

OHCAO CARDIAC ARREST OVERVIEW EMAS 2019

Demographics



7,665

OHCA calls attended

2,950

patients treated by paramedics



In 2018 2,375 patients were treated

OHCA incidence (per 100,000)

Age of cases

All cases
(Age/gender adjusted):



59.8

Males
(Age adjusted)



81.2

Females
(Age adjusted)



40.5

In 2018 incidence was 46
(males: 63.5, females: 31.2)

Median Age
71.7
Mean Age
68

In 2018,
median age was 72
(mean: 68.7)

Age Distribution

Sex Distribution



<15yrs



15-64yrs

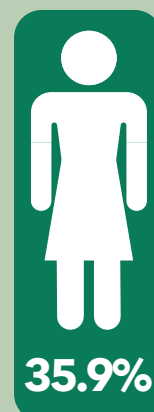


65+yrs

2018: ≤15y - 1.5%,
15-64y - 32.3%,
65+y - 66.1%



Median Age
70.1yrs
Mean Age
66.6yrs



Median Age
74.5yrs
Mean Age
70.5yrs

Event Details



78.3%

had a cardiac arrest at place of residence



0%

had a cardiac arrest in a public place



0%

had a cardiac arrest in the workplace



0%

had a cardiac arrest in a place of education



0.3%

had a cardiac arrest in a leisure centre



21.4%

had a cardiac arrest in another location



00:00 - 05:59

14.3%



06:00 - 11:59

32.1%



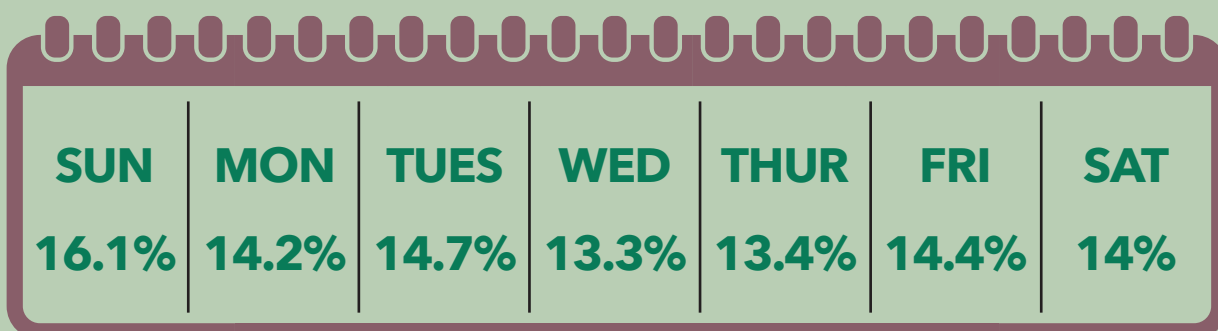
12:00 - 17:59

30.1%



18:00 - 23:59

23.5%



Median EMS response time



90th percentile time: 21.8 mins



Proportion of cases reached in 8 mins 39.3%

In 2018, median response time was 9.7 mins & 90th percentile time was 22.1 mins

In 2018, 38.8% of cases were reached in 8 mins

Clinical Presentation

AETIOLOGY

Presumed cardiac

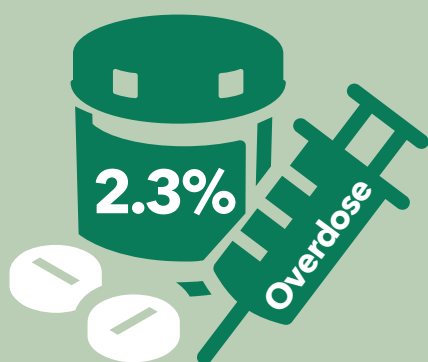


(2018: 82.5%)

Trauma



(2018: 3.7%)



(2018: 2.3%)

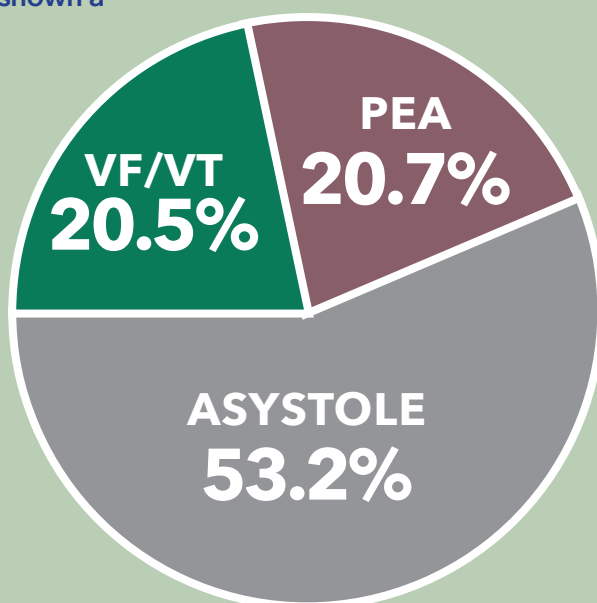
Asphyxia



(2018: 3.2%)

INITIAL RHYTHM

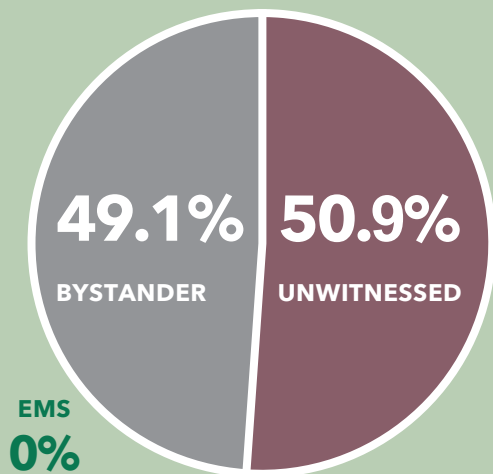
The proportion of cases presenting with a shockable rhythm has shown a year-on-year increase



