

Out-of-Hospital Cardiac Arrest Overview - England 2019

Demographics



80,220

OHCA calls attended

31146

patients treated by paramedics



In 2018 30829 patients were treated

OHCA incidence (per 100,000)

Age of cases

All cases
(Age/gender adjusted):



56.5

Males
(Age adjusted)



78.6

Females
(Age adjusted)



36.3

In 2018 incidence was 54.7
(males: 77.3, females: 36.3)

Median Age
70.4
Mean Age
66.6

In 2018,
median age was 70.9
(mean: 66.9)

Age Distribution

Sex Distribution



<15yrs



15-64yrs

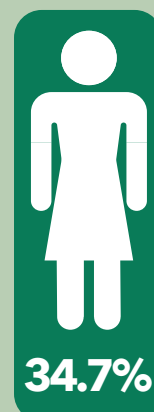


65+yrs

2018: ≤15y - 1.9%,
15-64y - 36.3%,
65+y - 61.9%



Median Age
69.1yrs
Mean Age
65.5yrs



Median Age
72.9yrs
Mean Age
68.7yrs

Event Details



79.1%

had a cardiac arrest at place of residence



9.1%

had a cardiac arrest in a public place



0.9%

had a cardiac arrest in the workplace



0.1%

had a cardiac arrest in a place of education



0.3%

had a cardiac arrest in a leisure centre



10.4%

had a cardiac arrest in another location



00:00 - 05:59

14.1%



06:00 - 11:59

31.5%



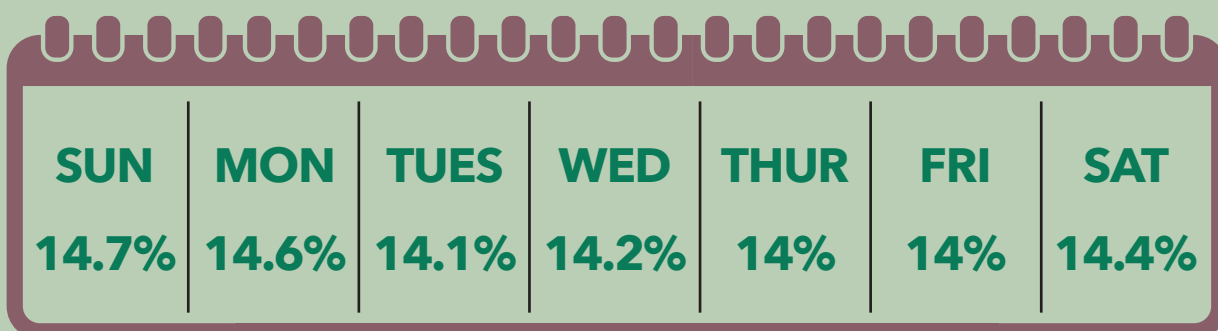
12:00 - 17:59

29.3%



18:00 - 23:59

25.1%



Median EMS response time



90th percentile time: 15.4 mins



Proportion of cases reached in 8 mins 61.5%

In 2018, median response time was also 6.8 mins & 90th percentile time was 16.1 mins

In 2018, 57.2% of cases were reached in 8 mins

Clinical Presentation

AETIOLOGY

Presumed cardiac

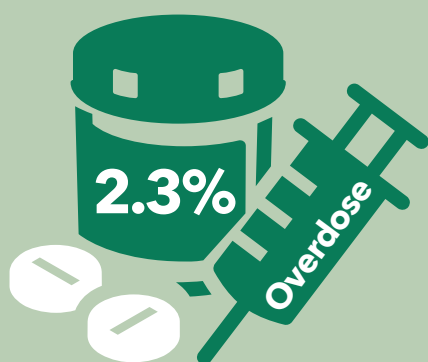


(2018: 82.5%)

Trauma



(2018: 3.7%)



(2018: 2.3%)

