



# Quality Transparency Dashboard

## Sepsis Mortality Calculation

Quality Transparency Dashboard Sepsis Mortality Calculation (Update Dec 2021)

### How does HQI calculate sepsis mortality? (ICD-10-CM)

#### Description:

In-hospital mortality rate among acute care discharges meeting the modified Dombrovskiy Method proxy case definition for sepsis. While sepsis and septic shock are proxy-diagnosed per the [Third International Consensus Definitions for Sepsis and Septic Shock \(SEP-3\)](#) based on the presence at discharge of a combination of ICD-10-CM codes, it is not strictly the identified cause of death.

#### Methodology:

The mortality rate calculation via the modified Dombrovskiy Method for sepsis case identification follows this process:

1. Identify all inpatient discharges with a diagnosis code (in any position) for septicemia or sepsis
2. Identify all inpatient discharges with a diagnosis code (in any position) for organ dysfunction
3. Categorize inpatient discharges with a code in both #1 and #2 as sepsis cases
4. Determine the percentage of sepsis cases categorized in #3 who received acute care (Type of Care = "1") and were deceased at discharge (Disposition of Patient = "20")

#### Denominator:

Acute-care inpatient discharges meeting the SEP-3 proxy sepsis case definition during the measurement timeframe.

#### Numerator:

Acute-care inpatient discharges meeting the SEP-3 proxy sepsis case definition during the measurement timeframe with a discharge disposition of "Expired."

#### ICD-10-CM CODES TO IDENTIFY SEPTICEMIA OR SEPSIS

Code	Code Description
A02.1	Salmonella sepsis
A20.7	Septicemic plague
A21.7	Generalized tularemia
A22.7	Anthrax sepsis
A26.7	Erysipelothrix sepsis

Code	Code Description
A32.7	Listerial sepsis
A39.1	Waterhouse-Friderichsen syndrome
A39.2	Acute meningococemia
A39.3	Chronic meningococemia
A39.4	Meningococemia, unspecified
A40.x	Streptococcal sepsis
A41.x	Other sepsis
A42.7	Actinomycotic sepsis
A54.86	Gonococcal sepsis
B00.7	Disseminated herpesviral disease
B37.7	Candidal sepsis
I26.01	Septic pulmonary embolism with acute cor pulmonale
I26.90	Septic pulmonary embolism without acute cor pulmonale
I76	Septic arterial embolism
O03.37	Sepsis following incomplete spontaneous abortion
O03.87	Sepsis following complete or unsp spontaneous abortion
O04.87	Sepsis following (induced) termination of pregnancy
O07.37	Sepsis following failed attempted termination of pregnancy
O08.82	Sepsis following ectopic and molar pregnancy
O85	Puerperal sepsis
O86.04	Sepsis following an obstetrical procedure
O86.09	Sepsis following an obstetrical procedure other surgical site
O86.81	Puerperal septic thrombophlebitis
O88.3x	Obstetric pyemic and septic embolism
P36.x	Bacterial sepsis of newborn
R65.2x	Severe Sepsis
T81.12xx	Postprocedural septic shock
T81.44xx	Sepsis following a procedure

### ICD-10-CM CODES TO IDENTIFY ORGAN DYSFUNCTION

Code	Code Description
A39.1	Waterhouse-Friderichsen syndrome
D65	Disseminated intravascular coagulation [defibrination syndrome]
D69.59	Other secondary thrombocytopenia

Code	Code Description
D69.6	Thrombocytopenia, unspecified
D69.8	Other specified hemorrhagic conditions
D69.9	Hemorrhagic condition, unspecified
E87.2	Acidosis
E87.4	Mixed disorder of acid-base balance
F05	Delirium due to known physiological condition
F06.0	Psychotic disorder with hallucinations due to known physiological condition
F06.1	Catatonic disorder due to known physiological condition
F06.2	Psychotic disorder with delusions due to known physiological condition
G62.81	Critical illness polyneuropathy
G72.81	Critical illness myopathy
G93.4x	Other and unspecified encephalopathy
G93.6	Cerebral edema
G93.82	Brain death
G93.9	Disorder of brain, unspecified
G96.81	Intracranial hypotension
G96.810	Intracranial hypotension, unspecified
G96.811	Intracranial hypotension, spontaneous
G96.819	Other intracranial hypotension
G96.89	Other specified disorders of central nervous system
I46.8	Cardiac arrest due to other underlying condition
I46.9	Cardiac arrest, cause unspecified
I95.1	Orthostatic hypotension
I95.89	Other hypotension
I95.9	Hypotension, unspecified
J80	Acute respiratory distress syndrome
J96.0x	Acute respiratory failure
J96.2x	Acute and chronic respiratory failure
J96.9x	Respiratory failure, unspecified
J98.01	Acute bronchospasm
J98.9	Respiratory disorder, unspecified
J99	Respiratory disorders in diseases classified elsewhere
K59.81	Ogilvie syndrome

Code	Code Description
K72.0x	Acute and subacute hepatic failure
K72.9x	Hepatic failure, unspecified
K76.2	Central hemorrhagic necrosis of liver
K76.3	Infarction of liver
K76.7	Hepatorenal syndrome
M35.81	Multisystem inflammatory syndrome
N17.x	Acute kidney failure
N19	Unspecified kidney failure
R00.0	Tachycardia, unspecified
R00.1	Bradycardia, unspecified
R03.1	Nonspecific low blood-pressure reading
R06.0	Dyspnea
R06.00	Dyspnea unspecified
R06.03	Acute respiratory distress
R06.09	Other forms of dyspnea
R06.82	Tachypnea, not elsewhere classified
R06.89	Other abnormalities of breathing
R09.02	Hypoxemia
R09.2	Respiratory arrest
R40.0	Somnolence
R40.1	Stupor
R40.20	Unspecified coma
R40.211x	Coma scale, eyes open, never
R40.212x	Coma scale, eyes open, to pain
R40.213x	Coma scale, eyes open, to sound
R40.221x	Coma scale, best verbal response, none
R40.222x	Coma scale, best verbal response, incomprehensible words
R40.223x	Coma scale, best verbal response, inappropriate words
R40.224x	Coma scale, best verbal response, confused conversation
R40.231x	Coma scale, best motor response, none
R40.232x	Coma scale, best motor response, extension
R40.233x	Coma scale, best motor response, abnormal
R40.234x	Coma scale, best motor response, flexion withdrawal

Code	Code Description
R40.235x	Coma scale, best motor response, localizes pain
R40.242x	Glasgow coma scale score 9-12
R40.243x	Glasgow coma scale score 3-8
R40.244x	Other coma, without documented Glasgow coma scale score, or with partial score reported
R40.3	Persistent vegetative state
R57.x	Shock, not elsewhere classified
R65.2x	Severe sepsis
T81.12xx	Postprocedural septic shock