

OHCAO CARDIAC ARREST OVERVIEW WMAS 2019

Demographics



10,118

OHCA calls attended

3,560

patients treated by paramedics



In 2018 3,842 patients were treated

OHCA incidence (per 100,000)

All cases
(Age/gender adjusted):



Males
(Age adjusted)



Females
(Age adjusted)



In 2018 incidence was 67.8
(males: 95.9, females: 43)

Age of cases

Median Age
70.7
Mean Age
66.9

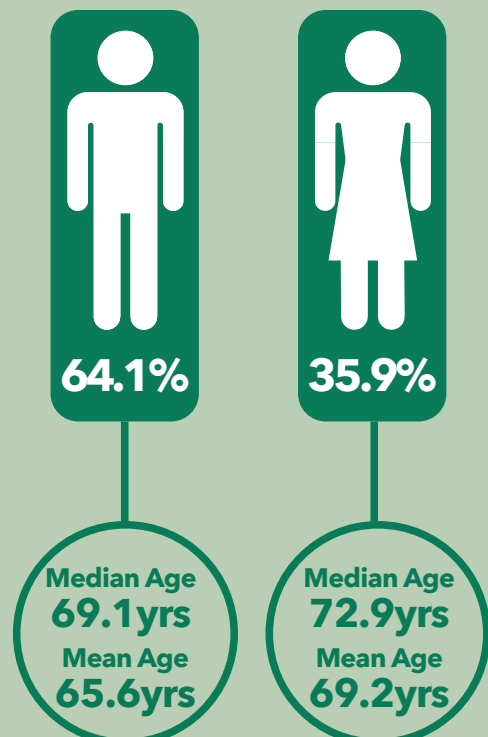
In 2018,
median age was 71.2
(mean: 67.6)

Age Distribution



2018: ≤15y - 1.5%,
15-64y - 35.5%,
65+y - 63%

Sex Distribution



Event Details



80.5%

had a cardiac arrest at place of residence



12.0%

had a cardiac arrest in a public place



1.6%

had a cardiac arrest in the workplace



0.2%

had a cardiac arrest in a place of education



0.5%

had a cardiac arrest in a leisure centre



5.2%

had a cardiac arrest in another location



00:00 - 05:59

14.1%



06:00 - 11:59

33%



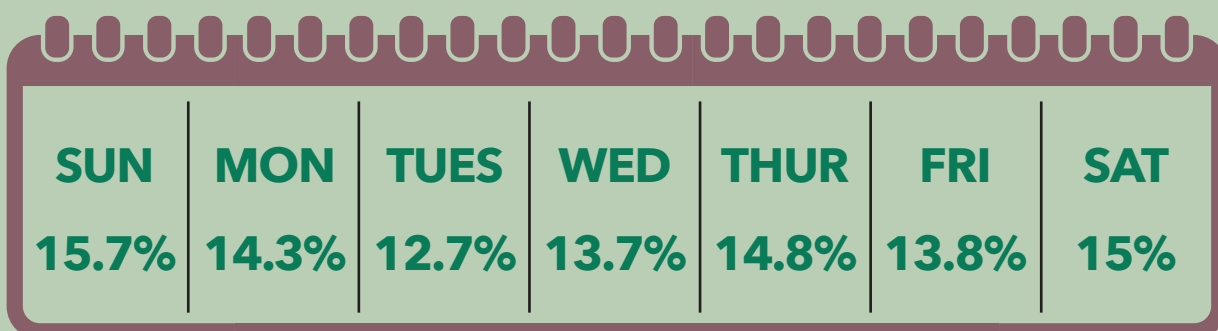
12:00 - 17:59

28%



18:00 - 23:59

24.9%



Median EMS response time



90th percentile time:
12.3
mins



Proportion of cases reached in 8 mins

In 2018, median response time was also 5.6 mins & 90th percentile time was 12.2 mins

In 2018, 71.5% of cases were reached in 8 mins

Clinical Presentation

AETIOLOGY

Presumed cardiac

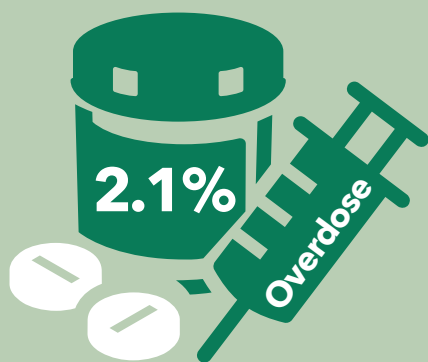


(2018: 91.1%)

