

Supplementary File

Supplemental Table S1
Participant demographics (%)^a

Group Sample Size (Total useable study sample n=1,065)	Acute	Chronic	Pediatric	Cardiac	P value
Age (years)					.01
25-29	2	0	0	0	
30-39	19	26	20	17	
40-49	28	25	24	24	
50-59	20	21	26	29	
60+	32	28	29	29	
Married or partnered	86	93	90	88	0.36
Gender					<0.001
Female	22	41	49	25	
Male	78	59	51	75	
Job title					.03
Physician (attending)	84	75	87	86	
Physician (resident)	13	24	11	11	
Registered Nurse	0	0	0	0	
PhD	1	0	0	1	
CRNA	1	0	1	0	
Other	1	1	1	2	
Work area					<0.001
Hospital (community)	45	18	21	41	
Hospital (teaching)	49	43	75	58	
Surgery center	6	4	2	1	
Office based practice	1	34	0	0	
Other		1	1	0	

^aData shown in %. P values were calculated using the Pearson Chi-square test.

Abbreviation: CRNA, certified registered nurse anesthetist.

Supplemental Table S2
Percentage of respondents with high MBI-HSS scores
stratified by self-identified burnout status (%)

	Currently burned out	Formerly burned out	Never burned out	Combined	P value
Acute	n=33	n=39	n=92	n=164	
1-2 high	91	41	27	44	0.07
3 high	12	8	2	6	<0.001
Chronic	n=26	n=18	n=24	n=68	
1-2 high	96	33	39	60	<0.001
3 high	15	0	0	6	0.032
Pediatric	n=100	n=129	n=264	n=493	
1-2 high	81	35	19	36	<0.001
3 high	13	1	1	3	<0.001
Cardiac	n=82	n=72	n=182	n=336	
1-2 high	82	35	27	42	<0.001
3 high	9	1	3	4	0.04

Data were shown as a percentage of 'n' value.

p value was calculated using the Pearson Chi-square test comparing number of MBI-HSS dimensions with high scores (Emotional Exhaustion ≥ 27 , Depersonalization ≥ 10 and Lack of Personal Accomplishment ≥ 18) and self-identified burnout status.

Abbreviation: MBI-HSS, Maslach Burnout Inventory-Human Services Survey.

Supplemental Table S3
Relationship of self-identified burnout with MBI-HSS
(symptoms of burnout and individual burnout dimensions)

	All participants N=1303	Acute N=164	Chronic N=69	Pediatric N=496	Cardiac N=336
Burnout symptoms, ^a % (n)	43.4 (565)	45.1 (74)	62.3 (43)	38.1 (189)	44.3 (149)
Sensitivity	0.690 [0.659, 0.719]	0.662 [0.572, 0.748]	0.585 [0.435, 0.728]	0.723 [0.679, 0.770]	0.685 [0.624, 0.745]
Specificity	0.854 [0.810, 0.896]	0.909 [0.810, 1]	1.00 [1, 1]	0.800 [0.719, 0.870]	0.854 [0.773, 0.930]
PPV	0.939 [0.917, 0.955]	0.966 [0.928, 1]	1.00 [1, 1]	0.934 [0.904, 0.960]	0.935 [0.901, 0.973]
NPV	0.460 [0.419, 0.500]	0.405 [0.288, 0.519]	0.605 [0.465, 0.733]	0.426 [0.353, 0.495]	0.469 [0.385, 0.561]
Spearman's correlation coefficients [95% CI] ^b					
Burnout symptoms	0.544 [0.504, 0.581]	0.506 [0.382, 0.613]	0.519 [0.318, 0.675]	0.579 [0.517, 0.635]	0.523 [0.440, 0.597]
EE	0.560 [0.522, 0.560]	0.514 [0.390, 0.619]	0.531 [0.334, 0.684]	0.589 [0.528, 0.644]	0.542 [0.461, 0.614]
DP	0.372 [0.323, 0.418]	0.392 [0.254, 0.514]	0.380 [0.155, 0.567]	0.380 [0.302, 0.454]	0.369 [0.272, 0.458]
LPA	0.291 [0.240, 0.341]	0.259 [0.109, 0.397]	0.209 [-0.035, 0.429]	0.336 [0.255, 0.412]	0.223 [0.119, 0.322]

^a The criteria for burnout (EE \geq 27 or DP \geq 10) was used to identify binary burnout status. Self-identified burnout was dichotomized as current vs. former or never for the calculations of sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and their 95% confidence intervals.

^b Non-parametric Spearman's correlation coefficient (R) [95% confidence interval] was calculated for burnout symptoms as well as the individual EE, DP, and LPA scores. All p values for the correlation analysis were less than 0.001, with the exception of LPA in Chronic (p = 0.092).

Abbreviations: MBI-HSS, Maslach Burnout Inventory-Human Services Survey; EE, emotional exhaustion; DP, depersonalization; LPA, lack of personal accomplishment; CI, confidence intervals.