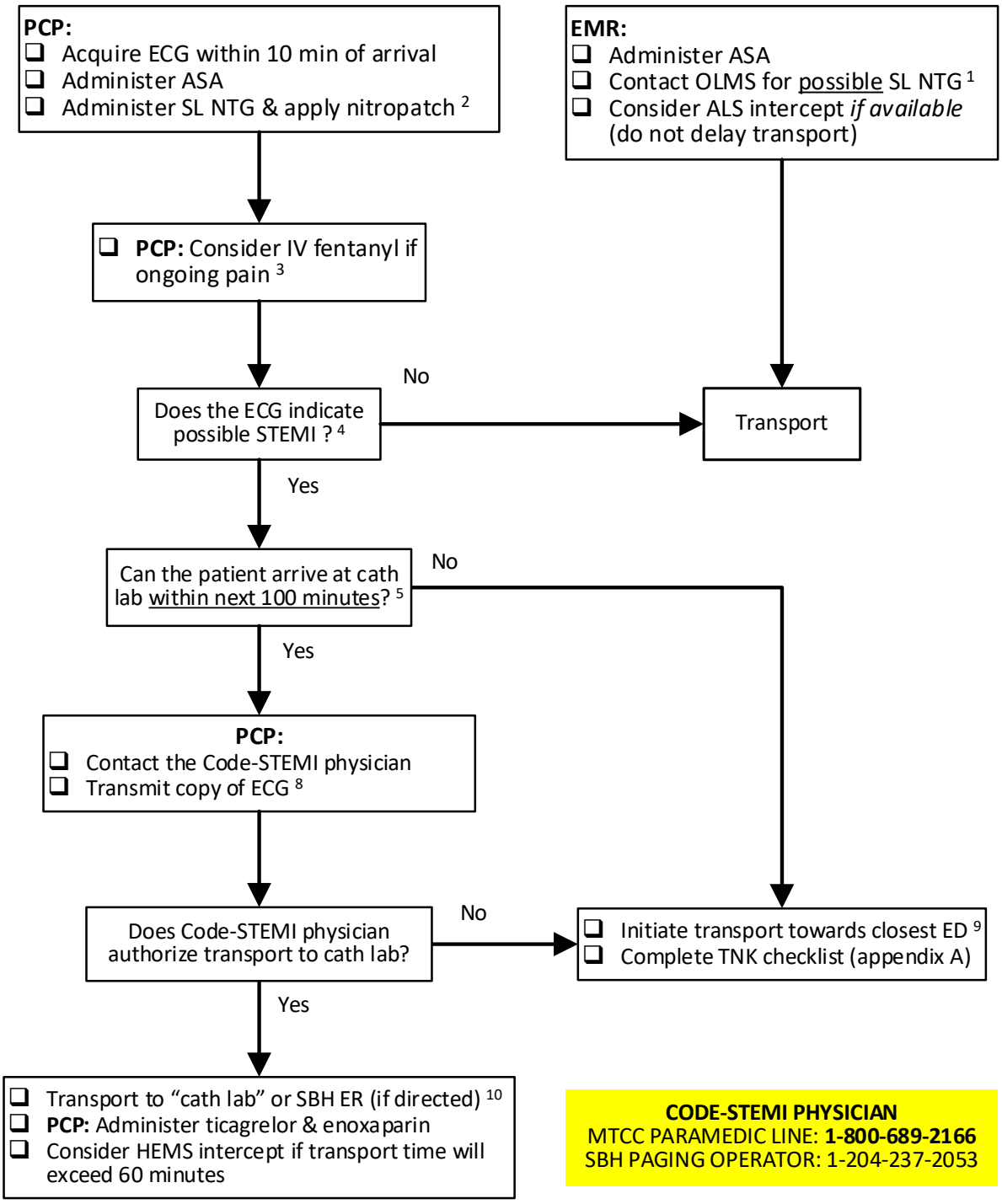
Shared health Soins communs Manitoba	E04A - ACUTE CORONAY SYNDROME & STEMI	
	Adult	MEDICAL
ALL - Paramedics with all work scopes will follow this protocol except where indicated by **EMR** (basic only) or **PCP** (primary & intermediate).		
Version date: 2022-11-02	Effective Date: 2022-11-29 (0700 hrs)	



INDICATIONS

- Chest discomfort, pain, pressure, or heaviness; and / or other symptoms consistent with or suspicious for an acute coronary syndrome (ACS)
- Indications for Code-STEMI bypass:
  - Known or suspected ST elevation myocardial infarction (STEMI) [4]
  - The patient can arrive at St. Boniface Hospital (SBH) cardiac catheterization lab (cath lab) within 100 minutes from first contact with EMS [5]
  - No contraindications to bypassing a closer emergency department (ED)

CONTRAINDICATIONS TO CODE-STEMI BYPASS

- Decreased level of consciousness
- Suspected respiratory failure, shock, or sepsis
- Known or suspected current internal bleeding (excluding menstruation)
- Known or suspected aortic dissection
- Known or suspected acute stroke
- Recent significant head trauma
- Advanced health care directive indicating “comfort care” only (ACP-C)

NOTES

1. Paramedics with the basic work scope may *assist* the patient with taking their own previously prescribed sublingual (SL) nitroglycerin.

