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Data Supplement 2: Transfer instability index for cardiac, neurologic, and traumatic emergencies**Table 1:** Factors associated with transfer instability index, circulatory conditions (N=859 hospitals); R-squared = 0.21

Variable	Coefficient	Effect Size*	Multiplicative Effect (95% CI)	P-value
Intercept	0.69	1.00	1.20 (1.50 – 2.65)	0.00
Hospital location (large metro is reference)				
Small Metro	-0.34	1.00	0.71 (0.65 – 0.78)	0.00
Micropolitan	-0.25	1.00	0.78 (0.71 – 0.86)	0.00
Other non-metro	-0.16	1.00	0.85 (0.76 – 0.96)	0.01
Hospital ownership (public is reference)				
Non-profit	-0.02	1.00	1.00 (0.90 – 1.06)	0.64
For-profit	0.02	1.00	1.02 (0.92 – 1.12)	0.76
Teaching status	0.08	1.00	1.08 (0.95 – 1.23)	0.24
Bed size (in hundreds of hospitals)	-0.02	1.87	0.955 (0.90 – 1.02)	0.14
Herfindahl-Hirschman Index	-0.10	0.77	0.93 (0.85 – 1.01)	0.09
ED case mix (% encounters with primary diagnosis)				
Acute myocardial infarction	0.13	0.30	1.04 (0.98 – 1.10)	0.17
Coronary atherosclerosis	0.16	0.32	1.05 (1.01 – 1.97)	0.01
Nonspecific chest pain	0.02	1.54	1.04 (0.99 – 1.08)	0.12
Congestive heart failure	0.13	0.45	1.06 (1.01 – 1.11)	0.03
Other circulatory disease	-0.21	0.12	0.97 (0.94 – 1.02)	0.25
ED payer mix (% encounters by payer; private pay is reference)				
Medicare	0.00	9.60	1.03 (0.08 – 1.09)	0.25
Medicaid	0.01	12.08	1.15 (1.09 – 1.20)	0.00
Uninsured	0.00	12.93	1.00 (0.95 – 1.05)	0.94
Other	0.00	3.30	1.01 (0.98 – 1.04)	0.50
Hospital services†				
Medical-surgical ICU	-0.12	1.00	0.88 (0.79 – 0.99)	0.03
Cardiac ICU	0.03	1.00	1.03 (0.94 – 1.13)	0.48
Adult cardiology services	0.09	1.00	1.10 (1.01 – 1.20)	0.04
Adult diagnostic/invasive catheterization	-0.01	1.00	0.99 (0.89 – 1.10)	0.81
Adult interventional cardiac catheterization	-0.02	1.00	0.99 (0.85 – 1.39)	0.84
Adult cardiac surgery	0.17	1.00	1.19 (1.02 – 1.39)	0.03
Adult cardiac electrophysiology	-0.06	1.00	0.95 (0.84 – 1.07)	0.38

*Effect size equals 1 for binary variables and the size of the move from the 25th to the 75th percentile for continuous variables.

†The model contained an additional variable for hospitals where the American Hospital Association service variables were missing.

Table 2: Factors associated with transfer instability index, injuries (N=654 hospitals); R-squared = 0.19

Variable	Coefficient	Effect Size*	Multiplicative Effect (95% CI)	P-value
Intercept	0.30	1.00	1.34 (0.89 – 2.04)	0.16
Hospital location (large metro is reference)				
Small metro	-0.43	1.00	0.65 (0.59 – 0.72)	0.00
Micropolitan	-0.24	1.00	0.79 (0.70 – 0.88)	0.00
Other Non-metro	-0.15	1.00	0.863	0.04
Hospital ownership (public is reference)				
Non-profit	-0.05	1.00	0.95 (0.87 – 1.05)	0.31
For-profit	0.06	1.00	1.07 (0.94 – 1.20)	0.31
Teaching status	-0.19	1.00	0.83 (0.71 – 0.95)	0.01
Bed size (in hundreds of hospitals)	-0.01	2.04	0.98 (0.92 – 1.04)	0.51
Herfindahl-Hirschman Index	-0.13	0.74	0.91 (0.82 – 1.01)	0.07
ED case mix (% encounters with primary diagnosis)				
Fracture of neck of femur (hip)	-0.01	0.12	1.00 (0.92 – 1.10)	0.96
Fracture of lower limb	0.09	0.26	1.02 (0.96 – 1.09)	0.48
Other fractures	-0.06	0.27	0.98 (0.91 – 1.06)	0.67
Intracranial injury	0.04	0.29	1.01 (0.96 – 1.06)	0.67
ED payer mix (% encounters by payer; private pay is reference)				
Medicare	0.02	9.40	1.19 (1.11 – 1.28)	0.00
Medicaid	0.01	11.79	1.06 (1.00 – 1.12)	0.07
Uninsured	0.01	12.49	1.09 (1.03 – 1.16)	0.00
Other	0.01	3.18	1.03 (1.00 – 1.06)	0.05
Hospital services				
Trauma center	0.13	1.00	1.14 (0.97 – 1.34)	0.13
Orthopedic	0.05	1.00	1.05 (0.94 – 1.19)	0.39
Medical surgical ICU	-0.02	1.00	0.99 (0.87 – 1.12)	0.82
Burn care	0.33	1.00	1.39 (0.97 – 1.98)	0.07

*Effect size equals 1 for binary variables and the size of the move from the 25th to the 75th percentile for continuous variables.