

Supplementary Online Content

Naim MY, Burke RV, McNally BF, et al. Association of bystander cardiopulmonary resuscitation with overall and neurologically favorable survival after pediatric out-of-hospital cardiac arrest in the United States: a report from the Cardiac Arrest Registry to Enhance Survival Surveillance Registry. *JAMA Pediatr*. Published online November 12, 2016. doi:10.1001/jamapediatrics.2016.3643.

eTable. Univariate arrest characteristics and bivariable association with type of bystander CPR

eFigure 1. Significant interactions for survival to hospital discharge comparison of no bystander CPR with bystander CPR

eFigure 2. Significant interactions for neurologically favorable survival comparison of no bystander CPR with bystander CPR

eFigure 3. Significant interactions for survival to hospital discharge comparison of no bystander CPR, compression-only CPR, and conventional CPR

eFigure 4. Significant interactions for neurologically favorable survival comparison of no bystander CPR, compression-only CPR, and conventional CPR

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

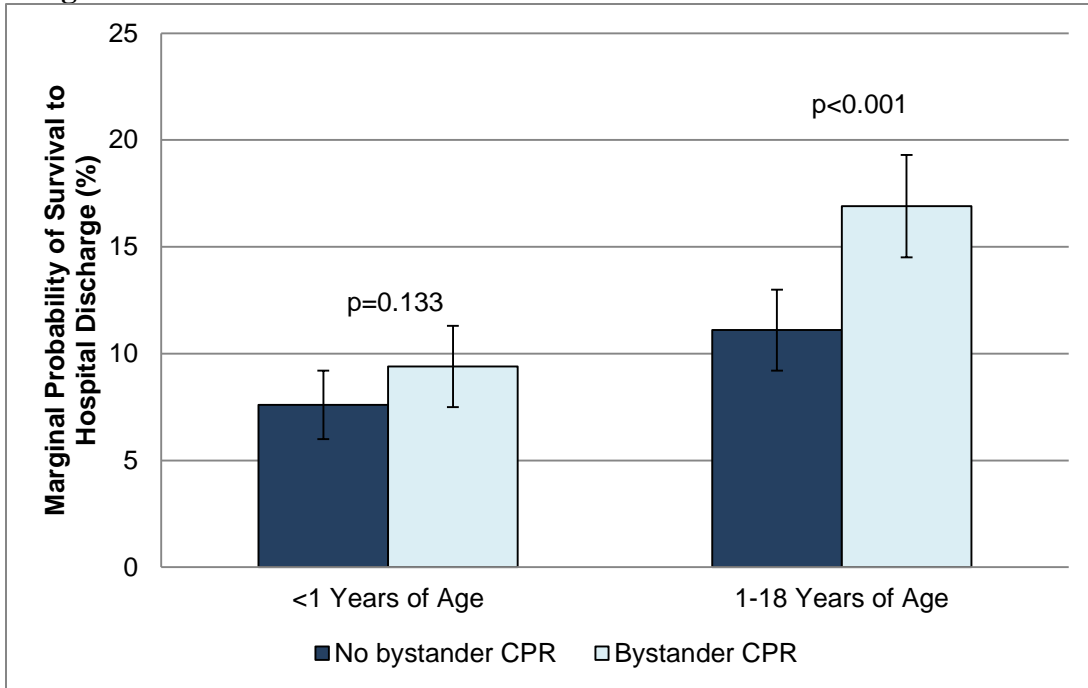
eTable. Univariate arrest characteristics and bivariable association with type of bystander CPR

Characteristics	All (N=1411)		Conventional (n=697)		Compression only CPR (n=714)		P value
	N	%		%	N	%	
Age							
<1	814	57.7	430	61.7	384	53.8	
1-18	597	42.3	267	38.3	330	46.2	<0.01
Gender							
Male	536	38.0	278	39.9	258	36.1	
Female	875	62.0	419	60.1	456	63.9	0.15
Race/ethnicity							
White	582	41.2	297	42.6	285	39.9	
Black	327	23.2	142	20.4	185	25.9	
Hispanic	137	9.7	50	7.2	87	12.2	
Other	365	25.9	208	29.8	157	22.0	<0.01
Bystander witnessed arrest							
No	992	70.3	498	71.4	494	69.2	
Yes	419	29.7	199	28.6	220	30.8	0.35
Arrest location							
Non-home/public	259	18.4	128	18.4	131	18.3	
Home/residence	1152	81.6	569	81.6	583	81.7	0.99
Shockable rhythm							
Non-shockable	1283	90.9	642	92.1	641	89.8	
Shockable	128	9.1	55	7.9	73	10.2	0.13
AED used							
No	1138	80.7	577	82.8	561	78.6	
Yes	273	19.3	120	17.2	153	21.4	0.05

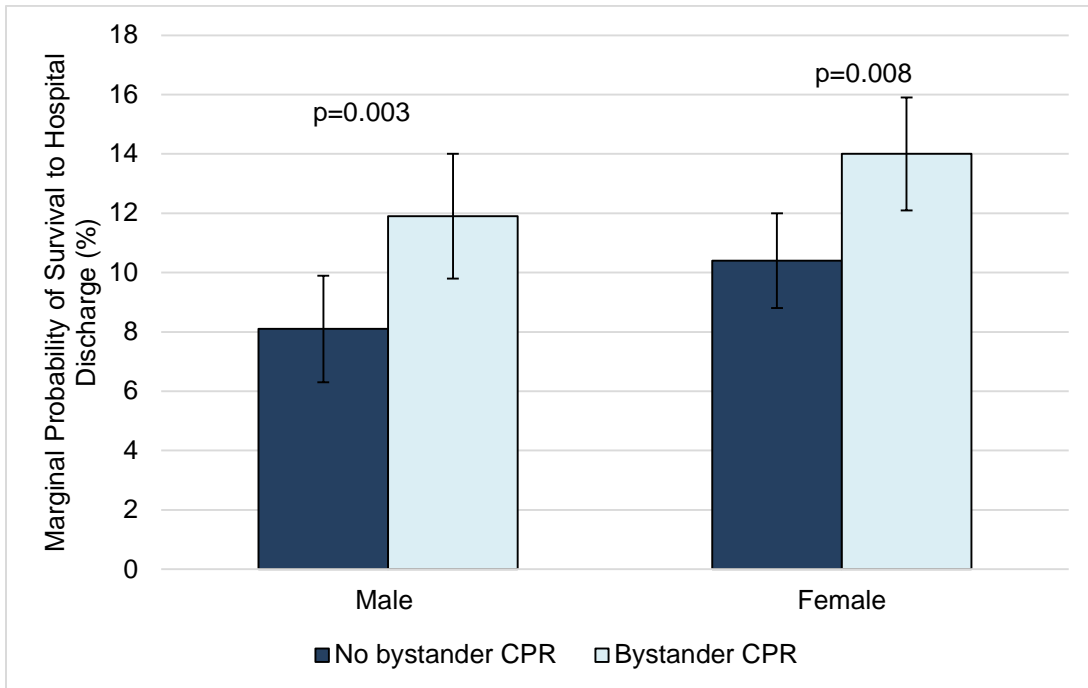
Abbreviations: CPR, cardiopulmonary resuscitation; AED, automated external defibrillator

eFigure 1. Significant interactions for survival to hospital discharge comparison of no bystander CPR with bystander CPR

