

Septicemia/Sepsis

ICD-9-CM CODING GUIDELINES

FY 2008 MS-DRG		Prior to 10/1/2007 CMS-DRG	
870	Septicemia w/ MV 96+ hours	575	Septicemia w/ mech vent 96+ hours, age >17
871	Septicemia w/o MV 96+ hours w/ MCC	576	Septicemia w/o mech vent 96+ hours, age >17
872	Septicemia w/o MV 96+ hours w/o MCC	416	Septicemia (Deleted as of 10/1/06)

The below listed septicemia/sepsis guidelines are not inclusive. The coder should refer to the applicable *Coding Clinic* guidelines for additional information. The Centers for Medicare & Medicaid Services considers *Coding Clinic*, published by the American Hospital Association, to be the official source for coding guidelines. Hospitals should follow the *Coding Clinic* guidelines to assure accuracy in ICD-9-CM coding and DRG assignment.

Definition of Principal Diagnosis

The principal diagnosis is that condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care.

Two or more diagnoses may equally meet the definition for principal diagnosis. This is in terms of the circumstances of admission, diagnostic work-up and/or therapy provided. Be aware that there is a difference between admitting a patient to treat two conditions and two conditions being present at the time of admission. The principal diagnosis is always the reason for admission.

Documentation to Support Septicemia/Sepsis

A diagnosis of generalized sepsis must be determined by a physician. A coder should have a physician clarify a diagnosis of septicemia or sepsis, as to whether it is a urosepsis/urinary tract infection (UTI) or generalized sepsis, when documentation is unclear. The term sepsis or systemic inflammatory response syndrome (SIRS) must be documented to assign a code from subcategory 995.9. (*Coding Clinic*, fourth quarter, 2006, page 156.)

When reviewing diagnoses of septicemia or sepsis, note the documentation substantiating the condition—including the blood and urine culture results, white blood cell count, temperature of the patient, presence of tachycardia, impaired organ system perfusion, hypotension, hyperventilation and metabolic acidosis—and the treatment the patient received.

Coding Guidelines

Bacteremia/septicemia

Bacteremia, coded 790.7, is the presence of bacteria in the blood and is a laboratory finding.

Septicemia, coded 038.x, is a systemic disease associated with the presence and persistence of pathogenic microorganisms or their toxins in the blood, which can include bacteria, viruses, fungi or other organisms. This is an acute illness. Effective with discharges of 12/15/03, per *Coding Clinic*, fourth quarter 2003, septicemia no longer equates with sepsis.

(See *Coding Clinic*, fourth quarter 2003, page 79, *Coding Clinic*, second quarter 2000, pages 3, 5 and 6, and *Coding Clinic*, fourth quarter 1993, pages 29 and 30.)

Biliary sepsis/percutaneous transhepatic cholangiogram

Biliary sepsis due to percutaneous transhepatic cholangiogram is coded 998.59, other postoperative infection, 998.5 prior to 10/1/1996, and 038.9, unspecified septicemia. (See *Coding Clinic*, second quarter 1995, page 7.)

Candida albicans septicemia

Septicemia due to *Candida albicans* is coded 112.5. (See *Coding Clinic*, second quarter 1989, page 10.)

Colostomy and enterostomy infection/septicemia

Septicemia due to an infection of a colostomy or enterostomy is coded 569.61, infection of colostomy and enterostomy plus 038.x, septicemia. (See *Coding Clinic*, fourth quarter 1998, page 44.)

Continuous intra-arterial blood gas monitoring

Blood gases are a significant indicator of cardiopulmonary function. This monitoring enables an uninterrupted display of arterial blood gas levels and trends for the previous 24 hours. As of 10/1/02, code 89.60, continuous intra-arterial blood gas monitoring, is the correct code. Prior to 10/1/02, code 89.65, measurement of systemic arterial blood gases, was the code used. (See *Coding Clinic*, fourth quarter 2002, page 112.)

Definition of sepsis

Sepsis is defined as SIRS due to infection. This supercedes all previously published *Coding Clinic* advice where sepsis was equated with septicemia. Prior to 10/1/06, the inclusion term sepsis was added under code 995.91, "SIRS due to infectious process without organ dysfunction." As of 10/1/06, the title for 995.91 has been changed to "Sepsis." (*Coding Clinic*, fourth quarter 2006, page 114.)

