

# 1 TABLE A1: REVISED CDE LIST

Concepts Name	Suggested UMLS-Code	Data-Type	Codelist
<b>ACS-Timepoints</b>			
<b>Timepoints</b>			
<b>Date of admission</b>	C1302393	datetime	
<b>Date of discharge</b>	C2361123	datetime	
<b>Arrival at hospital</b>	C1320532	datetime	
<b>Time of symptom onset</b>	C1320528	datetime	
<b>Follow up date</b>	C3694716	datetime	
<b>Arrival time at Cath Lab</b>	C3838354	datetime	
<b>Days spent in ICU</b>	C0023303 C0021708	integer	
<b>EMS dispatch time</b>	C3261085 C1264639	datetime	
<b>Visit date</b>	C1320303	datetime	
<b>Lenght of stay</b>	C0023303	integer	
<b>Date of last contact</b>	C0805839	datetime	
<b>Time of first medical contact</b>	C1320531	datetime	
<b>Time of transfer from Emergency department</b>	C0011008 C3495034	datetime	
<b>Date of transfer</b>	C1546432	datetime	
<b>Means of transfer</b>	C0449375	text	
<b>Admission location</b>	C0450429	text	
<b>Patient data</b>			
<b>Patient data</b>			
<b>Date of birth</b>	C0001779	text	
<b>Gender</b>	C0079399	text	1=Male 2=Female 3=Other
<b>Informed consent</b>	C0021430	boolean	

<b>Tobacco consume</b>	C0543414	text	
<b>Family history of coronary heart disease</b>	C0455404	boolean	
<b>Patient address</b>	C0421449	text	
<b>Allergies</b>	C0020517	text	
<b>Patient ID</b>	C2348585	text	
<b>First name</b>	C1443235	text	
<b>Study Participation status</b>	C2348568	boolean	
<b>Insurance</b>	C0021672	text	
<b>Postal code</b>	C0421454	text	
<b>Ethnic Group</b>	C0015031	text	
<b>Race</b>	C0034510	text	
<b>Physician name</b>	C2361125	text	
<b>Telephone number</b>	C1515258	text	
<b>Reduced life expectancy</b>	C1858274	boolean	
<b>Allergy to contrast medium</b>	C0570562	boolean	
<b>Occupation</b>	C0028811	text	
<b>Hospitalization since previous visit</b>	C0019993	boolean	
<b>Premature termination of study</b>	C2348570	boolean	
<b>Primary physician</b>	C0017319	text	
<b>Admission source</b>	C0553514	text	
<b>OPS-Codes</b>	C1550373	text	
<b>Patient name</b>	C1299487		
<b>First name</b>		text	
<b>Last Name</b>		text	
<b>Initials</b>		text	
<b>Patient history</b>			
<b>Patient history</b>	C0679831		

<b>Alcohol consumption</b>	C0001948	boolean	
<b>History of kidney transplant</b>	C0022671	boolean	
<b>Increased risk of bradycardia</b>	C0428977	boolean	
<b>Dyslipidemia</b>	C0242339	text	
<b>Thrombocytopenia</b>		text	
<b>Hypercholesterolemia</b>		text	
<b>History of heart transplant</b>	C0018823	text	
<b>Exercise</b>	C0015259	boolean	
<b>Laboratory</b>			
<b>Troponin</b>	C0523952		
<b>Troponin T</b>	C1141947	float	ng/mL
<b>Troponin I</b>	C0920210	float	ng/mL
<b>Laboratory</b>	C0681902		
<b>Creatinine</b>	C0201976	float	mg/dL
<b>Hemoglobin</b>	C0019046	float	mmol/L
<b>CK-MB</b>	C0523584	float	ng/mL
<b>Total cholesterol</b>	C1445957	float	mmol/L
<b>INR</b>	C0525032	float	
<b>Creatine Kinase</b>	C0201973	float	U/L
<b>LDL Cholesterol</b>	C0202117	float	mmol/L
<b>Platelet count</b>	C0005821	float	/L
<b>CRP</b>	C0201657	float	mg/L
<b>LDL measurement</b>	C0428474	float	mmol/L
<b>PTT</b>	C0030605	float	s
<b>Triglycerides</b>	C0202236	float	mg/dL
<b>Hematocrit</b>	C0518014	float	%
<b>GFR</b>	C0017654	float	mL/min
<b>White blood cell count</b>	C0023508	float	/L
<b>Cardiac biomarker</b>	C1271630	text	

