

Supplementary Table 1. Operational definitions of type 2 diabetes mellitus and its related comorbidities

	Operational definition of diagnosis
Type 2 diabetes mellitus from claim DB	ICD-10 code of type 2 diabetes mellitus (E11-E14) as the principal diagnosis or up to a fourth additional diagnosis+prescribed at least one anti-diabetic drug in a given year
Hypertension from claim DB	≥1 claim/year for antihypertensive medication under ICD-10 code of I10-I13, I15
Dyslipidemia from claim DB	≥1 claim/year for anti-dyslipidemia agents under ICD-10 code of E78
Anti-diabetic medications	Sulfonylurea, metformin, DPP-4i, alpha-glucosidase inhibitor, meglitinide, thiazolidinedione, insulins, GLP-1RA, SGLT2i
CVD	
ASCVD	IHD (+hospitalization ^a) or stroke (+hospitalization and CT/MRI scan ^a)
IHD	I20-25
Acute myocardial infarction	I21, I22
Percutaneous coronary intervention (PCI)	I20-I25 & M6551-4, M6561-7, M6571-2
Coronary artery bypass graft (CABG)	I20-I25 & O1640-2, O6147-9, OA640-2, OA647-9
(Ischemic) stroke	I63, I64
Heart failure	I50 (+hospitalization ^a)

DB, database; ICD-10, International Classification of Disease, 10th revision; DPP-4i, dipeptidyl peptidase-4 inhibitor; GLP-1RA, glucagon-like peptide-1 receptor agonist; SGLT2i, sodium-glucose cotransporter 2 inhibitor; CVD, cardiovascular disease; ASCVD, atherosclerotic cardiovascular disease; IHD, ischemic heart disease; CT, computed tomography; MRI, magnetic resonance imaging.

^aFor incident cases.