

Supplement to

**Out of Hours and Weekend Admissions to Danish Medical Departments: Admission Rates and 30-Day Mortality for 20 Common Medical Conditions**

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**Table S1.** ICD-10 diagnoses of common conditions among acute medical patients

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**Table S1. ICD-10 diagnoses of common conditions among acute medical patients**

Pneumonia	J12-J18, A48.1, A70.9
Erysipelas	A46
Bacteremia/septicemia	A40-41, A02.1, A20.7, A21.7, A22.7, A22.9B, A26.7, A28.2B, A32.7, A39.2-4, A42.7, A49.9A, A54.8G, B37.7, B49.9A, J95.0A
UTI	N30, N34, N39.0
Anemia	D50-64
Diabetes	E10-14
Dehydration	E86
Alcohol Intoxication	F10
Transient ischemic attack	G45
Angina	I20, I24, I25
AMI	I21
AFLI	I48
Heart Failure	I50, I11.0, I13.0, I13.2
Hypertension	I10, D15
Stroke	I60-61, I63-64
COPD	J40-44, J47
Respiratory failure	J96
Gastroenteritis	A0
Syncope	R55
Suspected AMI	Z03.4

**Table S2. ICD-10 codes for the Charlson Comorbidity Index conditions**

<b><i>Charlson score of 1:</i></b>	
Myocardial infarction	I21, I22, I23
Congestive heart failure	I50, I11.0, I13.0, I13.2
Peripheral vascular disease	I70, I71, I72, I73, I74, I77
Cerebrovascular disease	I60-I69, G45, G46
Dementia	F00-F03, F05.1, G30
Chronic pulmonary disease	J40-J47, J60-J67, J68.4, J70.1, J70.3, J84.1, J92.0, J96.1, J98.2, J98.3
Connective tissue disease	M05, M06, M08, M09, M30, M31, M32, M33, M34, M35, M36, D86
Ulcer disease	K22.1, K25-K28
Mild liver disease	B18, K70.0-K70.3, K70.9, K71, K73, K74, K76.0
Diabetes mellitus	E10.0-E10.2, E10.9, E11.0-E11.1, E11.9
<b><i>Charlson score of 2:</i></b>	
Hemiplegia	G81, G82
Diabetes with end organ damage	E10.2-E10.8, E11.2-E11.8
Any tumor	C00-C75
Leukemia	C91-C95
Lymphoma	C81-C85, C88, C90, C96
<b><i>Charlson score of 3:</i></b>	
Moderate to severe liver disease	B15.0, B16.0, B16.2, B19.0, K70.4, K72, K76.6, I85
<b><i>Charlson score of 6:</i></b>	
Metastatic solid tumor	C76-C80
AIDS	B21-B24

**Table S3. ICU admissions within three days after admission in medical conditions among acute medical patients according to time of admission**