Trauma



(2018: 3.3%)



(2018: 2.0%)

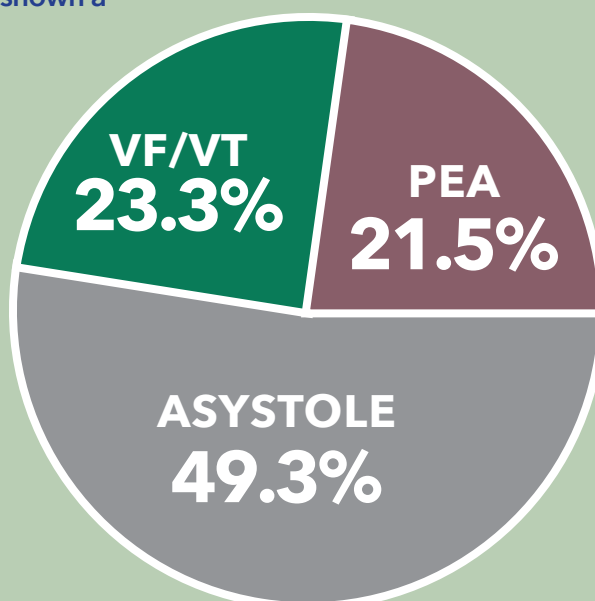
Asphyxia



(2018: 3.0%)

INITIAL RHYTHM

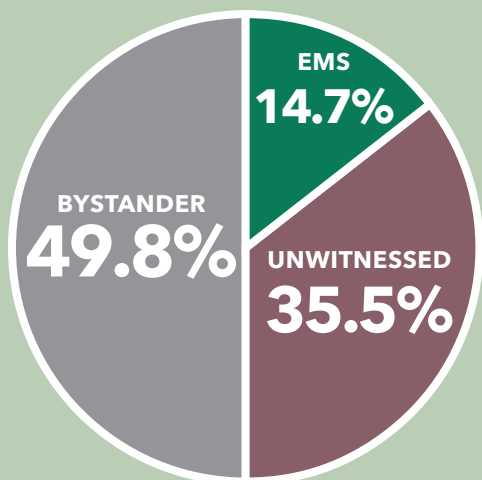
The proportion of cases presenting with a shockable rhythm has shown a year-on-year increase



2018:
VF/VT - 20.4%
Asystole - 50.1%
PEA - 22.2%

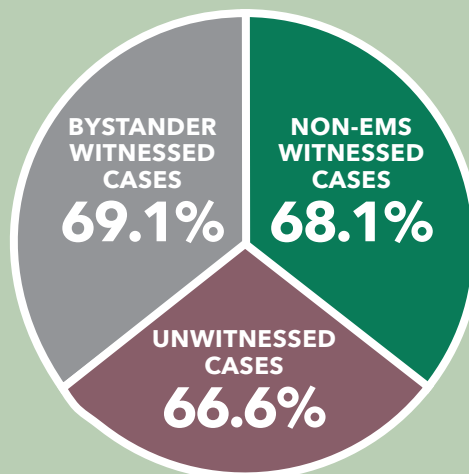
Bystander Interventions

Who witnessed cardiac arrest?



2018:
 Bystander - 46.6%
 EMS - 15.6%
 Unwitnessed - 37.8%

Bystander CPR rate:



2018:
 Non-EMS witnessed - 68.9%
 Bystander witnessed - 73.2%

Public Access Defibrillator use:



| ALL CASES | BYSTANDER WITNESSED CASES | UNWITNESSED CASES |
|-----------|---------------------------|-------------------|
| 5.3% | 6.8% | 5.4% |