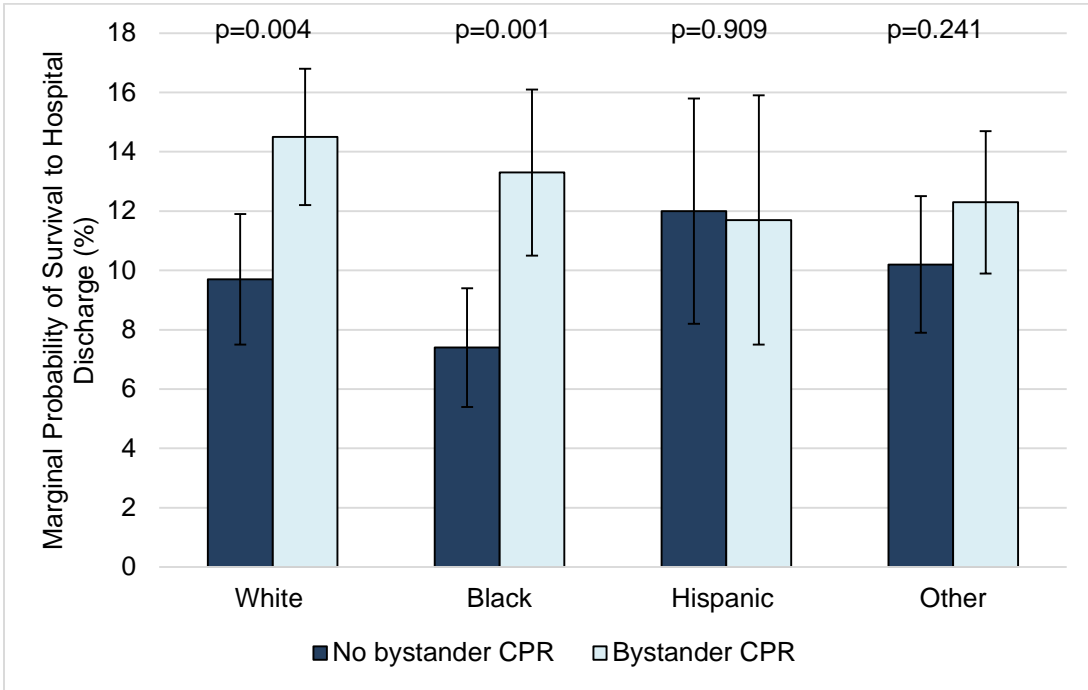
a. Age



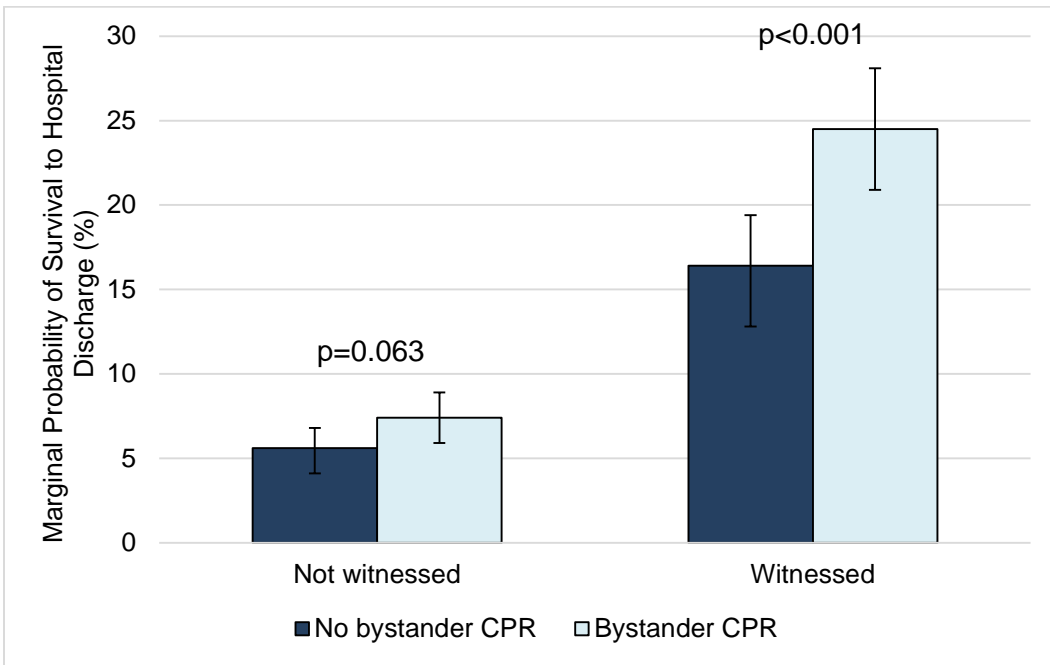
b. Gender



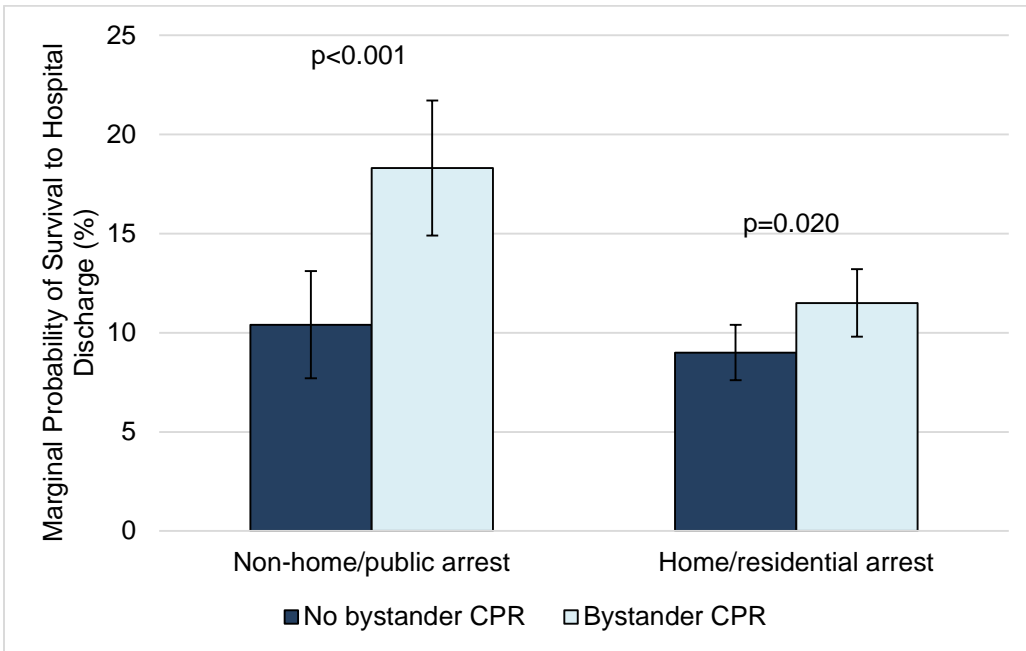
c. Race



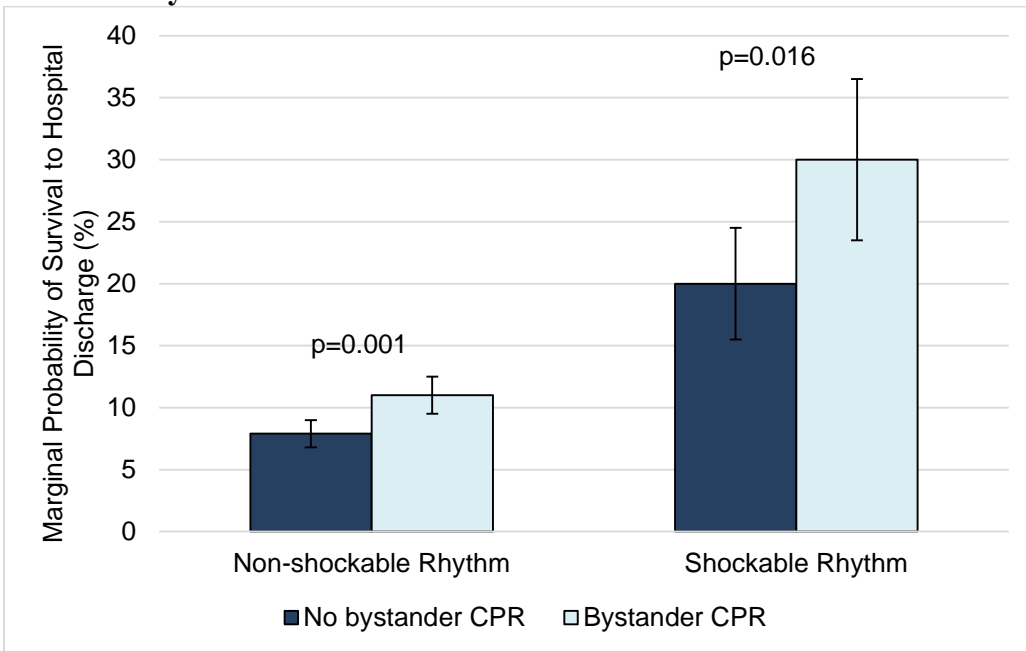
d. Witnessed Status



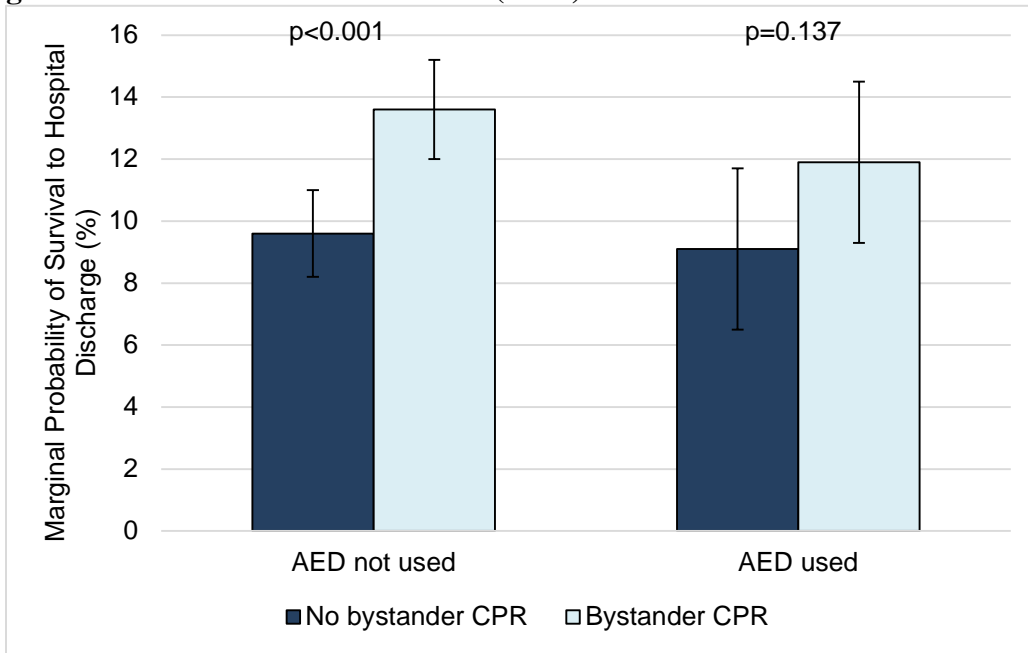
e. Arrest Location



