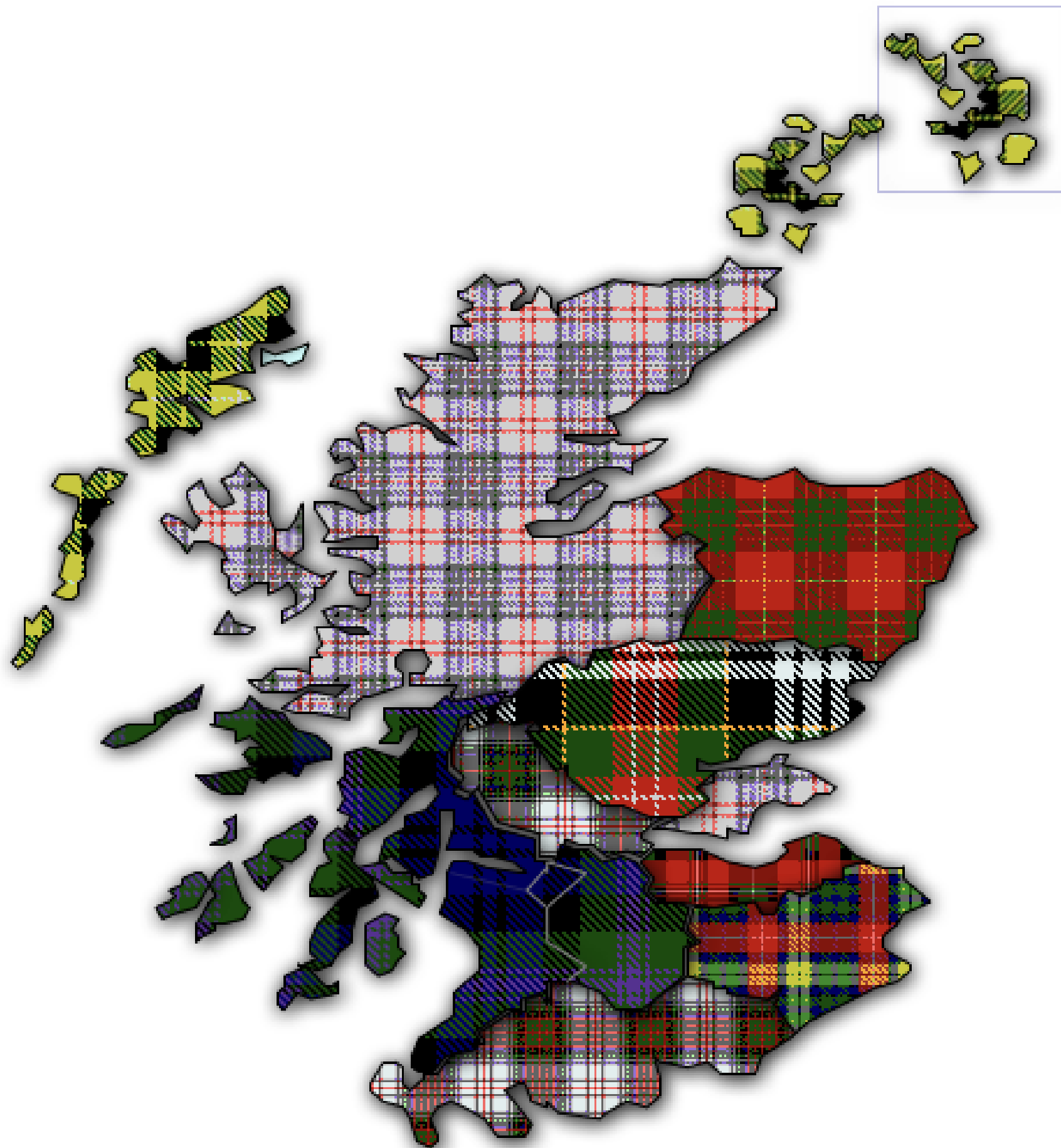




Dr Jim Ward Medical Director Scottish Ambulance Service

Scotland's Strategy to Improve Survival following OHCA

