

Supplement

Supplementary Table 1. Patient characteristics stratified by randomization

	Intervention (n = 8,001)	Control (n = 7,964)	p value
Stratification by AI-ECG			0.619
High risk of mortality	709 (8.9%)	688 (8.6%)	
Low risk of mortality	7,292 (91.1%)	7,276 (91.4%)	
Hospital			0.538
Academic medical center	7,404 (92.5%)	7,390 (92.8%)	
Community hospital	597 (7.5%)	574 (7.2%)	
Patient source			0.752
Emergency department	4,610 (57.6%)	4,569 (57.4%)	
Inpatient department	3,391 (42.4%)	3,395 (42.6%)	
Demographics and comorbidities			
Sex (male)	4,076 (50.9%)	4,168 (52.3%)	0.078
Age (mean ± SD)	60.9±18.5	61.5±18.2	0.030
Age group			0.114
<65 y/o	4,369 (54.6%)	4,224 (53.0%)	
65-74 y/o	1,773 (22.2%)	1,853 (23.3%)	
≥75 y/o	1,859 (23.2%)	1,887 (23.7%)	
Coronary artery disease	2,098 (26.2%)	2,089 (26.2%)	0.990
Heart failure	884 (11.0%)	903 (11.3%)	0.561
Atrial fibrillation	592 (7.4%)	580 (7.3%)	0.778
Hypertension	3,442 (43.0%)	3,434 (43.1%)	0.899

The p value was two-sided, with no adjustment for multiple comparisons. Abbreviations: ECG, electrocardiography; AI-ECG, artificial intelligence-enabled electrocardiogram; SD, standard deviation.

Supplementary Table 2. Subgroup analysis of incremental costs, mortality reduction, and cost-effectiveness of AI-ECG alerts among all patients

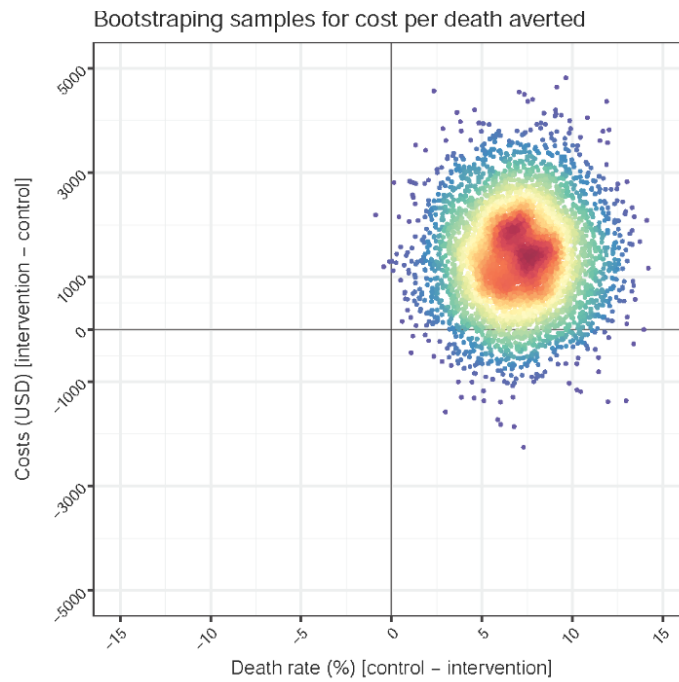
Subgroup	Incremental cost (\$)	Reduction in mortality rate (%)	ICER per death averted (\$)
All patients	409 (68, 743)	0.7 (0.0, 1.4)	59500 (-4657, 385950)
Patient source			
Emergency department	666 (-1976, 3381)	6.9 (-0.0, 13.8)	125025 (-985570, 1029496)
Inpatient department	2017 (-389, 4553)	7.0 (1.3, 13.1)	43484 (-4505, 194993)
Sex			
Male	172 (-142, 472)	0.3 (-0.4, 1.0)	40133 (-6355, 184224)
Female	359 (-64, 775)	0.1 (-0.8, 1.1)	261849 (-1164921, 1081149)
Age group			
<65 y/o	436 (-17, 901)	0.6 (-0.1, 1.2)	74715 (-273348, 651975)
65-74 y/o	409 (-264, 1101)	-0.0 (-1.2, 1.3)	-3182483 (-1253483, 1151033)
≥75 y/o	453 (-235, 1134)	1.3 (-0.7, 3.3)	35586 (-381118, 482972)
Comorbidities			
Coronary artery disease	217 (-431, 843)	0.6 (-0.6, 1.8)	36893 (-540656.0, 568766)
Heart failure	1011 (-323, 2411)	2.0 (-0.7, 4.5)	50871 (-397590, 477477)
Atrial fibrillation	729 (-1017, 2531)	1.2 (-1.7, 4.3)	593423 (-675806, 826157)
Hypertension	133 (-403, 637)	0.9 (-0.2, 2.0)	14198 (-151149, 181598)

* Abbreviations: ICER, incremental cost-effectiveness ratio.

Supplementary Table 3. Subgroup analysis of incremental costs, mortality reduction, and cost-effectiveness of AI-ECG alerts among high-risk patients

Subgroup	Incremental cost (\$)	Reduction in mortality rate (%)	ICER per death averted (\$)
High-risk patients	1386 (-439, 3235)	7.0 (2.4, 11.7)	19863 (-7954, 73753)
Patient source			
Emergency department	-322 (-2267, 1619)	9.2 (3.3, 15.6)	-3495 (-32831, 22008)
Inpatient department	3414 (200, 6912)	4.4 (-2.5, 11.3)	76886 (-575584, 842740)
Sex			
Male	2017 (-389, 4553)	7.0 (1.3, 13.1)	28892 (-8765, 146420)
Female	666 (-1976, 3381)	6.9 (-0.0, 13.8)	9595 (-59703, 123282)
Age group			
<65 y/o	3783 (113, 7624)	9.5 (2.6, 16.5)	39816 (565, 155565)
65-74 y/o	-749 (-4499, 3148)	4.6 (-3.6, 12.8)	-16454 (-368016, 383075)
≥75 y/o	916 (-1343, 3369)	6.8 (-1.3, 14.6)	13444 (-96173, 148853)
Comorbidities			
Coronary artery disease	-328 (-3156, 2418)	6.4 (0.3, 12.7)	-5125 (-107304, 78543)
Heart failure	914 (-2512, 4581)	11.3 (3.6, 19.1)	8100 (-31256, 53208)
Atrial fibrillation	-447 (-5435, 4528)	2.4 (-6.1, 11.1)	-18516 (-650422, 513891)
Hypertension	-615 (-2727, 1496)	9.4 (3.7, 15.0)	-6553 (-39817, 17785)

* Abbreviations: ICER, incremental cost-effectiveness ratio.



Supplementary Figure 1. Distribution of bootstrap samples for cost per death averted among ‘high risk’ participants.