

**Hypothesis:****Outcomes of ST elevation MI (STEMI) in patients with and without Infective endocarditis****NIS Database 2013-2014 using ICD9 codes****Primary Variables:****STEMI**

410.X1 [except 410.71 \(which is NSTEMI\)](#)

- 410.00-410.02 410.0 Acute myocardial infarction; of anterolateral wall
- 410.10-410.12 410.1 Acute myocardial infarction; of other anterior wall
- 410.20-410.22 410.2 Acute myocardial infarction; of **inferolateral** wall
- 410.30-410.32 410.3 Acute myocardial infarction; of **inferoposterior** wall
- 410.40-410.42 410.4 Acute myocardial infarction; of other inferior wall
- 410.50-410.52 410.5 Acute myocardial infarction; of **other lateral** wall
- 410.60-410.62 410.6 Acute myocardial infarction; **true posterior wall** infarction
- 410.70-410.72 410.7 Acute myocardial infarction; subendocardial infarction
- 410.80-410.82 410.8 Acute myocardial infarction; of other specified sites

410.90-410.92 410.9 Unspecified site

## **Second Variable**

### **Infective Endocarditis**

4210, 4211, 4219, 03642, 09884, 11281, 1154

11504

11514

11594

4249

42491

42499

## **Complications/outcomes with ICD-9-CM Codes:**

### **1. In Hospital Mortality**

### **2. Hospital length of stay**

### **3. Cost of stay**

### **4. Stroke**

434.91 Cerebral artery occlusion, unspecified with cerebral infarction

430 Subarachnoid hemorrhage

431 Intracerebral hemorrhage

432.0 Nontraumatic extradural hemorrhage

432.1 Subdural hemorrhage

432.9 Unspecified intracranial hemorrhage

433.01 Cerebral thrombus with infarction

433.11 Occlusion of carotid artery, with cerebral infarction

433.21 Occlusion of vertebral artery with cerebral infarction

433.31 Occlusion of bilateral precerebral arteries with infarction

433.81 Occlusion of other precerebral arteries with cerebral infarction  
433.91 Occlusion of unspecified precerebral arteries with infarction  
434.00 Cerebral infarction without mention of cerebral infarction  
434.01 Cerebral infarction with cerebral infarction  
434.10 Cerebral embolism without mention of cerebral infarction  
434.11 Cerebral embolism with cerebral infarction  
436 Acute cerebral vascular disease, ill-defined  
997.02 Iatrogenic cerebral infarction

**5. Tricuspid valve surgery 35.14, 35.27, 35.28**

**6. Pulmonary valve surgery 35.13, 35.25, 35.26**

**7. Aortic valve replacement**

35.21 Replacement of aortic valve with tissue graft  
35.22 Other replacement of aortic valve

**8. Mitral valve replacement**

35.23 Replacement of mitral valve with tissue graft  
35.24 Other replacement of mitral valve

**9. Heart Block**

First Degree Heart Block 426.11  
Mobitz type II Second degree Heart Block 426.12  
Other 2<sup>nd</sup> degree Heart Block 426.13  
Third degree Heart Block 426.0

**10. Diagnostic Coronary Angiographies**

37.22, 37.23, 88.53, 88.54,  
88.55, 88.56, 88.57

**11. Percutaneous Coronary Intervention**

00.66, 36.01, 36.02, 36.05,  
36.06, 36.07

**12. CABG**

36.10 Aortocoronary bypass for heart revascularization, not otherwise specified  
36.11 Aortocoronary bypass of one coronary artery  
36.12 Aortocoronary bypass of two coronary arteries  
36.13 Aortocoronary bypass of three coronary arteries  
36.14 Aortocoronary bypass of four coronary arteries

- 36.15 Single internal mammary-coronary artery bypass
- 36.16 Double internal mammary-coronary artery bypass

**16. Cardiogenic shock**

785.51

**17. Cardiac arrest**

427.5

**18. Acute Kidney Injury**

- 584.5 Acute Kidney Injury with tubular necrosis
- 584.6 Acute Kidney Injury with lesion of renal cortical necrosis
- 584.6 Acute Kidney Injury with lesion of renal cortical necrosis
- 584.8 Acute Kidney Injury, other specified pathological lesion in kidney
- 584.9 Acute Kidney Injury, unspecified

**19. Acute Kidney Injury Requiring Dialysis**

- 39.95 Hemodialysis (in addition to acute kidney injury)
- 585.6 End stage renal disease – excluded

**20. Pacemaker Implantation**

- 00.50 Implantation of CRT-P, total system
- 00.51 Implantation of CRT-D, total system
- 00.52 Implantation of coronary sinus lead
- 00.53 Implantation of CRT-P generator only
- 00.54 Implantation of CRT-D generator only
- 37.70 Initial insertion of lead, NOS

- 37.71 Initial insertion of lead, ventricle
- 37.72 Initial insertion of lead, ventricle and atrium
- 37.73 Initial insertion of lead, atrium
- 37.80 Initial insertion of permanent pacemaker, NOS
- 37.81 Initial insertion of single-chamber pacemaker
- 37.82 Initial insertion of single-chamber pacemaker, rate responsive
- 37.83 Initial insertion of dual-chamber pacemaker
- 37.94 Implantation of ICD, total system
- 37.96 Implantation of ICD, generator only

## **21. Cardiac Tamponade**

- 423.3 Cardiac tamponade

## **22. Acquired Pneumonia**

- 486 Pneumonia, organism unspecified
- 481 Pneumococcal pneumonia
- 482.8 Pneumonia due to other specified bacteria
- 482.3 Pneumonia due to streptococcus

## **23. Acute Respiratory Failure**

- 518.81, 518.82, 518.84, 799.1, 786.09, 518.4, 518.5

## **24. Sepsis**

- 995.91 Sepsis
- 038 Septicemia.
- 995.92 Severe sepsis
- 996.64 Infection and inflammatory reaction due to indwelling urinary catheter
- 999.31 Other and unspecified infection due to central venous catheter
- 999.32 Bloodstream infection due to central venous catheter

## **25. Mechanical Ventilation**

- 96.72 Invasive mechanical ventilation

## **27. Hematologic**

- 287.3, 287.4, 287.5 Thrombocytopenia
- 286.9 Coagulopathy

## **28. Heart Failure**

- 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, and 428.x

