

OHCAO CARDIAC ARREST OVERVIEW YAS 2019

Demographics



8,676

OHCA calls attended

2,902

patients treated by paramedics



In 2018 2,463 patients were treated

OHCA incidence (per 100,000)

All cases
(Age/gender adjusted):



Males
(Age adjusted)



Females
(Age adjusted)



In 2018 incidence was 49
(males: 69.5, females: 30.2)

Age of cases

Median Age
69.4
Mean Age
65.4

In 2018,
median age was 70
(mean: 65.5)

Age Distribution



<15yrs



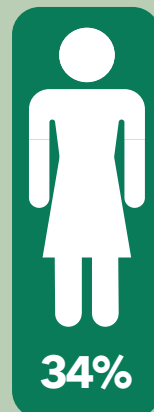
15-64yrs



65+yrs

2018: ≤15y - 2.1%,
15-64y - 38.2%,
65+y - 59.7%

Sex Distribution



Median Age
69yrs
Mean Age
65.1yrs

Median Age
70.4yrs
Mean Age
66.3yrs

Event Details



92.1%

had a cardiac arrest at place of residence



4.4%

had a cardiac arrest in a public place



0.3%

had a cardiac arrest in the workplace



0.1%

had a cardiac arrest in a place of education



0.8%

had a cardiac arrest in a leisure centre



2.3%

had a cardiac arrest in another location



00:00 - 05:59

14.2%



06:00 - 11:59

32%



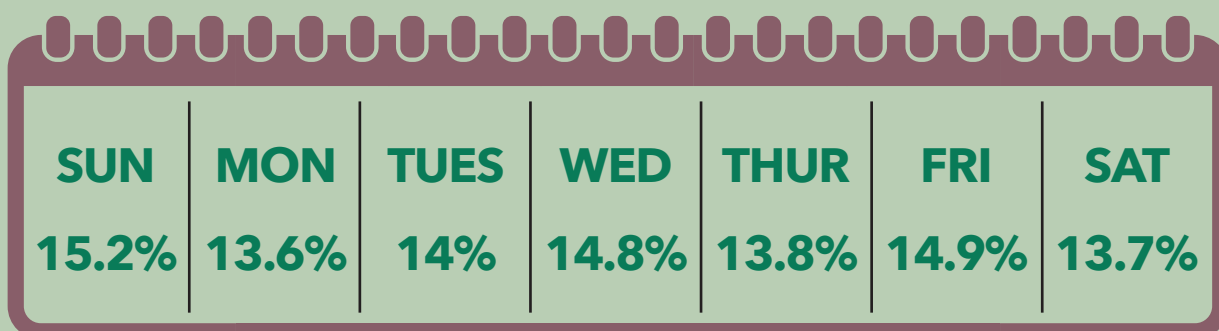
12:00 - 17:59

28.8%



18:00 - 23:59

25%



Median EMS response time



90th percentile time:
13.0 mins



Proportion of cases reached in 8 mins
62.9%

In 2018, median response time was also 6.8 mins & 90th percentile time was 14.4 mins

In 2018, 60.6% of cases were reached in 8 mins

Clinical Presentation

AETIOLOGY

Presumed cardiac

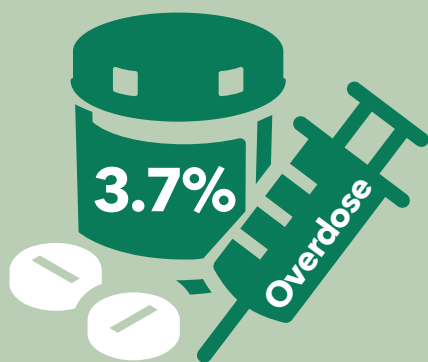


(2018: 89.1%)

Trauma



(2018: 3.7%)



(2018: 2.8%)

