

OHCAO CARDIAC ARREST OVERVIEW LAS 2019

Demographics



10,642

OHCA calls attended

4195

patients treated by paramedics



In 2018 4174 patients were treated

OHCA incidence (per 100,000)

All cases
(Age/gender adjusted):



62.4

Males
(Age adjusted)



87.4

Females
(Age adjusted)



40.6

In 2018 incidence was 63.7
(males: 89, females: 41.8)

Age of cases

Median Age
66.9
Mean Age
63.7

In 2018,
median age was 68.5
(mean: 64.6)

Age Distribution



<15yrs



15-64yrs



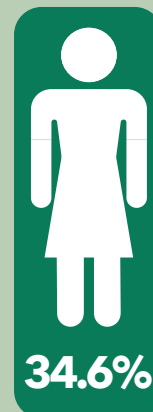
65+yrs

2018: ≤15y - 2.9%,
15-64y - 41.4%,
65+y - 55.7%

Sex Distribution



Median Age
64.3yrs
Mean Age
61.9yrs



Median Age
72.5yrs
Mean Age
67.2yrs

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

30.4%



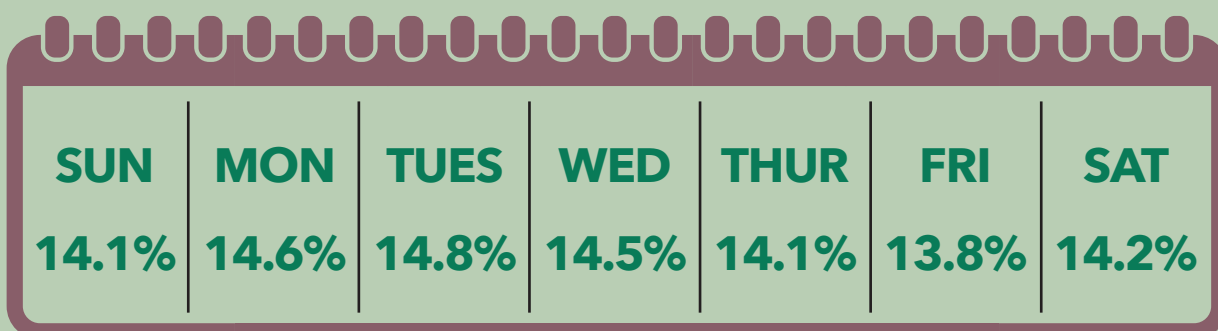
12:00 - 17:59

29.8%



18:00 - 23:59

25.7%



Median EMS response time



90th percentile time: 13.4 mins



Proportion of cases reached in 8 mins 64.6%

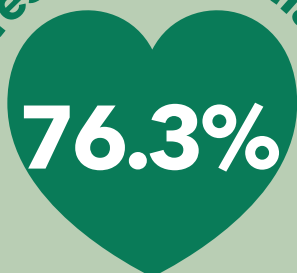
In 2018, median response time was also 6.6 mins & 90th percentile time was 14.1 mins

In 2018, 65.2% of cases were reached in 8 mins

Clinical Presentation

AETIOLOGY

Presumed cardiac

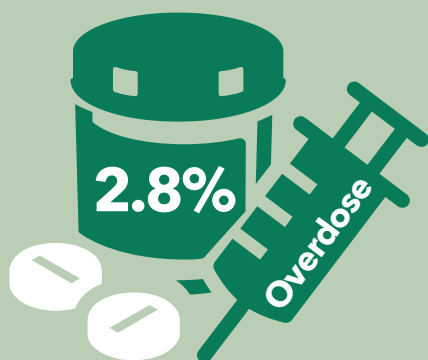


(2018: 79.1%)

Trauma



(2018: 5.0%)



(2018: 2.7%)

