

Supplementary Table S1 Overview of chronic comorbidities and corresponding ICD-9-CM

	ICD
Osteoporosis, unspecified	733.00
Senile osteoporosis	733.01
Rheumatoid arthritis	714.0
Other osteoporosis	733.09
Ankylosing spondylitis	720.0
Benign essential hypertension	401.1
Atrial fibrillation	427.31
Old myocardial infarction	412
Other specified forms of chronic ischemic heart disease	414.8
Other specified cardiac dysrhythmias	427.89
Mitral valve disorders	424.0
Aortic valve disorders	424.1
Hypertensive chronic kidney disease, benign, with chronic kidney disease stage I through stage IV, or unspecified	403.0
Congestive heart failure, unspecified	428.0
Unspecified essential hypertension	401.9
Left heart failure	428.1
Benign hypertensive heart disease without heart failure	402.10
Tricuspid valve disorders, specified as nonrheumatic	424.2
Heart failure, unspecified	428.9
Late effects of cerebrovascular disease, hemiplegia affecting unspecified side	438.20
Other chronic pulmonary heart diseases	416.8
Hypertensive chronic kidney disease, benign, with chronic kidney disease stage V or end stage renal disease	403.10
Other primary cardiomyopathies	425.4
Atrial flutter	427.32

Sinoatrial node dysfunction	427.81
Other generalized ischemic cerebrovascular disease	437.1
Cardiac dysrhythmia, unspecified	427.9
Paroxysmal ventricular tachycardia	427.1
Supraventricular premature beats	427.61
Other late effects of cerebrovascular disease	438.89
Ventricular fibrillation	427.41
Chronic ischemic heart disease, unspecified	414.9
Late effects of cerebrovascular disease, aphasia	438.11
Asthma, unspecified type, unspecified	493.90
Extrinsic asthma, unspecified	493.00
Chronic respiratory failure	473.0
Epilepsy, unspecified, without mention of intractable epilepsy	345.90
Generalized convulsive epilepsy, without mention of intractable epilepsy	345.10
Alzheimer's disease	331.0
Alcohol abuse, unspecified	305.00
Acute alcoholic intoxication in alcoholism, unspecified	303.00
Alcoholic cirrhosis of liver	571.2
Portal hypertension	572.3
Regional enteritis of unspecified site	555.9
Irritable bowel syndrome	564.1
Alcoholic liver damage, unspecified	571.3
Cirrhosis of liver without mention of alcohol	571.5
Chronic kidney disease, Stage III (moderate)	585.3
Chronic kidney disease, unspecified	585.9
Chronic kidney disease, Stage IV (severe)	585.4
End stage renal disease	585.6
Chronic kidney disease	585
Nephritis and nephropathy, not specified as acute or chronic, in diseases classified elsewhere	583.81
Other ascites	789.59

Supplementary Table S2 Overview of acute comorbidities and corresponding ICD-9-CM

	ICD
Cardiac arrest	427.5
Other pulmonary embolism and infarction	415.19
Subendocardial infarction, initial episode of care	410.71
Unspecified transient cerebral ischemia	435.9
Obstructive chronic bronchitis without exacerbation	491.20
Pneumonia, organism unspecified	485
Acute respiratory failure	518.81
Pulmonary insufficiency following trauma and surgery	518.5
Unspecified pleural effusion	511.9
Pneumonitis due to inhalation of food or vomitus	507.0
Obstructive chronic bronchitis with (acute) exacerbation	491.21
Bronchopneumonia, organism unspecified	485
Pneumonia due to other gram-negative bacteria	482.83
Other specified forms of effusion, except tuberculous	511.8
Obstructive chronic bronchitis with acute bronchitis	491.22
Other pulmonary insufficiency, not elsewhere classified	518.82
Methicillin susceptible pneumonia due to Staphylococcus aureus	482.41
Pneumonia due to Pseudomonas	482.1
Pneumonia due to escherichia coli [E. coli]	482.82
Bacterial pneumonia, unspecified	482.9
Pneumococcal pneumonia [Streptococcus pneumoniae pneumonia]	481
Pneumonia due to Hemophilus influenzae [H. influenzae]	482.2
Pneumonia due to Klebsiella pneumoniae	482.0
Iatrogenic pneumothorax	512.1
Paralytic ileus	560.1
Acute pancreatitis	577.0
Acute and subacute necrosis of liver	570