2018:
VF/VT - 19.3%
Asystole - 54.5%
PEA - 19.8%

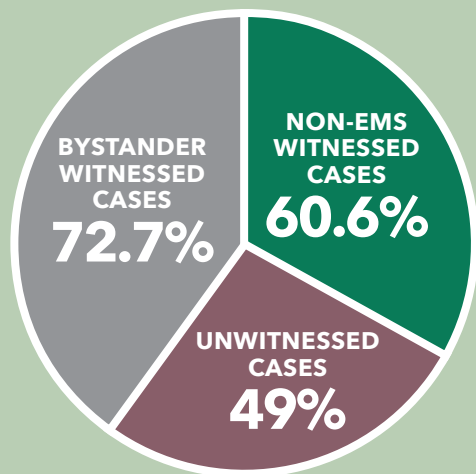
Bystander Interventions

Who witnessed cardiac arrest?



2018:
Bystander - 54.4%
EMS - 1.8%
Unwitnessed - 43.8%

Bystander CPR rate:



2018:
Non-EMS witnessed - 61.4%
Bystander witnessed - 68.3%

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

48.5%

2018: 48.3%



Admitted with ongoing CPR

24.1%

2018: CPR - 26.1%



Admitted with ROSC

27.5%

2018: 25.6%

27.5%
admitted to hospital with ROSC



7.3%
survived to discharge

45.7%
Utstein comparator group

2018:
All cases - 25.6% UCG - 50.2%

26.2%
Utstein comparator group*

2018:
All cases - 7.8% UCG - 26.5%

Paramedics successful in restarting

810
HEARTS

2018: 609

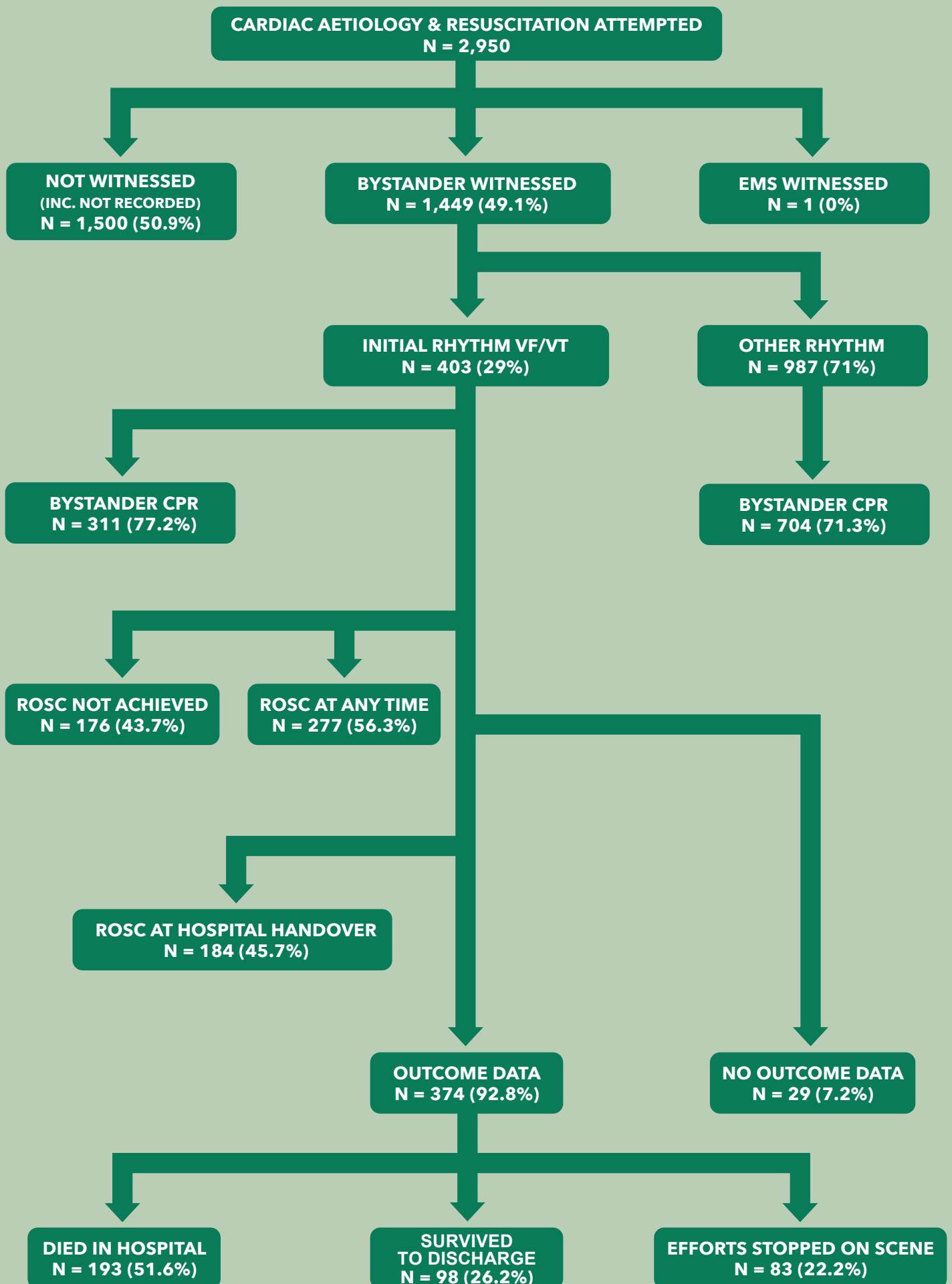
Number of lives saved

208

2018: 180

*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