

OHCAO CARDIAC ARREST OVERVIEW IOWAS 2019

Demographics



265

OHCA calls attended

129

patients treated by paramedics



In 2018 97 patients were treated

OHCA incidence (per 100,000)

All cases
(Age/gender adjusted):



Males
(Age adjusted)

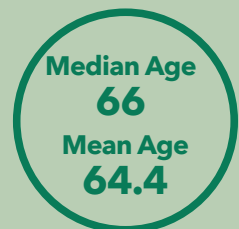


Females
(Age adjusted)



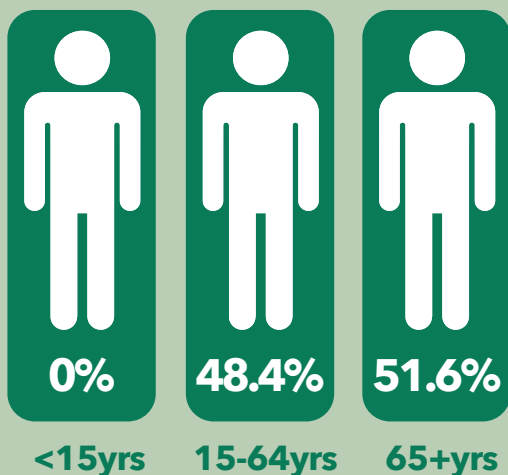
In 2018 incidence was 54.7
(males: 83.5, females: 31.3)

Age of cases



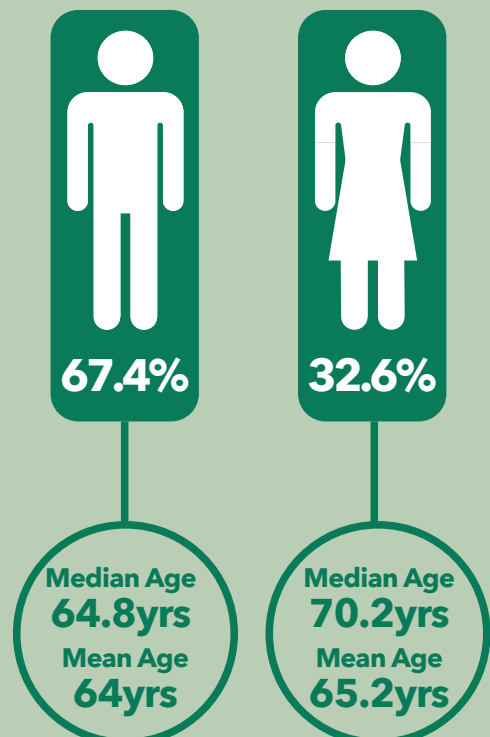
In 2018,
median age was 73.2
(mean: 68.8)

Age Distribution



2018: ≤15y - 2.1%,
15-64y - 29.9%,
65+y - 68%

Sex Distribution



Event Details



74.4%

had a cardiac arrest at place of residence



12.4%

had a cardiac arrest in a public place



4.7%

had a cardiac arrest in the workplace



0%

had a cardiac arrest in a place of education



1.6%

had a cardiac arrest in a leisure centre



7.0%

had a cardiac arrest in another location



00:00 - 05:59

14%



06:00 - 11:59

31%



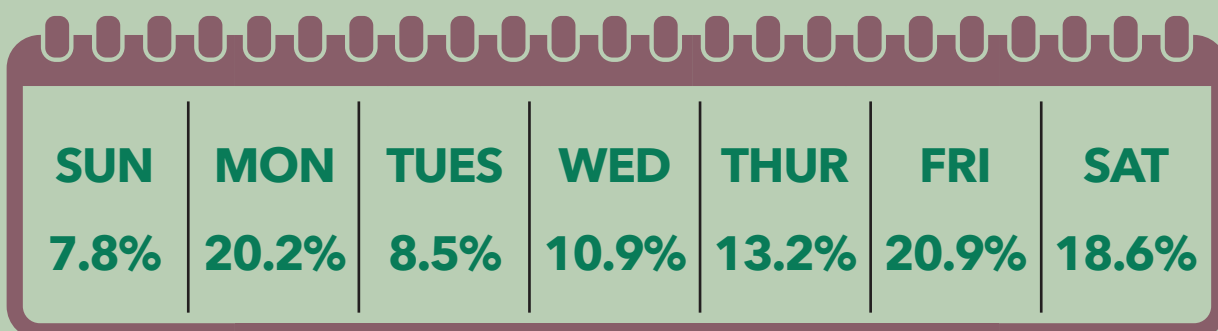
12:00 - 17:59

31%



18:00 - 23:59

24%



Median EMS response time



90th percentile time:
21 mins



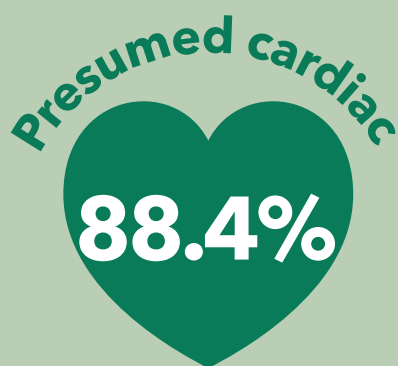
Proportion of cases reached in 8 mins
41.1%