Acute vascular insufficiency of intestine	557.0
Urinary tract infection, site not specified	599.0
Acute kidney failure, unspecified	584.9
Unspecified disorder of kidney and ureter	593.9
Acute cystitis	595.0
Cystitis, unspecified	575.10
Abnormal coagulation profile	790.92
Other shock without mention of trauma	785.59
Gangrene	785.4
Septic shock	785.52
Bacteremia	790.7
Cardiogenic shock	785.51
Other convulsions	780.39

Supplementary Table S3 Post- hoc analysis per type of road way user (Discharge home)

	Medical specialist			General practitioner			Rehabilitation			Outpatient nursing care		
	Estimate	SE	p-value	Estimate	SE	p-value	Estimate	SE	p-value	Estimate	SE	p-value
Cyclist vs Pedestrian	-0,18	0,036	<0,0001	-0,11	0,019	<0,0001	-0,12	0,050	0,0200	-0,47	0,106	<0,0001
Driver vs Pedestrian	0,06	0,051	0,2711	-0,01	0,027	0,7395	-0,30	0,064	<0,0001	-0,28	0,145	0,0579
Passenger vs Pedestrian	0,01	0,067	0,8935	-0,02	0,039	0,5659	-0,24	0,091	0,0080	-0,22	0,161	0,1689
Motorcyclist vs Pedestrian	-0,08	0,051	0,1414	-0,03	0,030	0,2982	-0,18	0,064	0,0042	-0,07	0,131	0,5948
Driver vs Cyclist	0,23	0,046	<0,0001	0,10	0,026	<0,0001	-0,18	0,062	0,0033	0,19	0,124	0,1212
Passenger vs Cyclist	0,19	0,064	0,0611	0,09	0,039	0,0232	-0,13	0,092	0,1679	0,25	0,143	0,0858
Motorcyclist vs Cyclist	0,10	0,045	0,0239	0,08	0,028	0,0057	-0,07	0,062	0,2770	0,40	0,100	<0,0001
Passenger vs Driver	-0,05	0,071	0,5069	-0,01	0,042	0,7467	0,06	0,095	0,5569	0,05	0,165	0,7437
Motorcyclist vs Driver	-0,13	0,056	0,0186	-0,02	0,034	0,4956	0,12	0,068	0,0905	0,21	0,129	0,1117
Motorcyclist vs Passenger	-0,08	0,071	0,2336	-0,01	0,045	0,8401	0,06	0,096	0,5347	0,15	0,149	0,3083

Supplementary Table S4 Post- hoc analysis per type of road way user (In-hospital rehabilitation)

	Medical specialist			General practitioner			Rehabilitation			Outpatient nursing care		
	Estimate	SE	p-value	Estimate	SE	p-value	Estimate	SE	p-value	Estimate	SE	p-value
Cyclist vs Pedestrian	-0,30	0,128	0,0180	-0,20	0,081	0,0149	-0,44	0,168	0,0088	-0,95	0,194	<0,0001
Driver vs Pedestrian	-0,17	0,169	0,3093	-0,32	0,120	0,0080	-0,70	0,192	0,0003	-0,55	0,339	0,1065
Passenger vs Pedestrian	-0,50	0,237	0,0361	-0,19	0,131	0,1570	-0,71	0,244	0,0034	-0,29	0,398	0,4660
Motorcyclist vs Pedestrian	-0,41	0,157	0,0085	-0,04	0,191	0,8267	-0,88	0,180	<0,0001	-0,63	0,308	0,0398
Driver vs Cyclist	0,11	0,171	0,5124	-0,09	0,117	0,4188	-0,30	0,250	0,2239	0,47	0,326	0,1525
Passenger vs Cyclist	-0,20	0,239	0,4087	-0,01	0,137	0,9264	-0,29	0,288	0,3149	0,69	0,43	0,1063
Motorcyclist vs Cyclist	-0,03	0,164	0,8645	0,14	0,194	0,4764	-0,46	0,231	0,0461	0,19	0,315	0,5375
Passenger vs Driver	-0,31	0,232	0,1829	0,08	0,145	0,5703	0,01	0,232	0,9515	0,22	0,435	0,6113
Motorcyclist vs Driver	-0,14	0,170	0,4096	0,23	0,194	0,2314	-0,16	0,160	0,3302	-0,27	0,348	0,4334
Motorcyclist vs Passenger	0,17	0,244	0,4882	0,15	0,221	0,4963	-0,17	0,235	0,4693	-0,49	0,477	0,3005