UTMB Guidelines for Documentation of Myocardial Infarction Types 1 and 2 in the Setting of Elevated Troponin

Documentation of the specific Type of MI is clinically important and essential for correct coding, billing, reimbursement, and reporting to the national health care database.

The Third Universal Definition of Myocardial Infarction has defined six types of MI. The two most commonly encountered are Type 1 (STEMI and NSTEMI) primarily due to CAD and Type 2 primarily due to a condition other than CAD. Most documentation queries are for the latter. Below are some common clinical scenarios and guidance for appropriate documentation.

Example 1: A patient is admitted with acute GI bleed, severe anemia, hypotension and chest pain. Troponins 0.035, 0.050, 0.085, 0.032 (all greater than 99th percentile, with a rise and fall trend). Treatment is control of bleeding, fluid resuscitation, and blood transfusion. The cardiologist diagnosed “demand ischemia with elevated troponins.” The circumstances in this case clearly confirm Type 2 MI with treatment directed at the underlying causes and not a coronary thrombosis.

The recommended documentation would be “Type 2 MI due to acute blood loss anemia 2/2 GI bleed.”

- Troponinemia is a term that denotes troponin protein was detected during blood chemistry evaluation, but does not infer acute ischemia. The term should not be documented without further specification of the significance of degree of elevation and the underlying etiology.

Example 2: A patient is admitted following a motor vehicle accident where she sustained blunt force trauma to the chest. The patient complains of generalized body pain. No underlying cardiac history. The patient remains hemodynamically stable. EKG has nonspecific findings. TTE shows increased myocardial echogenicity and focal systolic hypokinesis. Troponin levels are 0.142, 0.034, 0.026. The provider documents “cardiac contusion” and “troponinemia”. The circumstances in this case point to an elevation in troponin due to trauma, and are not indicative of demand ischemia or Type 2 MI.

The recommended documentation would be “troponin elevation due to cardiac contusion, not representative of Type 2 MI.”

It is essential to update the medical record as new clinical data is obtained. When you have a first elevated troponin, document a probable diagnosis.

- “Elevated troponin, suspect Type 2 MI”
- If there, is no significant rise and/or fall subsequently, explicitly document that you have ruled out Type 2 MI (to save yourself a potential query).

For any questions, please reach out to the clinical documentation specialist assigned to your service. Thank you for helping us improve our clinical documentation.

Regards,

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