f. Arrest Rhythm

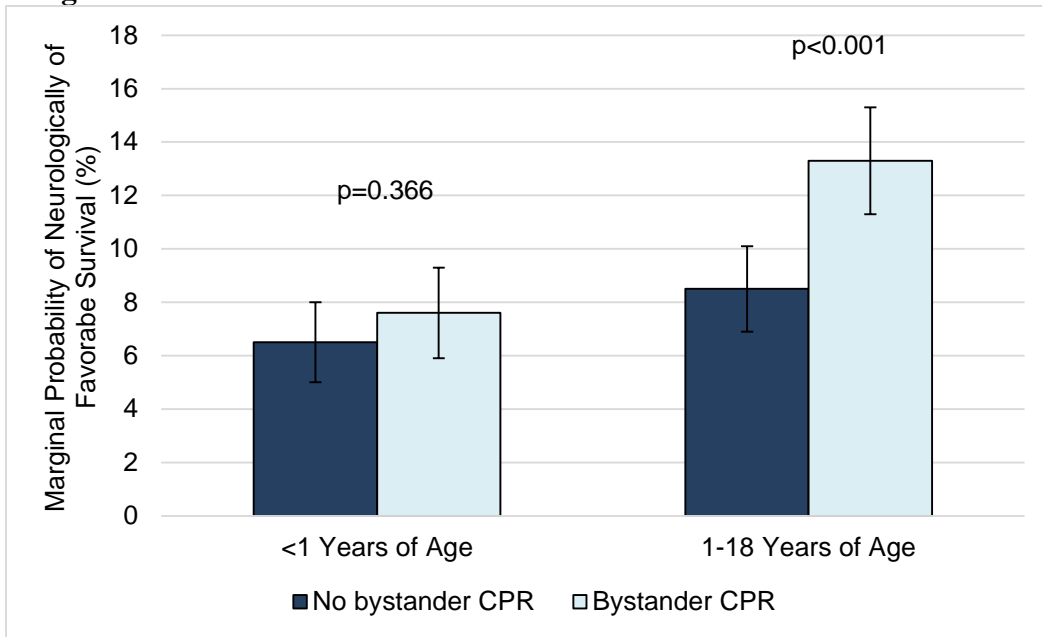


g. Automated external defibrillator (AED) use

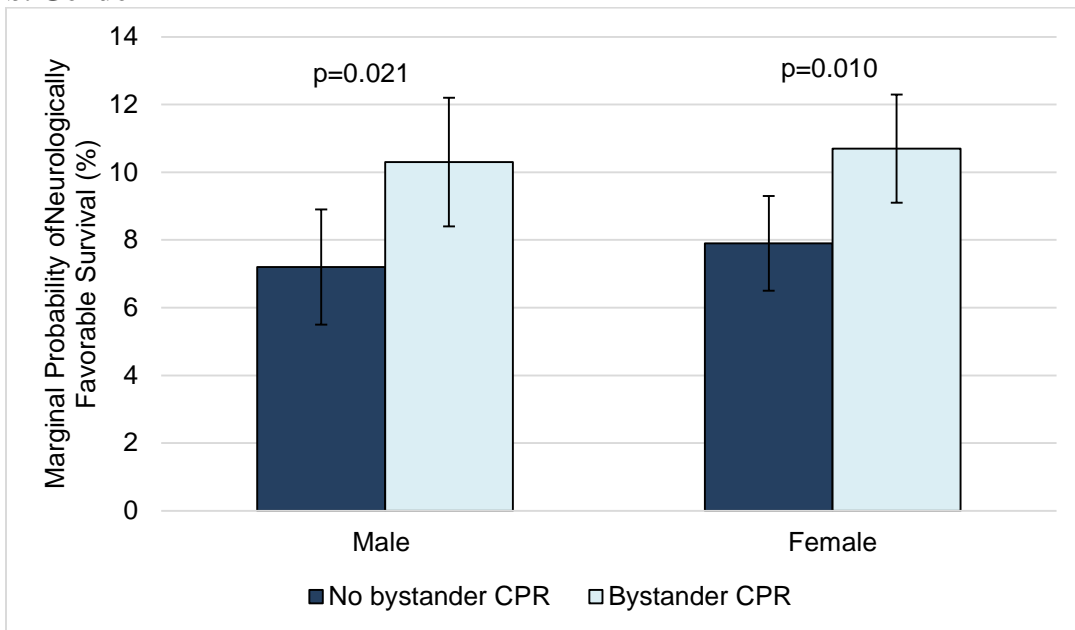


eFigure 2. Significant interactions for neurologically favorable survival comparison of no bystander CPR with bystander CPR

