

**Supplementary Table 1.** Severe illness diagnosis codes

Disease category	KCD-8 code
Myocardial infarction	I210–I219
Ischemic stroke	I6300–I64
Intracranial hemorrhage	I610–I629
Subdural hemorrhage	I600–I609
Severe trauma <sup>a)</sup>	Based on 2016–2019 NEDIS data, the SRR was made in 2023. The ICISS was calculated by multiplying the SRR of three diagnoses with the lowest SRR of all diagnoses. Trauma patients with ICISS <0.9 refer to severe trauma.
Aortic dissection	I7101–I7109, I7110–I7119, I713, I715, I718
Biliary disease	K8000–K8011, K8030–K8041, K8051, K819, K830, K831
Surgical diagnosis	K352–K353, K631, K650–K659, K661
GI bleeding (FB)	I850, I864, I8640, I983, K226, K2500, K2501, K2521, K2540, K2541, K2561, K260, K262, K264, K266, K920, K921, K922, T181
Tracheal bleeding (FB)	R042, R048, R049, T174–T179
Intoxication	T360–T659
Perinatal disease	O000–O009, O140–O159, O4200, O4201, O4209, O4210, O4211, O4219, O4220, O4221, O4229, O4290, O4291, O4299, O450–O459, O6000–O6039, O622, O720–O723, O800–O809, O820–O829
Premature born (low birth weight)	P0700–P0739, P220–P229, P240–P249, P360–P369, P520, P521, P5220–P5221, P523–P529, P590–P599
Severe burn	T2030–T2039, T2070–T2079, T213, T217, T313–T319
Status epilepticus	G410–G419
Meningitis	A830–A879, G000–G07
Sepsis	A021, A227, A241, A267, A400–A409, A410–A414, A419, A427, B007, B377
Diabetic encephalopathy	E1000–E1018, E1100–E1118, E1300–E1318, E1400–E1418
Pulmonary embolism (DVT)	I260, I269, I802
Arrhythmia	I441, I442, I450–I459, I472, I480–I489, I490, I495, I498, I499
ARDS/pulmonary edema	J80, J81, J850–J869, J9600–J9699
DIC	D65
Intussusception/ileus	K561–K563, K565–K566
Amputation	S480–S489, S580–S589, S6800–S689, S780–S789, S880–S889, S980–S984, T050–T059, T060–T068, T116, T136
Acute kidney injury	N170–N179
Ophthalmic emergency	H3300–H3309, H331, H332, H3330–H334, H335, H340–H349, H400, H4010–H4019, H4020–H4029, H403, H404, H405, H406, H408, H409, H420, H428
Post arrest care	I460–I469
Urologic emergency	N44, N4500–N4502, N4590–N4592

KCD-8, Korean Standard Classification of Diseases, Version 8; NEDIS, National Emergency Department

Information System; SRR, survival risk ratio; ICISS, International Classification of Diseases, Ninth

Revision–based Injury Severity Score; GI, gastrointestinal; FB, foreign body; DVT, deep vein thrombosis;

ARDS, acute respiratory distress syndrome; DIC, disseminated intravascular coagulation.

<sup>a)</sup>Severe trauma was added as severe illness diagnosis code from 2020.