<b>measurements</b>			
<b>HbA1c</b>	C0019018	float	%
<b>Blood Glucose</b>	C0202042	float	mg/dL
<b>Alanine aminotransferase</b>	C0201836	float	U/L
<b>MCH</b>	C0369183	float	pg
<b>Cardiac markers elevated</b>	C0741921	boolean	
<b>Red blood cell count</b>	C0014772	float	/L
<b>Aspartate aminotransferase</b>	C0201899	float	IU/L
<b>TSH</b>	C0202230	float	mIU/L
<b>Sodium</b>	C0337443	float	mmol/L
<b>MCV</b>	C1948043	float	fL
<b>MCHC</b>	C0474535	float	g/dL
<b>BNP</b>	C1095989	float	pg/mL
<b>Potassium</b>	C0202194	float	mmol/L
<b>Total bilirubin</b>	C0201913	float	µmol/L
<b>Magnesium</b>	C0024467	float	mmol/L
<b>Creatinine Clearance</b>	C0373595	float	mL/min
<b>Gamma-glutamyl transpeptidase</b>	C1883012	float	U/L
<b>Urea</b>	C0523961	float	mmol/L
<b>Medication</b>			
<b>Medication</b>			
<b>Current medication list</b>	C1553892	text	
<b>Contraception</b>	C0700589	text	
<b>Diuretics</b>	C0012798	text	
<b>Thienopyridine</b>	C2936588	text	
<b>NSAIDs</b>	C0003211	text	
<b>Non-statin lipid lowering agent</b>	C0003367	text	
<b>Eptifibatide</b>	C0253563	text	
<b>Calcium channel blocker</b>	C0006684	text	

<b>Insulin</b>	C0021641	text	
<b>Oral Thrombin inhibitor</b>	C3536847	text	
<b>Vitamin-K antagonists</b>	C2267235	text	
<b>Iotropic agent</b>	C0304509	text	
<b>Antiarrhythmics</b>	C0003195	text	
<b>Marcumar</b>	C0031444	text	
<b>Catecholamines</b>	C0007412	text	
<b>Tirofiban</b>	C0247025	text	
<b>Abciximab</b>	C0288672	text	
<b>Urokinase</b>	C0042071	text	
<b>Digoxin</b>	C0012265	text	
<b>Streptokinase</b>	C0038418	text	
<b>Ranolazine</b>	C0073633	text	
<b>Proton pump inhibitors</b>	C0358591	text	
<b>Ivabradin</b>	C0257190	text	
<b>Nitrates</b>	C0017887	text	
<b>Aspirin</b>	C0004057		
<b>Aspirin contraindication</b>	C0729798	boolean	
<b>Aspirin dosage</b>	C0178602 C0004057	float	mg
<b>Aspirin at discharge</b>	C3871203 C0004057	boolean	
<b>Anticoagulation</b>	C0003280		
<b>Anticoagulation start date</b>	C0003280 C0808070	datetime	
<b>Anticoagulation dose</b>	C0178602 C0003280	float	mg
<b>Anticoagulant</b>	C0003280	text	IV unfractionated=IV unfractionated Low molecular weight=Low molecular weight Bivalirudin=Bivalirudin Fondaparinux=Fondaparinux Other=Other
<b>Oral anticoagulant</b>	C0354604	boolean	
<b>Anticoagulation contraindicated</b>	C1531588	boolean	
<b>Thrombolytics</b>	C0040044		