If only the term sepsis is documented, codes 038.9 and 995.91 would be assigned in that sequence.

(See *Coding Clinic*, fourth quarter 2003, page 79.)

Definition of urosepsis

A diagnosis of urosepsis needs to be clarified with the physician to determine if it is a generalized sepsis (septicemia), coded 038.9, caused by leakage of urine or toxic urine by-products into the general vascular circulation; or urine contaminated by bacteria, bacterial by-products or other toxic material but without other findings, coded 599.0. Urosepsis is a nonspecific term. If it is the only term documented, only code 599.0 plus the code for the causal organism, if known. (*Coding Clinic*, fourth quarter 2003, page 80, *Coding Clinic*, second quarter 2000, page 6; *Coding Clinic*, first quarter 1998, page 5; and *Coding Clinic*, first quarter 1988, pages 1 and 3.)

If a Medical Executive Committee defines "urosepsis" as "sepsis (documented or presumed) secondary to a urinary tract infection," can coders code "sepsis" whenever a physician writes "urosepsis"? Facility guidelines must not conflict with the *Official ICD-9-CM Guidelines for Coding And Reporting* or replace physician documentation needed to support code assignment. (See *Coding Clinic*, second quarter 2004, page 13.)

Drotrecogin alfa (activated) infusion

Drotrecogin alfa (activated) is a new biological agent used to treat severe sepsis. It is believed to bring blood clotting and inflammation back into balance and restore blood flow to the organs. New code 00.11, infusion of drotrecogin alfa (activated), has been created and went into effect 10/1/02. (See *Coding Clinic*, fourth quarter 2002, pages 93-94.)

Endo-toxic shock/gram-negative shock

Endo-toxic shock and gram-negative shock are synonymous with septic shock. (See *Coding Clinic*, fourth quarter 2003, pages 80 and 81.)

Gastrostomy infection/septicemia

Septicemia due to an infection of a gastrostomy is coded 536.41 plus 038.x. (See *Coding Clinic*, fourth quarter 1998, pages 42 and 43.)

Indwelling urinary catheter/septicemia

Septicemia due to an indwelling urinary catheter is coded 996.64, infection and inflammatory reaction due to internal prosthetic device, implant and graft, as the principal diagnosis. In addition, the coder must code a secondary diagnosis code from category 038 and a code for the organism responsible, if not indicated by the septicemia code. (See *Coding Clinic*, third quarter 1993, page 6.)

Nadir sepsis

Nadir sepsis is coded 038.9, unspecified septicemia, as the principal diagnosis and 288.0, neutropenia as the secondary diagnosis. (See *Coding Clinic*, third quarter 1996, page 6.)

Negative blood cultures/septicemia

Negative or inconclusive blood cultures do not preclude a diagnosis of septicemia in patients with clinical evidence of the condition. (*Coding Clinic*, fourth quarter 2006, page 159, *Coding Clinic*, second quarter 2002, page 39, *Coding Clinic*, second quarter 2000, page 5, and *Coding Clinic*, first quarter 1988, pages 2 and 3.) The clinical evidence for reviewing septicemia with negative or inconclusive blood cultures is delineated in *Coding Clinic*, third quarter 1988, page 12.

Neutropenic sepsis

Neutropenic sepsis is coded 038.9, unspecified septicemia, as the principal diagnosis and 288.00, neutropenia, (5th digit added and note added to use additional code for any associated fever, 780.6, 10/1/06) as the secondary diagnosis. (See *Coding Clinic*, fourth quarter 2006, pages 69-71 and *Coding Clinic*, second quarter 1996, page 6.)

Noncandidal yeast urinary tract infection (UTI)

A noncandidal yeast UTI is coded 599.0 with a secondary code of 117.9. (See *Coding Clinic*, second quarter 1995, page 7.)

Oxazolidinone class of antibiotics

This is a new class of antibiotics used to treat gram-positive bacteria, including resistant gram-positive pathogens. They are reserved for the most medically significant resistant pathogens. They are most commonly used for resistant gram-positive infections in conditions such as septicemia, hospital-acquired pneumonia, ventilator-associated pneumonia and post-surgical wounds, traumatic wounds and cellulitis. A new code was created effective 10/1/02: Code 00.14, injection or infusion of oxazolidinone class of antibiotics. (See *Coding Clinic*, fourth quarter 2002, page 95.)

