

Supplemental table 1: ICD10 codes used to define clinical conditions and procedures

Cardiogenic Shock	R57.0
Acute Kidney Injury	N17, N19
Anemia	D50, D508, D509, D51, D53
Coronary artery bypass graft	0210, 0211, 0212, 0213
Coronary artery disease	I20, I21, I22, I23, I24, I25
Heart failure	I099, I110, I130, I132, I255, I420, I425, I429, I43, I50
Chronic Liver Disease	B180, K730, K740, K700, K7010, K702, K7030, K709, K717, K713, K714, K7150, K760, K762, K763, K764, K760, K769, Z944
Chronic deep vein thrombosis	I82211, I82291, I825, I827, I82A2, I82B2, I82C2, I82891, I825, I827, I82A2, I82B2, I82C2, I82891, I8291, V1251, V1255
Chronic Kidney Disease	I131, N18, N19, N250, Z490, Z492, Z940, Z992
Coagulopathy	D65, D68, D66, D67, D691, D693, D696
Connective Tissue Disease	L940, L941, L943, M05, M06, M08, M12, M123, M30, M310, M313, M32, M33, M34, M35, M45, M461, M468, M469
Chronic obstructive pulmonary disease	I278, I279, J40, J47, J60, J67, J684, J701, J703
Depression	F204, F313, F315, F32, F33, F341, F412, F432
Diabetes	E08, E09, E10, E11, E12, E13
Drug Abuse	F11, F16, F18, F19, Z715, Z722, F15, F12
Acute deep vein thrombosis	I82210, I82220, I82290, I824, I826, I82A1, I82B1, I82C1, I82890, I8290
ECMO	5A15223
Ethanol intake	F10, E52, G621, I426, K292, K700, K703, K709, T51, Z502, Z714, Z721
Atrial fibrillation/atrial flutter	I48,
Gastrointestinal bleeding	K9202, K9201, K9200, K625, R195, D50
Hemodialysis	5A1D
Hyperlipidemia	E78
Hypertension	I10, I11, I13, I15, I16
Hypothyroidism	E00, E03, E01, E02, E890, E00, E01, E02, E03, E890
Intraaortic balloon pump	5A02110, 5A02210
Percutaneous ventricular assist device	5A0221D, 5A0211D
Myocarditis	I514, I40, I41, B3322, D8685, J1182
NSTEMI	I214
STEMI	I21, I22
Obesity	E65, E66, E67, E68, Z683, Z684
Obstructive sleep apnea	G473
Pulmonary embolism	I26
Pulmonary hypertension	I26, I27, I28, I288, I289
Vasopressors	3E030XZ, 3E033XZ, 3E040XZ, 3E043XZ, 3E050XZ, 3E053XZ, 3E060XZ, 3E063XZ
Psychosis	F20, F22, F25, F28, F29, F302, F312, F315,
Peripheral vascular disease	I70, I71, I731, I738, I739, I771, I790, I792, K551, K558, K559, Z958, Z959,
Right Heart Cath	4A023N6, 4A023N8
Smoking	F17, Z87891, Z720, T652, V1582
Stroke	I69, Z8673, I63, I97811, I97821, I6781, I6782, I6789, I60, I61, I62, V1254
Heart Transplant	02YA
V fib/Flutter	I49
Left ventricular assist device	02HA0QZ, 02HA3RZ
Valvular heart Disease	I05, I06, I07, I08, I09, I39, Q230, Q233, Z952, Z954
Ventilator	5A19

Supplemental table 2: Predictors of 30-day readmissions among subsets

	OR [95% CI]	P value
<b>ECMO post-cardiac surgery</b>		
Length of stay	1.02 [1-1.03]	0.006
Medicaid as payor	4.11 [1.39-12.1]	0.01
Underwent LVAD	3.59 [1.19-10.84]	0.023
Diabetes	2.68 [1.18-6.05]	0.018
Acute DVT	2.95 [1.14-7.58]	0.025
Deficiency Anemia	12.66 [0.94-171.19]	0.056
Underwent Heart Transplant	0.16 [0.04-0.58]	0.006
Location defined as Fringe counties of metro area of > 1 million population	0.37 [0.14-0.97]	0.044
Counties in metro area of 250,000-999,999 population	0.14 [0.04-0.48]	0.002
Micropolitan counties	0.22 [0.06-0.87]	0.031
Not metropolitan	0.06 [0.01-0.51]	0.01
<b>ECMO not following cardiac surgery</b>		
Discharged to SNF	2.11 [1.06-4.21]	0.03
Discharged with HCC	2.15 [1.09-4.22]	0.03
Underwent LVAD	2.36 [1.31-4.25]	0.00
Asthma	3.69 [1.30-10.43]	0.01
Chronic Liver Disease	2.86 [1.06-7.72]	0.04

**Patient discharged with no LVAD**

Discharged to SNF	2.3 [1.21-4.4]	0.01
Discharged with HCC	2.19 [1.12-4.26]	0.02
Asthma	2.53 [0.99-6.46]	0.05
Chronic Liver Disease	2.36 [1.03-5.41]	0.04

**Patient who underwent LVAD during index hospitalization**

Dyslipidemia	3.17 [1.2-8.4]	0.02
Cardiac Arrest during admission	3.96 [1.04-15.15]	0.04