	Weekday				Weekend			
	Office hours (8.00 am-4.59 pm)		Out of hours (5.00 pm-7.59 am)		Weekend daytime hours (9.00 am-9.59 pm)		Weekend nighttime hours (10.00 pm-8.59 am) plus Friday 10.00-11.59 pm and Monday 0.00-7.59 am	
	n	ICU admissions (% of group)	n	ICU admissions (% of group)	n	ICU admissions (% of group)	n	ICU admissions (% of group)
<b>Infectious diseases</b>								
<i>Pneumonia</i>	5,886	165 (2.8)	2,797	118 (4.2)	2,197	75 (3.4)	978	55 (5.6)
<i>Erysipelas</i>	991	2 (0.2)	513	2 (0.4)	367	1 (0.3)	125	1 (0.8)
<i>Bacteremia/septicemia</i>	1,201	132 (11.0)	759	84 (11.1)	563	68 (12.1)	238	29 (12.2)
<i>Urinary Tract Infection</i>	1,944	6 (0.3)	996	6 (0.6)	740	2 (0.3)	300	1 (0.3)
<b>Hematological diseases</b>								
<i>Anemia</i>	2,384	15 (0.6)	417	7 (1.7)	266	7 (2.6)	93	4 (4.3)
<b>Endocrine and nutritional diseases</b>								
<i>Diabetes</i>	1,540	52 (3.4)	507	31 (6.1)	326	28 (8.6)	158	18 (11.4)
<i>Dehydration</i>	2,073	8 (0.4)	953	7 (0.7)	697	4 (0.6)	213	0
<b>Mental and behavioral disorders</b>								
<i>Alcohol intoxication</i>	989	17 (1.7)	994	18 (1.8)	556	11 (2.0)	388	16 (4.1)
<b>Diseases of the nervous system</b>								
<i>Transient ischemic attack</i>	1,380	0	811	2 (0.3)	609	1 (0.2)	200	1 (0.5)
<b>Diseases of the circulatory system</b>								
<i>Angina</i>	2,191	25 (1.1)	1,000	14 (1.4)	616	11 (1.8)	408	7 (1.7)
<i>Acute Myocardial Infarction</i>	2,274	85 (3.7)	1,317	65 (4.9)	997	43 (4.3)	694	35 (5.0)
<i>Atrial Fibrillation</i>	3,707	23 (0.6)	1,170	8 (0.7)	889	8 (0.9)	354	2 (0.6)
<i>Heart failure</i>	1,645	27 (1.6)	535	29 (5.4)	300	13 (4.3)	207	12 (5.8)
<i>Hypertension</i>	1,173	3 (0.3)	487	3 (0.6)	329	1 (0.3)	136	1 (0.7)
<i>Stroke</i>	3,187	84 (2.6)	1,587	90 (5.7)	1,407	46 (3.3)	515	30 (5.8)
<b>Diseases of the respiratory system</b>								
<i>Chronic Obstructive Pulmonary Disorder</i>	2,869	91 (3.2)	1,273	65 (5.1)	926	44 (4.8)	545	37 (6.8)
<i>Respiratory failure</i>	1,120	152 (13.6)	559	74 (13.2)	414	81 (19.6)	224	38 (17.0)
<b>Diseases of the digestive system</b>								
<i>Gastroenteritis</i>	1,179	3 (0.3)	612	7 (1.1)	466	6 (1.3)	231	1 (0.4)
<b>Symptoms and abnormal findings</b>								
<i>Syncope</i>	1,554	4 (0.3)	1,195	8 (0.7)	865	3 (0.4)	336	3 (0.9)
<b>Factors influencing health status</b>								
<i>Suspected Acute Myocardial Infarction</i>	3,719	6 (0.2)	2,304	4 (0.2)	1,455	8 (0.6)	712	7 (1.0)
<b>Other</b>	44,758	860 (1.9)	22,5626	691 (3.1)	14,155	462 (3.3)	6,921	323 (4.7)
Total (within three days)	87,764	1,760 (2.0)	43,312	1,333 (3.1)	29,140	923 (3.2)	13,976	521 (4.4)
Total (complete length of hospital stay)		2,603 (3.0)		1,712 (4.0)		1,190 (4.1)		746 (5.3)

**Table S4. Admission rates, age-and-sex standardized 30-day mortality and ICU admission within three days after the index date for the patients admitted through the emergency room**

	Weekday		Weekend	
	Office hours (8.00 am-4.59 pm)	Out of hours (5.00 pm-7.59 am)	Weekend daytime hours (9.00 am-9.59 pm)	Weekend nighttime hours (10.00 pm-8.59 am) plus Friday 10.00-11.59 pm and Monday 0.00-7.59 am
Total (n)	13,225	14,492	8,810	4,618
Hourly admission rate	5.83 (5.73-5.93)	4.46 (4.39-4.53)	6.00 (5.87-6.12)	2.60 (2.53-2.68)
Crude Mortality		4.80	5.86	4.79
Age- and sex- standardized mortality	5.87 (5.47-6.26)	5.51 (5.11-5.90)	6.19 (5.68-6.69)	5.95 (5.20-6.70)
ICU n (%)	622 (4.70)	657 (4.53)	448 (5.09)	266 (5.76)