



Key statistics from the National Cardiac Arrest Audit *2014/15*

Data collection scope (NCAA Version 1.3)

NCAA data are collected for all individuals (excluding neonates) receiving chest compression(s) and/or defibrillation and attended by the hospital-based resuscitation team (or equivalent) in response to a 2222 call.

Available data

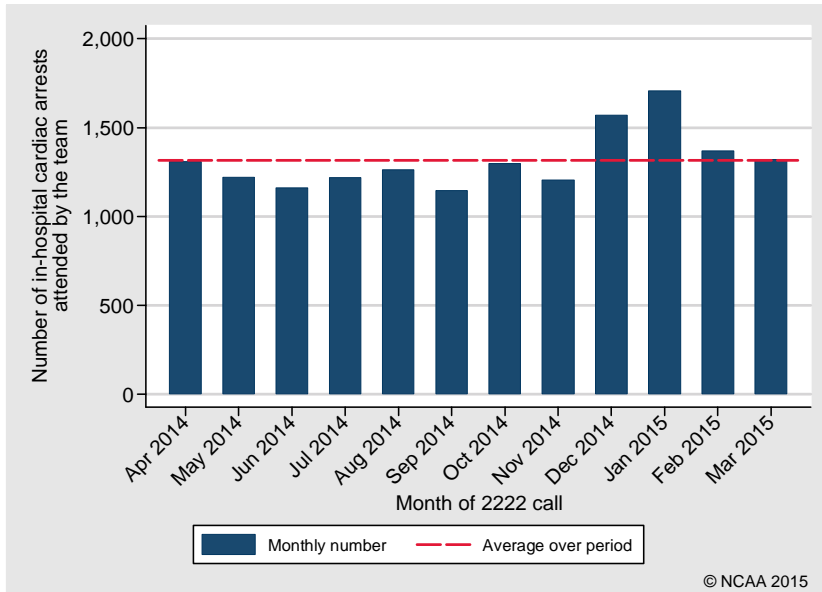
This report is based on data for in-hospital cardiac arrests in NHS acute hospitals. The following team visits were therefore excluded:

- Team visits taking place in specialist or non-acute hospitals
- Team visits taking place in paediatric hospitals
- Team visits (meeting the scope of NCAA) in response to pre-hospital cardiac arrests

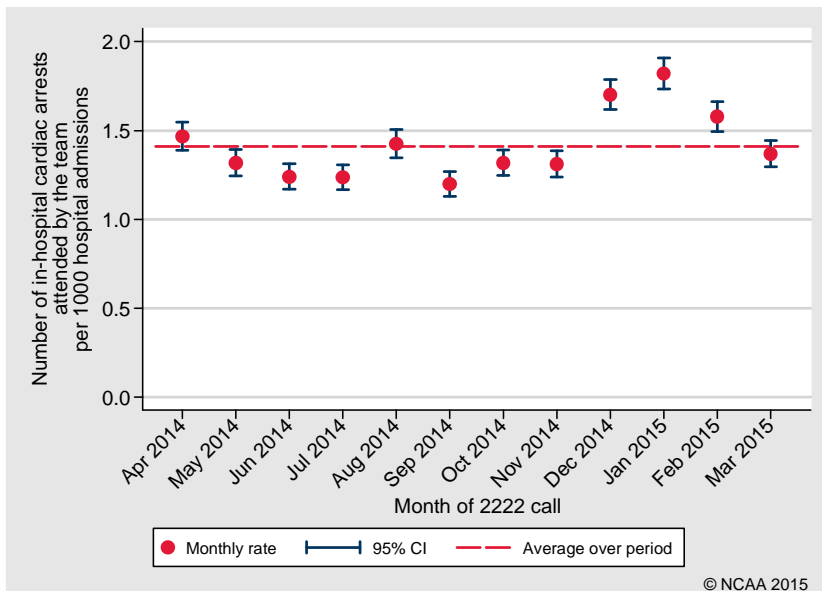
Year	Number of hospitals participating in NCAA	Total number of admissions to hospital	Total number of reported in-hospital cardiac arrests	Total number of individuals
April 2014 - March 2015	169	11,181,089	15,779	15,216
April 2013 - March 2014	158	9,706,203	14,082	13,574
April 2012 - March 2013	135	8,643,205	13,789	13,267
April 2011 - March 2012	112	6,139,438	9,792	9,437