DUGALD STEWAR



5.8 million population

1 National Ambulance Service

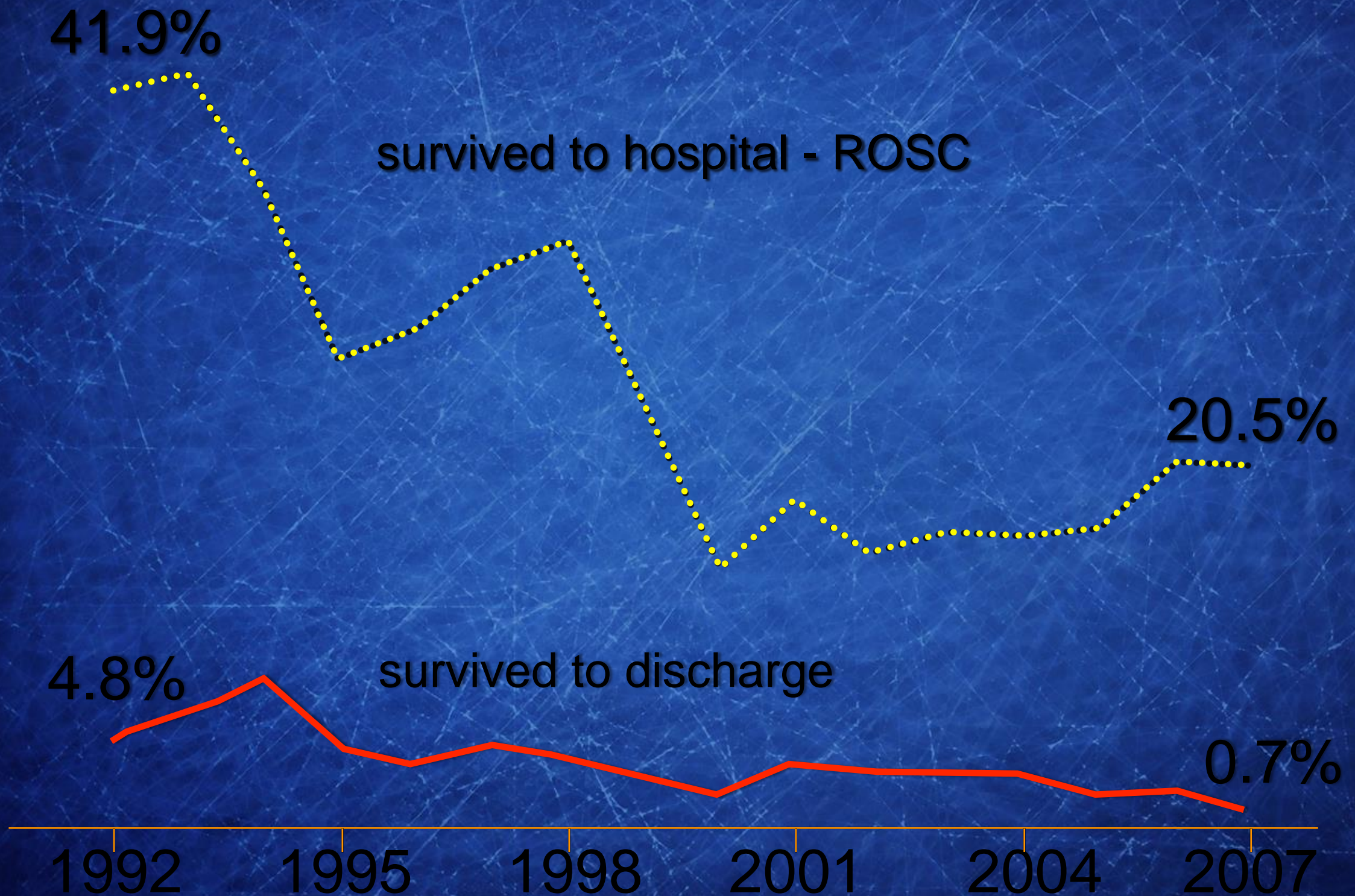
1.8 million calls for assistance each year

