**Appendix: The Society of Thoracic Surgeons (STS) database definitions.**

**Perioperative Myocardial Infarction (MI)** (not collected after 7/1/2014)

*Definition:*

Indicate the presence of a perioperative MI (0-24 hours postop) as documented by the following criteria: The CK-MB (or CK if MB not available) must be ≥ to 5 times the upper limit of normal, with or without new Q waves present in two or more contiguous ECG leads. No symptoms required.

Indicate the presence of a perioperative MI (>24 hours postop) as documented by at least one of the following criteria: Evolutionary ST-segment elevations, Development of new Q-waves in two or more contiguous ECG leads, New or presumably new LBBB (left bundle branch block) pattern on the ECG, The CK-MB (or CK if MB not available) must be ≥ to 3 times the upper limit of normal.

If CK-MB values were elevated prior to surgery, or there was clinical documentation of ischemic event occurring prior to entry into the operating room and CK-MB values continued to rise in the immediate postoperative period, **do not** code as a postop event as this would be an evolving preoperative MI. Apical Ballooning-Takotsubo Syndrome will appear as an MI on ECG, troponin may rise and EF will decrease significantly but without evidence of obstructive coronary artery disease (do not coded as perioperative MI)

**Prolonged Ventilation**

*Definition:* Indicate whether the patient had prolonged post-operative pulmonary ventilation > 24.0 hours. The hours of postoperative ventilation time include OR exit until extubation, plus any additional hours following re-intubation. Included (but not limited to) causes such as ARDS, pulmonary edema, and/or any patient requiring mechanical ventilation > 24 hours postoperatively.

**Renal Failure**

*Definition:* Indicate whether the patient had acute renal failure or worsening renal function resulting in ONE OR BOTH of the following:

1. Increase in serum creatinine level 3.0 times greater than baseline, or serum creatinine level ≥4 mg/dl with acute rise at least 0.5 mg/dl

2. A new requirement for dialysis postoperatively.

**Renal Failure Requiring Dialysis**

*Definition:* Indicate whether the patient had a new requirement for dialysis postoperatively, which may include hemodialysis, peritoneal dialysis, or any form of ultrafiltration. This includes a one-time need for dialysis as well as implementation of longer term therapy. If the patient was on a preoperative peritoneal dialysis and moved to hemodialysis postoperatively, this does not constitute a worsening of the condition and should not be coded as an event. Continuous veno-venous hemofiltration (CVVH, CVVHD) and continuous renal replacement therapy (CRRT) should be coded as yes.

**Reoperation for Bleeding**

*Definition:* Indicate whether the patient was re-explored for mediastinal bleeding with or without tamponade either in the ICU or returned to the operating room. Include patients that return to an OR suite or equivalent OR environment (i.e. ICU setting) as identified by your institution, that require surgical re-intervention to investigate/correct bleeding/tamponade. Include only those bleeding/tamponade interventions that pertain to the mediastinum or thoracic cavity. Please note that all other reoperation fields do require a return to an OR suite to capture as a complication. Do not capture reopening of the chest or situations of excessive bleeding that occur prior to the patient leaving the operating room at the time of the primary procedure. Tamponade is a situation which occurs when there is compression or restriction placed on the heart within the chest that creates hemodynamic instability or a hypo-perfused state. Do not include non-operatively treated excessive bleeding/tamponade events.

**Stroke (any)**

*Definition:* Indicate whether the patient has one of the following:

1. A postoperative stroke (i.e., any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that did not resolve within 24 hours. Central events are caused by embolic or hemorrhagic processes. Neurological deficits such as confusion, delirium and/or encephalopathy (anoxic or metabolic) are not to be coded in this field.
2. A postoperative Transient Ischemic Attack (TIA), i.e. loss of neurological function that was abrupt in onset but with complete return of function within 24 hours. Symptoms may include, but are not limited to visual, speech, memory or physical deficits. Includes amaurosis fugax.