Incidence of in-hospital cardiac arrests attended by the team

Number of in-hospital cardiac arrests attended by the team

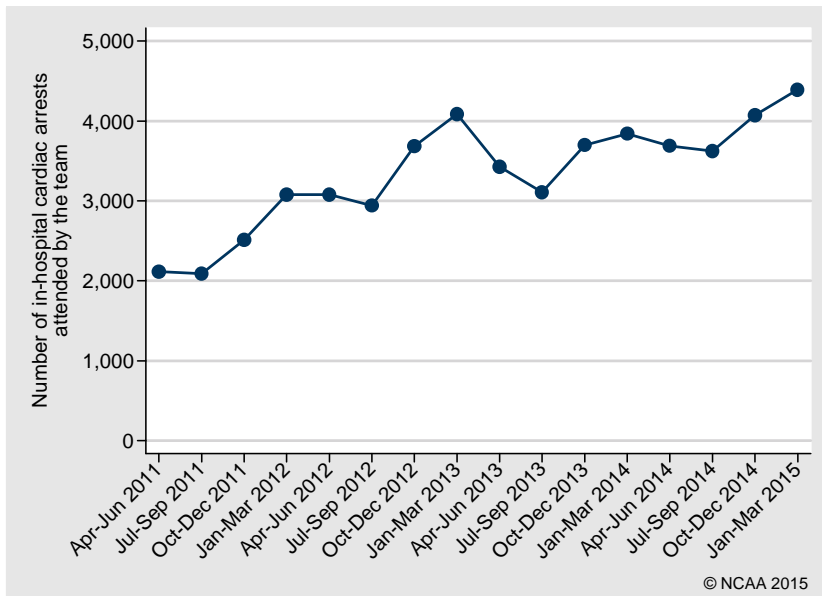


Rate of in-hospital cardiac arrests per 1000 hospital admissions

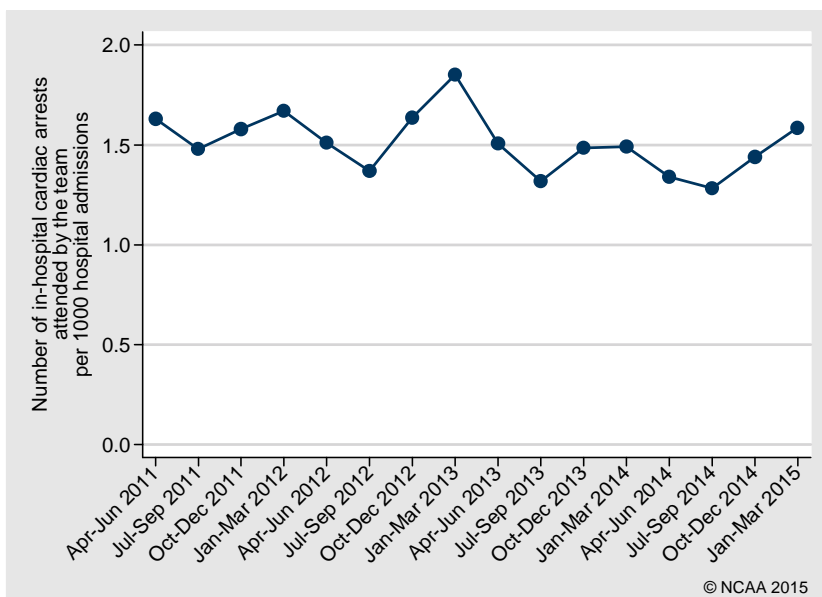


Trends in incidence of in-hospital cardiac arrests attended by the team

Number of in-hospital cardiac arrests attended by the team



Rate of in-hospital cardiac arrests per 1000 hospital admissions



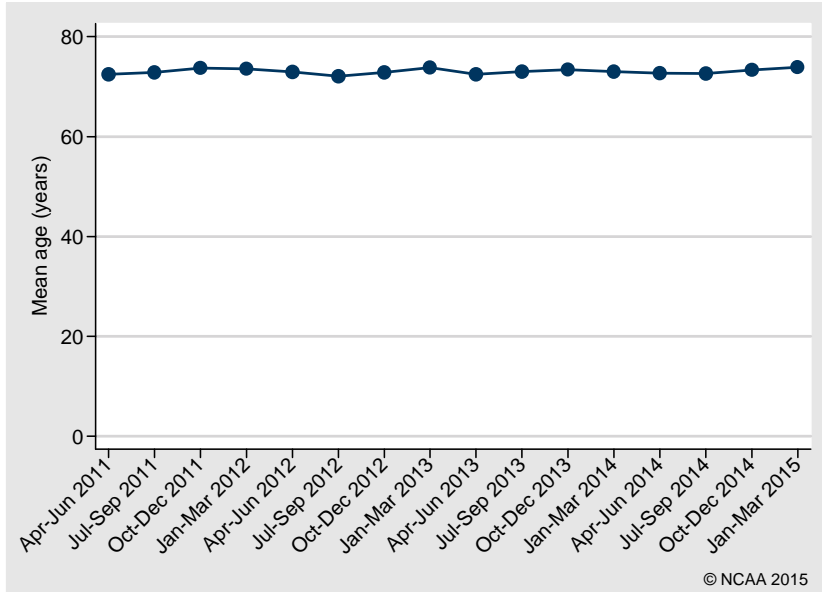
Patient characteristics

Age (years), n (%)	
0-15	147 (0.9)
16-64	3,385 (21.5)
65-74	3,359 (21.3)
75-84	5,152 (32.7)
85+	3,725 (23.6)
Missing	11 (0.1)
Mean (SD)	73.2 (15.7)
Median (IQR)	77 (66, 84)
Sex, n (%)	
Female	6,527 (41.4)
Male	9,241 (58.6)
Missing	11 (0.1)
Reason for admission to/attendance at/visit to your hospital, n (%)	
Patient - trauma	450 (2.9)
Patient - medical	13,264 (84.1)
Patient - elective/scheduled surgery	754 (4.8)
Patient - emergency/urgent surgery	1,060 (6.7)
Patient - obstetric	35 (0.2)
Outpatient	169 (1.1)
Staff	4 (0.0)
Visitor	27 (0.2)
Missing	16 (0.1)