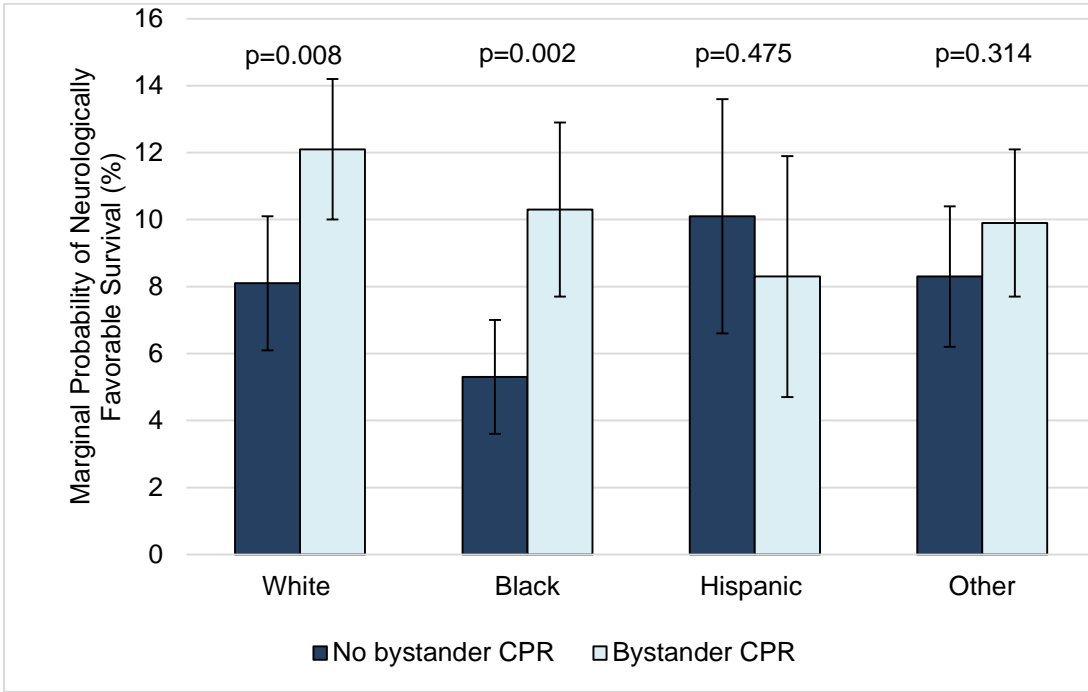
a. Age



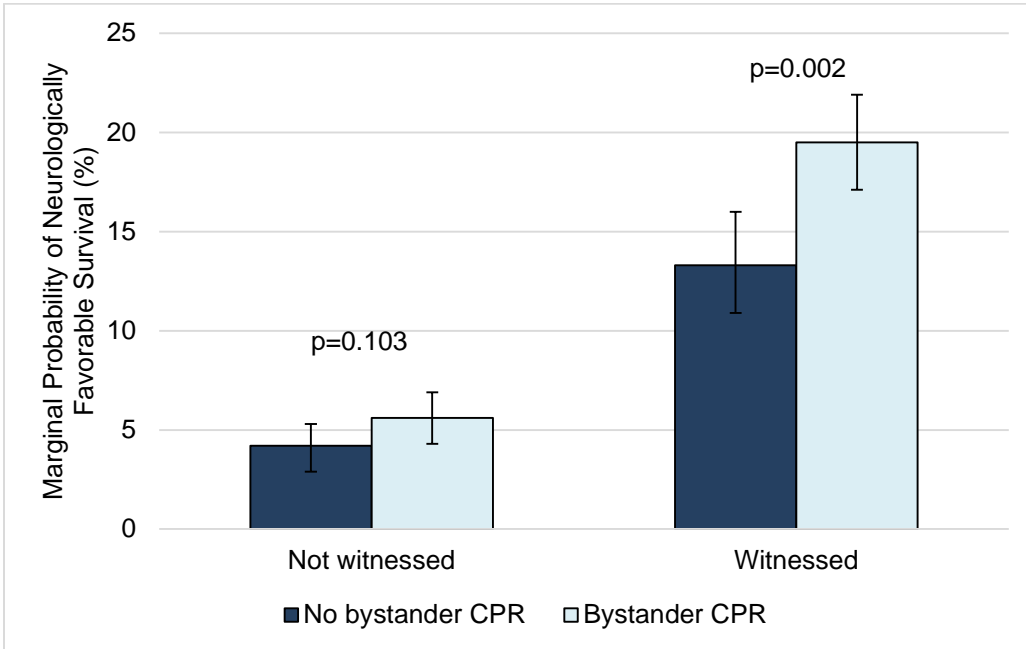
b. Gender



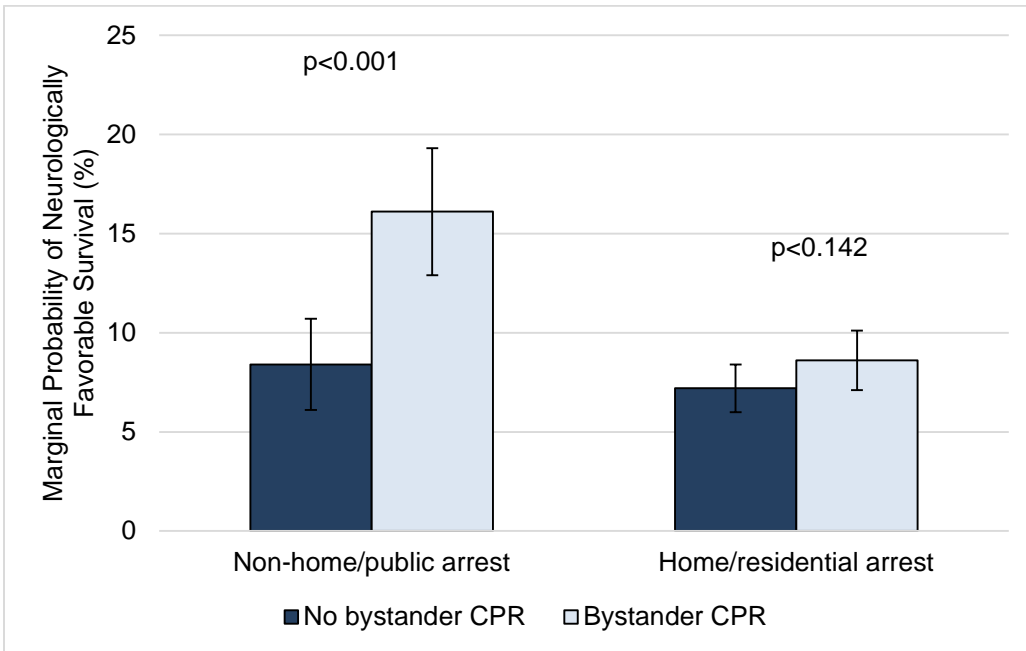
c. Race



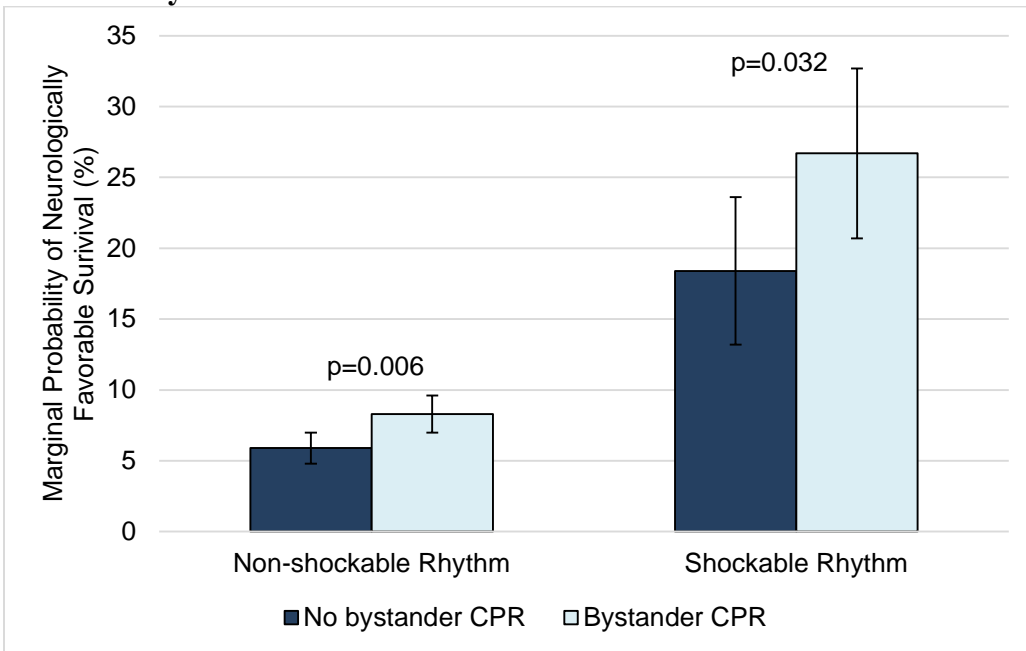
d. Witnessed Status



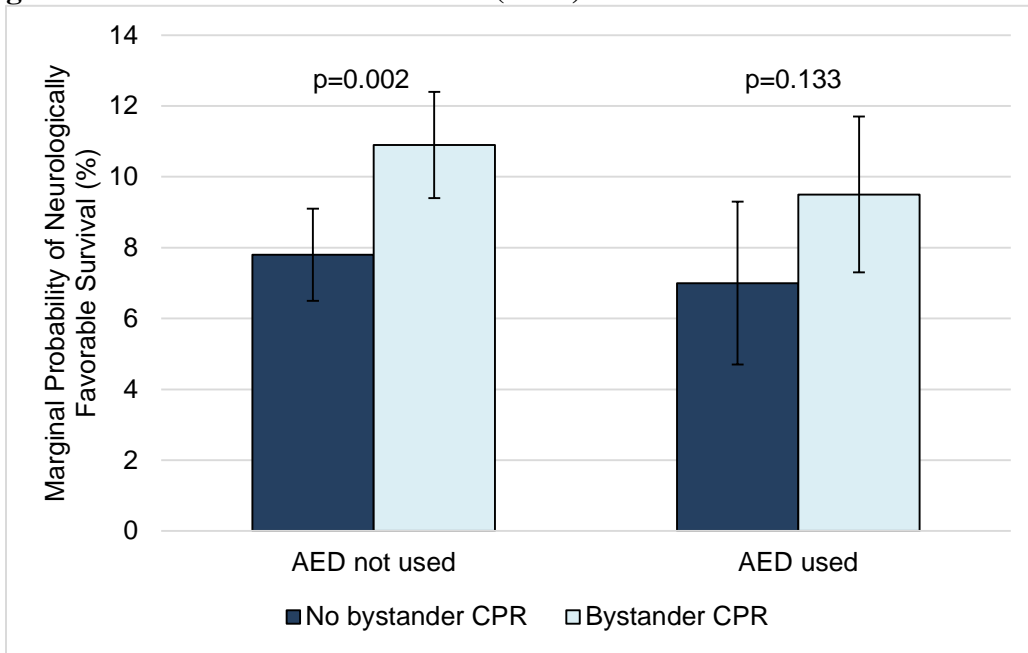
e. Arrest Location



f. Arrest Rhythm

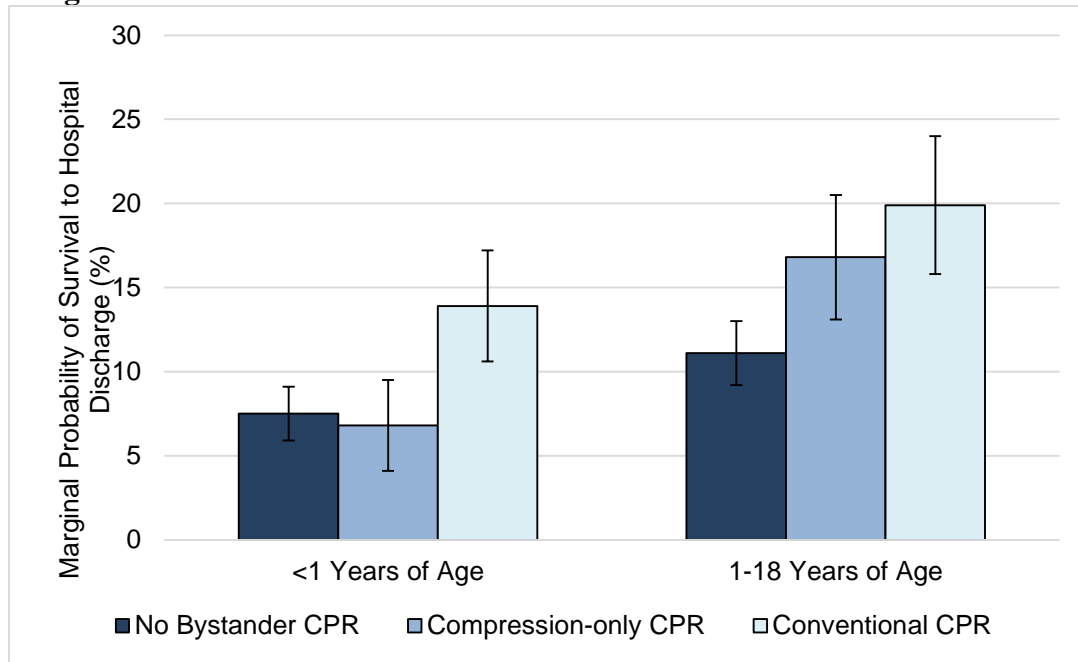


g. Automated external defibrillator (AED) use



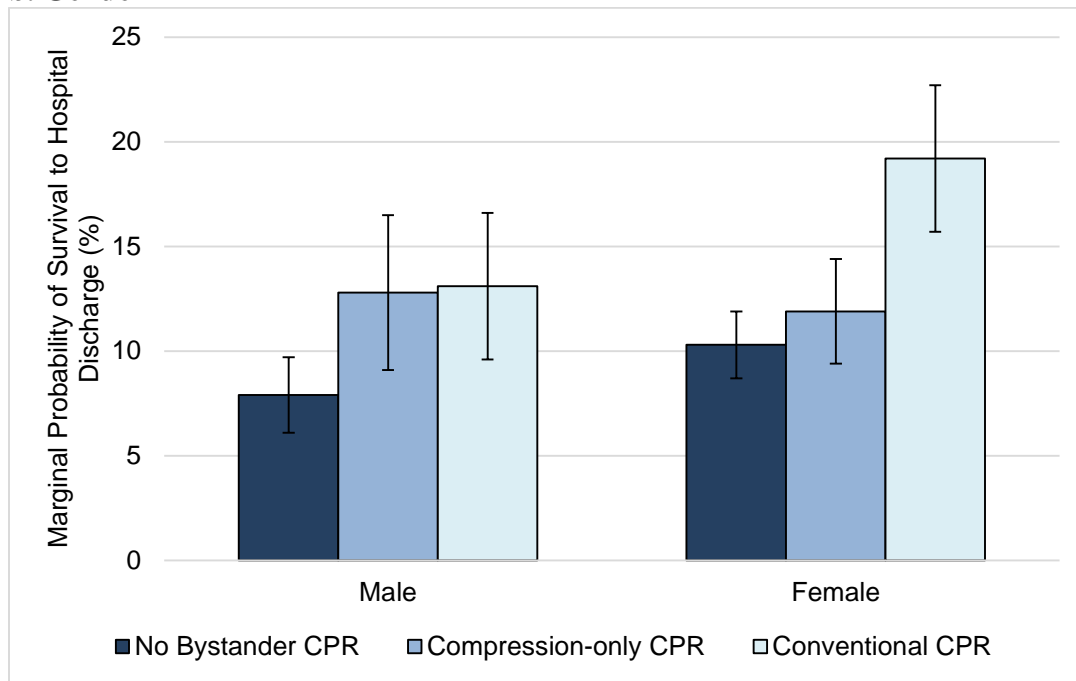
eFigure 3. Significant interactions for survival to hospital discharge comparison of no bystander CPR, compression-only CPR, and conventional CPR

a. Age



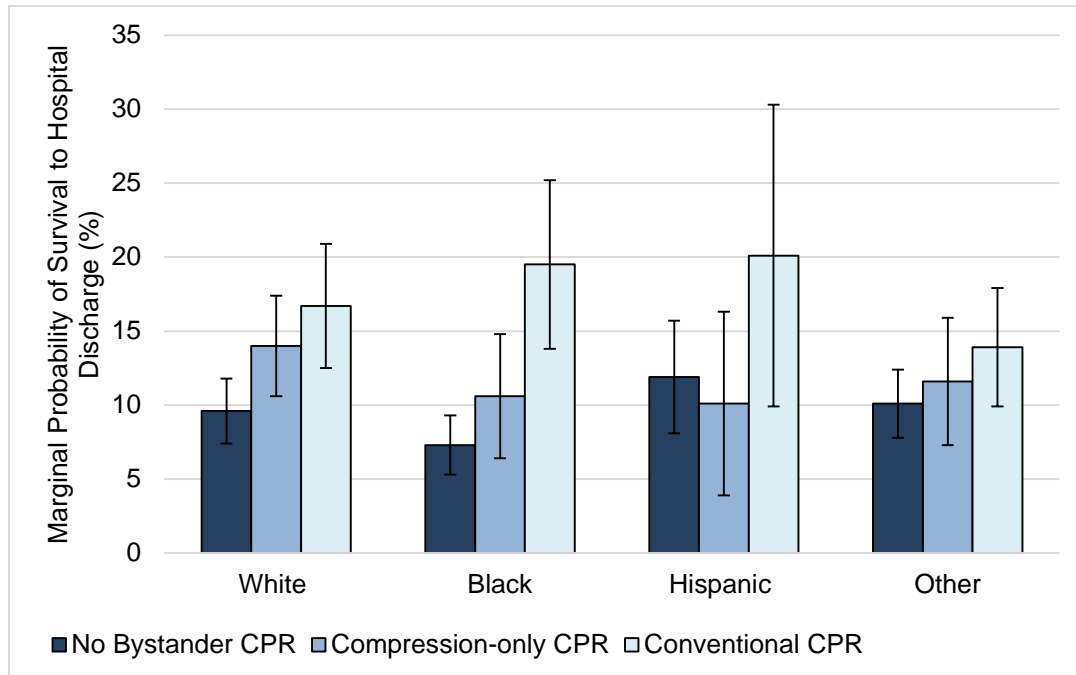
Interaction	P-value
<1 year of age, no bystander CPR vs. 1 year of age, compression-only CPR	0.685
<1 year of age, compression-only CPR vs. <1 year of age, conventional CPR	0.002
<1 year of age, no bystander CPR vs. <1 year of age, conventional CPR	<0.001
1-18 years of age, no bystander CPR vs. 1-18 years of age, compression-only CPR	0.003
1-18 years of age, compression-only CPR vs. 1-18 years of age, conventional CPR	0.258
1-18 years of age, no bystander CPR vs. 1-18 years of age, conventional CPR	<0.001

b. Gender



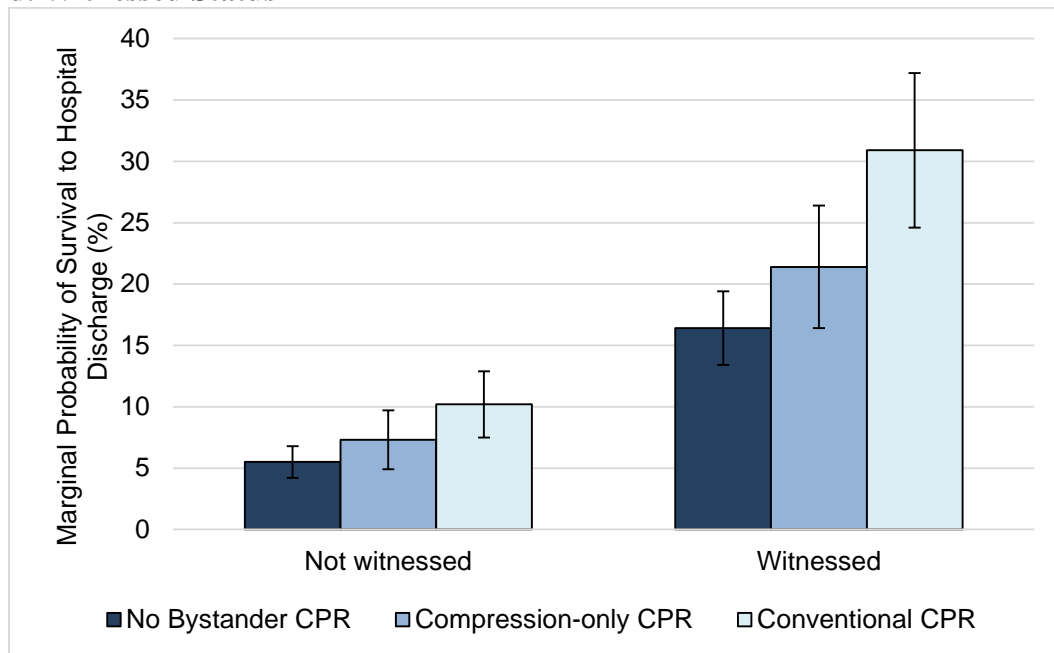
