

Supplemental Material

Table S1. International classification of disease codes used in the current analysis.

Disease/Treatment	ICD-9 codes	ICD-10 codes
Acute myocardial infarction	410.00, 410.01, 410.10, 410.11, 410.20, 410.21, 410.30, 410.31, 410.40, 410.41, 410.50, 410.51, 410.60, 410.61, 410.80, 410.81, 410.90, 410.91, 410.70, 410.71, 411.1	I21.01, I21.02, I21.09, I21.11 I21.19, I21.21, I21.29, I21.3, I22.0, I22.1, I22.2, I22.8, I22.9, I21.4, I22.2
Percutaneous coronary intervention	00.66, 36.01, 36.02, 36.05, 36.06, 36.07, 17.55	0270346, 027034Z, 02703D6, 02703DZ, 02703Z6, 02703ZZ, 0270446, 027044Z, 02704D6, 02704DZ
Coronary artery bypass grafting	3610, 3611, 3612, 3613, 3614, 3615, 3616, 3617, 3619	02130KW, 02130Z3, 02130Z8, 02130Z9, 02130ZC, 02130ZF, 02130K8, 02130K9, 02130KC, 02130KF, 02130A9, 02130AC, 02130AF, 02130AW 02130J3, 02130J8 02130J9, 02130JC 02130JF, 02130JW 02130K3, 02120Z8, 02120Z9, 02120ZC, 02120ZF, 0213093, 0213098, 0213099, 021309C, 021309F, 021309W, 02130A3, 02130A8, 02120AW, 02120J3, 02120J8, 02120J9, 02120JC, 02120JF, 02120JW, 02120K3, 02120K8 02120K9, 02120KC 02120KF, 02120KW, 02120Z3, 02110Z9, 02110ZC, 02110ZF 0212093, 0212098, 0212099, 021209C, 021209F, 021209W, 02120A3, 02120A8, 02120A9, 02120AC 02120AF, 02110J3, 02110J8, 02110J9, 02110JC, 02110JF, 02110JW, 02110K3, 02110K8, 02110K9, 02110KC, 02110KF, 02110KW, 02110Z3, 02110Z8, 02100ZC 02100ZF 0211093 0211098, 0211099, 021109C, 021109F, 021109W, 02110A3, 02110A8, 02110A9, 02110AC, 02110AF, 02110AW, 02100J3, 02100K9, 02100KC, 02100KF, 02100KW, 02100Z3, 02100Z8, 02100Z9, 0210093, 0210099, 021009C, 021009F, 021009W, 02100A3, 02100A8, 02100A9, 02100AC, 02100AF, 02100AW
Percutaneous left ventricular assist devices	3768	5A0221D5A0211D, 02HA3RJ, 02HA4RJ, 5A02116, 5A02216, 02HA3QZ, 02HA3RS, 02HA3RZ, 02HA4QZ, 02HA4RJ, 02HA4RS, 02HA4RZ
Extracorporeal membrane oxygenation	3965	5A1522F, 5A1522G, 5A15A2F, 5A15A2G, 5A1523
Intra-aortic balloon pump	3761	5A02210
Durable left ventricular assist devices	3766 & 3752	02HA0QZ
Renal replacement therapy	3995	5A1D70Z, 5A1D80Z, 5A1D90Z, 5A1D60Z, 5A1D00Z
Mechanical ventilation	9762	5A1935Z, 5A1945Z, 5A1955Z

Table S2. Treatment strategies across the different eras.

Treatment	Pre-PLVAD era (2004-2007)	PLVAD era (2008-2014)	Shock team era (2015-2018)	P value
AMI-CS				
Revascularization	64%	75%	69%	<0.01
Mechanical Circulatory Support				
IABP	49%	50%	33%	<0.01
PLVAD	0.1%	3%	10%	<0.01
ECMO	0.15	1%	2%	<0.01
LVAD	0.5%	0.6%	0.4%	<0.01
Mechanical Ventilation	14%	16%	42%	<0.01
Renal Replacement Therapy	3%	4%	7%	<0.01
Non-AMI-CS				
Mechanical Circulatory Support				
IABP	19%	15%	6%	<0.01
PLVAD	0.1%	1%	2%	<0.01
ECMO	0.2%	1%	2%	<0.01
LVAD	0.9%	1.9%	2.4%	<0.01
Mechanical Ventilation	19%	20%	42%	<0.01
Renal Replacement Therapy	9%	12%	13%	<0.01

IABP; Intra-aortic balloon pump, PLVAD; Percutaneous left ventricular support devices [Tandem heart & Impella heart pump], ECMO; Extracorporeal membrane oxygenation, LVAD; Durable left ventricular support devices.