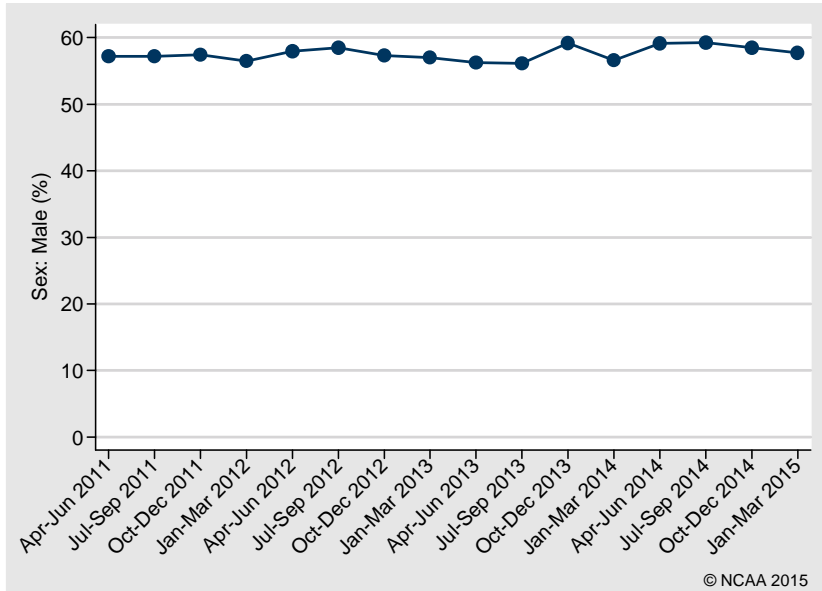
IQR, interquartile range; SD, standard deviation.