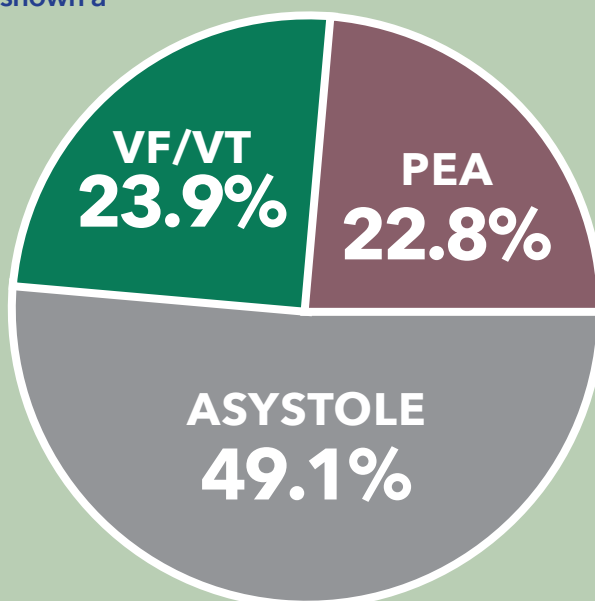
Asphyxia



(2018: 3.5%)

INITIAL RHYTHM

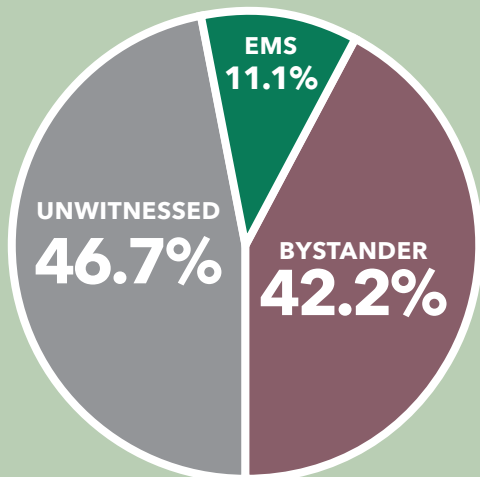
The proportion of cases presenting with a shockable rhythm has shown a year-on-year increase



2018:
VF/VT - 24.2%
Asystole - 50.1%
PEA - 23.5%

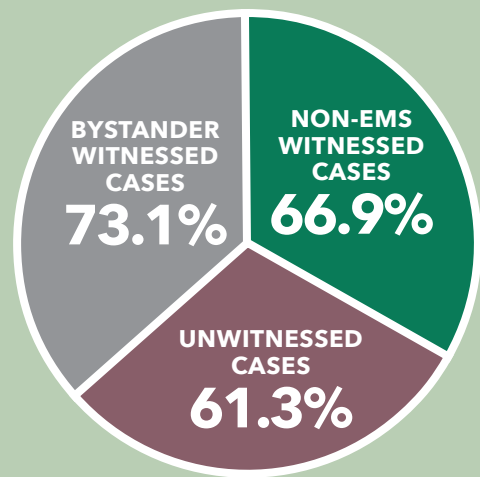
Bystander Interventions

Who witnessed cardiac arrest?



2018:
 Bystander - 40.6%
 EMS - 11.4%
 Unwitnessed - 47.9%

Bystander CPR rate:



2018:
 Non-EMS witnessed - 71.8%
 Bystander witnessed - 73.7%

Public Access Defibrillator use:



