Mortality of Patients Requiring Escalation to Intensive Care within 24 Hours of Admission in a Mixed Medical-Surgical Population

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Supplemental Data

Table S1. Crude mortality of patients in different age categories

	Mortality			
Age Strata	30 day	90 day	1 year	n
18-40	3.80%	4.80%	6.70%	104
41-55	4.40%	6.50%	13.30%	384
56-75	8.30%	11.50%	18.30%	2467
76-85	18.10%	23.90%	29.90%	653
> 85	23.30%	28.50%	41.50%	253

Table S2. Association between key admission characteristics and mortality of medical and surgical ICU patients at 1 year

Variable	All Patients n (%)	P*	Surgical Patients n (%)	P*	Medical Patients n (%)	P*
24-hr indirect admission	125/474 (26)	0.0008	33 (18) vs. 249 (11)	0.003	92 (31) vs. 415 (41)	0.003
Code blue	44/65 (68)	<0.0001	7 (64) vs. 275 (11)	<0.0001	37 (69) vs. 470 (38)	<0.0001
Rapid response call	113/280 (40)	<0.0001	15 (22) vs. 267 (11)	0.009	98 (46) vs. 409 (38)	0.021
Weekend admissions	116/440 (26)	0.0013	33 (15) vs. 249 (11)	0.074	83 (39) vs. 424 (39)	0.94
Evening admissions	156/630 (25)	0.0042	39 (15) vs. 243 (11)	0.241	117 (36) vs. 390 (40)	0.151
Severe sepsis/ shock	198/831 (24)	0.0075	63 (13) vs. 219 (11)	0.125	135 (39) vs. 372 (39)	0.95
ICU Readmission	208/704 (30)	<0.0001	82 (20) vs. 200 (9.3)	<0.0001	126 (43) vs. 381 (38)	0.118

* Significance level by Fisher's exact test

Table S3. Multivariable analysis of clinical characteristics and mortality of ICU patients

A. All patients 90-day mortality

Variable	OR	SE	95% CI	*P* > [z]
LOS Strata	1.35	0.05	1.245 - 1.46	0.0000
Age Strata	1.83	0.12	1.616 - 2.071	0.0000
ICU Readmission	1.59	0.19	1.253 - 2.015	0.0000
Medical vs. Surgical	6.25	0.70	5.025 - 7.778	0.0000
RRT	1.46	0.23	1.074 - 1.989	0.0160
Code Blue	6.50	1.91	3.657 - 11.561	0.0000
24-hr Delay Admit	0.98	0.15	0.73 - 1.313	0.8870

B. All patients 365-day mortality

Variable	OR	SE	95% CI	*P* > [z]
LOS Strata	1.24	0.05	1.156 - 1.333	0.0000
Age Strata	1.72	0.09	1.543 - 1.911	0.0000
ICU Readmission	1.65	0.17	1.346 - 2.021	0.0000
Medical vs.. Surgical	4.72	0.42	3.955 - 5.63	0.0000
RRT	1.26	0.18	0.949 - 1.682	0.1090
Code Blue	4.07	1.17	2.308 - 7.162	0.0000
24-hr Delay Admit	1.08	0.14	0.833 - 1.39	0.5740

C. Medical patients 90-day mortality

Variable	OR	SE	95% CI	*P* > [z]
LOS Strata	1.32	0.07	1.2 - 1.457	0.000
Code Blue	5.14	1.60	2.793 - 9.456	0.000
RRT	1.39	0.23	0.996 - 1.933	0.053
24-hr Delay Admit	0.80	0.14	0.574 - 1.116	0.189
Age Strata	1.74	0.13	1.5 - 2.011	0.000

D. Medical patients 365-day mortality

Variable	OR	SE	95% CI	*P* > [z]
LOS Strata	1.25	0.06	1.137 - 1.371	0.000
Code Blue	3.16	0.98	1.729 - 5.791	0.000
RRT	1.25	0.20	0.904 - 1.703	0.181
24-hr Delay Admit	0.849	0.13	0.625 - 1.154	0.295
Age Strata	1.74	0.12	1.516 - 2	0.000

Table S3, continued

E. Surgical patients 90-day mortality

Variable	OR	SE	95% CI	*P* > [z]
LOS Strata	1.36	0.10	1.178 - 1.558	0.000
Age Strata	1.95	0.23	1.557 - 2.447	0.000
ICU Readmission	2.35	0.47	1.592 - 3.476	0.000
PM Admission	1.35	0.33	0.841 - 2.183	0.212
RRT	1.50	0.59	0.699 - 3.241	0.297
24-hr Delay Admit	1.62	0.46	0.924 - 2.84	0.092
Code Blue	14.78	9.61	4.132 - 52.842	0.000

F. Surgical patients 365-day mortality

Variable	OR	SE	95% CI	*P* > [z]
LOS Strata	1.21	0.07	0.001 - 1.083	0.0010
Age Strata	1.63	0.14	0 - 1.374	0.0000
ICU Readmission	2.20	0.33	0 - 1.641	0.0000
PM Admission	1.04	0.20	0.839 - 0.712	0.8390
RRT	1.20	0.40	0.58 - 0.625	0.5800
24-hr Delay Admit	1.63	0.36	0.025 - 1.063	0.0250

Abbreviations: LOS, length of stay; ICU, intensive care unit; RRT, Renal replacement therapy; PM, night time; OR, odds ratio; SE, standard error; CI, confidence interval; P, P value measure of statistical significance.