



PIONEER

Health Data Research Hub

NIHR | Midlands Patient Safety Research Collaboration

NIHR Midlands ARC Dataset: Outcomes From Out-Of-Hospital Cardiac Arrest

Data range for infographic: 01.04.2018-31.12.2022
Other extended time periods are available on request

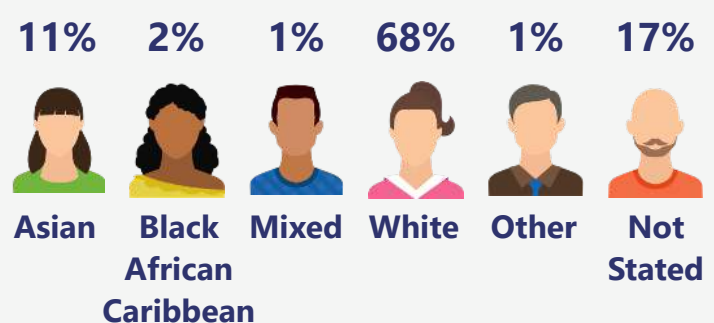
A highly granular dataset of 1,588 Cardiac arrests curated by PIONEER in collaboration with West Midlands Ambulance Service (WMAS), including demography, initial presentations, serial physiology, investigations, treatments and outcomes.

Demographic

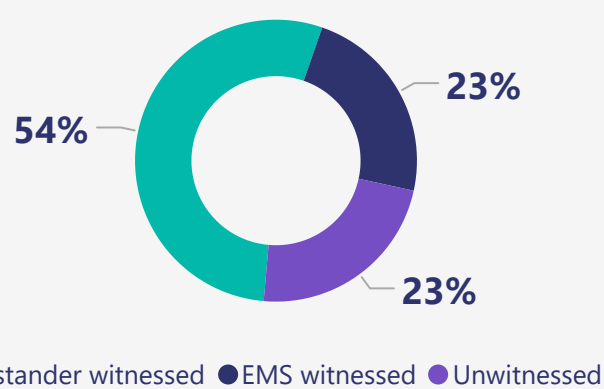
The dataset includes:

- Young adults **2%** (ages 18-29)
- Adults **45%** (ages 30-69)
- Older adults **53%** (ages 70+)

Based on the index of multiple deprivation map, **45%** of the population are from most deprived areas and **13%** of patients are from least deprived areas.



Cardiac arrest witness



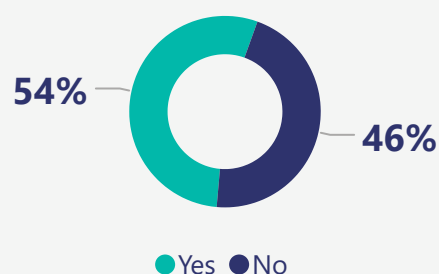
West Midlands Ambulance Service (WMAS)

1.6K West Midlands Ambulance Conveyances with:

- Cardiac arrest details
- Medications administered
- Resuscitation details

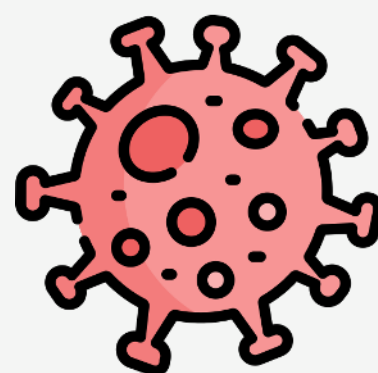
And other vital signs and observations.

WMAS CPR by bystander



Resuscitation/Defibrillation

- **52%** of WMAS callouts had defibrillation
- **34%** of admissions had resuscitation in-hospital



COVID19

- **861** COVID19 tests completed
- **38** spells with confirmed COVID19

Other COVID19 details are available.

Inpatient care

- **1,588 Hospitalised spells;** containing **1,563** unique patients admitted with cardiac arrest
- **7K** days worth of hospital data with an average in-hospital length of stay of 4 days
- In-hospital mortality rate of 81% with 87% of patients discharged surviving over 12 months
- The median National Early Warning Score is 9 and the median Clinical Frailty Scale is 4

Critical care

2.6K days worth of critical care data and an average of length of stay of 6 days.

25%



Cardiac support

25%



Organ support

24%

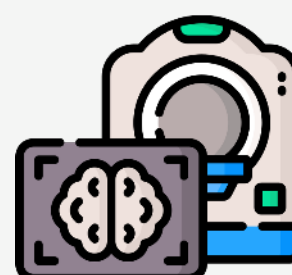


Respiratory support

Other critical care support are available.

Medical imaging

- **383** Chest X-rays
- **368** Cardiac angiography
- **135** CT pulmonary angiogram
- **74** Heart MRI
- **20** Transthoracic echocardiogram



Other medical imaging are available.