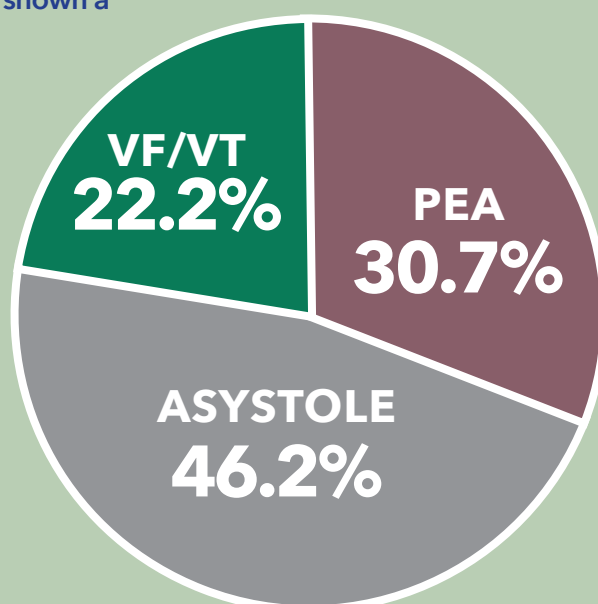
Asphyxia



(2018: 4.9%)

INITIAL RHYTHM

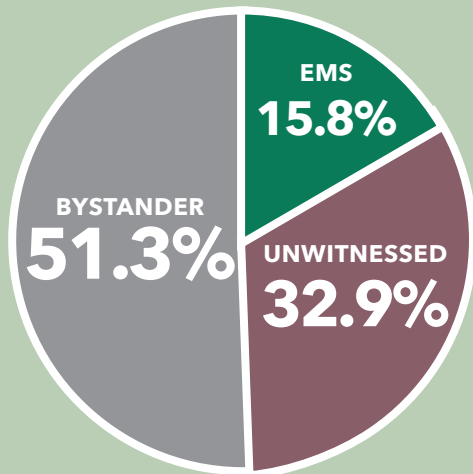
The proportion of cases presenting with a shockable rhythm has shown a year-on-year increase



2018:
VF/VT - 21.8%
Asystole - 47%
PEA - 30.4%

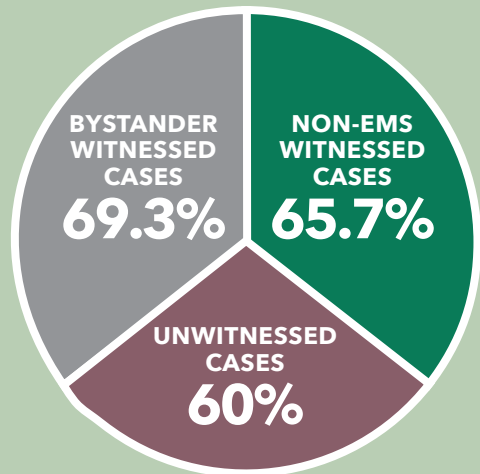
Bystander Interventions

Who witnessed cardiac arrest?



2018:
 Bystander - 50.9%
 EMS - 15.6%
 Unwitnessed - 33.5%

Bystander CPR rate:



2018:
 Non-EMS witnessed - 64.6%
 Bystander witnessed - 66.4%

Public Access Defibrillator use:



