# National Surgical Quality Improvement Program Measures

## Colon Surgery

The Colon Surgery NSQIP measure looks at patients who came back within 30 days of having a piece of their colon removed due to polyps, diverticula, tumors, or other conditions. A patient who comes back within 30 days due to a heart attack, infection, blood clots, stroke, pneumonia, kidney failure or requires additional breathing support is counted. Additionally, if a patient dies within this time frame, they are also counted.

### Inclusion Criteria

Numerator

Heart Attack: 429.9, 428.0

Infection: 415.11

Blood clots: 453.40, 997.2, 997.1, 997.49, 998.9, 569.62

Stroke: 434.91, 997.02

Pneumonia: 486, 997.32, 997.39, 668.0

Denominator

Colon Surgery: 46.0, 46.01, 46.02, 46.03, 46.04, 46.13, 46.23, 46.20, 45.76, 45.03, 45.41, 45.42, 45.43, 45.71, 45.72, 45.73, 45.74, 45.75, 45.81, 45.82, 45.83

### Exclusion Criteria

None.

## Deep Vein Thrombosis or Pulmonary Embolism after Vascular or General Surgery

A deep vein thrombosis (DVT) or a pulmonary embolism (PE) can be a serious complication after surgery. Sometimes a deep vein thrombosis can lead to a pulmonary embolism which is a blood clot that has been dislodged but then gets stuck in the lungs causing a disruption in blood flow. The Deep Vein Thrombosis or Pulmonary Embolism NSQIP measure is calculated by determining the number of patients who had vascular or general surgery that came back with a DVT or PE.

### Inclusion Criteria

Numerator

Deep Vein Thrombosis: 453.40, 453.90, 453.41, 453.42, 997.1, 997.49, 997.39, 997.2, 999.9, 997.71

Pulmonary Embolism: 415.11

Blood clots: 453.40, 997.2, 997.1, 997.49, 998.9, 569.62

Denominator

Vascular Surgery: 39.0, 39.13, 39.21, 39.22, 39.25, 39.26, 39.52, 39.64, 39.72, 39.78

### Exclusion Criteria

None.

## Urinary tract infection following vascular or general surgery

A urinary tract infection (UTI) is an infection that affects any part of the urinary tract, consisting of the kidneys, ureters, bladder and urethra. The most common type of UTI is a bladder infection. This measure tracks patients who experienced urinary tract infection after general or vascular surgery.

### Inclusion Criteria

Numerator

ICD-9-CM codes 39.0, 599.0

### Exclusion Criteria

## Pneumonia following vascular or general surgery

Pneumonia is an infection in one or both lungs that causes them to fill up with fluid. Symptoms of pneumonia include coughing, fever, chills and trouble breathing. Sometimes the cause of pneumonia is unknown or it may occur as a complication of another procedure. This measure tracks patients who experienced pneumonia after general or vascular surgery.

### Inclusion Criteria

Numerator

ICD-9-CM codes 480.0,480.1,480.2,480.3,480.8,480.1,480.1,482.0,482.1,482.2,482.30,482.31, 482.32,482.39,482.4,482.40,482.41,482.42,482.49,482.8,482.81,482.82,482.83,482.84,482.9,483.0,483.1,483.8,484.0,484.1,484.6,484.7,484.8,485, 486.0,487.0, 518.81, 518.82, 518.84, 799.1

### Exclusion Criteria

None

## Sepsis after general or vascular surgery

Sepsis is a serious medical condition in which the body has a severe inflammatory response to an infection. Sepsis is considered a medical emergency because it can progress quickly and can affect several different body organs. Sepsis is a potential complication of surgery and hospitalization.

### Inclusion Criteria

Numerator

Icd-9 diagnosis code for Sepsis: 995.91, 995.92, 785.52

Denominator

None

Exclusion Criteria

None

## Death within 30 days following vascular or general surgery

Mortality is a measure of the number of deaths (in general, or due to a specific cause).

All surgeries involve risk, including complications that may include death. While some patients have higher risks than others, some complications may be preventable.

### Inclusion Criteria

Numerator

No codes applicable – death date is provided by dataset and we will trace back to see if it was within 30 days.

Denominator

None

Exclusion Criteria

None