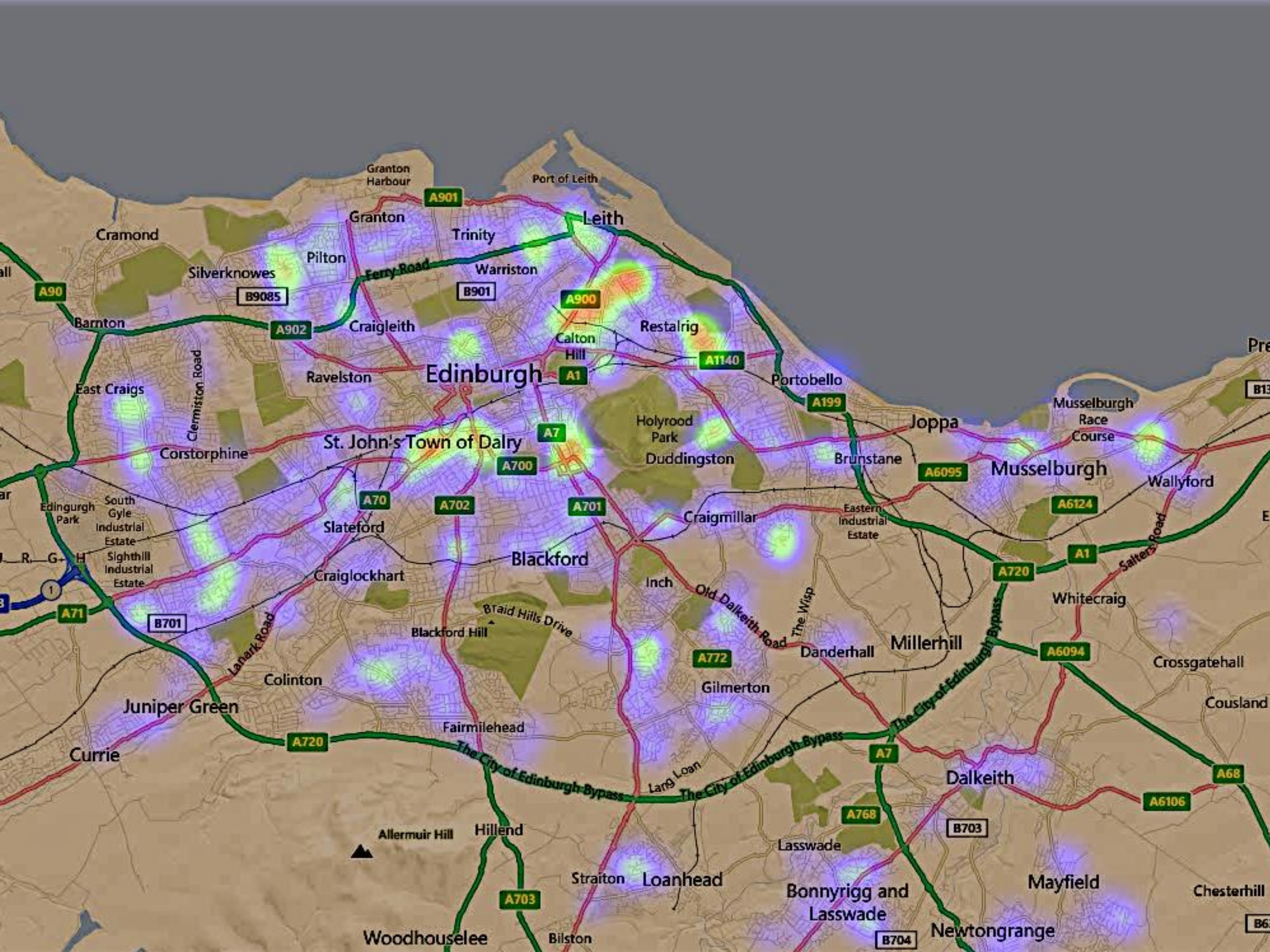
500,000+ '999' emergencies