Interaction	P-value
Male, no bystander CPR vs. Male, compression-only CPR	0.012
Male, compression-only CPR vs. Male, conventional CPR	0.910
Male, no bystander CPR vs. Male, conventional CPR	0.005
Female, no bystander CPR vs. Female, compression-only CPR	0.278
Female, compression-only CPR vs. Female, conventional CPR	<0.001
Female, no bystander CPR vs. Female, conventional CPR	<0.001

c. Race



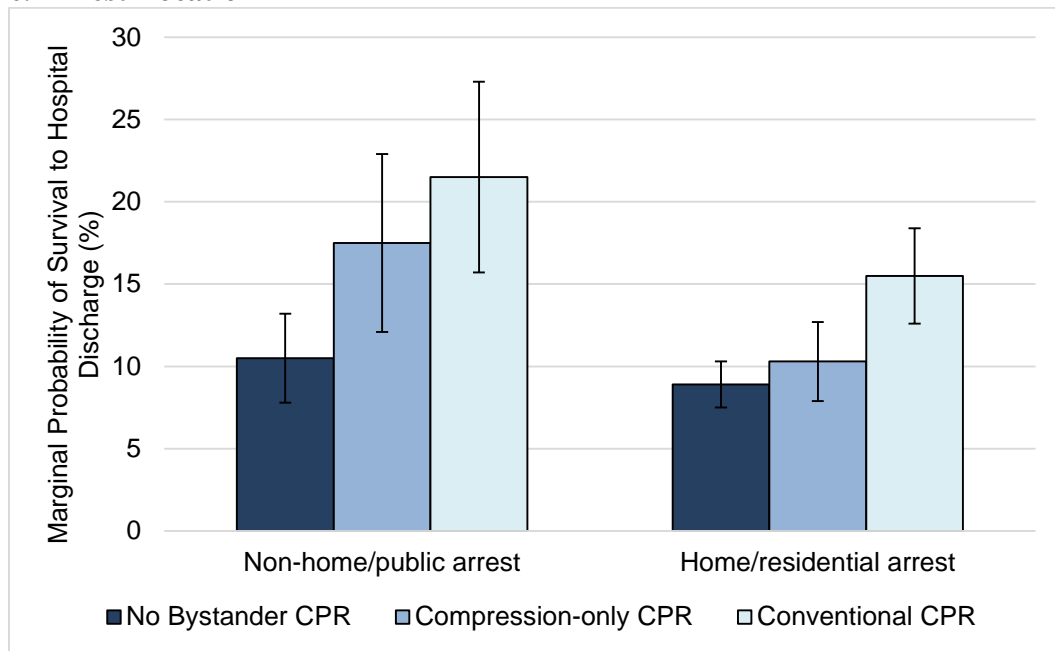
Interaction	P-value
White, no bystander CPR vs. White, compression-only CPR	0.026
White, compression-only CPR vs. White, conventional CPR	0.269
White, no bystander CPR vs. White, conventional CPR	0.001
Black, no bystander CPR vs. Black, compression-only CPR	0.125
Black, compression-only CPR vs. Black, conventional CPR	0.013
Black, no bystander CPR vs. Black, conventional CPR	<0.001
Hispanic, no bystander CPR vs. Hispanic, compression-only CPR	0.663
Hispanic, compression-only CPR vs. Hispanic, conventional CPR	0.089
Hispanic, no bystander CPR vs. Hispanic, conventional CPR	0.096
Other, no bystander CPR vs. Other, compression-only CPR	0.533
Other, compression-only CPR vs. Other, conventional CPR	0.457
Other, no bystander CPR vs. Other, conventional CPR	0.096

