Use of High-Sensitivity Cardiac Troponin in the Emergency Department

The American College of Emergency Physicians (ACEP) endorses the following principles regarding the use of high sensitivity cardiac troponin (hs-cTn) in the evaluation and management of patients presenting to the emergency department with symptoms concerning for acute coronary syndrome (ACS):

- The use of hs-cTn allows for safe earlier disposition of patients presenting with symptoms concerning for ACS.
- A detectable hs-cTn level does not mean a patient is necessarily having an acute myocardial infarction (MI), as there are multiple other conditions that can result in a detectable hs-cTn level.
- In cases of low but detectable hs-cTn levels, serial hs-cTn testing can help exclude MI.
- Each hs-cTn assay has different analytic characteristics (Link to PREP) and their values cannot be compared interchangeably.
- A patient’s history and hs-cTn result(s), in conjunction with a diagnostic algorithm (Link to PREP), are helpful to inform clinical decision making for patients who present with symptoms concerning for ACS.
- There is no one universally accepted clinical algorithm. Institutions should develop an algorithm tailored to their unique patient population (prevalence of ACS), practice environment, clinician risk tolerance, and the type of hs-cTn assay available.