<b>Thrombolytics contraindicated</b>	C3260558	boolean	
<b>Thrombolytics dosage</b>	C0040044 C0178602	float	
<b>Clopidogrel</b>	C0070166		
<b>Clopidogrel contraindicated</b>	C1319916	boolean	
<b>Clopidogrel dosage</b>	C0070166 C0178602	float	
<b>Clopidogrel start time</b>	C130188 C0070166	datetime	
<b>Low molecular weight heparin</b>	C0019139		
<b>Enoxaparin</b>	C0206460	text	
<b>LMWH start date</b>	C3536766 C1301880	datetime	
<b>LMWH dose</b>	C3536766 C0178602	float	
<b>Glycoprotein 2b/3a inhibitors</b>	C3640054		
<b>2b/3a blocker dosage</b>	C3640054 C0178602	float	
<b>2b/3a start time</b>	C1301880 C3640054	datetime	
<b>Unfractionated heparin</b>	C2825026		
<b>Unfractionated heparin contraindication</b>	C2825026 C0522473	boolean	
<b>Unfractionated heparin dose</b>	C2825026 C0178602	float	
<b>Unfractionated heparin start time</b>	C1301880 C2825026	datetime	
<b>Beta-Blocker</b>	C0001645		
<b>Beta-Blocker contraindication</b>	C1278474	boolean	
<b>Statins</b>	C0360714		
<b>Statin contraindicated</b>	C1277178	boolean	
<b>Statin dose</b>	C0360714 C0178602	float	
<b>ACE Inhibitors</b>	C0003015		
<b>ACE inhibitor contraindicated</b>	C0003015 C0522473	boolean	

<b>Angiotensin 2 Receptor Antagonists</b>	C0521942		
<b>ARB Contraindication</b>	C1273465	boolean	
<b>Warfarin</b>	C0043031		
<b>Warfarin contraindicated</b>	C0043031 C0522473	boolean	
<b>Prasugrel</b>	C1620287		
<b>Prasugrel Dose</b>	C1620287 C0178602	float	
<b>Prasugrel contraindicated</b>	C1620287 C0522473	boolean	
<b>Prasugrel start time</b>	C1620287 C1301880	datetime	
<b>Ticagrelor</b>	C1999375		
<b>Ticagrelor dosage</b>	C1999375 C0178602	float	
<b>Ticagrelor contraindication</b>	C1999375 C0522473	boolean	
<b>Ticagrelor start time</b>	C1999375 C1301880	datetime	
<b>Bivalirudin</b>	C0168273		
<b>Bivalirudin contraindicated</b>	C0168273 C0522473	boolean	
<b>Bivalirudin start time</b>	C0168273 C1301880	datetime	
<b>Fondaparinux</b>	C1098510		
<b>Contraindication to fondaparinux</b>	C0700589 C0522473	boolean	
<b>Ticlopidine</b>	C0040207		
<b>Ticlopidine dose</b>	C0040207 C0178602	float	
<b>Ticlopidin contraindicated</b>	C0522473 C0040207	boolean	
<b>Dabigatran</b>	C2348066		
<b>Dabigatran contraindicated</b>	C2348066 C0522473	boolean	

<b>Aldosterone Blocking Agent</b>	C0002007		
<b>Aldosterone blocking agent contraindicated</b>	C0002007 C0522473	boolean	
<b>Aldosterone blocking agent dose</b>	C0002007 C0178602	float	
<b>Rivaroxaban</b>	C1739768		
<b>Rivaroxaban contraindicated</b>	C1739768 C0522473	boolean	
<b>Dalteparin</b>	C0206461		
<b>Dalteparin contraindicated</b>	C0206461 C0522473	boolean	
<b>Apixaban</b>	C1831808		
<b>Apixaban contraindicated</b>	C1831808 C0522473	boolean	
<b>Outcome</b>			
<b>Outcome</b>			
<b>Adverse events</b>	C0877248	text	
<b>Event prolonged hospitalization</b>	C0745041	text	
<b>Complications</b>	C0009566		
<b>Vascular complications</b>	C1393529	text	
<b>Neurological complications</b>	C0235029	text	
<b>Death</b>	C0011065		
<b>Discharge Status</b>	C0586514	text	1=Death 2=Alive 3=Unknown
<b>Cause of Death</b>	C0007465	text	
<b>Date of death</b>	C1148348	datetime	
<b>Autopsy performed</b>	C0004398	boolean	
<b>Rehospitalization</b>	C0600290		



