

**Supplementary Table 3.** Number of nurses before and after rapid response system implementation

Variable	Pre-RRS	RRS	P-value
General surgery ward	90 (27.3)	92 (27.2)	1.000
1	14 (13.2)	15 (13.8)	
2	15 (14.2)	15 (13.8)	
3	15 (14.2)	15 (13.8)	
4	14 (13.2)	15 (13.8)	
5	16 (15.1)	17 (15.6)	
6	15 (14.2)	15 (13.8)	
7	17 (16.0)	17 (15.6)	
Obstetrics and gynecology ward	54 (16.4)	55 (16.3)	0.991
1	12 (22.2)	11 (20.0)	
2	13 (24.1)	14 (25.5)	
3	14 (25.9)	14 (25.5)	
4	15 (27.8)	16 (29.1)	
Neurosurgery ward	30 (9.1)	31 (9.2)	1.000
1	14 (46.7)	14 (45.2)	
2	16 (53.3)	17 (54.8)	
Orthopedic surgery ward	54 (16.4)	58 (17.2)	1.000
1	14 (25.9)	15 (25.9)	
2	12 (22.2)	13 (22.4)	
3	14 (25.9)	15 (25.9)	
4	14 (25.9)	15 (25.9)	
Other departments ward	66 (20.0)	63 (18.6)	0.995
Ear, Nose, and Throat Surgery	14 (21.2)	14 (22.2)	
Urologic Surgery	15 (22.7)	14 (22.2)	
Others	37 (56.1)	35 (55.6)	
Total	330 (100)	338 (100)	1.000

Values are presented as number (%). Pre-RRS: August 2013 to July 2015, RRS: August 2015 to July 2017. RRS: rapid response system.

**Supplementary Table 4.** Number of residents before and after rapid response system implementation

Variable	Pre-RRS	RRS	P-value
Department			1.000
General Surgery	29 (29–30)	26 (25–26)	
Obstetrics and Gynecology	23 (23–25)	21 (20–22)	
Neurosurgery	12 (11–13)	13 (13–13)	
Orthopedic Surgery	22 (11–22)	21 (20–23)	
Ear, Nose, and Throat Surgery	13 (13–15)	13 (13–14)	
Urologic Surgery	12 (12–12)	12 (12–12)	
Plastic Surgery	15 (15–16)	15 (15–16)	

Values are presented as median (interquartile range). Pre-RRS: August 2013 to July 2015, RRS: August 2015 to July 2017. RRS: rapid response system.