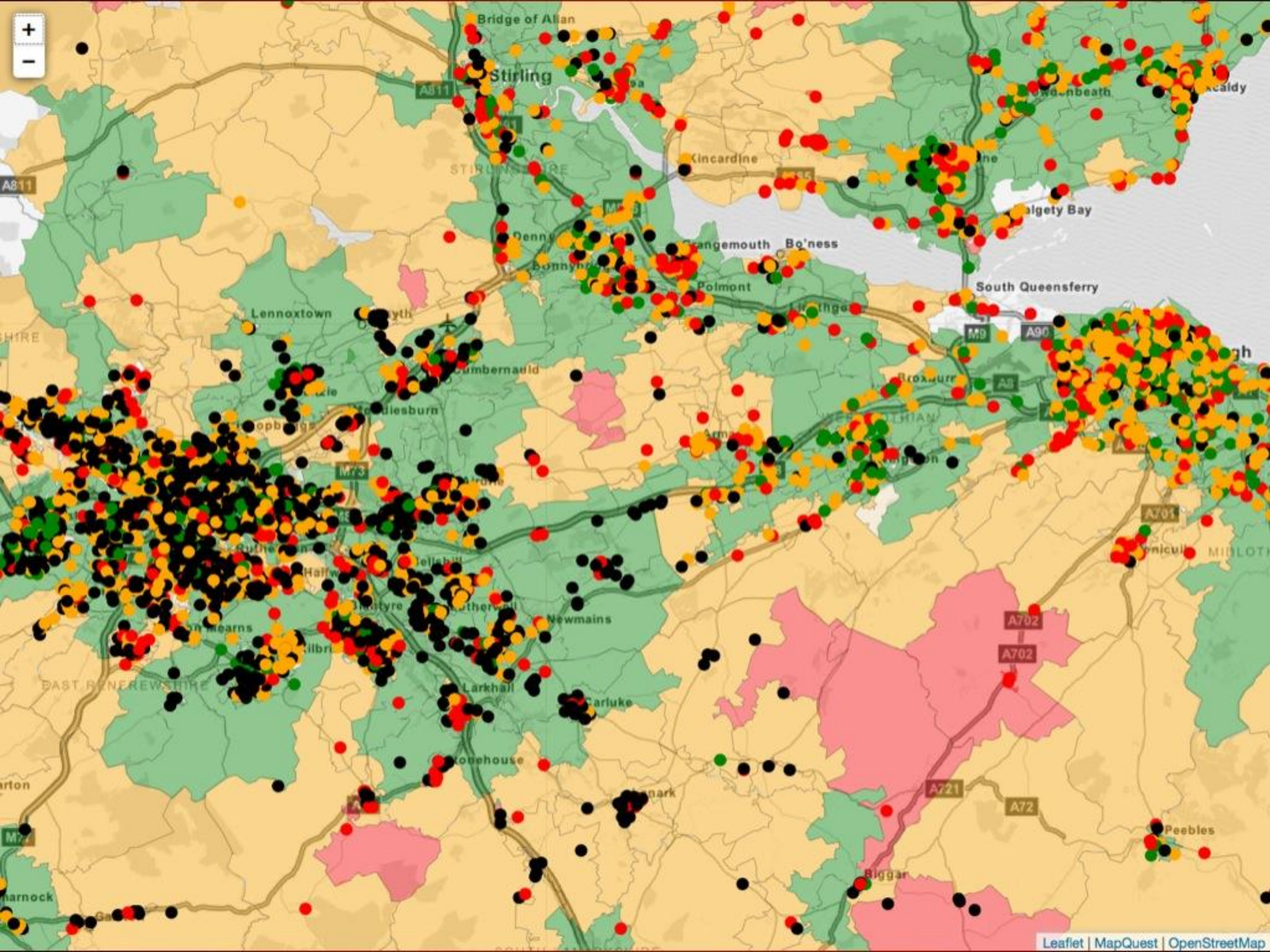
**70,000 immediately life threatening
(Cardiac Arrest rate >1%)**

