**Supplementary 1**

ICD codes for selection criteria

SCA

282.60 Sickle-cell disease, unspecified

282.61 Hb-SS disease without crisis

282.62 Hb-SS disease with crisis

282.63 Sickle-cell/Hb-C disease without crisis

282.64 Sickle-cell/Hb-C disease with crisis

282.68 Other sickle-cell disease without crisis

282.69 Other sickle-cell disease with crisis

517.3 Acute chest syndrome

289.52 Splenic sequestration

99.04 (ICD-9-CM procedural code) Transfusion of packed cells

Bacterial pneumonia

003.22 Salmonella pneumonia

481 Pneumococcal pneumonia

482.0 Pneumonia due to Klebsiella pneumoniae

482.1 Pneumonia due to Pseudomonas

482.2 Pneumonia due to Hemophilusinfluenzae

482.3 Pneumonia due to streptococcus

482.30 Pneumonia due to Streptococcus, unspecified

482.31 Pneumonia due to Streptococcus, group A

482.32 Pneumonia due to Streptococcus, group B

482.39 Pneumonia due to other Streptococcus

482.4 Pneumonia due to staphylococcus

482.40 Pneumonia due to Staphylococcus, unspecified

482.41 Methicillin susceptible pneumonia due to Staphylococcus aureus

482.42 Methicillin resistant pneumonia due to Staphylococcus aureus

482.49 Other Staphylococcus pneumonia

482.8 Pneumonia due to other specified bacteria

482.81 Pneumonia due to anaerobes

482.82 Pneumonia due to Escherichia coli

482.83 Pneumonia due to other gram-negative bacteria

482.84 Pneumonia due to Legionnaires' disease

482.89 Pneumonia due to other specified bacteria

482.9 Bacterial pneumonia, unspecified

513.0 Abscess of lung

Acute ischemic/embolic CVA:

346.60 Persistent migraine aura with cerebral infarction, without mention of intractable migraine without mention of status migrainosus

346.61 Persistent migraine aura with cerebral infarction, with intractable migraine, so stated, without mention of status migrainosus

346.62 Persistent migraine aura with cerebral infarction, without mention of intractable migraine with status migrainosus

346.63 Persistent migraine aura with cerebral infarction, with intractable migraine, so stated, with status migrainosus

433.01 Occlusion and stenosis of basilar artery with cerebral infarction

433.11 Occlusion and stenosis of carotid artery with cerebral infarction

433.21 Occlusion and stenosis of vertebral artery with cerebral infarction

433.31 Occlusion and stenosis of multiple and bilateral precerebral arteries with cerebral infarction

433.81 Occlusion and stenosis of other specified precerebral artery with cerebral infarction

433.91 Occlusion and stenosis of unspecified precerebral artery with cerebral infarction

434.01 Cerebral thrombosis with cerebral infarction

434.11 Cerebral embolism with cerebral infarction

434.90 Cerebral artery occlusion, unspecified without mention of cerebral infarction

434.91 Cerebral artery occlusion, unspecified with cerebral infarction

Pulmonary embolism:

4150 Acute corpulmonale

41513 Saddle embolus of pulmonary artery

41519 Other pulmonary embolism and infarction

DVT

Clinical Classification Software code 118 “Phlebitis”

Disturbances of retinal circulation:

362.30 Retinal vascular occlusion, unspecified

362.31 Central retinal artery occlusion

362.32 Retinal arterial branch occlusion

362.33 Partial retinal arterial occlusion

362.34 Transient retinal arterial occlusion

362.35 Central retinal vein occlusion

362.36 Venous tributary (branch) occlusion

362.37 Venous engorgement

607.3 Priapism

Cholelithiasis, acute cholecystitis, cholangitis:

574.00 Calculus of gallbladder with acute cholecystitis, without mention of obstruction

574.01 Calculus of gallbladder with acute cholecystitis, with obstruction

574.10 Calculus of gallbladder with other cholecystitis, without mention of obstruction

574.11 Calculus of gallbladder with other cholecystitis, with obstruction

574.20 Calculus of gallbladder without mention of cholecystitis, without mention of obstruction

574.21 Calculus of gallbladder without mention of cholecystitis, with obstruction

574.30 Calculus of bile duct with acute cholecystitis, without mention of obstruction

574.31 Calculus of bile duct with acute cholecystitis, with obstruction

574.40 Calculus of bile duct with other cholecystitis, without mention of obstruction

574.41 Calculus of bile duct with other cholecystitis, with obstruction

574.50 Calculus of bile duct without mention of cholecystitis, without mention of obstruction

574.51 Calculus of bile duct without mention of cholecystitis, with obstruction

574.60 Calculus of gallbladder and bile duct with acute cholecystitis, without mention of obstruction

574.61 Calculus of gallbladder and bile duct with acute cholecystitis, with obstruction

574.70 Calculus of gallbladder and bile duct with other cholecystitis, without mention of obstruction

574.71 Calculus of gallbladder and bile duct with other cholecystitis, with obstruction

574.80 Calculus of gallbladder and bile duct with acute and chronic cholecystitis, without mention of obstruction

574.81 Calculus of gallbladder and bile duct with acute and chronic cholecystitis, with obstruction

574.90 Calculus of gallbladder and bile duct without cholecystitis, without mention of obstruction

574.91 Calculus of gallbladder and bile duct without cholecystitis, with obstruction

575.0 Acute cholecystitis

575.12 Acute and chronic cholecystitis

575.2 Obstruction of gallbladder

576.1 Cholangitis

576.2 Obstruction of bile duct

Bacterial sepsis/septic shock

790.7 Bacteremia

995.91 Sepsis

995.92 Severe sepsis

785.52 Septic shock