<b>Reason for Rehospitalization</b>	C1830395	text	
<b>Date of Rehospitalization</b>	C1264639 C0600290	datetime	
<b>Rehabilitation</b>			
<b>Cardiac rehabilitation</b>	C0700431	boolean	
<b>Smoking counseling</b>	C1273715	boolean	
<b>Procedures</b>			
<b>Procedures</b>	C0087111		
<b>Intra-aortic balloon pump</b>	C0021860	boolean	
<b>Cardiac pacemaker</b>	C0030163	boolean	
<b>Hemodialysis</b>	C0019004	boolean	
<b>Cardiac surgery</b>	C0018821	text	
<b>Pulmonary Artery Catheter</b>	C0190658	text	
<b>Ventilator</b>	C0087153	text	
<b>Arterial Access Site</b>	C3272298	text	1=Femoral 2=Brachial 3=Radial 4=Other
<b>Cardiopulmonary Resuscitation</b>	C0007203	boolean	
<b>Contrast medium</b>	C0009924	text	
<b>X-ray tomography</b>	C0040405	text	
<b>X-ray Exposure time</b>	C2348485	time	
<b>Mechanical support</b>	C0457617	text	
<b>MRI imaging</b>	C0024485	text	
<b>Holter monitoring</b>	C0013801	text	
<b>Pulmonary angiography</b>	C0677490	text	
<b>Hemodialysis</b>	C0019004	text	
<b>Drug eluting balloon</b>	C1322815	text	
<b>Valve replacement</b>	C0190173	text	
<b>Brachytherapy</b>	C0006098	text	
<b>Comfort measures only</b>	C0150521	boolean	
<b>Angioplasty</b>	C0162577	text	

<b>Revascularization</b>	C0581603	text	
<b>Ventilation/perfusion scan</b>	C0560738	text	
<b>Urgency</b>	C2188402	text	
<b>Percutaneous Coronary Intervention</b>	C1532338		
<b>History of PCI</b>	C1320647	boolean	
<b>Contraindication for PCI</b>	C0522473 C1532338	boolean	
<b>Date of most recent PCI</b>	C1532338 C1264639	datetime	
<b>Coronary Artery Bypass Graft</b>	C0010055		
<b>Date of CABG</b>	C2164190	datetime	
<b>History of CABG</b>	C1842251	boolean	
<b>Coronary Angiography</b>	C0085532		
<b>Date of Coronary angiography</b>	C0011008 C0085532	datetime	
<b>Contraindication for angiography</b>	C0085532 C0522473	boolean	
<b>Electrocardiogram</b>	C0013798		
<b>ECG findings</b>	C0438154	text	
<b>Time of ECG</b>	C2826759	datetime	
<b>Surgical procedure</b>	C0543467		
<b>History of surgery</b>	C0744961	boolean	
<b>Non-cardiovascular invasive procedure</b>	C1548804	text	
<b>Myocardial stress test</b>	C1384495		
<b>Date of stress test</b>	C1384495 C0011008	datetime	
<b>Stress echocardiography</b>	C0920208	text	
<b>Non-invasive stress test</b>	C3272313	text	

<b>Echocardiography</b>	C0013516		
<b>Date of Echocardiogram</b>	C0013516 C0011008	datetime	
<b>Cardiac stent placement</b>	C3272316		
<b>Stent type</b>	C0687568 C0332307	text	1=Drug-eluting stent[C1322815] 2=Bare metal stent[C2825200] 3=Other stent
<b>Number of stents</b>	C2024081	integer	
<b>Stent length</b>	C0449462	text	
<b>Transfusion of blood</b>	C0005841		
<b>Date of blood transfusion</b>	C1879316 C0011008	datetime	
<b>Intracardial defibrillator (ICD)</b>	C1273352		
<b>Temporary pacemaker ICD</b>	C0162589	boolean	
<b>ICD implantation date</b>	C1273352 C0011008	date	
<b>Examinations</b>			
<b>Examination findings</b>	C0243095		
<b>Pericard</b>	C0031050	text	
<b>Mitral valve</b>	C0577791	text	
<b>Tricupid valve</b>	C0577797	text	
<b>Aortic valve</b>	C0577789	text	
<b>Right atrium</b>	C1269890	text	
<b>Left atrium</b>	C1269894	text	
<b>Aorta</b>	C3532907	text	
<b>Cardiac auscultation</b>	C1291017	text	
<b>Right coronary artery</b>	C0226042	text	
<b>Right ventricle</b>	C0577787	text	
<b>Left ventricle</b>	C0577786	text	
<b>Left coronary artery</b>	C0226029	text	
<b>Physical examination</b>	C0031809	text	