d. Witnessed Status



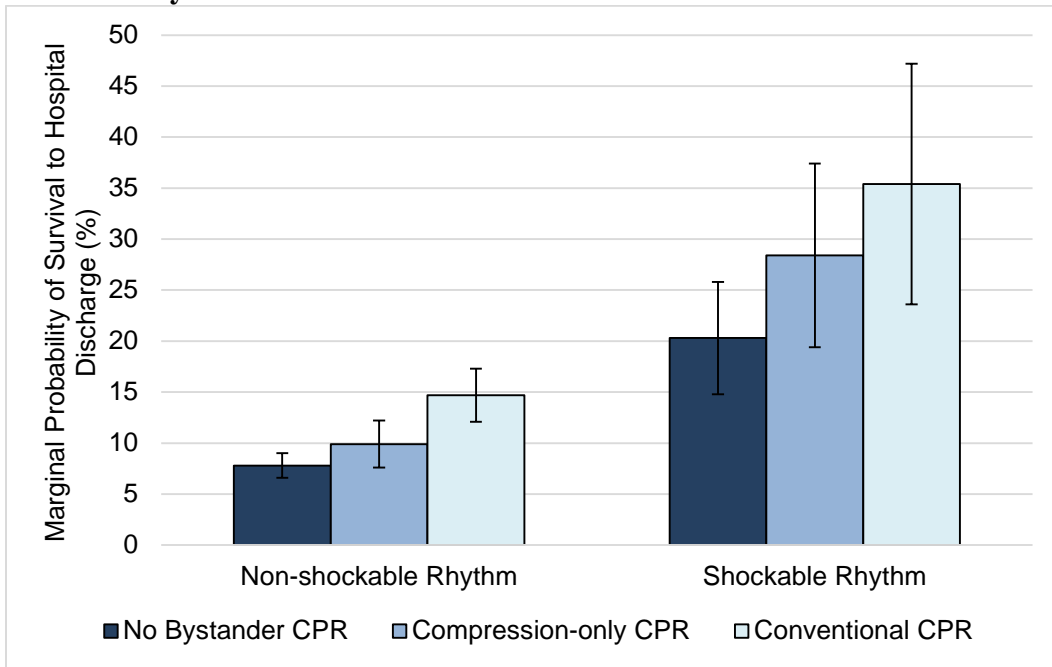
Interaction	P-value
Not witnessed, no bystander CPR vs. Not witnessed, compression-only CPR	0.158
Not witnessed, compression-only CPR vs. Not witnessed, conventional CPR	0.118
Not witnessed, no bystander CPR vs. Not witnessed, conventional CPR	<0.001
Witnessed, no bystander CPR vs. Witnessed, compression-only CPR	0.068
Witnessed, compression-only CPR vs. Witnessed, conventional CPR	0.017
Witnessed, no bystander CPR vs. Witnessed, conventional CPR	<0.001

e. Arrest Location



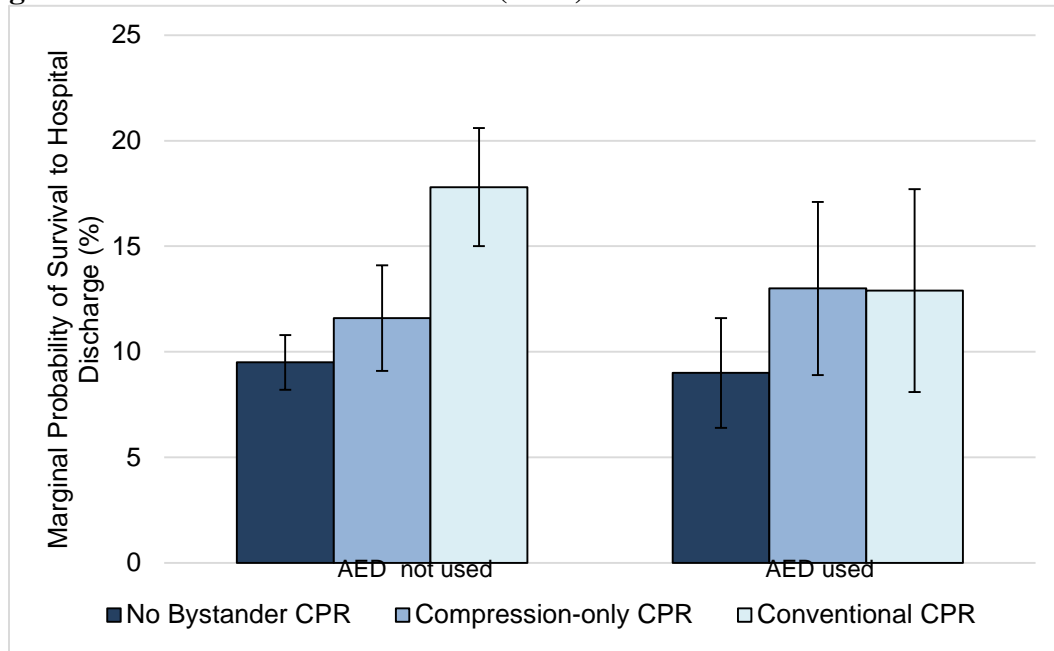
Interaction	P-value
Non-home/public arrest, no bystander CPR vs. Non-home/public arrest, compression-only CPR	0.012
Non-home/public arrest, compression-only CPR vs. Non-home/public arrest, conventional CPR	0.317
Non-home/public arrest, no bystander CPR vs. Non-home/public arrest, conventional CPR	<0.001
Home/residential arrest, no bystander CPR vs. Home/residential arrest, compression-only CPR	0.319
Home/residential arrest, compression-only CPR vs. Home/residential arrest, conventional CPR	0.001
Home/residential arrest, no bystander CPR vs. Home/residential arrest, conventional CPR	<0.001

f. Arrest Rhythm



Interaction	P-value
Non-shockable rhythm, no bystander CPR vs. Non-shockable rhythm, compression-only CPR	0.085
Non-shockable rhythm, compression-only CPR vs. Non-shockable rhythm, conventional CPR	0.008
Non-shockable rhythm, no bystander CPR vs. Non-shockable rhythm, conventional CPR	<0.001
Shockable rhythm, no bystander CPR vs. Shockable rhythm, compression-only CPR	0.107
Shockable rhythm, compression-only CPR vs. Shockable rhythm, conventional CPR	0.330
Shockable rhythm, no bystander CPR vs. Shockable rhythm, conventional CPR	0.013

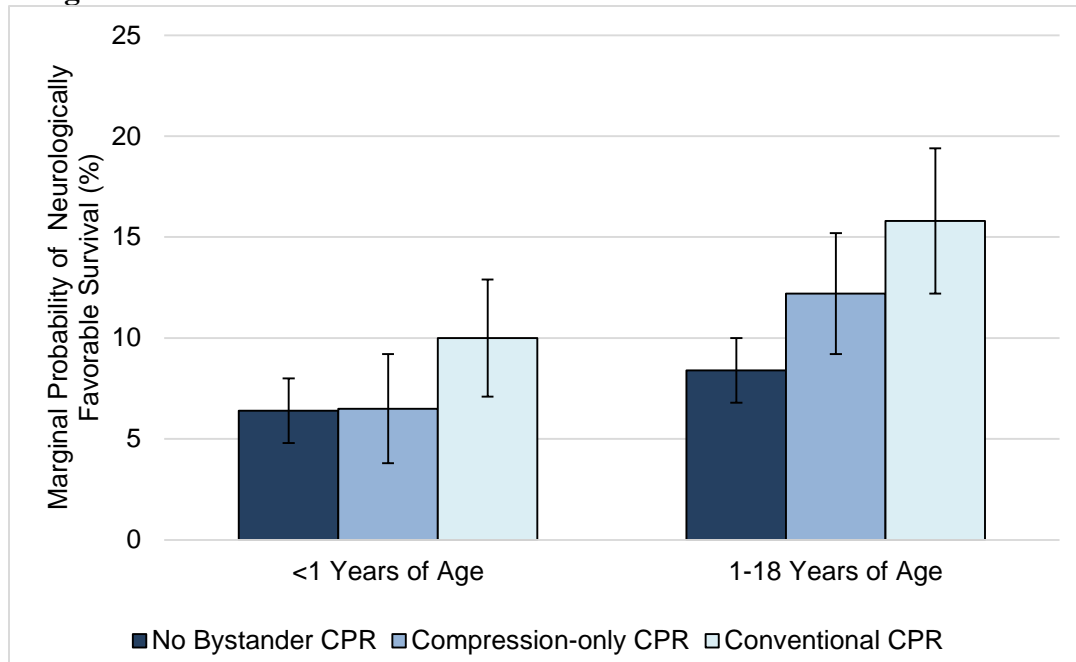
g. Automated external defibrillator (AED) use



