

Supplementary Online Content

Shen Y-C, Hsia RY. Association between ambulance diversion and survival among patients with acute myocardial infarction. *JAMA*. 2011;305(23):2440-2447.

eTable 1. Full Regression Results on the Association Between Ambulance Diversion of the Nearest ED and AMI Mortality Rates (N=11 625)

eTable 2. Association Between Ambulance Diversion of the Nearest ED and AMI Mortality Rates: Compare Patients Who Were Admitted to the Nearest ED and Those Who Bypassed the Nearest ED (N=11 625)

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Full Regression Results on the Association Between Ambulance Diversion of the Nearest ED and AMI Mortality Rates (N=11 625)

	Mortality Rate (95% CI)				
	7-day	30-day	90-day	9-month	1-year
Nearest ED Diversion Status on Day of Admission					
Was not on diversion on the day of admission (reference group)					
Was exposed to <6 hrs of diversion	0.41 [-0.95,1.77]	0.19 [-1.59,1.96]	0.21 [-1.74,2.15]	0.34 [-1.76,2.45]	0.16 [-1.91,2.23]
Was exposed to 6 to <12 hrs of diversion	0.02 [-1.63,1.66]	1.22 [-0.83,3.26]	0.17 [-1.94,2.28]	-1.13 [-3.55,1.28]	-1.28 [-3.73,1.18]
Was exposed to ≥12 hrs of diversion	1.45 [-0.69,3.58]	3.24* [0.60,5.88]	2.89* [0.13,5.64]	2.93* [0.15,5.71]	3.04* [0.33,5.75]
Patient demographics are included as 36 fully interacted categories (5-year age group, gender, race)					
Patient comorbid conditions					
peripheral vascular disease	-0.46 [-2.43,1.50]	-1.65 [-4.31,1.00]	0.44 [-2.67,3.54]	0.52 [-2.85,3.90]	0.49 [-2.99,3.97]
chronic pulmonary disease	-1.12+ [-2.39,0.16]	0.24 [-1.35,1.84]	1.75+ [-0.14,3.64]	4.49** [2.52,6.46]	5.55** [3.52,7.58]
dementia	6.59** [3.24,9.95]	9.29** [4.76,13.81]	10.24** [5.67,14.81]	12.92** [8.48,17.36]	13.16** [8.67,17.66]
chronic renal failure	7.03** [1.94,12.12]	12.32** [6.70,17.94]	14.26** [7.87,20.65]	12.55** [6.33,18.77]	12.98** [6.71,19.24]
diabetes	-1.08* [-2.14,-0.01]	-2.87** [-4.19,-1.56]	-3.01** [-4.58,-1.44]	-2.33** [-4.04,-0.62]	-1.86* [-3.62,-0.10]
liver disease	8.54 [-1.77,18.85]	15.05* [1.94,28.17]	21.04** [7.26,34.83]	29.49** [15.28,43.70]	30.74** [16.60,44.88]
cancer	3.64** [1.13,6.15]	9.15** [6.05,12.24]	13.76** [10.13,17.39]	18.60** [14.84,22.37]	19.78** [16.16,23.41]
Year/month Indicators					
2000 (reference year)					
2001	1.55 [-1.49,4.58]	2.01 [-2.36,6.38]	0.86 [-4.04,5.76]	4.44+ [-0.31,9.20]	4.95* [0.19,9.72]
2002	1.09 [-2.07,4.26]	1.52 [-2.69,5.73]	-0.12 [-4.95,4.72]	1.42 [-3.32,6.17]	2.71 [-1.87,7.30]
2003	-0.36 [-3.27,2.54]	-0.35 [-4.19,3.50]	-2.07 [-6.57,2.42]	-1.89 [-6.39,2.61]	-2.56 [-6.95,1.83]
2004	-0.27 [-3.40,2.85]	-0.01 [-4.13,4.11]	-1.44 [-6.10,3.22]	-0.80 [-5.52,3.93]	-1.55 [-6.13,3.03]
2005	-1.02 [-3.83,1.78]	-0.97 [-4.66,2.71]	-3.04 [-7.32,1.24]	-3.61 [-7.97,0.76]	-4.46* [-8.82,-0.10]