In 2018, median response time was also 9.5 mins & 90th percentile time was 20 mins

In 2018, 41.2% of cases were reached in 8 mins

Clinical Presentation

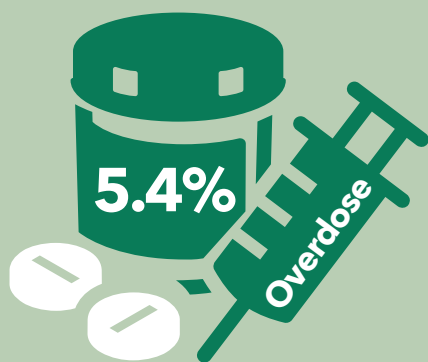
AETIOLOGY



(2018: 89.7%)



(2018: 2.1%)



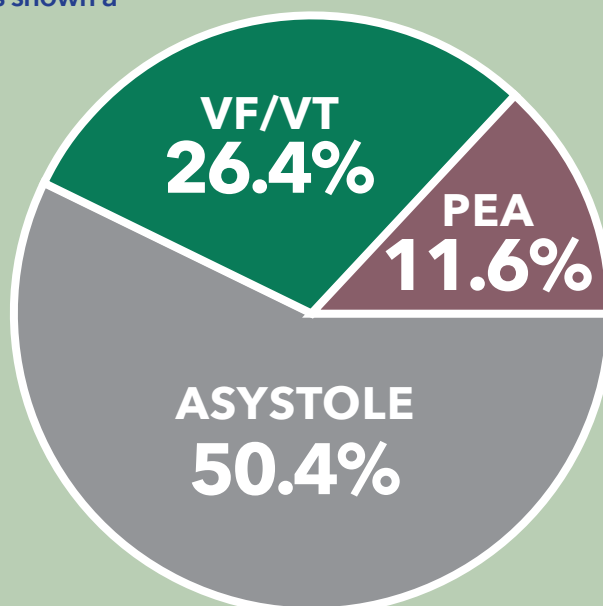
(2018: 3.1%)



(2018: 1.0%)

INITIAL RHYTHM

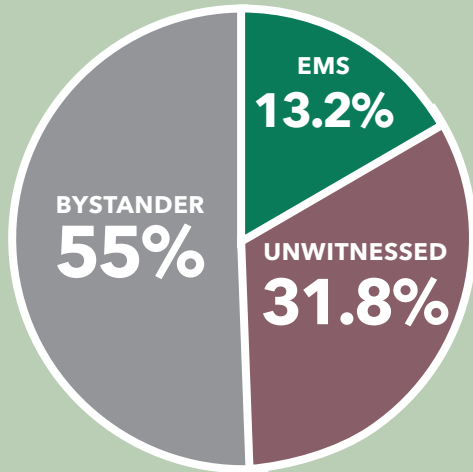
The proportion of cases presenting with a shockable rhythm has shown a year-on-year increase



2018:
VF/VT - 21.6%
Asystole - 49.5%
PEA - 20.6%

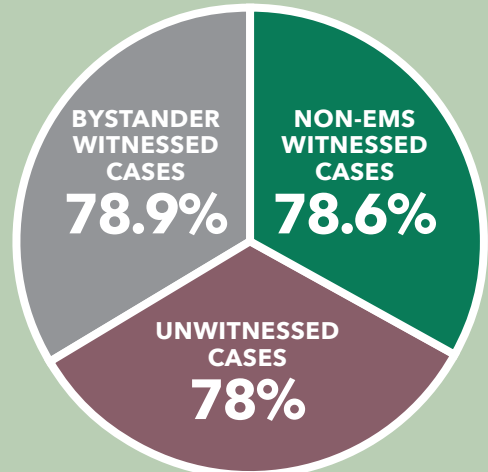
Bystander Interventions

Who witnessed cardiac arrest?