2018:
 Bystander witnessed - 7.0%
 Unwitnessed - 4.4%

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

33.9%

2018: 34.9%



Admitted with ongoing CPR

32.7%

2018: CPR - 33.9%



Admitted with ROSC

33.4%

2018: 31.2%

33.4%
admitted to hospital with ROSC



11.5%
survived to discharge

54.2%
Utstein comparator group

2018:
All cases - 31.2% UCG - 55.9%

32.2%
Utstein comparator group*

2018:
All cases - 10.5% UCG - 33.3%

Paramedics successful in restarting

1190
HEARTS

2018: 1200

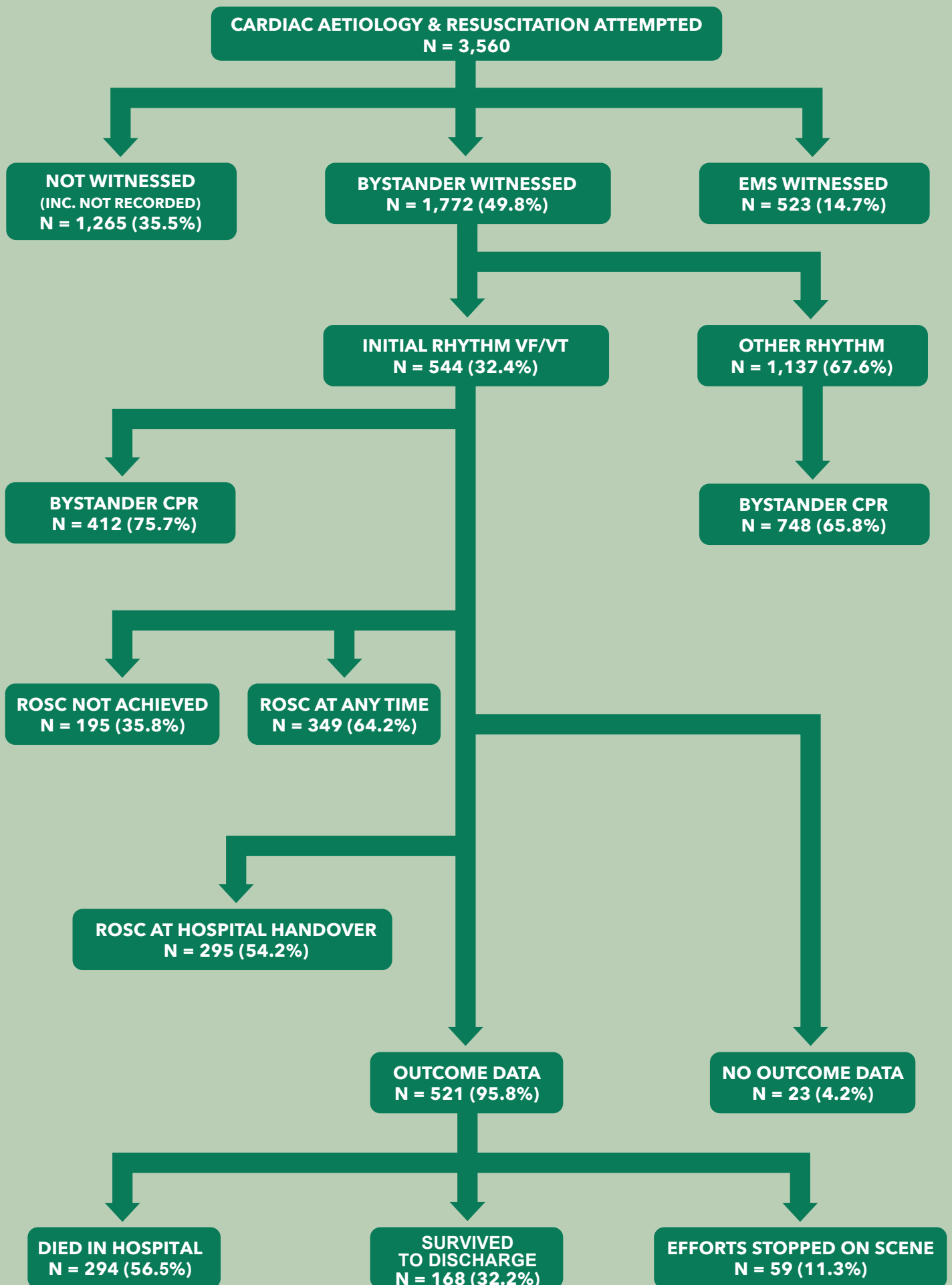
Number of lives saved

402

2018: 392

*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