Interaction	P-value
AED not used, no bystander CPR vs. AED not used, compression-only CPR	0.121
AED not used, compression-only CPR vs. AED not used, conventional CPR	0.002
AED not used, no bystander CPR vs. AED not used, conventional CPR	<0.001
AED used, no bystander CPR vs. AED used, compression-only CPR	0.092
AED used, compression-only CPR vs. AED used, conventional CPR	0.973
AED used, no bystander CPR vs. Fe AED used male, conventional CPR	0.137

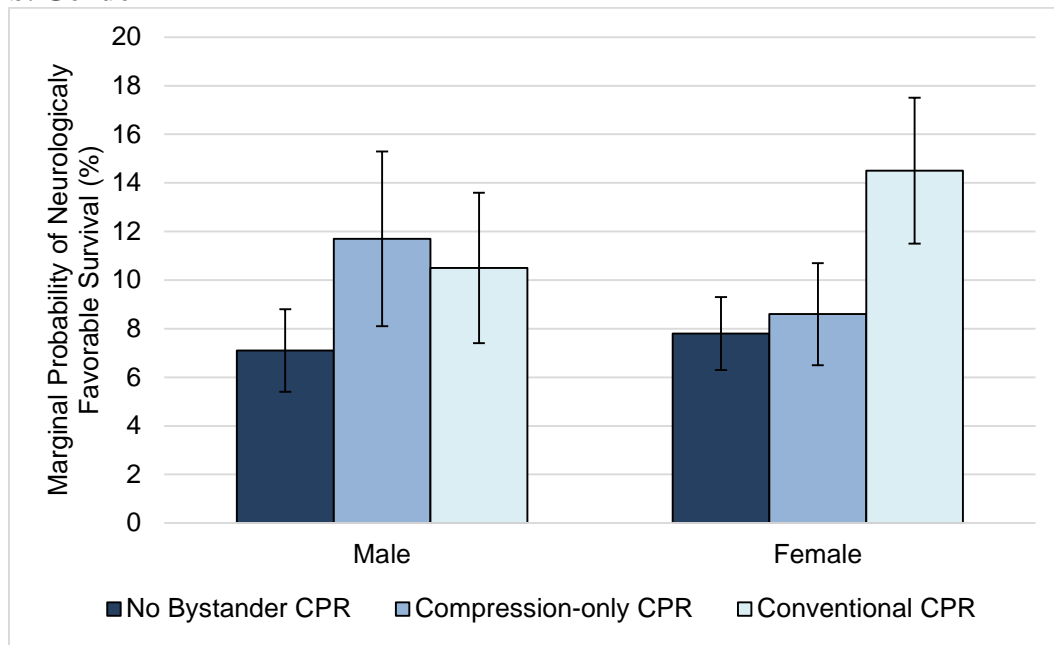
eFigure 4. Significant interactions for neurologically favorable survival comparison of no bystander CPR, compression-only CPR, and conventional CPR

a. Age



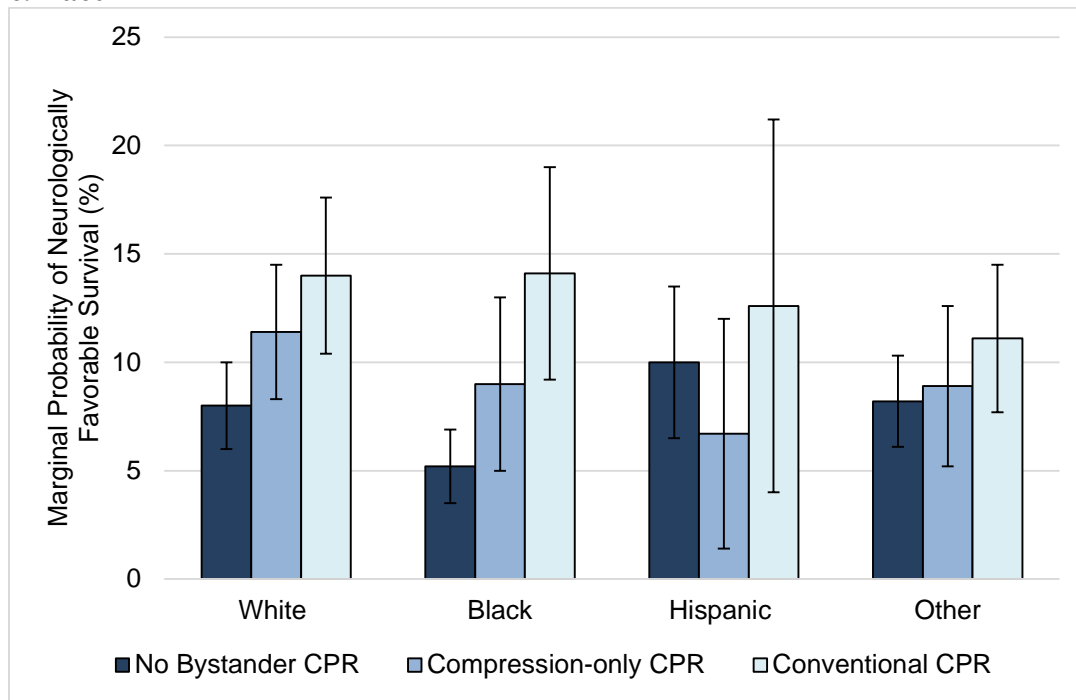
Interaction	P-value
<1 year of age, no bystander CPR vs. 1 year of age, compression-only CPR	0.978
<1 year of age, compression-only CPR vs. <1 year of age, conventional CPR	0.083
<1 year of age, no bystander CPR vs. <1 year of age, conventional CPR	0.019
1-18 years of age, no bystander CPR vs. 1-18 years of age, compression-only CPR	0.021
1-18 years of age, compression-only CPR vs. 1-18 years of age, conventional CPR	0.117
1-18 years of age, no bystander CPR vs. 1-18 years of age, conventional CPR	<0.001

b. Gender



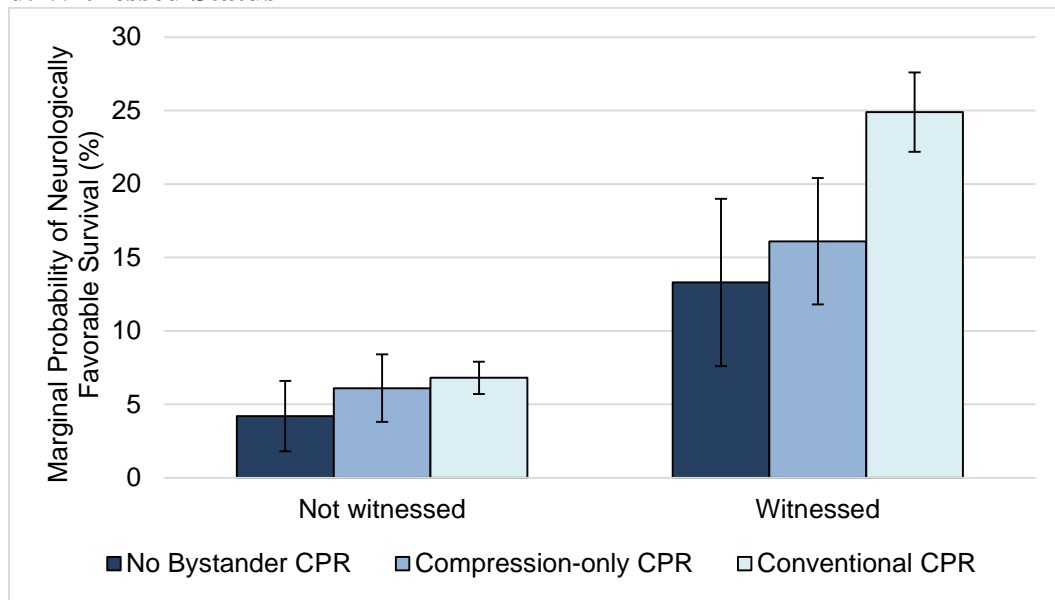
Interaction	P-value
Male, no bystander CPR vs. Male, compression-only CPR	0.013
Male, compression-only CPR vs. Male, conventional CPR	0.635
Male, no bystander CPR vs. Male, conventional CPR	0.039
Female, no bystander CPR vs. Female, compression-only CPR	0.563
Female, compression-only CPR vs. Female, conventional CPR	0.002
Female, no bystander CPR vs. Female, conventional CPR	<0.001