<b>Abdominal wall</b>	C1269041	text	
<b>Lung percussion</b>	C1291006	text	
<b>Current condition</b>	C1148438	text	
<b>Weight</b>	C0005910	float	kg
<b>Heart rate</b>	C0018810	integer	bpm
<b>Pregnancy</b>	C0549206	boolean	
<b>Height</b>	C0005890	integer	cm
<b>Hypertension</b>	C0020538	boolean	
<b>Left ventricular ejection fraction</b>	C0428772	float	%
<b>Chest pain</b>	C0008031	boolean	
<b>Dyspnea</b>	C0013404	boolean	
<b>Peripheral arterial disease</b>	C1704436	boolean	
<b>Malignant neoplasm</b>	C0006826	boolean	
<b>Symptoms at admission</b>	C3177142	text	
<b>TIMI Score</b>	C3272266	text	
<b>Hemodynamic instability</b>	C0948268	boolean	
<b>Coronary Artery Disease</b>	C1956346	boolean	
<b>Cardiovascular risk factors</b>	C0850624	text	
<b>Aneurysm</b>	C0002940	text	
<b>Arteriovenous malformation</b>	C0003857	text	
<b>Waist circumference</b>	C0455829	integer	cm
<b>Ventricular Septal Defect</b>	C0018818	boolean	
<b>Edema</b>	C0013604	boolean	
<b>Cardiac Tamponade</b>	C0007177	boolean	
<b>Trauma</b>	C1368081	text	
<b>Body mass index</b>		float	kg/qm
<b>Body surface area</b>	C0005902	float	qm
<b>Cardiac Wall rupture</b>	C0018813	boolean	
<b>Mitral regurgitation</b>	C0026266	boolean	
<b>Drug dependence</b>	C1510472	text	
<b>Left ventricular assist device</b>	C0181598	boolean	
<b>COPD</b>	C0024117	boolean	

<b>Asthma</b>	C0004096	boolean	
<b>Pulmonary embolism</b>	C0034065	boolean	
<b>Carotid stenosis</b>	C0007282	boolean	
<b>Body temperature</b>	C0005903	float	°C
<b>Breathing sound</b>	C0035234	text	
<b>Aortic dissection</b>	C0340643	boolean	
<b>Rheumatoid arthritis</b>	C0003873	boolean	
<b>Cyanosis</b>	C0010520	boolean	
<b>Left ventricular systolic dysfunction</b>	C1277187	boolean	
<b>Syncope</b>	C0039070	boolean	
<b>Puls status</b>	C1287726	text	
<b>Nutritional status</b>	C0392209	text	
<b>Mental illness</b>	C0004936	boolean	
<b>Hypotension</b>	C0020649	boolean	
<b>Other arterial thrombotic event</b>	C0151942	boolean	
<b>EQ-5D-3L Quality of Life</b>	C2733251	text	
<b>Snusning</b>	C0040338	boolean	
<b>Infectivity</b>	C0030657	text	
<b>Date of examination</b>	C2826643	date	
<b>Electrophysiology study</b>	C1446476	text	
<b>Physical status</b>	C0450990	text	
<b>Blood pressure</b>	C0005823		
<b>Systolic blood pressure</b>	C0871470	integer	mmHg
<b>Diastolic blood pressure</b>	C0428883	integer	mmHg
<b>Myocardial ischemia</b>	C0151744		
<b>ECG signs of myocardial ischemia</b>	C1141959	boolean	
<b>Reinfarction</b>	C0948369		

