	CDC, 1990	Angus, 2001*	Martin, 2003	Dombrovskiy, 2005	Esper, 2006	Dombrovskiy, 2007	Shen, 2010*	Kumar, 2011	Chen, 2013*
Sepsis									
Septicemia 038.0-038.9	•	•	•	•	•	•	•	•	•
Herpetic septicemia 054.5				•		•			
Bacteremia 790.7		•	•		•		•	•	•
Disseminated fungal infection 117.9		•	•		•		•	•	•
Disseminated candidal infection 112.5		•	•	•	•	•	•	•	•
Candidal endocarditis 112.81		•	•		•		•	•	•
Fungal endocarditis 115.04, 115.14, 115.94		•					•	•	•
Salmonella septicemia 003.1		•		•		•	•	•	•
Septicemic plague 020.2		•	•	•		•	•	•	•
Anthrax septicemia 022.3		•		•		•	•	•	•
Meningococcal septicemia 036.2		•		•		•	•	•	•
Waterhouse Friedrichson Syndrome 036.3		•		•		•	•	•	•
Gonococcemia 098.89		•		•		•	•	•	•
Sepsis due to indwelling catheter 996.62		•					•	•	•
Sepsis** 995.91				•		•			
Severe sepsis** 995.92				•		•		•	
Septic shock*** 785.52						•		•	
Severe sepsis									
Respiratory									
93.90 Non-invasive mechanical ventilation							•		•
96.04 Continuous positive airway pressure	NA				NA		•		•
Ventilator management 96.7		•	•				•	•	•

Acute respiratory failure 518.81 Acute reprinatory distress syndrome (ARDS) 518.82 ARDS after shock or trauma 518.85 Respiratory insufficience 786.09 Respiratory arrest 799.1 Cardiovascular Use of vasopressor agent 00.17 Cardiae arrest 427.5 Hypotension, postural 438.0 Hypotension, specified, not elsewhere classified 458.8 Hypotension, arterial, constitutional 488.9 Shock 785.50 Shock, cardiogenic 785.51 Septic shock*** 785.52 Shock, circulatory or septic 785.52 Shock, circulatory or septic 785.53 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified Acute hepatic failure or nerosis 570 Hepatic encephalopathy 572.2 Hepatic infarction 573.4 Hepatic infarction 573.4									
Syndrome (ARDS) Sis 82 Sis 83 Sis 83 Sis 83 Sis 84 S				•	•	•	•	•	•
Trauma 518.85 Respiratory insufficience 786.09	syndrome (ARDS)	-		•	•	•	•	•	•
Respiratory arrest	trauma			•			•	•	•
Cardiovascular	Respiratory insufficience 786.09			•	•	•	•	•	•
Use of vasopressor agent 00.17 Cardiac arrest 427.5 Hypotension, postural 458.0 Hypotension, specified, not elsewhere classified 458.8 Hypotension, arterial, constitutional 458.9 Shock 785.50 Shock, cardiogenic 785.51 Septic shock**** 785.52 Shock, circulatory or septic 785.59 Hypotension, transient 796.3 Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepaties, septic or unspecified 573.3 Hepatitis, septic or unspecified 573.3 Hepatic infarction	Respiratory arrest 799.1			•	•	•	•	•	•
Cardiac arrest 427.5 Hypotension, postural 458.0 Hypotension, specified, not elsewhere classified 458.8 Hypotension, arterial, constitutional 458.9 Shock 785.50 Shock, cardiogenic 785.51 Septic shock**** 785.52 Shock, circulatory or septic 785.59 Hypotension, transient 796.3 Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure s84 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction	Cardiovascular								
Hypotension, postural 458.0 Hypotension, specified, not elsewhere classified 458.8 Hypotension, arterial, constitutional 458.9 Shock 785.50 Shock, cardiogenic 785.51 Septic shock**** 785.52 Shock, circulatory or septic 785.59 Hypotension, transient 796.3 Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepaticencephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction	Use of vasopressor agent 00.17							•	
Hypotension, specified, not elsewhere classified 458.8 Hypotension, arterial, constitutional 458.9 Shock 785.50 Shock, cardiogenic 785.51 Septic shock**** 785.52 Shock, circulatory or septic 785.59 Hypotension, transient 796.3 Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction					•	•			
elsewhere classified 458.8 Hypotension, arterial, constitutional 458.9 Shock 785.50 Shock, cardiogenic 785.51 Septic shock**** 785.52 Shock, circulatory or septic 785.59 Hypotension, transient 796.3 Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction			•	•	•	•	•		•
constitutional 458.9 Shock 785.50 Shock, cardiogenic 785.51 Septic shock**** 785.52 Shock, circulatory or septic 785.59 Hypotension, transient 796.3 Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepaticis, septic or unspecified 573.3 Hepatic infarction	elsewhere classified		•	•	•	•	•	•	•
Shock, cardiogenic 785.51 Septic shock**** 785.52 Shock, circulatory or septic 785.59 Hypotension, transient 796.3 Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction	constitutional		•	•	•	•	•	•	•
Septic shock**** 785.52 Shock, circulatory or septic 785.59 Hypotension, transient 796.3 Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction			•	•	•	•	•	•	•
Shock, circulatory or septic 785.59 Hypotension, transient 796.3 Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction			•	•	•	•	•	•	•
Hypotension, transient 796.3 Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction					•	•		•	
Renal Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction	Shock, circulatory or septic 785.59		•	•	•	•	•	•	•
Hemodialysis 573.3 Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction				•	•	•	•	•	•
Acute glomerulonephritis 580 Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction	Renal								
Acute renal failure 584 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction	Hemodialysis 573.3			•			•		•
S84 Chronic kidney disease 585 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction				•			•		•
S85 Renal failure, unspecified 586 Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction			•	•	•	•	•	•	•
Hepatic Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction									
Acute hepatic failure or necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction				•			•		•
necrosis 570 Hepatic encephalopathy 572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction	Hepatic								
572.2 Hepatitis, septic or unspecified 573.3 Hepatic infarction	necrosis		•	•	•	•	•	•	•
unspecified 573.3 Hepatic infarction				•	•	•	•	•	•
	unspecified			•			•		•
			•		•	•	•	•	•
Hematologic	Hematologic								

Disseminated intravascular coagulation 286.2		•			•		•
Purpura fulminans 286.6	•	•	•	•	•	•	•
Acquired coagulation factor deficiency 286.7						•	
Coagulopathy 286.9	•	•	•	•	•	•	•
Thrombocytopenia, primary 287.3		•			•		•
Thrombocytopenia, secondary 287.4	•	•	•	•	•	•	•
Thrombocytopenia, unspecified 287.5	•	•	•	•	•	•	•
Neutropenia 288.0							
Abnormal coagulation profile 790.92					•		•
Metabolic							
Acidosis, metabolic or lactic 276.2		•			•	•	•
Neurologic							
Electroencephalography 89.14		•			•	•	•
Transient organic psychosis 293	•	•	•	•	•	•	•
Anoxic brain injury 348.1	•	•	•	•	•	•	•
Encephalopathy, acute 348.3	•	•	•	•	•	•	•
Coma 780.01		•	•	•	•	•	•
Altered consciousness, unspecified 780.09		•			•	•	•

* 1,286 distinct infection codes included
**Implemented on October 1, 2002

*** Implemented on October 1, 2003

**** Implemented on October 1, 2003. Only to be used with code 995.2 for severe sepsis.

Where 4-digit codes are listed, all associated subcodes were included.

In case of discrepancies between code number and corresponding code text given by the article, the code given in this table was assigned due to code text