   However, consult with the on-line medical support (OLMS) physician before administering sublingual (SL) nitroglycerin to a patient who is not currently prescribed SL nitroglycerin.

2. Patients with right ventricular infarction (RVI) may be exquisitely dependent on right ventricular filling to maintain adequate cardiac output. Use nitrates with caution. If hypotension develops, discontinue nitrates, and administer 250 ml boluses of crystalloid solution (repeat as required).

3. If ischemic chest discomfort is not relieved after three sprays of sublingual (SL) nitroglycerin, consider fentanyl or morphine for further pain management. Note that opiates may also cause hypotension with RVI.

4. Paramedics will consider a ST-elevation myocardial infarction (STEMI) if:

   a. The monitor-defibrillator automated interpretation indicates a STEMI or suspected STEMI. For the Zoll X-series, the prompt **STEMI** will appear.

   b. The ECG shows any of the following :
      i. ST-segment elevation (STE) at the J-point of at least 1 mm in any two or more contiguous leads
      ii. STE at the J-point in leads V2 or V3 of at least 2 mm in males over age 40, at least 2.5 mm in males under age 40, and at least 1.5 mm in all adult females, or
      iii. New or presumed new left bundle branch block (LBBB)

5. Paramedics will contact the Code-STEMI physician <u>only</u> if they reasonably judge that the 100-minute window to the cath lab can be met by direct ground transport or, where possible, by air intercept. Paramedics will transport at a safe vehicular speed, and any decision about the road safety of transport remains with the vehicle operator.

6. Paramedics will contact the Medical Transportation Coordination Center (MTCC) paramedic line for the name of the "Code-STEMI physician" and contact that physician directly with the number provided.

   If unable to contact the Code-STEMI physician, paramedics will contact the SBH paging operator and request to speak to the *"on-call interventional cardiologist for a code-25 outside call".*

   If unable to reach either of these individuals, paramedics will contact the MTCC dispatcher and ask to speak to the on-line medical support (OLMS) physician.

7. Communication with the physicians should include the patient's name, age, and gender; current symptoms; time of symptom onset; relevant medical history, medications, and allergies; current vital signs and relevant physical findings.

8. When transmitting an ECG by text or e-mail, the Personal Health Information Act (PHIA) requires you to obscure or cover the patient's identifying data.

9. Some patients beyond the 100-minute concentric may benefit from transport to an ED capable of providing emergent fibrinolytic therapy, followed by prompt transfer to the cath lab for subsequent percutaneous coronary intervention (PCI), so-called "drip & ship".

   Initiate transport towards the closest ED. DO NOT ADMINISTER TICAGRELOR OR ENOXAPARIN. If time allows, paramedics will perform the TNK checklist while en route (appendix A). Unless otherwise advised, paramedics will remain with the patient pending a decision about emergent secondary interfacility transfer.

10. If the patient is stable on arrival at SBH, paramedics will transport directly to the cath lab, unless otherwise advised. If the patient is unstable on arrival at SBH, paramedics will go first to the SBH ED.

    If the patient deteriorates en route to Winnipeg, paramedics will redirect to the ED that has the shortest estimated transport time from the patient's current location. Always ensure appropriate pre-arrival notification of ED staff.

LINKS
M03.1 - MORPHINE M03.2 - FENTANYL M21 - NITROGLYCERIN M37.1 - ASA M37.2 - TICAGRELOR M43 - ENOXAPARIN

APPROVED BY	
	
Medical Director - Provincial EMS/PT	Associate Medical Director - Provincial EMS/PT

VERSION CHANGES (refer to X05 for change tracking)
• Paramedics will no longer contact OLMS if outside of 100 minute concentric

APPENDIX A: TNK CHECKLIST	NO	YES
Promptly inform the OLMS or receiving physician if the answer to any is “yes”.		
Has any BP measurement been greater than 180/110?		
Has there been traumatic or prolonged CPR?		
Is there active internal bleeding (excluding menstrual bleeding)?		
Has the patient had an ischemic stroke within the last 3 months		
Has the patient ever had an intracranial bleed?		
Has the patient had significant head or facial trauma within the last 3 months?		
Has the patient had intracranial or intraspinal surgery or trauma within the last 2 months?		
Does the patient have an intracranial tumor, arteriovenous malformation, or cerebral aneurysm?		
Has the patient had recent major surgery?		
Is the patient pregnant or within one week post-partum?		
Is there any suspicion of an aortic dissection?		
Is there any suspicion of acute pericarditis?		
Does the patient have a true allergy to TNK or tenectaplase?		