Trends in patient characteristics

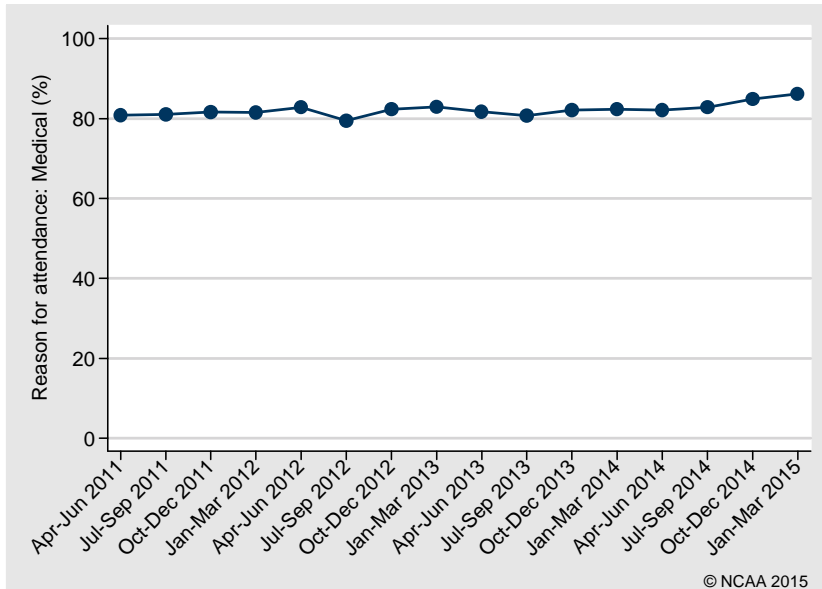
Mean age



Sex: Male



Reason for attendance: Medical



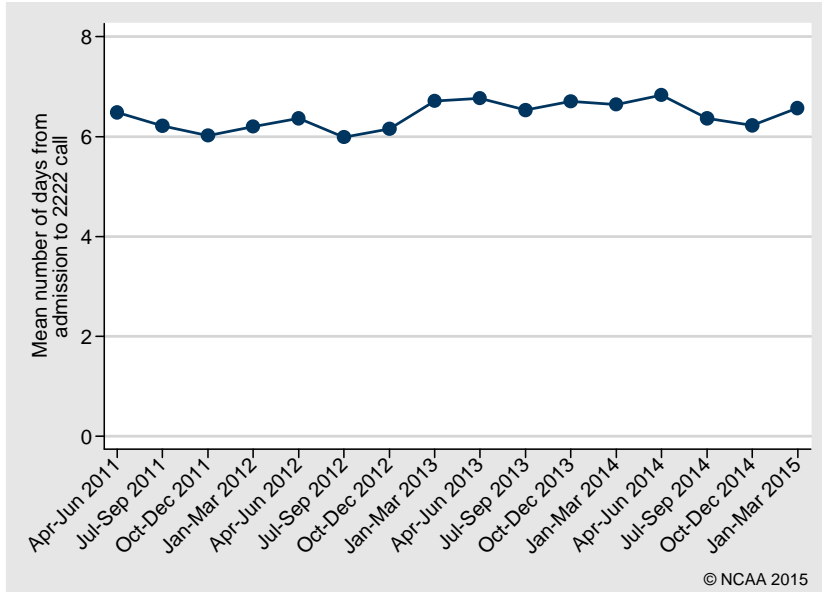
Team visit characteristics

Number of days from admission to 2222 call, n (%)	
0	4,039 (25.6)
1	2,714 (17.2)
2-7	5,212 (33.0)
8-30	3,173 (20.1)
>30	624 (4.0)
Missing	17 (0.1)
Mean (SD)	6.5 (13.3)
Median (IQR)	2 (0, 7)
Location of arrest, n (%)	
Emergency department	1,516 (9.6)
Emergency admissions unit	1,215 (7.7)
Theatre & recovery	222 (1.4)
Imaging department	237 (1.5)
Cardiac catheter laboratory	391 (2.5)
Specialist treatment area	190 (1.2)
ICU or ICU/HDU	638 (4.0)
HDU	266 (1.7)
PICU	29 (0.2)
PHDU	8 (0.1)
Coronary care unit	1,539 (9.8)
Other intermediate care area	16 (0.1)
Obstetrics area	19 (0.1)
Ward	9,336 (59.2)
Other internal location	11 (0.1)
Clinic	67 (0.4)
Non-clinical area	76 (0.5)
Missing	3 (0.0)
Status at team arrival, n (%)	
Dead - resuscitation stopped	194 (1.2)
Resuscitation ongoing	13,388 (84.8)
ROSC achieved before team arrival	1,328 (8.4)
Deteriorating (not yet arrested)	856 (5.4)
Missing	13 (0.1)
Presenting/first documented rhythm, n (%)	
Shockable - VF	1,581 (10.0)
Shockable - VT	730 (4.6)
Shockable - unknown rhythm	88 (0.6)
Non-shockable - asystole	3,565 (22.6)
Non-shockable - PEA	8,208 (52.0)
Non-shockable - bradycardia	85 (0.5)
Non-shockable - unknown rhythm	341 (2.2)
Never determined	614 (3.9)
Unknown	567 (3.6)

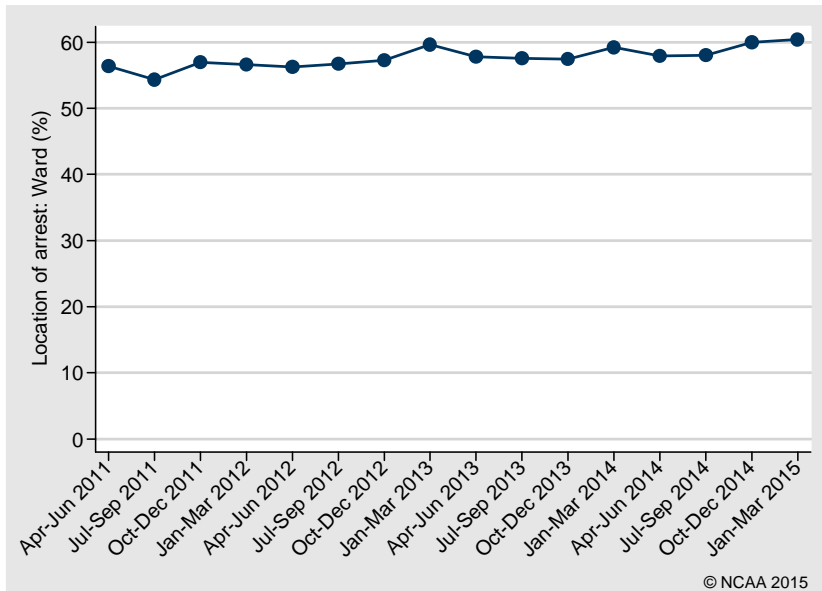
HDU, high dependency unit; ICU, intensive care unit; IQR, interquartile range; PEA, pulseless electrical activity; PHDU, paediatric high dependency unit; PICU, paediatric intensive care unit; ROSC, return of spontaneous circulation; SD, standard deviation; VF, ventricular fibrillation; VT, ventricular tachycardia.

Trends in team visit characteristics

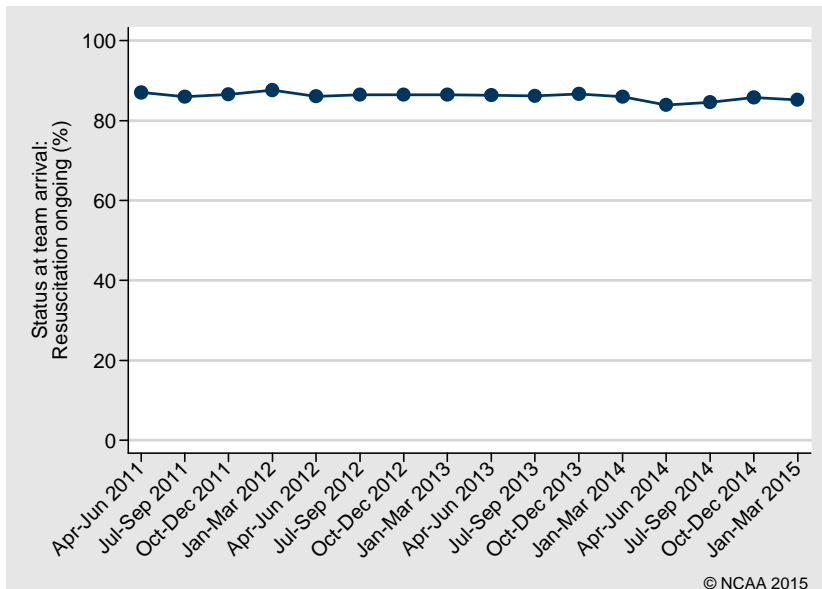
Mean number of days from admission to 2222 call