Pneumococcal pneumonia and pneumococcal septicemia

Only one code, 481 (pneumococcal pneumonia), was used to code pneumococcal pneumonia and pneumococcal septicemia until 10/1/91. As of 10/1/91, two codes are necessary to code pneumococcal pneumonia (481) and pneumococcal septicemia (038.2). (See *Coding Clinic*, first quarter 1992, pages 17 and 18, and *Coding Clinic*, first quarter 1991, page 13.)

Pseudomonas urinary tract infection (UTI)/septicemia

Septicemia due to a *Pseudomonas* UTI is coded 038.43, *Pseudomonas* septicemia, as the principal diagnosis and 599.0, UTI, as the secondary diagnosis. Code 041.7, *Pseudomonas* infection, does not have to be coded as it is already identified by the code for septicemia. (See *Coding Clinic*, fourth quarter 1988, page 10.)

Refractory septic shock

Refractory septic shock is septic shock lasting for more than one hour, which does not respond to fluid administration or pharmacological intervention. (See *Coding Clinic*, second quarter 2000, pages 3 and 4.)

Sepsis due to postprocedural infection

Sepsis caused by a postprocedural infection is considered a complication of care. Cases of postprocedural infection—such as code 998.59, Other postoperative infection, or 674.3x, Other complications of obstetrical surgical wounds—should be coded first followed by the appropriate sepsis codes (systemic infection code and either code 995.91 or 995.92). An additional code(s) for acute organ dysfunction should also be assigned for cases of severe sepsis. (*Coding Clinic*, fourth quarter 2006, page 159.) As of 10/01/07, a note was added for all postprocedural complications, that the code assignment is based on the provider's documentation of the relationship between the infection and the procedure. (*Official Guidelines for Coding and Reporting*, effective 10/01/07, page 19.)

Sepsis, severe sepsis, or SIRS/underlying infection other than septicemia

If the terms sepsis, severe sepsis or SIRS are used with an underlying infection other than septicemia, such as pneumonia, cellulitis or a nonspecified urinary tract infection, code 038.9 should be assigned first, then code 995.91, followed by the code for the initial infection. Systemic infection is sequenced before the localized infection. (See *Coding Clinic*, first quarter 2005, page 113-116 and *Coding Clinic*, fourth quarter 2003, page 80.)

If the patient is admitted for acute influenza and altered mental status and later in the admission develops a clinical picture of septic shock, pneumonia and hypotension followed by an acute myocardial infarction (AMI), and acute renal failure (ARF), the reason for admission is influenza, with pneumonia (487.1). Secondary diagnoses would be 038.9, unspecified septicemia; 995.92, systemic inflammatory response syndrome due to infectious process with organ dysfunction; 785.52, septic shock; 548.9, ARF; and 410.91, AMI. (See *Coding Clinic*, second quarter 2005, pages 18 and 19.)

The note to "code first underlying systemic infection" now only applies to the codes that relate to an infectious process, specifically codes 995.91 and 995.92. The systemic infection is still sequenced before subcategory 995.9. (*Coding Clinic*, fourth quarter 2006, pages 113-116.)

A "code first underlying conditions, such as acute pancreatitis or trauma" note was added to codes 995.93 and 995.94 for SIRS due to noninfectious process with and without acute organ dysfunction. (*Coding Clinic*, fourth quarter 2006, pages 113-116.)

Subcategory 995.9 code titles were revised to better explain the meaning of the codes and their intended use. For example, the title for code 995.91 has been changed from "Systemic inflammatory response syndrome due to infectious process without organ dysfunction" to "Sepsis." (*Coding Clinic*, fourth quarter 2006, pages 113-116.)

Sepsis syndrome

Sepsis syndrome comprises septicemia with evidence of inadequate organ perfusion with at least some degree of one or more of the following: hypoxemia, elevated lactate, oliguria, altered mentation, disseminated intravascular coagulopathy (DIC), decreased

platelets, increased INR and/or increased fibrin split products (FSP). (See *Coding Clinic*, second quarter 2000, page 4.)