2018:
 Bystander - 48.5%
 EMS - 19.6%
 Unwitnessed - 32%

Bystander CPR rate:



2018:
 Non-EMS witnessed - 74.4%
 Bystander witnessed - 80.9%

Public Access Defibrillator use:



ALL CASES
3.9%

BYSTANDER WITNESSED CASES
5.6%

UNWITNESSED CASES
2.4%

2018:
 Bystander witnessed - 17.0%
 Unwitnessed - 9.7%

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

46.5%

2018: 47.4%



Admitted with ongoing CPR

26.4%

2018: CPR - 26.8%



Admitted with ROSC

27.1%

2018: 25.8%

27.1%
admitted to hospital with ROSC



10.5%
survived to discharge

54.5%
Utstein comparator group

2018:
All cases - 25.8% UCG - 41.2%

33.3%
Utstein comparator group*

2018:
All cases - 9.6% UCG - 31.3%

Paramedics successful in restarting



2018: 25

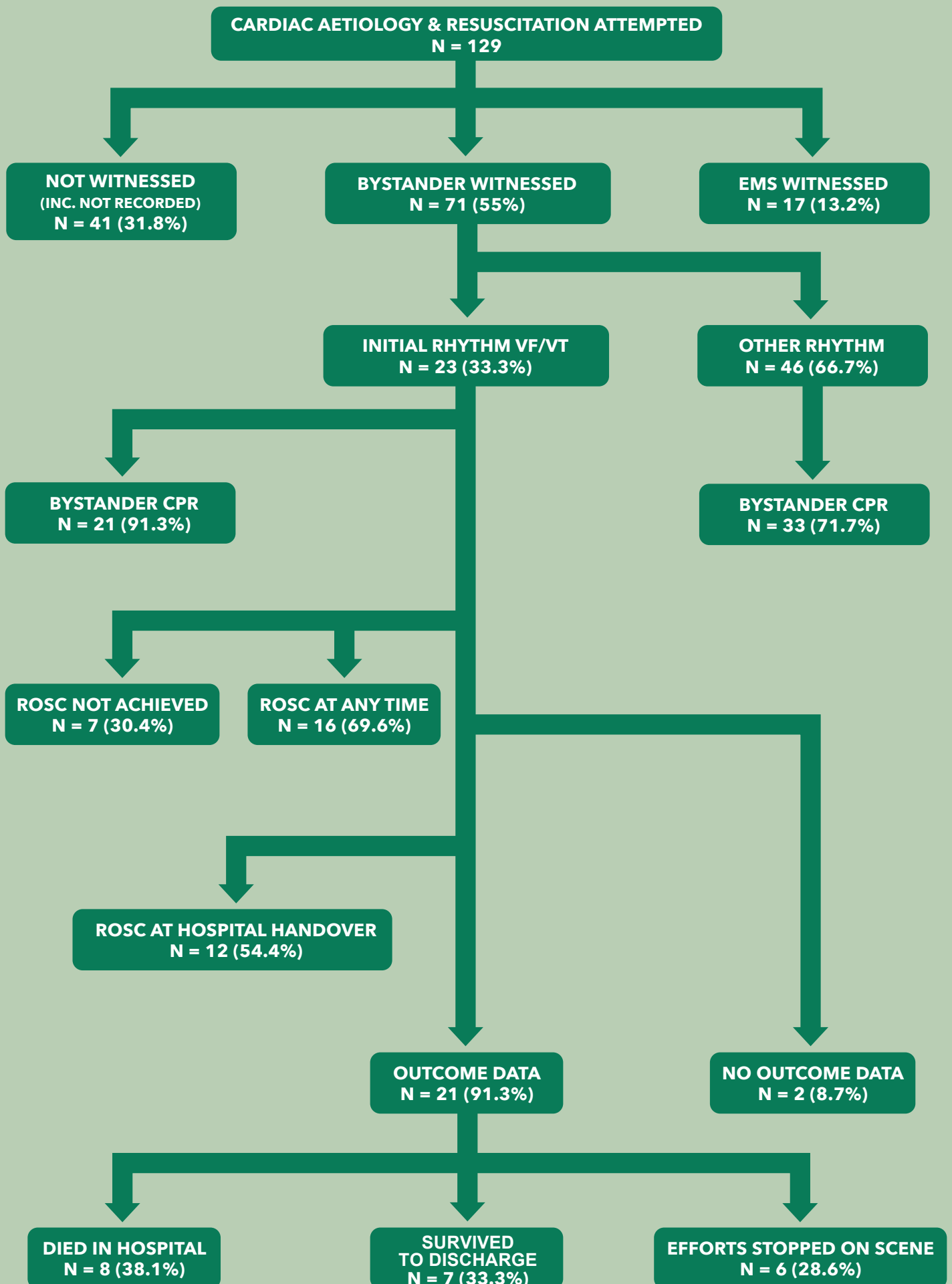
Number of lives saved



2018: 9

*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