

Ability of the LACE index to predict 30-day hospital readmissions in patients with community-acquired pneumonia

Claudia C. Dobler, Maryam Hakim, Sidhartha Singh, Matthew Jennings, Grant Waterer, Frances L. Garden

Supplementary Material

Table S1: ICD-10 codes for community-acquired pneumonia (CAP) index admissions

ICD code	Diagnosis	Number of hospitalisations, proportion of all CAP cases in % (N=4508)	N, % of 30-day hospital readmissions (all-cause) (N=636)	N, % of 30-day hospital readmissions (CAP only, any CAP ICD code) (N=113)
A40.3	Sepsis due to Streptococcus pneumoniae	22 (0.5%)	4 (0.6%)	3 (2.7%)
B01.2	Varicella pneumonia	2 (0.04%)		
J10.0	Influenza with pneumonia, other influenza virus identified	10 (0.2%)	3 (0.5%)	
J11.0	Influenza due to unidentified influenza virus with pneumonia	0 (0%)		
J12.0	Adenoviral pneumonia	5 (0.1%)		
J12.1	Respiratory syncytial virus pneumonia	16 (0.4%)	2 (0.3%)	
J12.2	Parainfluenza virus pneumonia	15 (0.3%)	3 (0.5%)	
J12.3	Human metapneumovirus pneumonia	35 (0.8%)	4 (0.6%)	
J12.8	Other viral pneumonia	36 (0.8%)	2 (0.3%)	1 (0.9%)
J12.9	Viral pneumonia, unspecified	28 (0.6%)	3 (0.5%)	
J13	Pneumonia due to Streptococcus pneumoniae	141 (3.1%)	11 (1.7%)	2 (1.8%)
J14	Pneumonia due to Haemophilus influenzae	44 (1.0%)	4 (0.6%)	1 (0.9%)
J15.0	Pneumonia due to Klebsiella pneumoniae	17 (0.4%)	6 (0.9%)	2 (1.8%)
J15.2	Pneumonia due to staphylococcus	27 (0.6%)	3 (0.5%)	1 (0.9%)
J15.4	Pneumonia due to other streptococci	7 (0.2%)		
J15.5	Pneumonia due to Escherichia coli	0 (0%)		
J15.6	Pneumonia due to other aerobic Gram-negative bacteria	6 (0.1%)	1 (0.2%)	
J15.7	Pneumonia due to Mycoplasma pneumoniae	40 (0.9%)	6 (0.9%)	4 (3.5%)
J15.8	Other bacterial pneumonia	4 (0.1%)	2 (0.3%)	
J15.9	Bacterial pneumonia, unspecified	19 (0.4%)	3 (0.5%)	2 (1.8%)
J16.8	Pneumonia due to other specified infectious organisms	11 (0.2%)	1 (0.2%)	1 (0.9%)
J18.0	Bronchopneumonia, unspecified	70 (1.6%)	7 (1.1%)	1 (0.9%)
J18.1	Lobar pneumonia, unspecified	22 (0.5%)	2 (0.3%)	
J18.8	Other pneumonia, organism unspecified	54 (1.2%)	8	1
J18.9	Pneumonia, unspecified	3861 (85.6%)	561	93
J85.1	Abscess of lung with pneumonia	16 (0.4%)		

Table S2: Most common ICD-10 codes for community-acquired pneumonia (CAP) index admissions, their frequency and C-statistic for 30-day all-cause readmissions and readmissions due to CAP

ICD-10 code	Diagnosis	Number of hospitalisations, proportion of all CAP cases in % (N=4508)	N, % of 30-day all-cause hospital readmissions (N=636)	N, % of 30-day hospital readmissions due to CAP (N=113)	C-statistic for 30-day all-cause readmissions (if only patients with this code (for the index admission) are included)	C-statistic for 30-day readmissions due to CAP (if only patients with this code (for the index admission) are included)
All code s	All ICD-10 codes for CAP					
J18.9	Pneumonia, unspecified	3861 (85.6%)	561	93	0.6407	0.5715
J13	Pneumonia due to Streptococcus pneumoniae	141 (3.1%)	11 (1.7%)	2 (1.8%)	0.6420	0.5755
J18.0	Bronchopneumonia, unspecified	70 (1.6%)	7 (1.1%)	1 (0.9%)	0.6825	Cannot be calculated (no cases)