Sepsis and severe sepsis associated with noninfectious process

In some cases, a noninfectious process, such as trauma, may lead to an infection which can result in sepsis or severe sepsis. If sepsis or severe sepsis is documented as associated with a noninfectious condition, such as a burn or serious injury, and this condition meets the definition for principal diagnosis, the code for the noninfectious condition should be sequenced first, followed by the code for the systemic infection and either code 995.91, sepsis, or 995.92, severe sepsis. Code also any associated acute organ dysfunction(s) for cases of severe sepsis. If the sepsis or severe sepsis meets the definition of principal diagnosis, the systemic infection and sepsis codes should be sequenced before the noninfectious condition. If both the associated noninfectious condition and the sepsis or severe sepsis meet the definition of principal diagnosis, either may be assigned as principal diagnosis.

If the patient has sepsis or severe sepsis associated with a noninfectious condition, only assign one SIRS code (995.91, sepsis, or 995.92, severe sepsis).

As of 10/1/07, only one code from subcategory 995.9 should be assigned for SIRS associated with trauma or other non-infectious condition. Assign the SIRS code (subcategory 995.9) that corresponds to the principal diagnosis. (See *Official Guidelines for Coding and Reporting*, Effective 10/01/07, page 19.)

Septic arterial embolism

New code, 449, was created 10/1/07 for septic arterial embolism. These emboli occur when embolic material from the localized infection travels through the systemic arterial system and lodges in the small vessels of the body. Code first the underlying infection, such as: infective endocarditis (421.0) and lung abscess (513.0). Use an additional code to identify the site of the embolism (433.0-433.9, 444.0-444.9). Sepsis needs to be documented before codes from categories 038, septicemia, and 995.9, systemic inflammatory response syndrome [SIRS] are assigned.

A patient with a diagnosis of lung abscess and septic arterial embolism of the femoral artery is coded 513.0, abscess of lung; 449, septic arterial embolism; and 444.22, arterial embolism and thrombosis, lower extremity.

See *Coding Clinic*, fourth quarter 2007, pages 84-86.

Septic pulmonary embolism

New code, 415.12, was created 10/1/07 for septic pulmonary embolism. This occurs when the infectious material from a localized infection breaks off, enters the venous system, travels through the heart and lodges in the arteries of the lung. Code first the underlying infection, such as septicemia (038.0-038.9).

An end-stage renal disease (ESRD) dialysis patient was admitted with sepsis and septic pulmonary emboli due to an infected venous dialysis catheter. Blood cultures confirmed gram-negative bacilli. This is coded 996.62, infection and inflammatory reaction due to other vascular device, implant and graft, as principal diagnosis. Also assign secondary diagnoses codes of 038.40, septicemia due to gram-negative organism, unspecified; 995.91, sepsis; 415.12, septic pulmonary embolism; 585.6, ESRD and V45.1, renal dialysis status.

See *Coding Clinic*, fourth quarter 2007, pages 84-86.

Septic shock

Effective 10/1/03, septic shock is no longer coded to 785.59, shock without mention of trauma, other. It has a new code, 785.52, septic shock. This code has instructions to code first systemic inflammatory process with organ dysfunction (995.92) and code 995.92 has instructions to “code first underlying infection.” (See *Coding Clinic*, fourth quarter 2003, page 73.)

Septic shock is defined as sepsis with hypotension, a failure of the cardiovascular system. Therefore, septic shock meets the definition for severe sepsis. Prior to 10/1/06, the instructions stated that when septic shock is documented, code first the initiating systemic infection or trauma, then either code 995.92, systemic inflammatory response syndrome due to infectious process with organ dysfunction or 995.94, systemic inflammatory response syndrome due to noninfectious process with organ dysfunction, followed by code 785.52, septic shock. Any additional codes for other acute organ dysfunctions should also be assigned. (*Coding Clinic*, fourth quarter 2003, page 80.) As of 10/1/06, these instructions were revised. The instructional note at code 785.52, septic shock, stating to code first SIRS due to noninfectious process with organ dysfunction (995.94), has been deleted. While it is possible to develop septic shock following trauma, the development of septic shock indicates the presence of severe sepsis. The parallel note at code 995.94 to code septic shock has also been deleted. (*Coding Clinic*, fourth quarter 2006, page 114.)

Sequencing of septic shock:

Septic shock generally refers to circulatory failure associated with severe sepsis, and therefore, it represents a type of acute organ dysfunction. (*Coding Clinic*, fourth quarter 2006, page 158.)

