



Ischemic burden time is a risk for morbidity and mortality, EMS can help decrease first medical contact to intervention time/reflow by efficient scripting/training of safely minimizing scene time

Pertinent Assessment Findings

A complete medication list should be obtained from each patient. It is especially important for the treating physician and healthcare providers to be informed if the patient is taking beta-blockers, calcium channel blockers, clonidine, digoxin, blood thinners (anticoagulants), and medications for the treatment of erectile dysfunction or pulmonary hypertension

Quality Improvement

Associated NEMSIS Protocol(s) (eProtocol.01) (for additional information, go to www.nemsis.org)

- 9914117 – Medical - Cardiac Chest Pain
- 9914143 – Medical - ST-Elevation Myocardial Infarction (STEMI)

Key Documentation Elements

- The time of symptom onset
- The time of patient contact by EMS to the time of 12-lead EKG acquisition
- The time aspirin (ASA) administered, or reason why not given
- The time of STEMI notification

Performance Measures

- The time of patient contact by the first medical contact to the time of 12-lead EKG acquisition within 10 minutes
- The time from first diagnostic 12-lead EKG to STEMI notification
- Confirmation patient received ASA (taken prior to EMS arrival, advised by dispatch, given by EMS, or substantiated by other pertinent negatives)
- The time of a STEMI patient's ultimate arrival to a receiving hospital
- *The time of EMS notification to the time of activation of a cardiac catheterization laboratory
- *The time of arrival at the percutaneous coronary intervention (PCI) center to the time of cardiac catheterization (door-to-balloon time) or if patient not transported directly to PCI center, the time of arrival at receiving hospital to thrombolytics
- *The time of prehospital 12-lead EKG acquisition to the time of device deployment (formerly EKG-to-balloon time)
- *NOTE: These measures can only be evaluated if EMS documentation can be combined with information provided by the receiving hospital

References

1. Bosson KN, Kaji AH, Niemann JT, et al. The utility of prehospital EKG transmission in a large EMS system. *Prehosp Emerg Care*. 2015;19(4):496–503
2. De Champlain F, Boothroyd LJ, Vadeboncoeur A, et al. Computerized interpretation of the prehospital electrocardiogram: predictive value for ST-segment elevation myocardial infarction and impact on on-scene time. *CJEM*. 2014;16(2):94–105
3. Meine TJ, Roe MT, Chen AY, et al. Association of intravenous morphine use and outcomes in acute coronary syndromes: results from the CRUSADE quality improvement initiative. *Am Heart J*. 2005;149(6):1043–9