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	Mortality Rate (95% CI)				
	7-day	30-day	90-day	9-month	1-year
January (reference month)					
February	-0.33	1.08	2.47	2.37	2.66
	[-2.75,2.08]	[-2.25,4.41]	[-1.41,6.34]	[-1.59,6.33]	[-1.23,6.55]
March	0.27	-0.41	-0.49	-0.78	0.03
	[-2.47,3.01]	[-3.73,2.91]	[-4.16,3.18]	[-4.64,3.07]	[-3.85,3.92]
April	-0.86	-1.84	-2.18	-2.98	-4.18*
	[-3.37,1.65]	[-5.12,1.44]	[-5.88,1.52]	[-6.89,0.93]	[-8.02,-0.33]
May	-0.74	-0.36	-0.58	0.14	-1.15
	[-3.61,2.13]	[-3.87,3.16]	[-4.44,3.29]	[-3.99,4.28]	[-5.22,2.92]
June	-0.64	0.01	-1.74	-3.70+	-5.06*
	[-3.15,1.87]	[-3.43,3.45]	[-5.49,2.02]	[-7.77,0.38]	[-9.12,-1.01]
July	-1.73	-2.19	-2.68	-3.61+	-5.72**
	[-4.35,0.88]	[-5.57,1.20]	[-6.75,1.38]	[-7.66,0.43]	[-9.70,-1.74]
August	-1.87	-1.73	-3.13+	-4.48*	-6.54**
	[-4.39,0.65]	[-4.91,1.45]	[-6.78,0.52]	[-8.48,-0.47]	[-10.49,-2.58]
September	-0.61	-0.54	-1.42	-2.81	-4.86**
	[-3.24,2.02]	[-3.80,2.71]	[-4.81,1.96]	[-6.46,0.85]	[-8.42,-1.30]
October	-1.77	-2.15	-1.84	-5.07*	-7.38**
	[-4.36,0.82]	[-5.36,1.07]	[-5.39,1.71]	[-8.93,-1.21]	[-11.22,-3.55]
November	-0.40	0.03	-0.97	-5.15**	-7.79**
	[-3.03,2.22]	[-3.07,3.12]	[-4.46,2.51]	[-8.80,-1.49]	[-11.35,-4.22]
December	-1.76	-1.91	-0.58	-5.91**	-7.96**
	[-4.30,0.78]	[-5.15,1.33]	[-4.22,3.07]	[-9.46,-2.35]	[-11.56,-4.37]
Hospital Characteristics					
Admitted to hospital with cath lab	-0.53	-0.55	-1.79	-3.94*	-4.01*
	[-2.85,1.79]	[-3.78,2.67]	[-5.26,1.67]	[-7.35,-0.54]	[-7.32,-0.70]
Admitted to for-profit hospital	-0.77	-0.55	-0.80	0.75	1.61
	[-3.29,1.75]	[-3.70,2.60]	[-4.19,2.58]	[-2.67,4.18]	[-1.84,5.07]
Admitted to government hospital	3.02*	4.22**	4.51**	3.73*	3.52*
	[0.55,5.48]	[1.23,7.21]	[1.37,7.65]	[0.23,7.22]	[0.09,6.95]
Admitted hospital's total beds (log transformed)	-0.90	-1.33	-1.74	0.73	0.86
	[-2.84,1.05]	[-3.82,1.15]	[-4.48,1.00]	[-1.95,3.40]	[-1.82,3.54]
Constant term	20.37**	35.28**	49.19**	49.03**	52.94**
	[9.30,31.43]	[21.34,49.23]	[33.99,64.39]	[34.14,63.91]	[38.03,67.86]

Significant at +p<0.10 *p<0.05 **p<0.01

eTable 2. Association Between Ambulance Diversion of the Nearest ED and AMI Mortality Rates: Compare Patients Who Were Admitted to the Nearest ED and Those Who Bypassed the Nearest ED (N=11 625)

	Mortality Rate (95% CI)				
	7-day	30-day	90-day	9-month	1-year
Nearest ED Diversion Status on Day of Admission					
Was not on diversion on the day of admission (reference group)					
Was exposed to <6 hrs of diversion	0.34	-1.34	-0.55	-0.35	-0.80
	[-1.95,2.64]	[-4.36,1.69]	[-4.06,2.96]	[-4.15,3.45]	[-4.43,2.84]
Was exposed to 6 to <12 hrs of diversion	0.63	1.92	-0.14	-0.49	-1.10
	[-2.09,3.36]	[-1.64,5.49]	[-3.92,3.63]	[-4.69,3.71]	[-5.30,3.10]
Was exposed to ≥12 hrs of diversion	1.59	2.14	1.69	1.75	1.66
	[-1.65,4.83]	[-1.90,6.17]	[-2.67,6.04]	[-2.35,5.85]	[-2.47,5.79]
Patient bypassed the closest ED	1.04	0.02	-0.06	0.09	-0.12
	[-1.38,3.45]	[-3.26,3.30]	[-4.17,4.05]	[-4.12,4.30]	[-4.38,4.15]
Interaction Between Bypass indicator and Diversion Exposure Levels					
Bypass X <6 hours diversion	0.14	2.59	1.29	1.18	1.62
	[-2.69,2.96]	[-1.28,6.47]	[-3.48,6.06]	[-4.00,6.35]	[-3.50,6.74]
Bypass X 6 to <12 hours diversion	-1.02	-1.17	0.54	-1.07	-0.28
	[-4.22,2.18]	[-5.52,3.18]	[-4.41,5.49]	[-6.57,4.43]	[-5.82,5.26]
Bypass X ≥12 hrs of diversion	-0.23	1.90	2.05	2.05	2.38
	[-4.03,3.57]	[-3.09,6.90]	[-3.42,7.52]	[-3.63,7.74]	[-3.24,8.01]