For all cases of septic shock, the code for the systemic infection should be sequenced first, followed by codes 995.92 and 785.52. Any additional codes for other acute organ dysfunctions should also be assigned. The code for septic shock cannot be assigned as a principal diagnosis. (*Coding Clinic*, fourth quarter 2006, page 158.)

Do not code septic shock because sepsis with hypotension is documented. The physician must document a diagnosis of septic shock before it can be coded. (See *Coding Clinic*, third quarter 2005, page 23.)

When sepsis develops after admission, the sepsis codes may be assigned as secondary diagnoses. (See *Coding Clinic*, second quarter 2005, page 19.)

Septic shock is a form of organ dysfunction associated with severe sepsis. Septic shock cannot occur in the absence of severe sepsis. (See *Coding Clinic*, second quarter 2005, page 19.) *Coding Clinic*, fourth quarter 2006 goes on to say that septic shock indicates the presence of severe sepsis. Code 995.92, severe sepsis, must be assigned with code 785.52, septic shock, even if the term “severe sepsis” is not documented in the record. The “use additional code” note and the “code first” note in the tabular support this guideline. (*Coding Clinic*, fourth quarter 2006, page 158.)

Endo-toxic shock and gram-negative shock are synonymous with septic shock. (See *Coding Clinic*, fourth quarter 2003, pages 80 and 81.)

Septic shock/respiratory failure/ pneumonia

An 85-year-old female presented to the ER with increasing shortness of breath, productive cough and progressive weakness. The patient was admitted to ICU, intubated,

mechanically ventilated and started on broad-spectrum antibiotics for septic shock, respiratory failure and Haemophilus influenza pneumonia. The patient then suffered an acute nontransmural myocardial infarction. The principal diagnosis is unspecified septicemia, 038.9. Secondary diagnoses are pneumonia due to Haemophilus influenzae, 482.2; SIRS due to infectious process with organ dysfunction, 995.92; septic shock, 785.52; acute respiratory failure, 518.81; AMI, subendocardial infarction, initial episode of care, 410.71. The septic shock meets the definition for severe sepsis. (See *Coding Clinic*, second quarter 2005, pages 19 and 20.)

Septic shock/septicemia

Prior to 10/01/06, septicemia with shock was always coded with the septicemia listed first and then the shock. (See *Coding Clinic*, second quarter 2002, page 39, *Coding Clinic*, second quarter 2000, pages 3 and 4, and *Coding Clinic*, first quarter 1988, pages 2 and 3.) If septic shock was documented, it was necessary to code first the initiating systemic infection or trauma, then either code 995.92 or 995.94, followed by code 785.52, septic shock. (See *Coding Clinic*, fourth quarter 2003, page 114.) As of 10/01/06, these instructions were revised. The instructional note at code 785.52 septic shock, stating to code first SIRS due to noninfectious process with organ dysfunction (995.94), has been deleted. While it is possible to develop septic shock following trauma, the development of septic shock indicates the presence of **severe sepsis**. The parallel note at code 995.94 to code septic shock has also been deleted. For all cases of septic shock, the code for the systemic infection should be sequenced first, followed by codes 995.92 and 785.52. Additional codes for other acute organ dysfunctions should also be assigned. (*Coding Clinic*, fourth quarter 2006, page 114.)

E. coli septicemia and septic shock are coded 038.42, septicemia due to other gram-negative organisms, Escherichia coli [E. coli] as principal diagnosis with secondary diagnoses codes of 995.92, systemic inflammatory response syndrome due to infectious process with organ dysfunction, and 785.52, septic shock. (*Coding Clinic*, fourth quarter 2003, page 73.)

Septic shock/septicemia/pregnancy

Septic shock and sepsis complicating abortion, ectopic pregnancy and molar pregnancy are classified to category codes in Chapter 11 (630-639). (See *ICD-9-CM Official Coding Guidelines for Coding and Reporting*, Section I, C. Chapter 1.b. and Section I, C. Chapter 11, and *Coding Clinic*, second quarter 2002, page 39.)

Severe sepsis

“Severe sepsis” is SIRS due to an infection that advances to organ dysfunction, and is not just a case of very bad sepsis. (See *Coding Clinic*, fourth quarter 2002, pages 71-72.) As of 10/1/06, severe sepsis generally refers to sepsis with associated acute organ dysfunction. If a patient has sepsis with multiple organ dysfunctions, follow the instructions for coding severe sepsis. Either the term sepsis or SIRS must be documented to assign a code from subcategory 995.9. (*Coding Clinic*, fourth quarter 2006, pages 155 and 156.)

