

State of Resuscitation in the United States



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Hospital cardiac arrest resuscitation practice in the United States: A nationally representative survey; J Hosp Med. 2014 Feb 19. Edelson DP, Yuen TC, Mancini ME, Davis DP, Hunt EA, Miller JA, Abella BS.

Motivating Change

"May you have the hindsight to know where you've been, the foresight to know where you're going, and the insight to know when you're going too far."

~ Irish Blessing



Motivating Change

What is the most important tool for motivating change in our institutions?



Compelling Data!

Examples of Data that can Motivate Leadership

- Our survival rate is 10 points lower than the national average!
- Our time to defibrillation is 2 minutes longer than the national average!
- We perform CPR without any means of quality assessment!



Table 4. Incidence and Outcome of EMS-Treated Out-of-Hospital Cardiac Arrest^a

	Alabama (n = 267)	Dallas (n = 1265)	Iowa (n = 565)	Milwaukee (n = 801)	Ottawa (n = 1836)	Pittsburgh (n = 575)	Portland (n = 793)	Seattle (n = 1170)	Toronto (n = 2992)	Vancouver (n = 1634)	Overall (n = 11 898)
Adjusted incidence rate per 100 000	40.3	82.9	51.3	86.7	45.1	51.1	47.0	74.4	57.0	52.8	56.0
Adjusted mortality rate per 100 000	36.9	77.2	44.4	78.0	42.3	47.1	41.0	62.3	53.6	46.9	50.9
Case-fatality rate, %	91.7	92.6	86.9	90.1	93.5	92.3	86.8	83.5	93.8	88.5	90.7
Survival to discharge, %	3.0	4.5	11.0	9.7	5.3	7.0	10.6	16.3	5.5	9.7	7.9
Vital status data missing, %	5.3	2.9	2.1	0.1	1.2	0.7	2.5	0.2	0.7	1.7	1.4

Abbreviation: EMS, emergency medical services.

^aAll rates were unequal across sites at $P < .001$.

Differences in Survival

What percentage of Hospitals have a CPR Committee?

- A. 33%
- B. 66%
- C. 75%
- D. 92%



What Percentage of Hospitals have a CPR (Code) Committee?

A. 66%



What profession is the most common for a Chair of a Code Committee?

- A. Physician
- B. Nurse
- C. Nurse/Physician Co-Chair
- D. Other Profession



What profession is the most common
for a Chair of a Code Committee?

A. Physician 48%



TABLE 2. In-hospital Resuscitation Structure and Practices

	Value	2010 AHA Guidelines
Structure		
Existing CPR committee	270 (66)	
CPR chair		<i>Hospital cardiac arrest resuscitation practice in the United States: A nationally representative survey. Dana P. Edelson, et al. JOURNAL OF HOSPITAL MEDICINE:2014</i>
Physician only	129 (48)	
Nurse only	90 (34)	
Nurse/physician co-chair	31 (12)	
Other	17 (6)	

What is the specialty of the Code Chair?

- A. Anesthesia Critical Care
- B. Emergency Medicine
- C. Cardiology
- D. Pulmonary/Critical Care



What is the specialty of the Code Chair?

D. Pulmonary/
Critical Care



Specialty

Clinical specialty of chair*

Pulmonary/critical care	79 (35)
Emergency medicine	71 (31)
Anesthesia/critical care	43 (19)
Cardiology	38 (17)
Other	32 (14)
Hospital medicine	23 (10)
Predetermined cardiac arrest team structure	334 (77)

Equipment



Where are the largest percentage of AEDs located in the Hospital?

- A. High-acuity inpatient
- B. Low-acuity inpatient
- C. Outpatient
- D. Public areas



Where are the largest percentage of AEDs located in the Hospital?

D. Public areas 78%



Survey of Equipment

Equipment

AEDs used as primary defibrillator by location

High-acuity inpatient areas	69 (16)	
Low-acuity inpatient areas	109 (26)	
Outpatient areas	206 (51)	Class IIb, LOE C [†]
Public areas	263 (78)	Class IIb, LOE C [†]

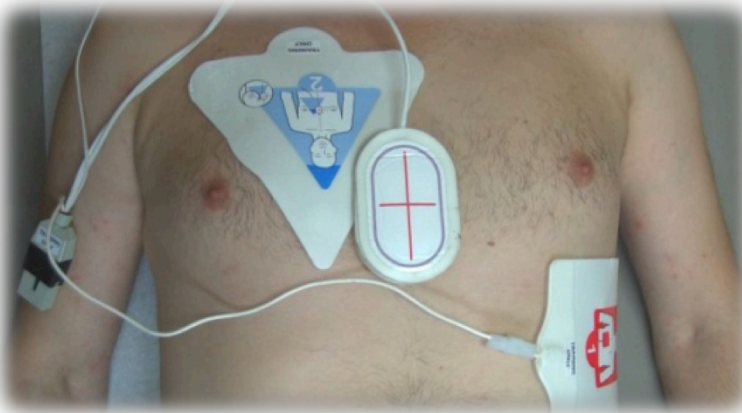
Defibrillator throughout hospital

Same brand and model	281 (66)
Same brand, different models	93 (22)
Different brands	54 (13)

What percentage of hospitals do not
have any CPR assist technology?

- A. 70%
- B. 50%
- C. 35%
- D. 22%

Capnography Mechanical CPR Feedback Devices



Where are the largest percentage of AEDs located in the Hospital?

D. 70%

**Capnography
Mechanical CPR
Feedback Devices**



Survey of Equipment

CPR assist technology used*

None

291 (70)

Capnography

106 (25)

Class IIb, LOE C[†]

Mechanical CPR

25 (6)

Class IIb, LOE B/C^{†‡}

Feedback device

17 (4)

Class IIa, LOE B

What percentage of patients with ROSC receive Targeted Temperature Management?

A. < 5% of patients	309 (74%)
B. 5%-25% of patients	68 (16%)
C. 26%-50% of patients	11 (3%)
D. 51%-75% of patients	10 (2%)
E. > 75%	18 (4%)



Getting the expertise and equipment to the bedside

Predetermined cardiac arrest team structure	334 (77)
Notifications of responders*	
Hospital-wide PA system	406 (93)
Pager/calls to individuals	230 (53)
Local alarm	49 (11)

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Thank you!

Questions?
Discussions?
Innovations?