ALL CASES
5.9%

BYSTANDER WITNESSED CASES
7.8%

UNWITNESSED CASES
5.5%

2018:
 Bystander witnessed - 6.0%
 Unwitnessed - 3.4%

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

54.5%

2018: 55.3%



Admitted with ongoing CPR

18.4%

2018: CPR - 22.5%



Admitted with ROSC

27.1%

2018: 22.3%

27.1%
admitted to hospital with ROSC



9.4%
survived to discharge

55.8%
Utstein comparator group

2018:
All cases - 22.3% UCG - 47.3%

32.8%
Utstein comparator group*

2018:
All cases - 10.7% UCG - 30.7%

Paramedics successful in restarting

787
HEARTS

2018: 549

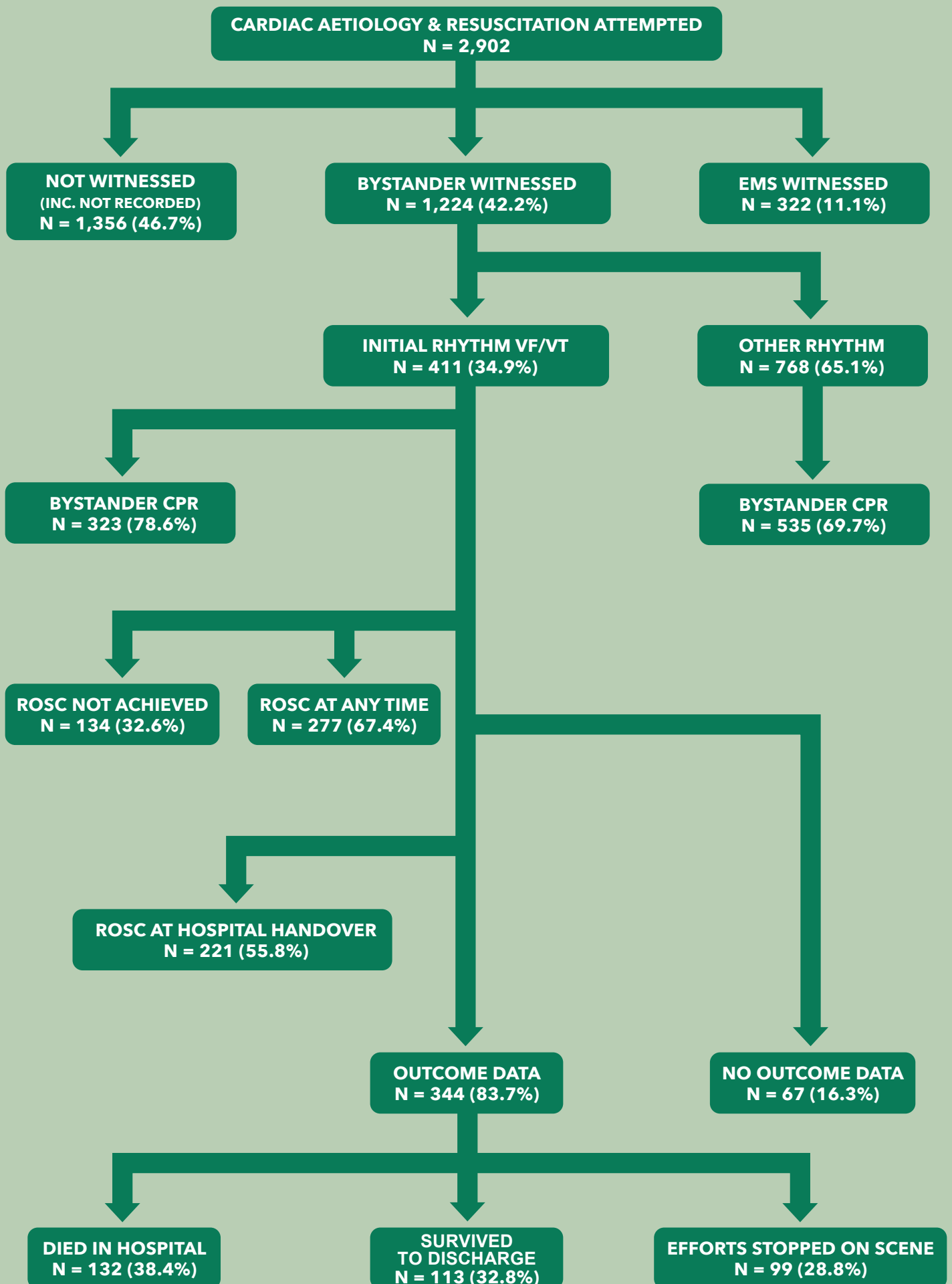
Number of lives saved

249

2018: 253

*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