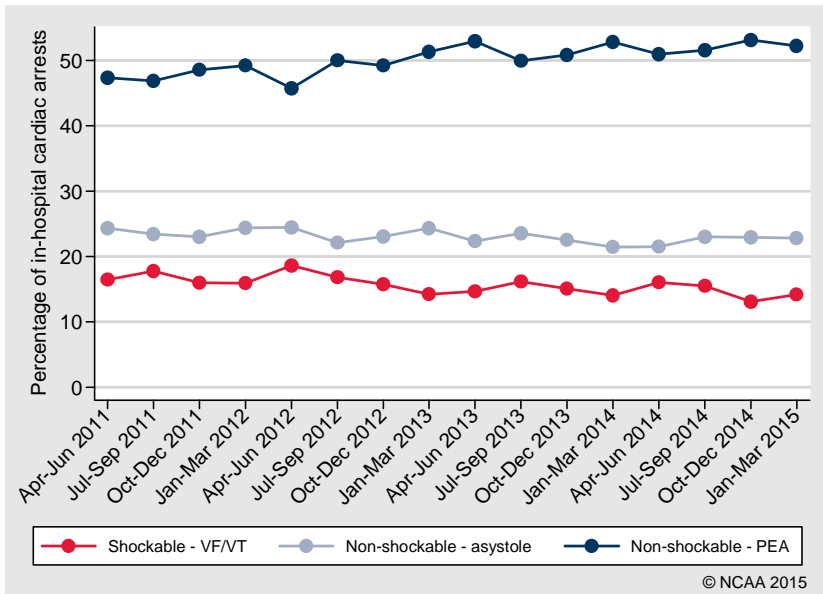
Location of arrest: Ward



Status at team arrival: Resuscitation ongoing



Presenting/first documented rhythm

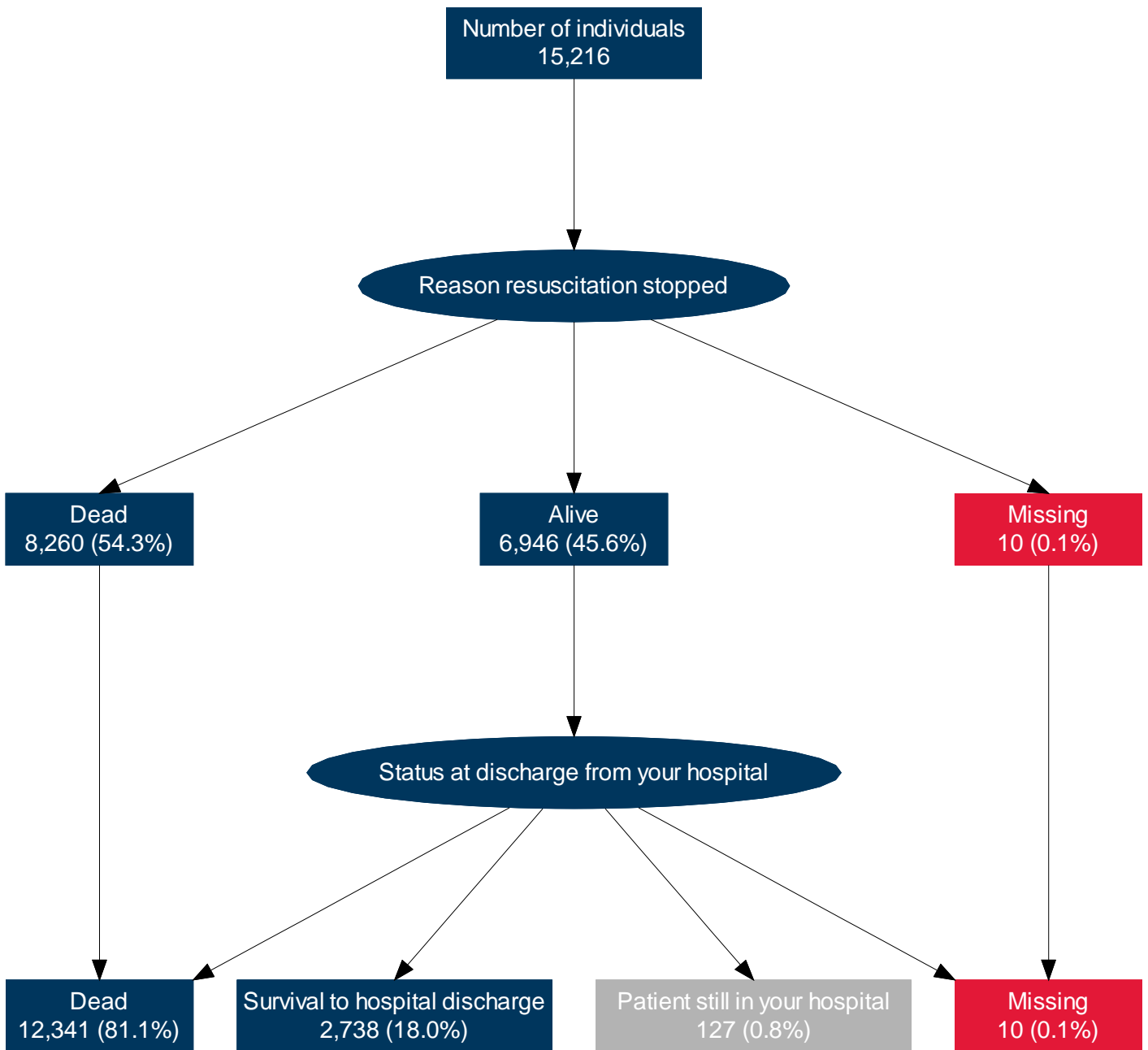


Outcomes

Reason resuscitation stopped at end of team visit, n (%)	
Alive - ROSC > 20 minutes	7,358 (46.6)
Dead - ROSC < 20 minutes	1,021 (6.5)
Dead - no ROSC	5,203 (33.0)
Dead - DNACPR	419 (2.7)
Dead - futility	1,768 (11.2)
Missing	10 (0.1)
Post-arrest location, n (% of ROSC > 20 minutes)	
Emergency admissions unit	223 (3.0)
ICU or ICU/HDU	2,434 (33.1)
HDU	165 (2.2)
PICU	39 (0.5)
PHDU	7 (0.1)
CCU	1,441 (19.6)
Other intermediate care area	9 (0.1)
Obstetrics area	10 (0.1)
Ward	1,683 (22.9)