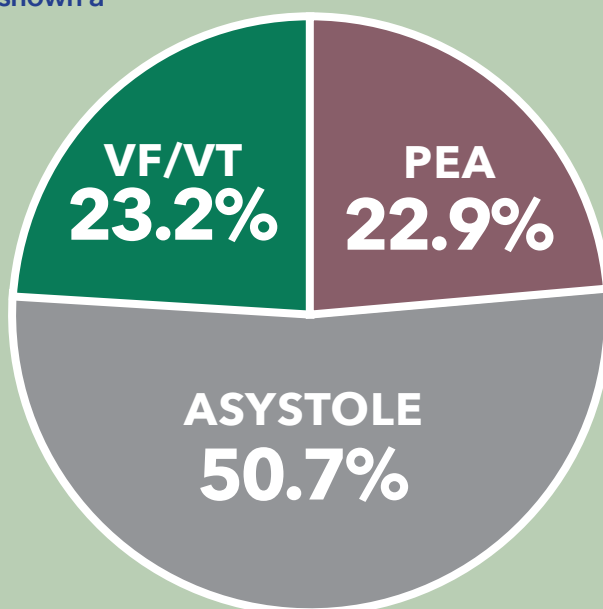
Asphyxia



(2018: 3.2%)

INITIAL RHYTHM

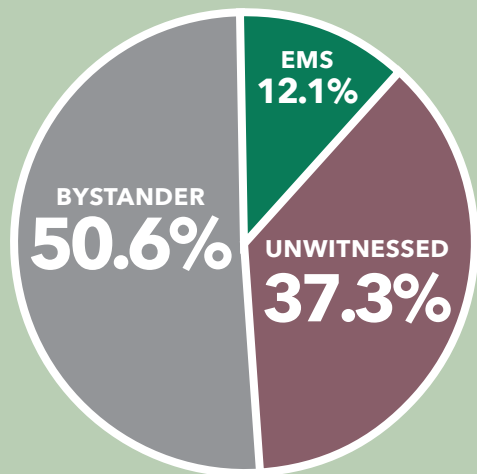
The proportion of cases presenting with a shockable rhythm has shown a year-on-year increase



2018:
VF/VT - 21.8%
Asystole - 51.3%
PEA - 22.3%

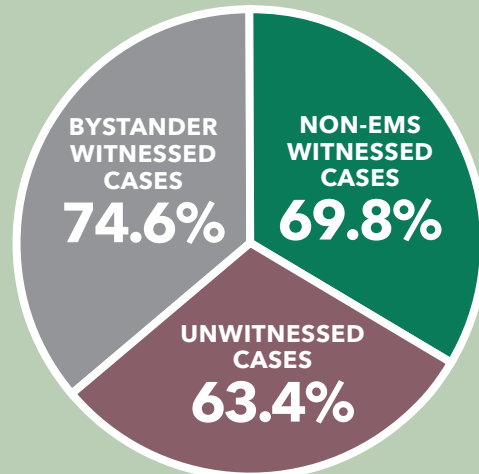
Bystander Interventions

Who witnessed cardiac arrest?



2018:
 Bystander - 49.3%
 EMS - 12.2%
 Unwitnessed - 38.6%

Bystander CPR rate:



2018:
 Non-EMS witnessed - 69.1%
 Bystander witnessed - 73.7%

Public Access Defibrillator use:



ALL CASES
5.9%

BYSTANDER WITNESSED CASES
7.8%

UNWITNESSED CASES
5.1%

2018:
 Bystander witnessed - 6.4%
 Unwitnessed - 4.7%

Comments:

- Over time, the proportion of cases that were witnessed by a bystander continues to be around 51%
- Bystander CPR rate of non-EMS witnessed cases has increased over time
- Bystander CPR rate in bystander witnessed cases has also increased significantly over time
- Use of a PAD continues to increase substantially