6000 'OHCA' - 3000+ resuscitation attempts

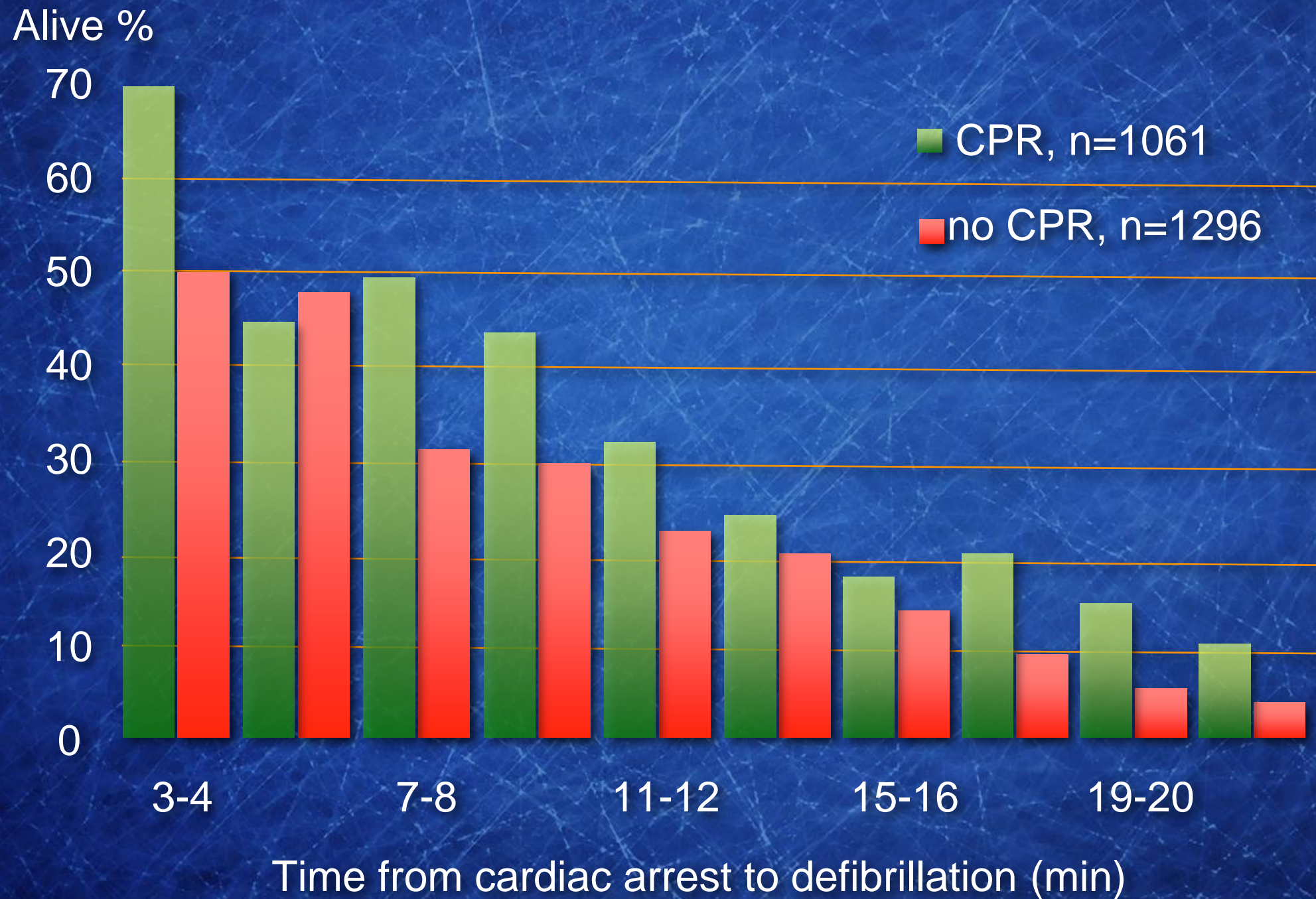
Outcome after OHCA in SE Scotland 1992 - 2007







Probability of survival decreases rapidly with time after OHCA





Early recognition and call for help
- to prevent cardiac arrest



Early CPR
- to buy time



Early Defibrillation
- to restart the heart



Post resuscitation care
- to restore quality of life





POLICE SCOTLAND



British Heart Foundation



The Scottish Government
Riaghaltas na h-Alba

Scotland's Strategy for Out-of-Hospital Cardiac Arrest



A woman with short brown hair and glasses, wearing a black blazer over a red and blue patterned top, is speaking at a wooden podium. An AKG microphone is positioned in front of her. The background is dark. A logo for the Resuscitation Research Group is visible on the podium.