Figure S1. Trend in in-hospital mortality during the study period stratified by hospital bed size.

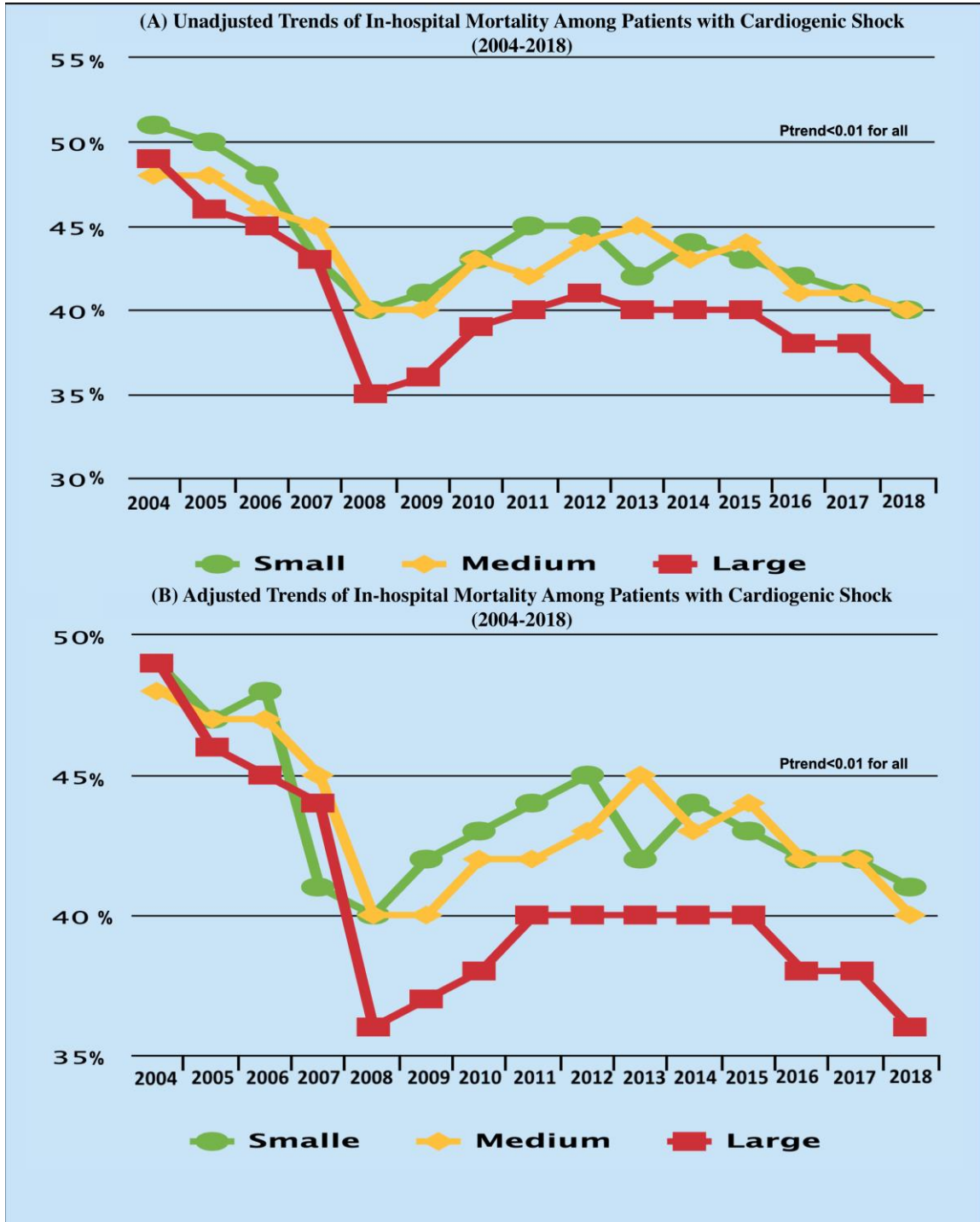


Figure S2. Trend in in-hospital mortality during the study period stratified by hospital teaching status.