Other internal location	2 (0.0)
Mortuary	1,100 (14.9)
Other hospital	224 (3.0)
Not in hospital	21 (0.3)
Missing	0 (0.0)
CPC at hospital discharge, n (% of adult survivors)	
1	2,236 (81.5)
2	280 (10.2)
3	78 (2.8)
4	7 (0.3)
Missing	142 (5.2)

CPC, cerebral performance category; DNACPR, do not attempt cardiopulmonary resuscitation; HDU, high dependency unit; ICU, intensive care unit; PHDU, paediatric high dependency unit; PICU, paediatric intensive care unit; ROSC, return of spontaneous circulation.

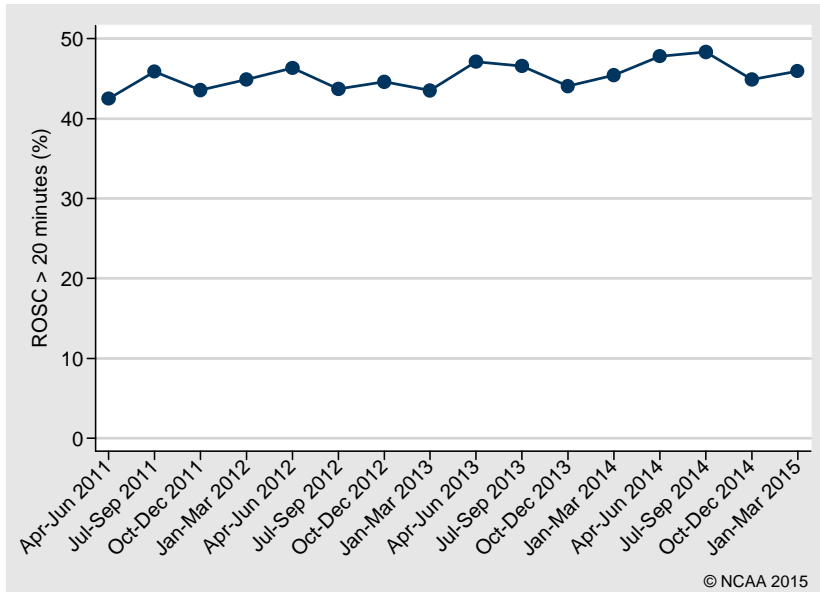
Outcome flow



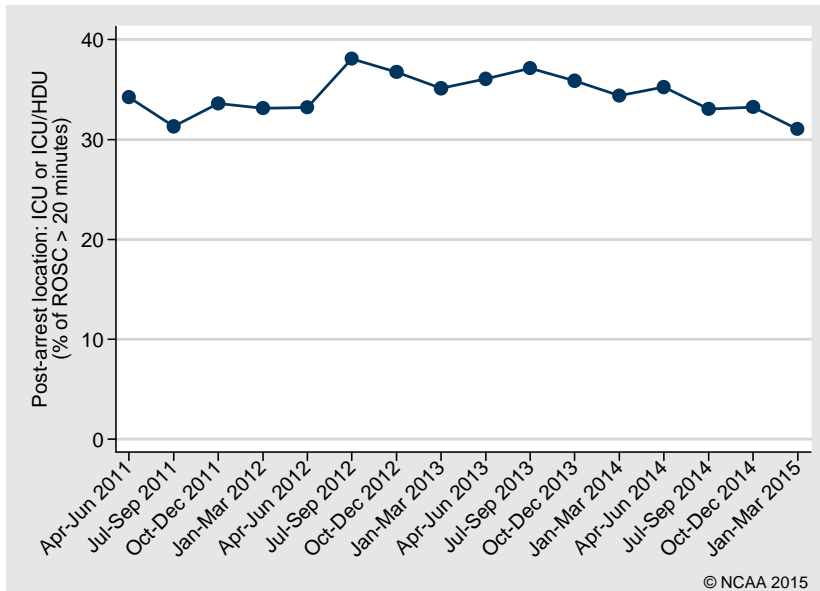
All percentages are reported as the percentage of all individuals (N=15,216).

