

Additional file 3 for Wojtusiak et al., Computational Barthel Index: An Automated Tool for Assessing and Predicting Activities of Daily Living Among Nursing Home Patients

Top ranked predictors of functional status.

Rank	Attributes	Min/Max	Description	R	GINI RE-EVAL	GINI EVAL
1	Eating		Previous known score for eating		0.2522	-----
2	Bladder		Previous known score for bladder incontinence		0.2391	-----
3	Walking		Previous known score for walking		0.2106	-----
4	Bathing		Previous known score for bathing		0.1911	-----
5	Transferring		Previous known score for transferring		0.1907	-----
6	Bowels		Previous known score for bowel incontinence		0.1872	-----
7	Dressing		Previous known score for dressing		0.1724	-----
8	Grooming		Previous known score for grooming		0.1694	-----
9	Toileting		Previous known score for toileting		0.1694	-----
10	ccs653	Min	Delirium, dementia, and amnestic and other cognitive disorders		0.0216	0.0310
11	Age		Age at the time of prediction		0.0133	0.0335
12	ccs159	Min	Urinary tract infections	X	0.0128	0.0217
13	ccs199	Max	Chronic ulcer of skin		0.0071	0.0121
14	ccs211	Min	Other connective tissue disease		0.0065	0.0091
15	ccs82	Min	Paralysis	X	0.0062	0.0110
16	ccs255	Min	Administrative/social admission	X	0.0061	0.0107
17	ccs660	Min	Alcohol-related disorders	X	0.0058	0.0110
18	ccs129	Max	Aspiration pneumonitis; food/vomitus		0.0055	0.0072
19	ccs659	Min	Schizophrenia and other psychotic disorders		0.0055	0.0089
20	ccs155	Min	Other gastrointestinal disorders	X	0.0053	0.0113
21	ccs257	Min	Other aftercare		0.0053	0.0077
22	ccs98	Min	Essential hypertension		0.0052	0.0089
23	ccs95	Min	Other nervous system disorders		0.0050	0.0066
24	ccs663	Max	Screening and history of mental health and substance abuse codes		0.0049	0.0078
25	ccs162	Min	Other diseases of bladder and urethra		0.0045	0.0040
26	ccs113	Min	Late effects of cerebrovascular disease	X	0.0045	0.0082
27	ccs259	Min	Residual codes; unclassified		0.0044	0.0067
28	ccs254	Min	Rehabilitation care; fitting of prostheses; and adjustment of devices	X	0.0043	0.0068
29	ccs256	Min	Medical examination/evaluation		0.004	0.0074
30	ccs258	Min	Other screening for suspected conditions (not mental disorders or infectious disease)		0.0040	0.0061

Additional file 3 for Wojtusiak et al., Computational Barthel Index: An Automated Tool for Assessing and Predicting Activities of Daily Living Among Nursing Home Patients

31	ccs163	Min	Genitourinary symptoms and ill-defined conditions	X	0.0037	0.0059
32	ccs59	Min	Deficiency and other anemia		0.0037	0.0047
33	ccs53	Min	Disorders of lipid metabolism		0.0037	0.0076
34	ccs136	Max	Disorders of teeth and jaw		0.0036	0.0066
35	ccs204	Min	Other non-traumatic joint disorders		0.0036	0.0071
36	ccs661	Min	Substance-related disorders	X	0.0036	0.0077
37	ccs89	Min	Blindness and vision defects	X	0.0035	0.0070
38	ccs197	Min	Skin and subcutaneous tissue infections	X	0.0034	0.0047
39	ccs114	Min	Peripheral and visceral atherosclerosis		0.0034	0.0038
40	ccs3	Max	Bacterial infection; unspecified site		0.0032	0.0045
41	ccs10	Min	Immunizations and screening for infectious disease		0.0031	0.0052
42	ccs109	Min	Acute cerebrovascular disease	X	0.0030	0.0067
43	ccs238	Min	Complications of surgical procedures or medical care		0.0029	0.0041
44	ccs127	Min	Chronic obstructive pulmonary disease and bronchiectasis	X	0.0028	0.0052
45	ccs86	Min	Cataract		0.0026	0.0058
46	ccs205	Min	Spondylosis; intervertebral disc disorders; other back problems	X	0.0027	0.0058
47	ccs200	Min	Other skin disorders	X	0.0025	0.0055
48	ccs45	Min	Maintenance chemotherapy; radiotherapy		0.0016	0.0053
49	ccs657	Max	Mood disorders		0.0026	0.0048
50	ccs111	Min	Other and ill-defined cerebrovascular disease	X	0.0025	0.0047
...						
337	W		Race White		0.0006	0.0012
341	UR		Unknown Race		0.0006	0.0011
365	B		Race Black		0.0004	0.0009
434	Gender		Gender		0.0002	0.0004
445	A		Race Asian		0.0002	0.0003

The table includes top 50 attributes across Re-Evaluation and Evaluation models. Previous evaluations results associated with the Re-Evaluation models (M_{RE}^d) were included at the beginning of the table. Gender and race along with their ranking were also added at the bottom of the table for comparison.