c. Race



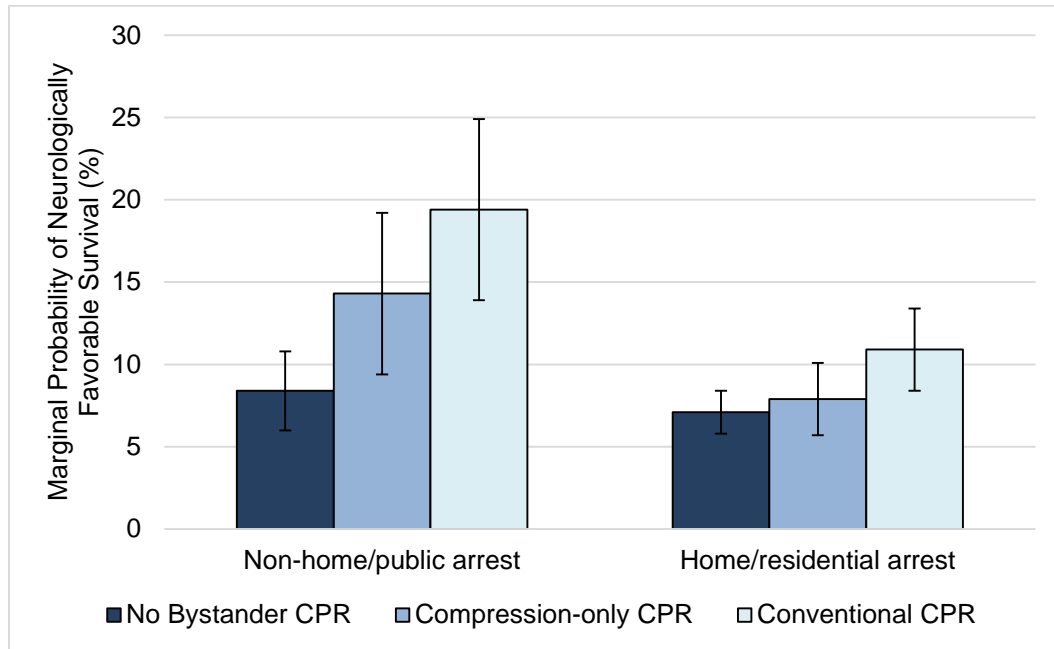
Interaction	P-value
White, no bystander CPR vs. White, compression-only CPR	0.057
White, compression-only CPR vs. White, conventional CPR	0.291
White, no bystander CPR vs. White, conventional CPR	0.003
Black, no bystander CPR vs. Black, compression-only CPR	0.054
Black, compression-only CPR vs. Black, conventional CPR	0.114
Black, no bystander CPR vs. Black, conventional CPR	<0.001
Hispanic, no bystander CPR vs. Hispanic, compression-only CPR	0.347
Hispanic, compression-only CPR vs. Hispanic, conventional CPR	0.237
Hispanic, no bystander CPR vs. Hispanic, conventional CPR	0.570
Other, no bystander CPR vs. Other, compression-only CPR	0.763
Other, compression-only CPR vs. Other, conventional CPR	0.409
Other, no bystander CPR vs. Other, conventional CPR	0.148

d. Witnessed Status



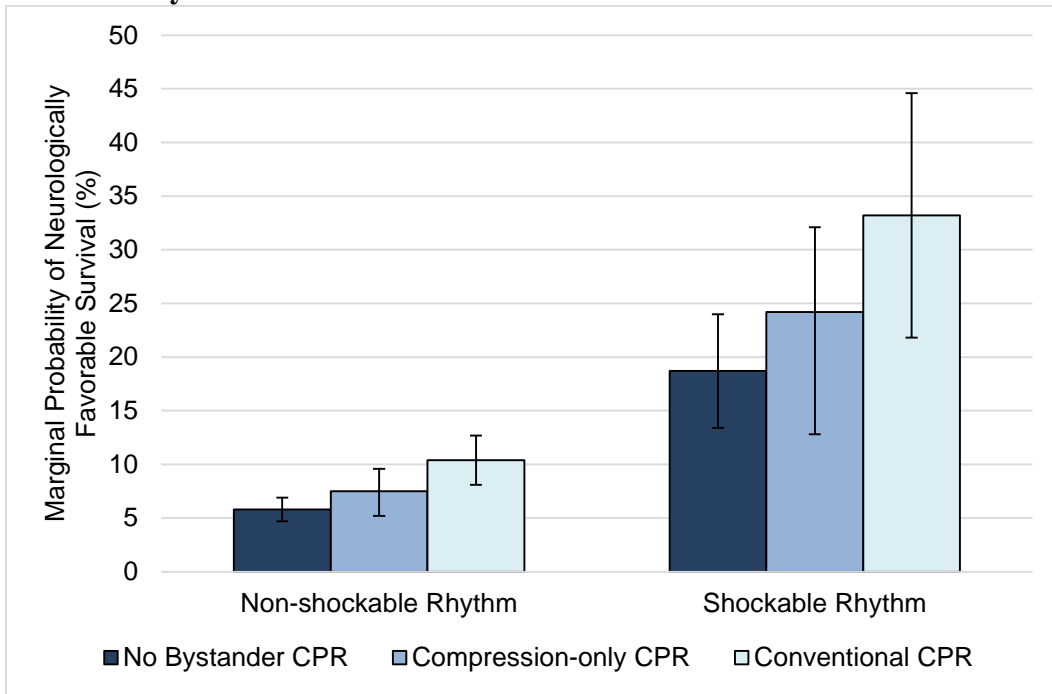
Interaction	P-value
Not witnessed, no bystander CPR vs. Not witnessed, compression-only CPR	0.093
Not witnessed, compression-only CPR vs. Not witnessed, conventional CPR	0.662
Not witnessed, no bystander CPR vs. Not witnessed, conventional CPR	0.023
Witnessed, no bystander CPR vs. Witnessed, compression-only CPR	0.245
Witnessed, compression-only CPR vs. Witnessed, conventional CPR	0.011
Witnessed, no bystander CPR vs. Witnessed, conventional CPR	<0.001

e. Arrest Location



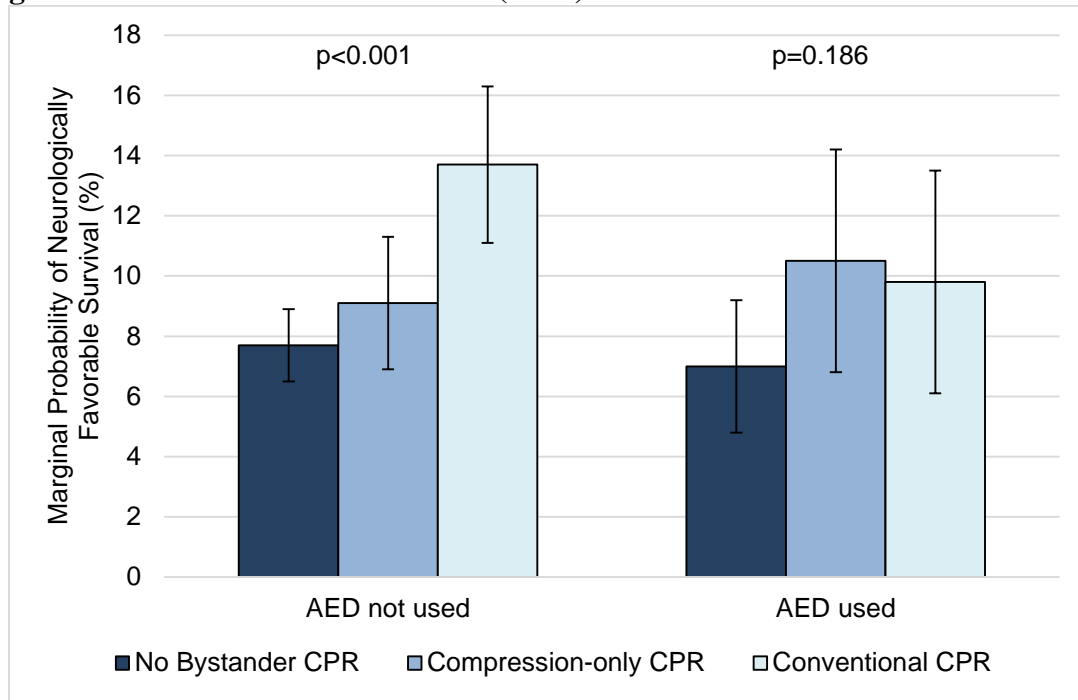
Interaction	P-value
Non-home/public arrest, no bystander CPR vs. Non-home/public arrest, compression-only CPR	0.016
Non-home/public arrest, compression-only CPR vs. Non-home/public arrest, conventional CPR	0.157
Non-home/public arrest, no bystander CPR vs. Non-home/public arrest, conventional CPR	<0.001
Home/residential arrest, no bystander CPR vs. Home/residential arrest, compression-only CPR	0.525
Home/residential arrest, compression-only CPR vs. Home/residential arrest, conventional CPR	0.080
Home/residential arrest, no bystander CPR vs. Home/residential arrest, conventional CPR	0.005

f. Arrest Rhythm



Interaction	P-value
Non-shockable rhythm, no bystander CPR vs. Non-shockable rhythm, compression-only CPR	0.124
Non-shockable rhythm, compression-only CPR vs. Non-shockable rhythm, conventional CPR	0.071
Non-shockable rhythm, no bystander CPR vs. Non-shockable rhythm, conventional CPR	<0.001
Shockable rhythm, no bystander CPR vs. Shockable rhythm, compression-only CPR	0.230
Shockable rhythm, compression-only CPR vs. Shockable rhythm, conventional CPR	0.172
Shockable rhythm, no bystander CPR vs. Shockable rhythm, conventional CPR	0.012

g. Automated external defibrillator (AED) use



Interaction	P-value
AED not used, no bystander CPR vs. AED not used, compression-only CPR	0.279
AED not used, compression-only CPR vs. AED not used, conventional CPR	0.008
AED not used, no bystander CPR vs. AED not used, conventional CPR	<0.001
AED used, no bystander CPR vs. AED used, compression-only CPR	0.086
AED used, compression-only CPR vs. AED used, conventional CPR	0.767
AED used, no bystander CPR vs. Fe AED used male, conventional CPR	0.190