Sepsis or severe sepsis may be present on admission but the diagnosis may not be confirmed until sometime after admission. If the documentation is not clear whether the sepsis or severe sepsis was present on admission, the provider should be queried. (*Coding Clinic*, fourth quarter, page 157.)

Prior to 10/1/06, for patients with severe sepsis, the code for the systemic infection (038.x) or trauma was sequenced first, followed by either code 995.92, systemic inflammatory response syndrome due to infectious process with organ dysfunction, or code 995.94, systemic inflammatory response syndrome due to noninfectious process with organ dysfunction. Also code any specific organ dysfunction. (See *Coding Clinic*, fourth quarter

2003, page 80.) As of 10/1/06, Subcategory 995.9 code titles were revised to better explain the meaning of the codes and their intended use. For example, "The title for code 995.92 has been changed from 'Systemic inflammatory response syndrome due to infectious process with organ dysfunction' to 'Severe sepsis.' Severe sepsis generally refers to sepsis with associated acute organ dysfunction." (*Coding Clinic*, fourth quarter 2006, pages 113-116.)

Staphylococcal septicemia

Prior to 10/1/97, two codes were needed to code staphylococcal septicemia; one for the septicemia and one for the organism. As of 10/1/97, a fifth digit was added to code 038.1 to specify the type of staphylococcal septicemia, so now only one code is required. (See *Coding Clinic*, fourth quarter 1997, page 32.)

Streptococcus pneumoniae septicemia

Streptococcus pneumoniae septicemia is coded 038.2 pneumococcal septicemia. (See *Coding Clinic*, second quarter 1996, page 5.)

Streptococcal sepsis

Streptococcal sepsis is coded 038.0, Streptococcal septicemia, and 995.91, SIRS due to infectious process without organ dysfunction. Codes assigned should be in this order. (See *Coding Clinic*, fourth quarter 2003, pages 80 and 113.)

Streptococcal septicemia

Streptococcal septicemia is coded using only one code, 038.0, Streptococcal septicemia. The physician should be queried to see if the patient has sepsis, an infection with SIRS. (See *Coding Clinic*, fourth quarter 2003, pages 80 and 113.)

Subcategory 995.9 (SIRS)

Subcategory 995.9 has a first code note instructing coder to first code the underlying cause of the SIRS (infection or trauma). In the absence of a specified underlying condition, the default first code assigned should be 038.9.

Either the term sepsis or SIRS must be documented to assign a code from subcategory 995.9.)

(See *Coding Clinic*, fourth quarter 2003, pages 79 and 80.)

Systemic inflammatory response syndrome (SIRS)

Per *Coding Clinic*, "SIRS is a clinical response to an insult, infection or trauma, that includes systemic inflammation, elevated or reduced temperature, rapid heart rate and respiration and elevated white blood count."

SIRS codes (995.9x) are usually secondary diagnoses, though they can be a principal diagnosis. Use additional codes for all involved organ dysfunctions.

"Severe sepsis" is SIRS due to an infection that advances to organ dysfunction, and is not just a case of very bad sepsis.

When severe sepsis is documented in a patient with an underlying condition of trauma, code 995.92, SIRS due to infectious process with organ dysfunction, rather than 995.94, SIRS due to noninfectious process with organ dysfunction.

(See *Coding Clinic*, fourth quarter 2002, pages 71 and 72.)

Systemic inflammatory response syndrome (SIRS)/septicemia

SIRS describes the endothelial inflammation believed to be associated with sepsis and septic shock. SIRS can be diagnosed when patients demonstrate two or more signs of systemic inflammation in the setting of a disorder known to cause endothelial inflammation and in the absence of any other known cause.

SIRS is the systemic response to infection or trauma, with symptoms, including fever, tachycardia, tachypnea and leukocytosis.

If the underlying cause of the SIRS is known, code the cause. For example, if the underlying cause is septicemia, code the septicemia, 038.9.

If the underlying cause is unknown, the default first code is 038.9.

(See *Coding Clinic*, fourth quarter 2003, page 79, *Coding Clinic*, second quarter 2000, page 4, and *Coding Clinic*, third quarter 1999, pages 5 and 6.)