<b>Reinfarction date</b>	C0948369 C0011008	datetime	
<b>Coronary stenosis</b>	C0242231		
<b>Stenosis percent</b>	C3897965	float	%
<b>Culprit artery</b>	C1299364	text	LAD=LAD LCx=LCx RCA=RCA LM=LM Graft/Stent=Graft/Stent Unknown=Unknown
<b>Number of diseased vessels</b>	C3275120	integer	
<b>Left main stenosis</b>	C2825221	boolean	
<b>LAD Stenosis</b>	C2825222	boolean	
<b>Diagnosis</b>			
<b>Stroke/TIA</b>	C0038454		
<b>History of stroke</b>	C0559159	boolean	
<b>Type of stroke</b>	C3897486	text	1=Ischemic 2=Hemorrhagic
<b>Date of stroke</b>	C0038454 C0011008	datetime	
<b>Heart failure</b>	C0018801		
<b>Heart failure</b>	C0018801		
<b>History of heart failure</b>	C0455531	boolean	
<b>Date of heart failure</b>	C0018801 C1264639	datetime	
<b>NYHA classification</b>	C1275491	text	1=I 2=II 3=III 4=IV
<b>Diagnosis</b>	C0011900		
<b>Acute Coronary Syndrome</b>	C0948089	boolean	
<b>Impaired renal function</b>	C0151746	boolean	
<b>STEMI</b>	C1536220	boolean	
<b>Cardiogenic shock</b>	C0036980	boolean	
<b>NSTEMI</b>	C3537184	boolean	
<b>Impaired hepatic function</b>	C0086565	boolean	
<b>Increased bleeding risk</b>	C3251812	boolean	

<b>Diagnosis</b>	C0011900	text	
<b>Atrial fibrillation</b>	C0004238	text	
<b>Working diagnosis on admission</b>	C0332135	text	
<b>Cardiac arrest</b>	C0018790	boolean	
<b>Final/discharge diagnosis</b>	C0332144	text	
<b>Secondary diagnosis</b>	C0332138	text	
<b>Depression</b>	C0011581	boolean	
<b>Hemorrhage</b>	C0019080		
<b>Bleeding location</b>	C0019080 C0450429	text	GI=GI Retroperitoneal=Retroperitoneal Intracranial=Intracranial Access Site=Access Site Other=Other GU=GU
<b>History of bleeding</b>	C3251812	boolean	
<b>Angina pectoris</b>	C0002962		
<b>CCS classification</b>	C1879987	text	I=I II=II III=III IV=IV
<b>History of Angina pectoris</b>	C0455530	boolean	
<b>Type of Angina pectoris</b>		text	1=Stable[C0340288] 2=Unstable[C0002965]
<b>Diabetes mellitus</b>	C0011849		
<b>Diabetes therapy</b>	C3274787	text	Insulin=Insulin Oral=Oral Diet=Diet None=None Other=Other
<b>Myocardial infarction</b>	C0027051		
<b>Infarction location</b>	C0027051 C0450429	text	Anterior=Anterior Posterior=Posterior Inferior=Inferior Other=Other
<b>History of MI</b>	C1275835	boolean	
<b>Date of most recent MI</b>	C2924287	datetime	
<b>EKG</b>			
<b>EKG findings</b>	C0438154		
<b>Cardiac rhythm</b>	C0232187	text	Sinus rhythm=Sinus rhythm[C0232201] Atrial fibrillation or flutter=Atrial fibrillation or flutter[C0004238 C0004239] Paced=Paced[C2981711] Other rhythm=Other rhythm

<b>Left bundle branch block</b>	C0023211	boolean	
<b>Ventricular arrhythmia</b>	C0085612	boolean	
<b>Significant Q waves</b>	C0429090	boolean	
<b>AV block</b>	C0004245	boolean	
<b>QT interval</b>	C0429028	text	
<b>Ventricular tachycardia</b>	C0042514	boolean	
<b>Ventricular fibrillation</b>	C0042510	boolean	
<b>PQ time</b>	C0429024	integer	ms
<b>Right branch bundle block</b>	C0085615	boolean	
<b>QTc time</b>	C0489625	integer	ms
<b>ST elevation</b>	C0520886		
<b>Location of ST elevation</b>		text	Anterior leads=Anterior leads[C3874460] Lateral leads=Lateral leads[C3874459] Inferior leads=Inferior leads[C3874457]
<b>ST depression</b>	C0520887		
<b>Location of ST depression</b>		text	Inferior leads=Inferior leads[C3874480] Anterior leads=Anterior leads[C3874467] Lateral leads=Lateral leads[C0743440]
<b>Pathological T wave</b>	C0438167		
<b>T inversion</b>	C0520888	boolean	
<b>ST-segment changes</b>	C0232326		
<b>ST deviation</b>	C1116089	boolean	
<b>Nonspecific ST/T Change</b>	C0920117	boolean	
<b>QRS annotation</b>	C0429098		
<b>QRS duration</b>	C0429025	integer	ms