

Appendix 1 (as supplied by the authors): Supplementary tables

Supplementary Table S1. Baseline characteristics among patients discharged home alive within 24 hours of admission, categorized by time of admission.

Patient Characteristic	Admitted in Day (N=398)	Admitted in Evening (N=1795)	Admitted in Night (N=2052)	p-value
Age – median (IQR)	56 (36, 74)	63 (47, 78)	63 (45, 79)	<0.001
Female – n (%)	203 (51.0)	894 (49.8)	1058 (51.6)	0.552
Charlson Comorbidity Index – n (%)				0.041
0	198 (49.7)	748 (41.7)	900 (43.9)	
1	81 (20.4)	397 (22.1)	484 (23.6)	
2	44 (11.1)	249 (13.9)	264 (12.9)	
3+	75 (18.8)	401 (22.3)	404 (19.7)	
Transported via Ambulance – n (%)	142 (35.7)	650 (36.2)	739 (36.0)	0.978
Admitted in prior 30 days* – n (%)	48 (12.1)	170 (9.5)	154 (7.5)	0.005
LAPS - mean (sd)	12.9 (12.0)	13.0 (12.2)	13.0 (12.7)	0.984

Supplementary Table S1 Legend: The time of admission was categorized as 'day' (8:00 to 16:59:59), 'evening' (17:00 to 24:00), or 'night' (00:00:01 to 7:59:59). *Admitted to GIM at a study site in prior 30 days. Statistical significance for differences across categories was calculated using chi-square analysis for categorical variables and Kruskal-Wallis test for continuous variables. LAPS: Laboratory-based acute physiology score.

Supplementary Table S2. Baseline characteristics among patients discharged home alive within 72 hours of admission, categorized by time of admission.

Patient Characteristic	Admitted in Day (N=3230)	Admitted in Evening (N=6951)	Admitted in Night (N=7506)	p-value
Age – median (IQR)	64.00 [47.00, 80.00]	67.00 [51.00, 81.00]	66.00 [49.00, 80.00]	<0.001
Female – n (%)	1536 (47.6)	3553 (51.1)	3788 (50.5)	0.003
Charlson Comorbidity Index – n (%)				0.249
0	1243 (38.5)	2518 (36.2)	2751 (36.7)	
1	734 (22.7)	1564 (22.5)	1725 (23.0)	
2	496 (15.4)	1092 (15.7)	1179 (15.7)	
3+	757 (23.4)	1777 (25.6)	1851 (24.7)	
Transported via Ambulance – n (%)	1488 (46.1)	2683 (38.6)	3060 (40.8)	<0.001
Admitted in prior 30 days* – n (%)	334 (10.3)	656 (9.4)	665 (8.9)	0.052
LAPS - mean (sd)	15.6 (13.5)	15.5 (13.7)	15.5 (13.6)	0.89

Supplementary Table S2 Legend: The time of admission was categorized as ‘day’ (8:00 to 16:59:59), ‘evening’ (17:00 to 24:00), or ‘night’ (00:00:01 to 7:59:59). *Admitted to GIM at a study site in prior 30 days. Statistical significance for differences across categories was calculated using chi-square analysis for categorical variables and Kruskal-Wallis test for continuous variables. LAPS: Laboratory-based acute physiology score.

Supplementary Table S3. Baseline characteristics among patients discharged home alive within 24 hours of admission, categorized by weekend versus weekday admission.

Patient Characteristic	Admitted on Weekday (N=3316)	Admitted on Weekend (N=929)	p-value
Age – median (IQR)	63 (46, 79)	61 (44, 77)	0.138
Female – n (%)	1705 (51.4)	450 (48.4)	0.117
Charlson Comorbidity Index – n (%)			0.887
0	1436 (43.3)	410 (44.1)	
1	760 (22.9)	202 (21.7)	
2	436 (13.1)	121 (13.0)	
3+	684 (20.6)	196 (21.1)	
Transported via Ambulance – n (%)	1196 (36.1)	335 (36.1)	1
Admitted in prior 30 days* – n (%)	273 (8.2)	99 (10.7)	0.025
LAPS - mean (sd)	12.8 (12.2)	13.4 (13.0)	0.19

Supplementary Table S3 Legend: The day of admission was categorized as ‘weekday’ (Monday to Friday) or ‘weekend’ (Saturday and Sunday). *Admitted to GIM at a study site in prior 30 days. Statistical significance for differences across categories was calculated using chi-square analysis for categorical variables and Kruskal-Wallis test for continuous variables. LAPS: Laboratory-based acute physiology score.