Tracheostomy site/septicemia

Septicemia from an infected tracheostomy site due to *Staphylococcus aureus* is coded 519.11, infection of tracheostomy and 038.11, *Staphylococcus aureus* septicemia. (See *Coding Clinic*, fourth quarter 1998, page 42.)

Vascular access device/sepsis

Sepsis due to a vascular access device is coded with 996.62, infection and inflammatory reaction due to other vascular catheter, as the principal diagnosis. (As of 10/1/07, if the device is a central venous catheter, Hickman catheter, peripherally inserted central catheter (PICC) or triple lumen catheter, code 999.31, infection due to central venous catheter, should be used rather than 996.62.) This principal diagnosis is followed by the appropriate sepsis code from category 038 and a code from subcategory 995.9, systemic inflammatory response syndrome (SIRS). If organ dysfunction is present, codes should be added to identify the specific type of organ dysfunction. (See *Coding Clinic*, fourth quarter 2007, pages 96 and 97, and *Coding Clinic*, second quarter 2004, page 16.)

Vascular access device/septicemia

Coding a diagnosis of septicemia due to a vascular access device requires two codes. The principal diagnosis is coded 996.62, infection and inflammatory reaction due to other vascular device. (As of 10/1/07, if the device is a central venous catheter, Hickman catheter, peripherally inserted central catheter (PICC) or triple lumen catheter, code 999.31, infection due to central venous catheter, should be used rather than 996.62.) The secondary diagnosis is a code from category 038, septicemia. A code from subcategory 995.9, systemic inflammatory response syndrome (SIRS), should not be used. (See *Coding Clinic*, fourth quarter 2007, pages 96 and 97, and *Coding Clinic*, second quarter 2004, page 16 and *Coding Clinic*, second quarter 1994, page 13.)

Procedures

BiPAP (bi-level positive airway pressure)

BiPAP was previously classified as a noncontinuous ventilator.

The new BiPAP S/T-D Ventilatory Support System is recognized as a continuous ventilator for patients with spontaneous respirations.

Neither of these systems are coded under category 96.7, other continuous mechanical ventilation, since a patient on BiPAP does not have either the insertion of an endotracheal

tube or a tracheostomy as required for the use of category 96.7. BiPAP is coded to 93.90, continuous positive airway pressure [CPAP]. (See *Coding Clinic*, third quarter 1998, page 14.)

Continuous intra-arterial blood gas monitoring

Blood gases are a significant indicator of cardiopulmonary function. This monitoring enables an uninterrupted display of arterial blood gas levels and trends for the previous 24 hours. As of 10/1/02, code 89.60, continuous intra-arterial blood gas monitoring, is the correct code. Prior to 10/1/02, code 89.65, measurement of systemic arterial blood gases, was the code used. (See *Coding Clinic*, fourth quarter 2002, page 112.)

Determining duration of mechanical ventilation

When a patient is intubated in the emergency room and then admitted to the same hospital, begin counting the duration of the mechanical ventilation at the time of the intubation in the emergency room. (See *Coding Clinic*, second quarter 1992, pages 13 and 14.)

When a patient is intubated and begun on ventilation in an emergency room and then transferred to another hospital, the duration of the mechanical ventilation at the second hospital is counted from the time of admission to the second hospital. (See *Coding Clinic*, second quarter 1992, page 14.)

When a ventilator-dependent patient is admitted to a LTCH for weaning from mechanical ventilation, the duration of mechanical ventilation should be coded and is counted starting from the time of admission to the long-term care hospital. (See *Coding Clinic*, first quarter 2004, pages 23 and 24.)

Mechanical ventilation used during a procedure is considered integral to the procedure, so no code from category 96.7 should be used. (See *Coding Clinic*, fourth quarter 1991, page 16.)

When a patient is intubated for mechanical ventilation, the duration is counted from the time of the intubation. If the intubation was done prior to admission, begin counting the duration at the time of the admission. (See *Coding Clinic*, fourth quarter 1991, pages 17 and 18.)

Begin counting the duration for tracheostomy patients on ventilation at the time the mechanical ventilation was begun. (See *Coding Clinic*, fourth quarter 1991, page 17.)

