

Table S1 Cardiopulmonary resuscitation related data and outcomes of patients with in-hospital cardiac arrest in the emergency department.

	No. of patients (N=125)	% of patients
Aetiology of cardiac arrest		
Presumed cardiac cause	30	24.0
Traumatic-related	17	13.6
Hypoxia	36	28.8
Non-traumatic massive bleeding	9	7.2
Other medical cause	33	26.4
Initial cardiac rhythm of cardiac arrest		
Ventricular fibrillation	5	4.0
Ventricular tachycardia	4	3.2
Asystole	16	12.8
Pulseless electrical activity	100	80.0
Witness cardiac arrest	121	96.8
Defibrillation during resuscitation	26	20.8
Advanced airway insertion	116	92.8
Time to advanced airway, median (IQR) (minutes)	2 (1, 3.5)	
Time until first dose of epinephrine, median (IQR) (minutes)	1 (0, 2)	
Time until first dose of epinephrine categories		
No used	9	7.2
0-2 minutes	100	80.0
>2-4 minutes	10	8.0
>4 minutes	6	4.8
Hypoglycemia	14	11.4
Intravenous amiodarone used during resuscitation	10	8.0
Intravenous sodium bicarbonate used during resuscitation	29	23.2
Intravenous calcium used during resuscitation	26	20.8

	No. of patients (N=125)	% of patients
Sustained return of spontaneous circulation	85	68.0
Survival until hospital discharge	37	29.6
Neurological outcome at day 30 th after cardiac arrest*		
Died in hospital	87	69.6
CPC 1	18	14.4
CPC 2	4	3.2
CPC 3	9	7.2
CPC 4	5	4.0
CPC 5	2	1.6

* CPC = Cerebral Performance Categories: CPC 1 = good cerebral performance; CPC 2 = moderate cerebral disability; CPC 3 = severe cerebral disability; CPC 4 = coma/vegetative state; CPC 5 = brain death.

Table S2 Incidence of in-hospital cardiac arrest and mean emergency department bed occupancy rate across COVID-19 pandemic periods.

Group	Number of monitored ED patients N=54,951	Number of IHCA N=125 n (incidence)	Mean EDBOR (%) (SD)
Pre-COVID (2020)	19,077	41 (0.21)	86.87 (39.39)
Peak wave (2021)	15,222	41 (0.27)	58.18 (31.93)
Post wave (2022)	20,652	43 (0.21)	66.26 (29.99)

Table S3 Distribution of in-hospital cardiac arrest (IHCA) events by ED bed occupancy rate (EDBOR) category and shift.

EDBOR category	Total IHCA N=125 n (%)	Day shift N=45 n (%)	Evening shift N=52 n (%)	Night shift N=28 n (%)
<60%	60 (48.0)	19 (42.2)	26 (50.0)	15 (53.6)
60 – 100%	39 (31.2)	17 (37.8)	16 (30.8)	6 (21.4)
>100 – 150%	16 (12.8)	6 (13.3)	6 (11.5)	4 (14.3)
>150%	10 (8.0)	3 (6.7)	4 (7.7)	3 (10.7)