Supplementary Table S4. Baseline characteristics among patients discharged home alive within 72 hours of admission, categorized by weekend versus weekday admission.

Patient Characteristic	Admitted on Weekday (N=13,242)	Admitted on Weekend (N=4,445)	p-value
Age – median (IQR)	66 (49, 80)	67 (49, 81)	0.21
Female – n (%)	6703 (50.6)	2174 (48.9)	0.05
Charlson Comorbidity Index – n (%)			0.642
0	4877 (36.8)	1635 (36.8)	
1	2998 (22.6)	1025 (23.1)	
2	2056 (15.5)	711 (16.0)	
3+	3311 (25.0)	1074 (24.2)	
Transported via Ambulance – n (%)	5303 (40.0)	1928 (43.4)	<0.001
Admitted in prior 30 days* – n (%)	1222 (9.2)	433 (9.7)	0.324
LAPS - mean (sd)	15.4 (13.6)	16.0 (13.6)	0.004

Supplementary Table S4 Legend: The day of admission was categorized as ‘weekday’ (Monday to Friday) or ‘weekend’ (Saturday and Sunday). *Admitted to GIM at a study site in prior 30 days. Statistical significance for differences across categories was calculated using chi-square analysis for categorical variables and Kruskal-Wallis test for continuous variables. LAPS: Laboratory-based acute physiology score.

Supplementary Table S5. Multivariable regression models of patient, physician, and situational characteristics associated with short admissions to GIM, restricted to one admission per patient.

Characteristics	Model A: <24 hours		Model B: <72 hours	
	Adjusted Odds Ratio (95% CI)	p-value	Adjusted Odds Ratio (95% CI)	p-value
Patient Characteristics				
Age	0.99 (0.99, 0.99)	<0.001	0.99 (0.99, 0.99)	<0.001
Female Sex (Patient)	0.97 (0.90, 1.05)	0.478	1.00 (0.96, 1.05)	0.126
CCI Score 0	2.15 (1.92, 2.41)	<0.001	1.90 (1.78, 2.02)	<0.001
CCI Score 1	1.75 (1.55, 1.97)	<0.001	1.66 (1.55, 1.77)	<0.001
CCI Score 2	1.24 (1.08, 1.43)	0.001	1.35 (1.26, 1.46)	<0.001
Not Transported via Ambulance	1.50 (1.38, 1.63)	<0.001	1.51 (1.44, 1.58)	<0.001
Admitted in prior 30 days*	0.71 (0.58, 0.87)	<0.001	0.67 (0.60, 0.75)	<0.001
LAPS	0.97 (0.97, 0.98)	<0.001	0.98 (0.98, 0.98)	<0.001
Physician Characteristics				
Physician Sex Female	0.81 (0.74, 0.88)	<0.001	0.82 (0.77, 0.86)	<0.001
Years Since Graduation	1.00 (1.00, 1.00)	0.933	1.00 (1.00, 1.00)	0.464
Situational Factors				
Admitted Weekday	1.32 (1.20, 1.45)	<0.001	1.06 (1.00, 1.12)	0.034
Admitted Evening	2.62 (2.29, 3.00)	<0.001	1.22 (1.15, 1.31)	<0.001
Admitted Night	2.89 (2.53, 3.31)	<0.001	1.32 (1.24, 1.41)	<0.001
GIM Admissions in Past 12 hours	1.01 (0.99, 1.02)	0.257	1.01 (1.00, 1.01)	0.209
Admitted to Short Stay Unit	1.59 (1.40, 1.80)	<0.001	2.37 (2.16, 2.60)	<0.001
Fiscal Year of Admission	1.09 (1.04, 1.15)	<0.001	1.05 (1.02, 1.08)	<0.001

Supplementary Table S5 Legend. Adjusted odds ratios were derived from logistic regression models using generalized estimating equations to account for clustering of admissions within physicians. Only one admission per patient was included. For patients with multiple admissions, a randomly selected admission was included. For variables with more than 2 categories, the reference categories were: CCI score 3 (high comorbidity) and admission in the day-time (vs evening and night). *Admitted to GIM at a study site in prior 30 days. CCI Score: Charlson Comorbidity Index score. GIM: General Internal Medicine. LAPS: Laboratory-based acute physiology score.