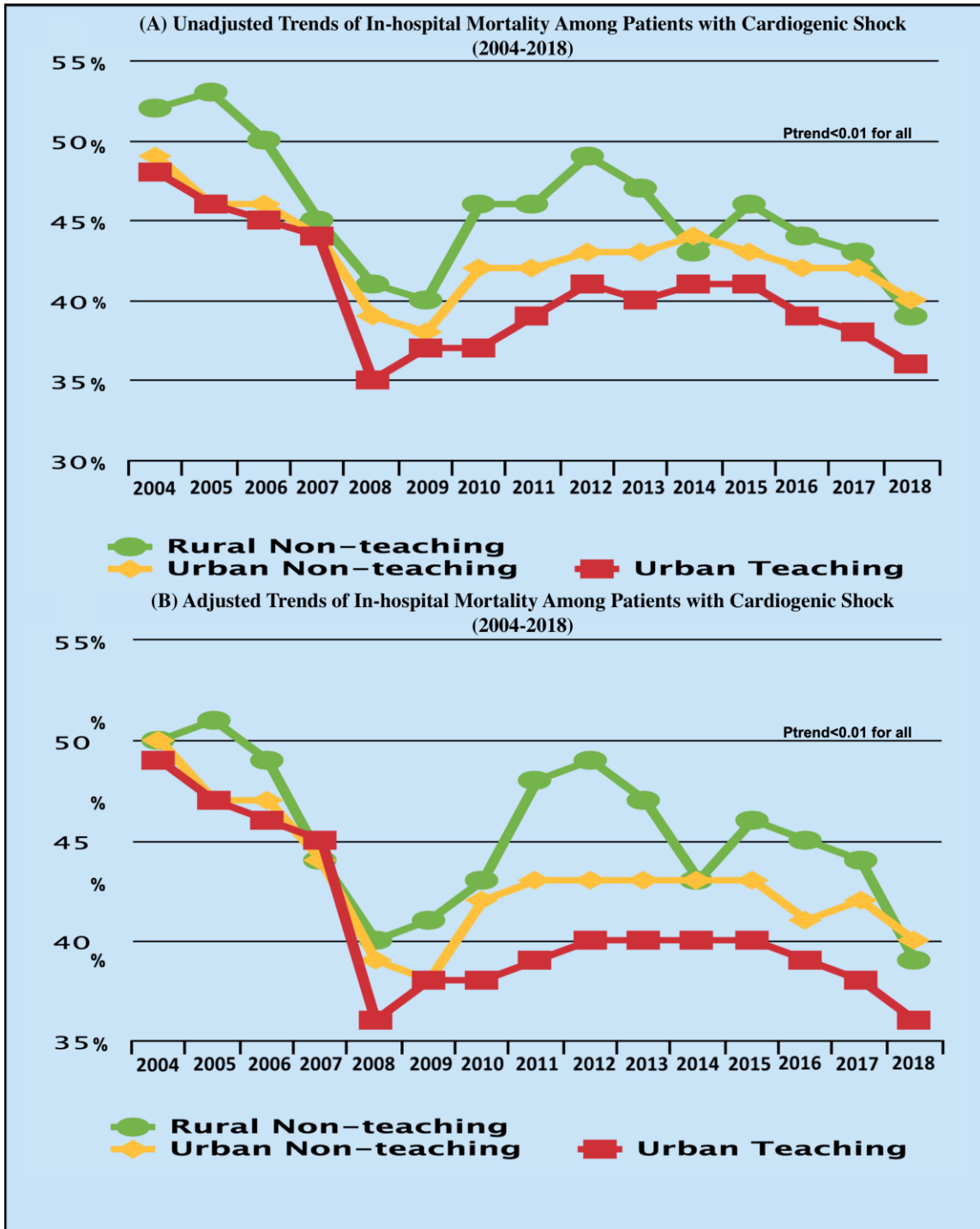
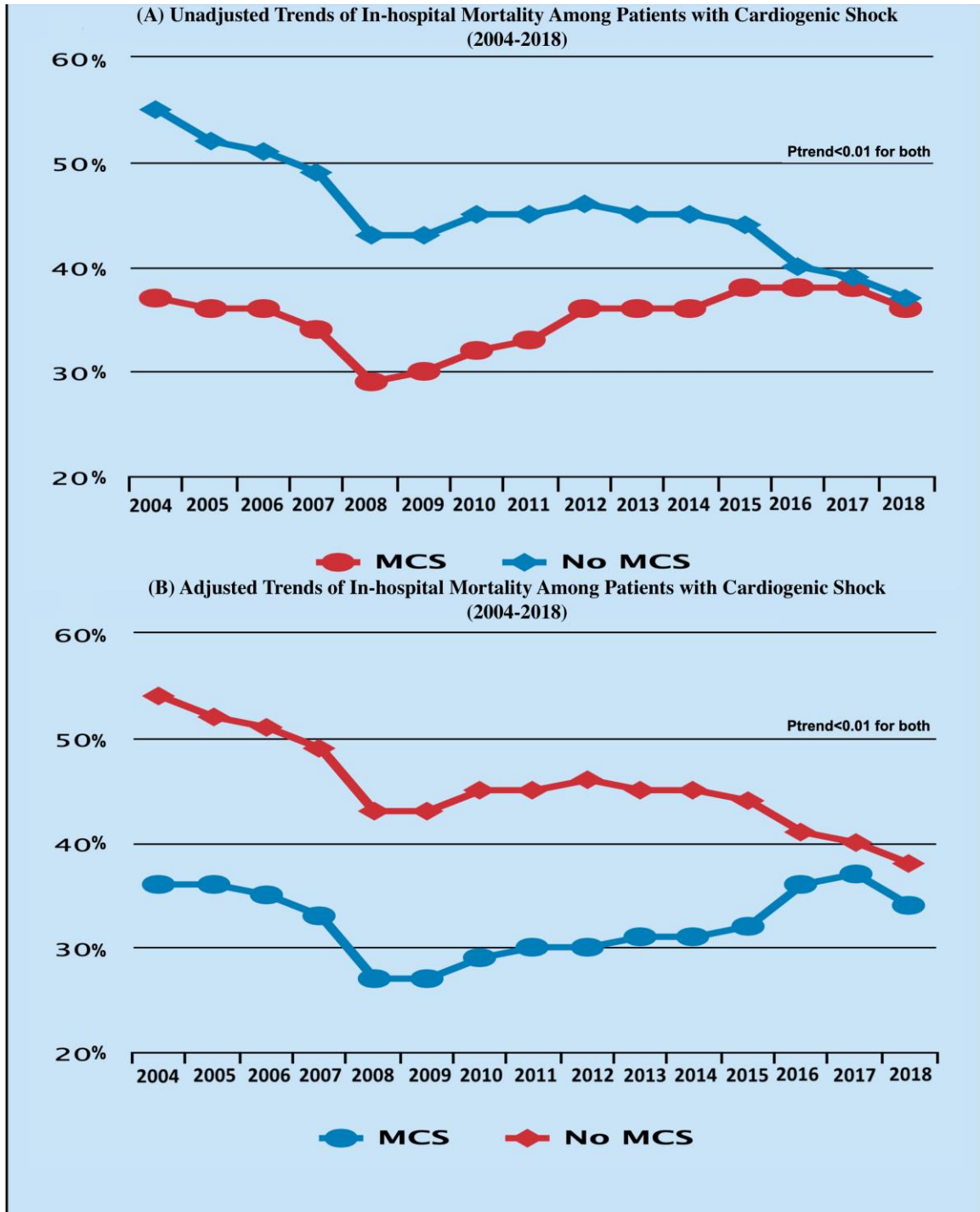
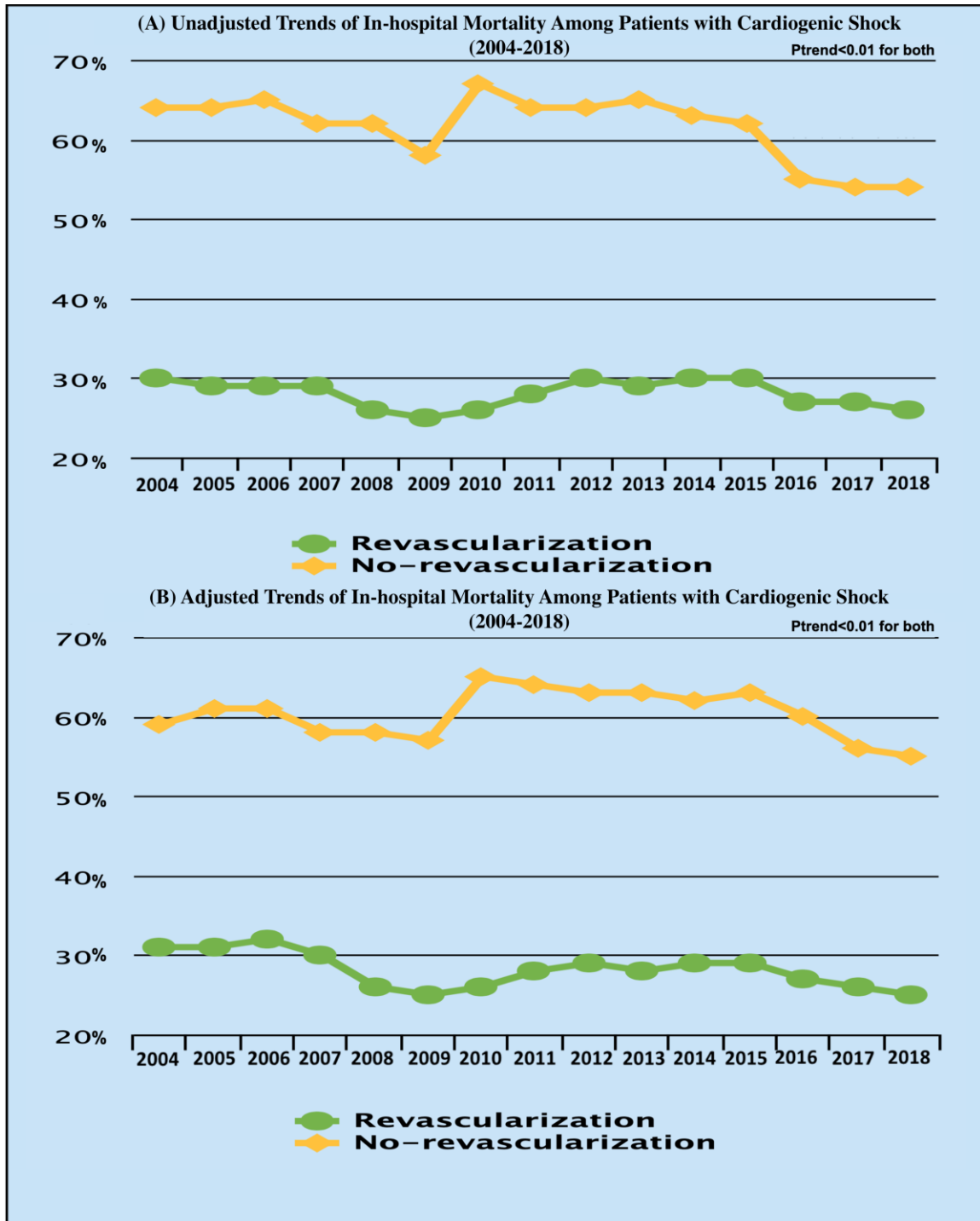


Figure S3. Trend in in-hospital mortality during the study period stratified by utilization of mechanical circulatory support.



MCS; Mechanic circulatory support devices

Figure S4. Trend in in-hospital mortality during the study period among patients with AMI-CS stratified by revascularization status.



AMI-CS; Acute myocardial infarction related cardiogenic shock