ALL
CASES
6.9%

BYSTANDER
WITNESSED
CASES
8.8%

UNWITNESSED
CASES
7.0%

2018:
 Bystander witnessed - 7.8%
 Unwitnessed - 7.3%

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

46.2%

2018: 42.4%



Admitted with ongoing CPR

20.3%

2018: CPR - 22.1%



Admitted with ROSC

33.5%

2018: 35.5%

33.5%
admitted to hospital with ROSC



10.1%
survived to discharge

58.8%
Utstein comparator group

2018:
All cases - 35.5% UCG - 61.8%

31.7%
Utstein comparator group*

2018:
All cases - 10.6% UCG - 33.9%

Paramedics successful in restarting

1405
HEARTS

2018: 1482

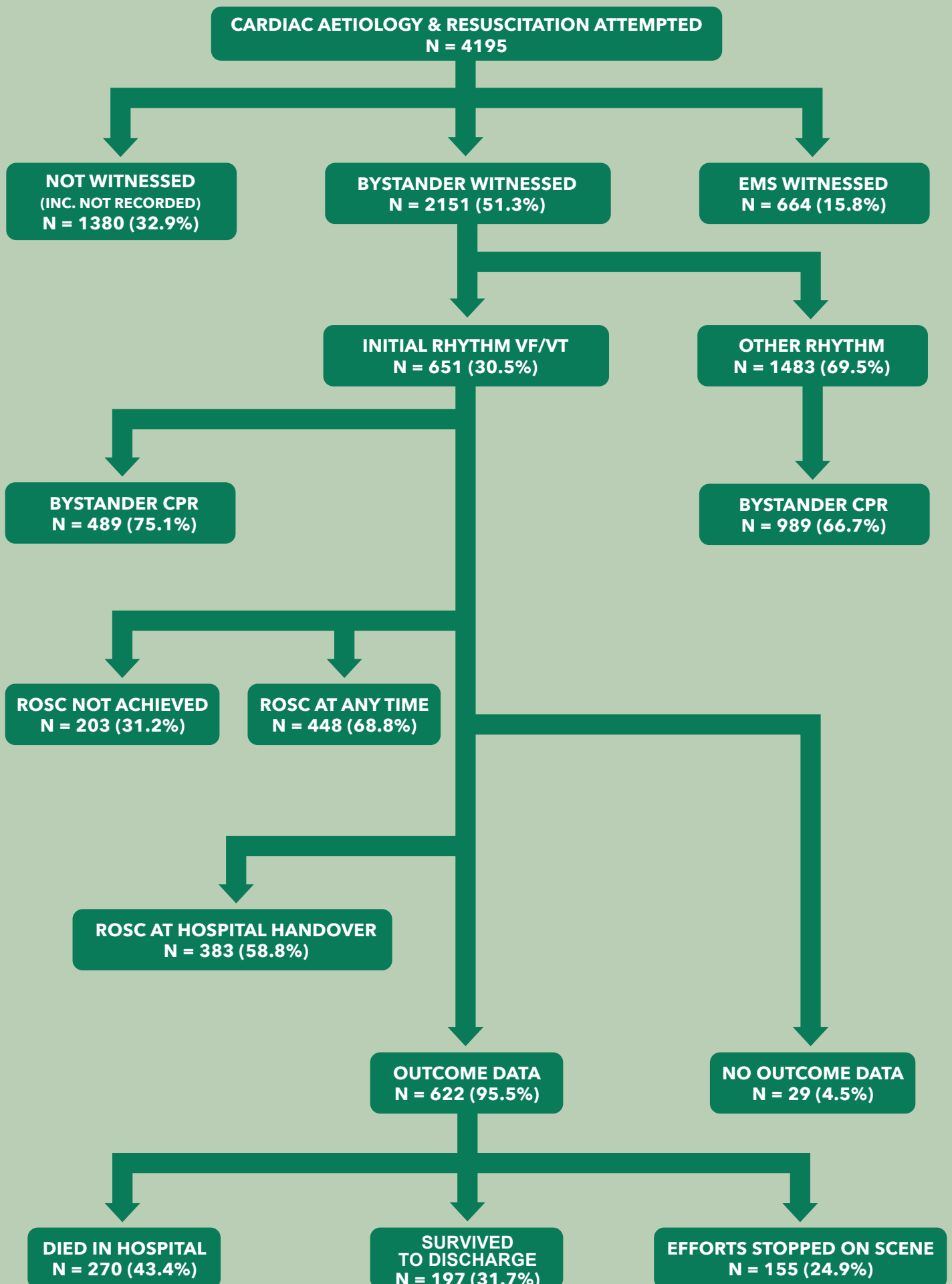
Number of lives saved

410

2018: 431

*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