Clinical Outcomes



Declared dead on scene

46%

2018: 48.1%



Admitted with ongoing CPR

23.3%

2018: CPR - 22.6%



Admitted with ROSC

30.7%

2018: 29.4%

30.7%
admitted to hospital with ROSC



9.6%
survived to discharge

54.1%
Utstein comparator group

2018:
All cases - 29.4% UCG - 53.4%

30%
Utstein comparator group*

2018:
All cases - 9.7% UCG - 29.8%

Paramedics successful in restarting

9570
HEARTS

2018: 9049

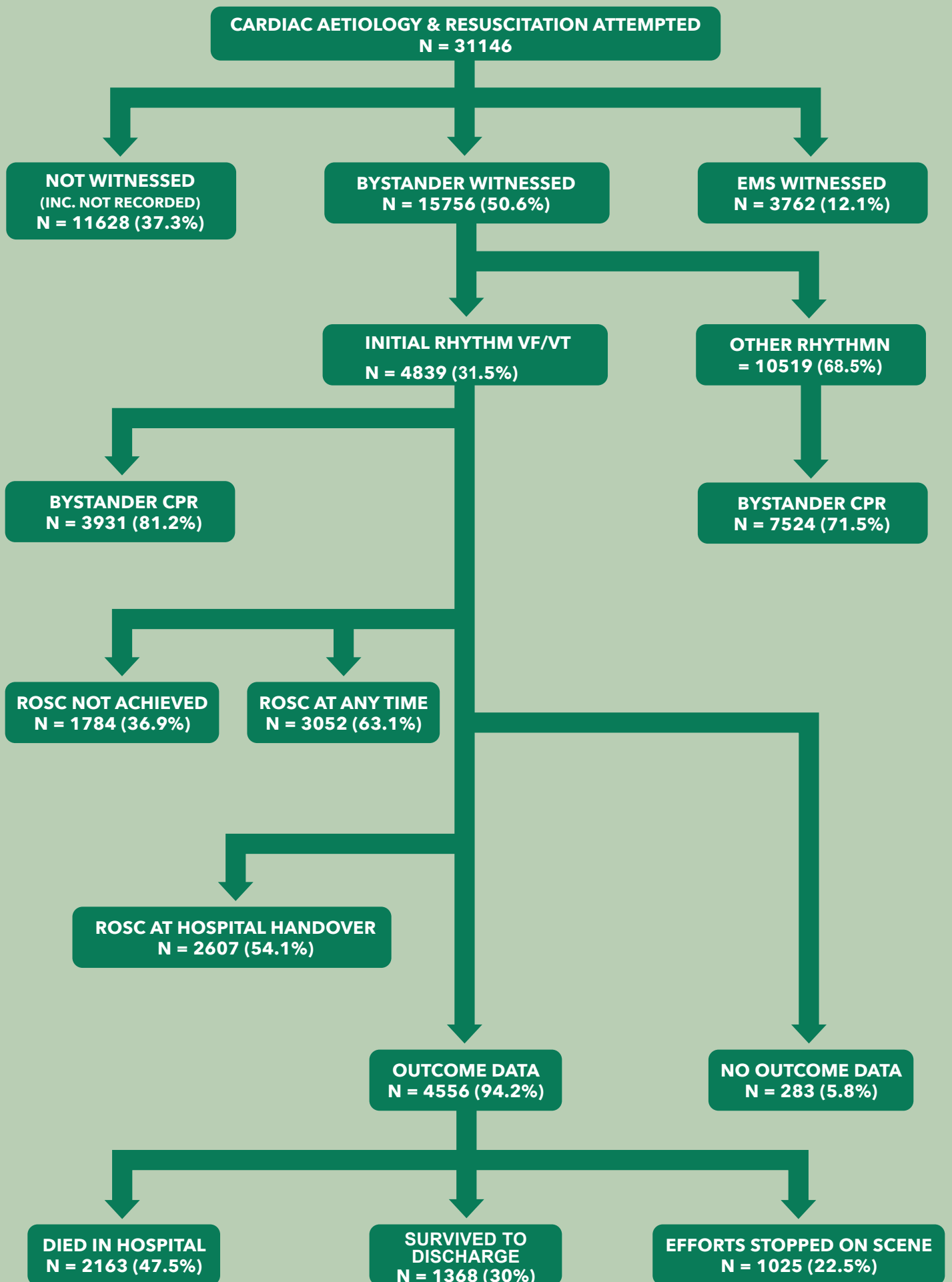
Number of lives saved

2884

2018: 2880

*Bystander witnessed, shockable rhythm

Utstein Comparator Group* Flow Chart



*Allows some adjustment for case-mix to facilitate comparisons between ambulance services in UK and rest of world