Trends in outcomes

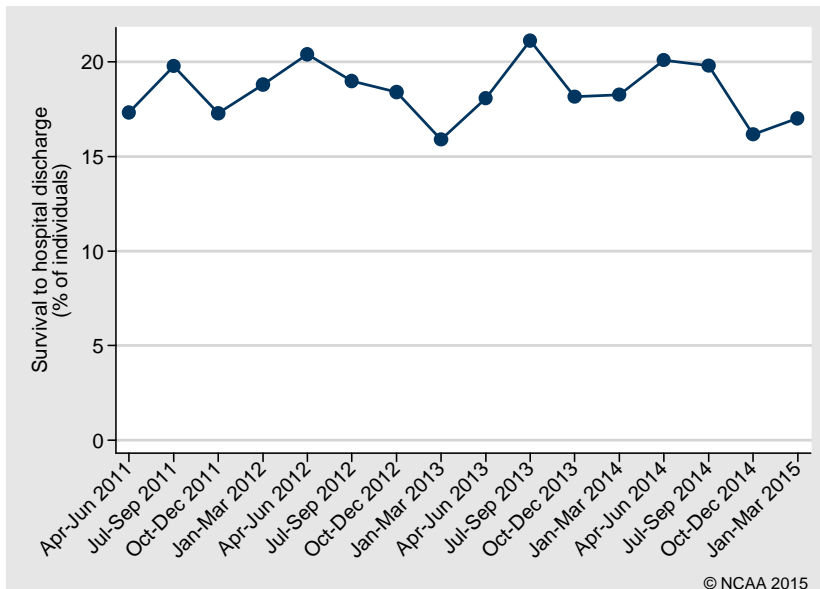
Reason resuscitation stopped: ROSC > 20 minutes



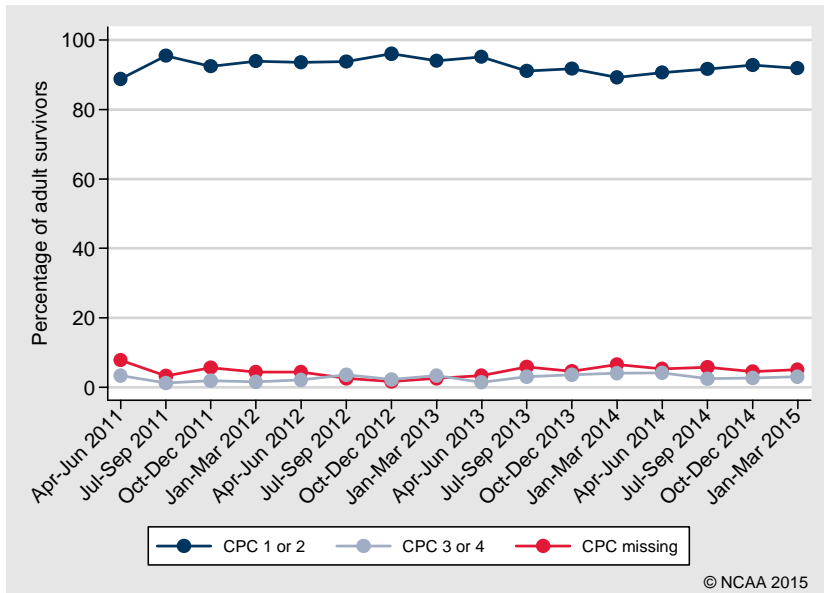
Post-arrest location: ICU or ICU/HDU



Survival to hospital discharge



CPC at hospital discharge (adult survivors)



Outcomes by patient subgroups

ROSC > 20 minutes

Subgroup	Number of in-hospital cardiac arrests*	Number with ROSC > 20 min	Percentage (95% confidence interval)
Overall	15,769	7,358	46.7 (45.9, 47.4)
By presenting rhythm:			
Shockable - VF/VT	2,311	1,769	76.5 (74.8, 78.2)
Non-shockable - asystole	3,565	1,022	28.7 (27.2, 30.2)
Non-shockable - PEA	8,208	3,553	43.3 (42.2, 44.4)
By age group (years):			
0-15	147	94	63.9 (55.9, 71.3)
16-64	3,385	1,897	56.0 (54.4, 57.7)
65-74	3,359	1,699	50.6 (48.9, 52.3)
75-84	5,152	2,295	44.5 (43.2, 45.9)
85+	3,725	1,372	36.8 (35.3, 38.4)

PEA, pulseless electrical activity; ROSC, return of spontaneous circulation; VF, ventricular fibrillation; VT, ventricular tachycardia.

* Excluding arrests missing reason resuscitation stopped (N=10).