When a patient is documented to have an extended duration (several days) of ventilation following surgery, the duration is counted from the time the patient was intubated for ventilation at the time of surgery. (See *Coding Clinic*, second quarter 1992, page 14.) "Extended" duration meaning several days has been further defined as meaning more than two days. (See *Coding Clinic*, second quarter 2006, page 8 and *Coding Clinic*, third quarter 2004, page 11.)

A patient was intubated and placed on mechanical ventilation for surgery. Mechanical ventilation was maintained for three days postoperatively. Since the patient was maintained on mechanical ventilation more than two days post-op, a code for mechanical ventilation may be assigned. Code 96.71, continuous mechanical ventilation for less than 96 consecutive hours and code 96.04, insertion of endotracheal tube. (See *Coding Clinic*, second quarter 2006, page 8.)

A patient was intubated during a lobectomy of the lung and then extubated at the end of the procedure. The patient required re-intubation later that day and was on mechanical

ventilation for 23 hours. Codes 96.71, continuous mechanical ventilation for less than 96 hours, and 96.04, insertion of endotracheal tube, to describe the re-intubation and postoperative mechanical ventilation. (See *Coding Clinic*, volume 10, number 5 1993, page 17.)

Endotracheally intubated/manually bagged/expired

A patient in respiratory arrest was endotracheally intubated and manually bagged, but expired before being placed on mechanical ventilation. Code 93.93, nonmechanical methods of resuscitation. It would be inappropriate to assign code 96.71 for manual ventilation. (See *Coding Clinic*, second quarter 2003, page 17.)

INOmax therapy

INOmax (nitric oxide/nitrogen) therapy is used to treat persistent pulmonary hypertension in newborns and pulmonary hypertension in patients with respiratory failure and hypoxia. This was coded 93.98, other control of atmospheric pressure and composition, until 10/1/02, when a new code was created. This is now coded 00.12, administration of inhaled nitric oxide. (See *Coding Clinic*, fourth quarter 2002, page 94, and *Coding Clinic*, first quarter 2002, page 14.)

Infusion of vasopressor agent

Vasopressors are used in the treatment of shock. Prior to 10/1/04, code 99.29, injection or infusion of other therapeutic or prophylactic substance, was used. As of 10/1/04, code 00.17, infusion of vasopressor agent, was created. Vasopressors act primarily by causing the arteries of the body to constrict, thereby raising blood pressure. They are administered via temporary, continuous intravenous infusion. Some examples are Dobutamine, Dopamine, Epinephrine and Methoxamine. (See *Coding Clinic*, fourth quarter 2004, pages 108 and 109.)

Intermittent positive pressure breathing (IPPB)

Intermittent positive pressure breathing (IPPB, coded 93.91), continuous negative pressure ventilation (CNP, iron lung, coded 93.99), continuous positive airway pressure (CPAP, coded 93.90) and other methods of respiratory therapy by face mask, nasal cannula, and nasal catheter, are all coded under category 93.9, respiratory therapy. (See ICD-9-CM, volume 3, tabular list, category 93.9, and *Coding Clinic*, fourth quarter 1991, pages 21 and 22.)

Noninvasive positive pressure ventilation (NIPPV)

Noninvasive positive pressure ventilation is coded 93.90, continuous positive airway pressure (CPAP). NIPPV is not classified as mechanical ventilation, because the patient is not mechanically ventilated via tracheostomy or endotracheal (ET) intubation. There is no need for ET tube and/or sedation. NIPPV can involve use of a ventilator and can go beyond CPAP. Therefore, review all documentation to determine appropriate code. (See *Coding Clinic*, third quarter 2004, page 3.)

Positive airway pressure ventilation (CPAP)

Positive airway pressure ventilation via facemask is coded 93.90, continuous positive airway pressure. (See *Coding Clinic*, first quarter 2002, page 13.)

RespirTech PRO

Ventilation performed with RespirTech PRO, when endotracheal intubation is used. is coded to 96.7x, other continuous mechanical ventilation. Since category 96.7 is used only when endotracheal intubation or a tracheostomy is used, if the ventilation is done with RespirTech PRO utilizing a facemask, it is coded 93.90, continuous positive airway pressure. The definitive variable for use of category 96.7 is mechanical ventilation via endotracheal intubation and not endotracheal intubation alone. (See *Coding Clinic*, second quarter 2002, page 19 and *Coding Clinic*, first quarter 2002, pages 12 and 13.)

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