Survival to hospital discharge

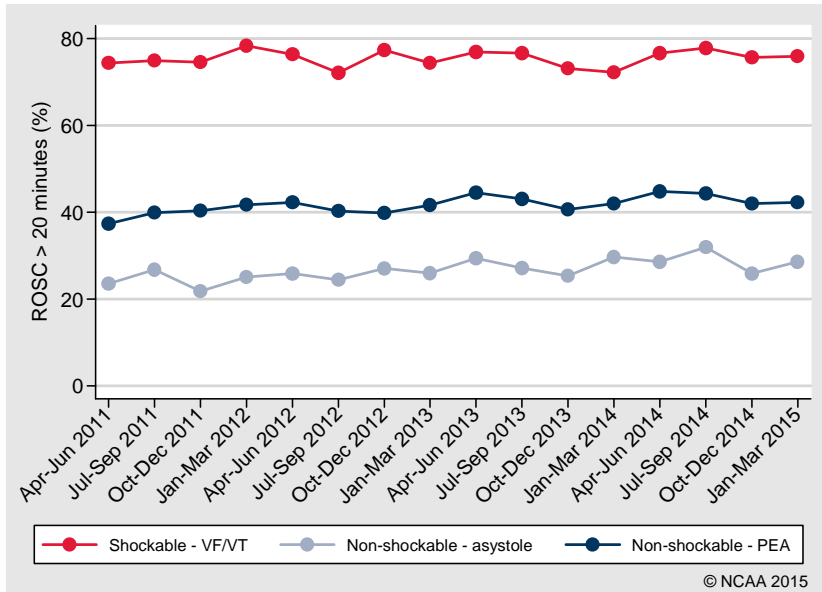
Subgroup	Number of individuals*	Number of hospital survivors	Percentage (95% confidence interval)
Overall	15,079	2,738	18.2 (17.6, 18.8)
By presenting rhythm:			
Shockable - VF/VT	2,058	981	47.7 (45.5, 49.8)
Non-shockable - asystole	3,467	309	8.9 (8.0, 9.9)
Non-shockable - PEA	7,931	927	11.7 (11.0, 12.4)
By age group (years):			
0-15	138	67	48.6 (40.4, 56.8)
16-64	3,188	888	27.9 (26.3, 29.4)
65-74	3,178	650	20.5 (19.1, 21.9)
75-84	4,935	758	15.4 (14.4, 16.4)
85+	3,640	375	10.3 (9.4, 11.3)

PEA, pulseless electrical activity; VF, ventricular fibrillation; VT, ventricular tachycardia.

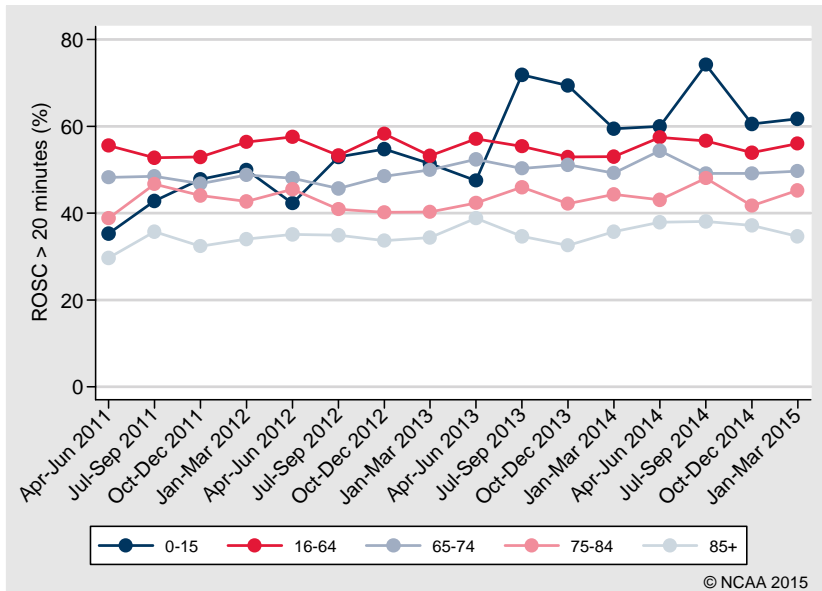
* Excluding individuals still in hospital (N=127) or missing hospital survival (N=10).

Trends in outcomes by patient subgroups

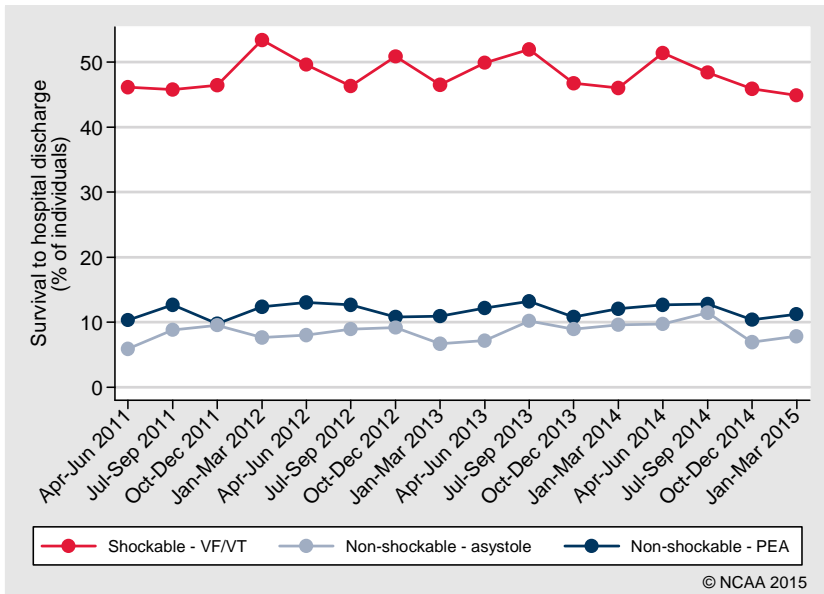
ROSC > 20 minutes by presenting/first documented rhythm



ROSC > 20 minutes by age group



Survival to hospital discharge by presenting/first documented rhythm



Survival to hospital discharge by age group