**‘Save 1000 lives
by 2020...’**

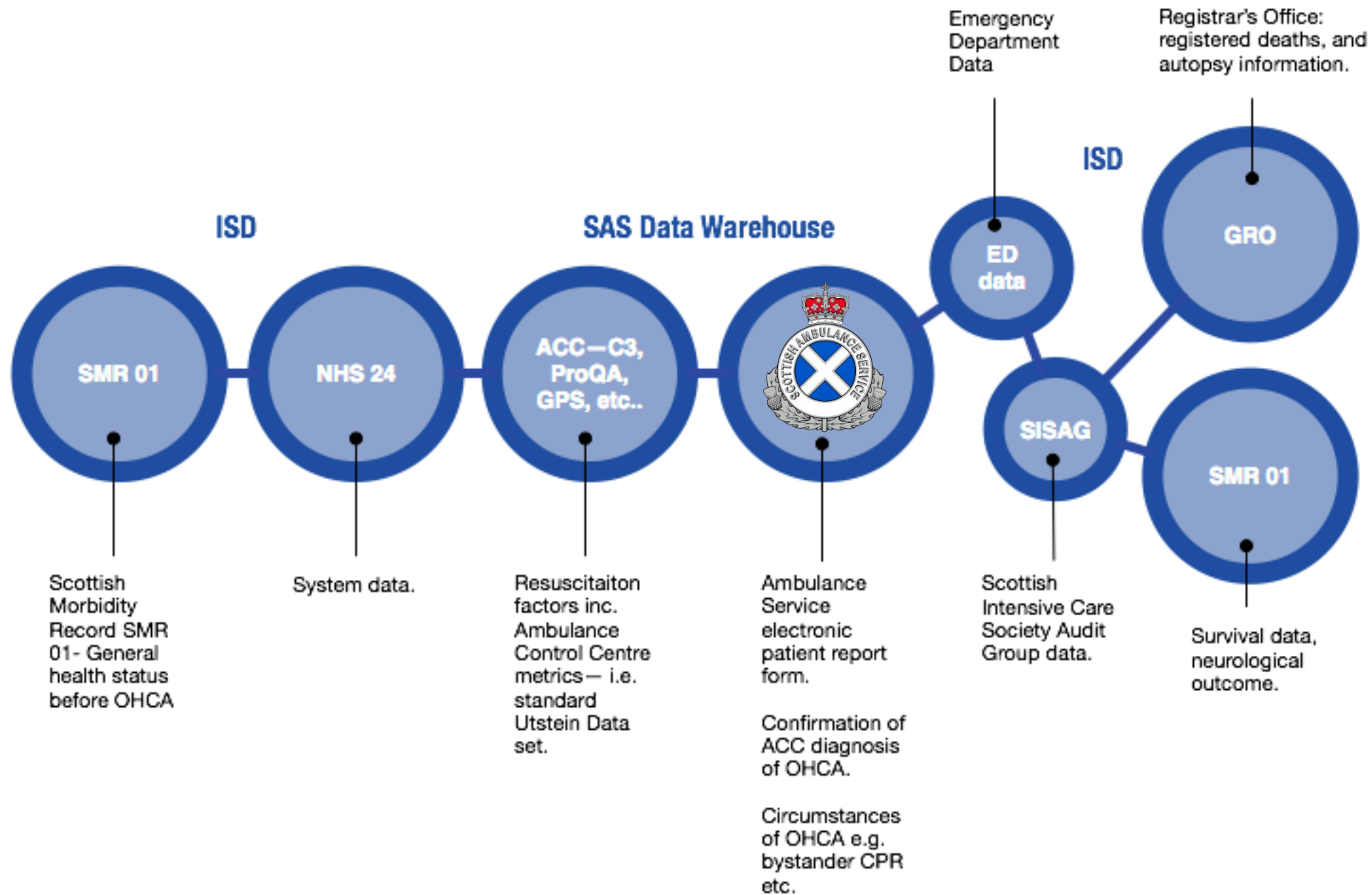
—Maureen Watt, MSP

Elements of Scotland's OHCA Strategy

- Registry Development
- Safe a Life for Scotland
- Co-responding; SAS, Fire Service, Police, Volunteers
- High Performance CPR training
- 3RU roll out
- Urban vs Rural
- ACC improvement practice (ACE)

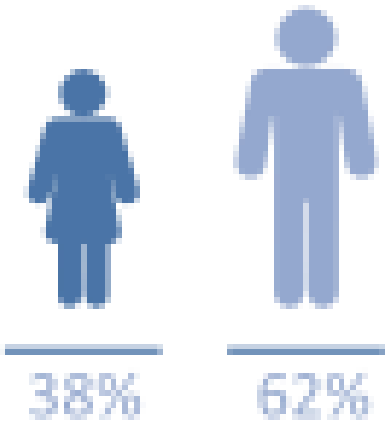
Registry Deveopment

OHCA - the patient journey

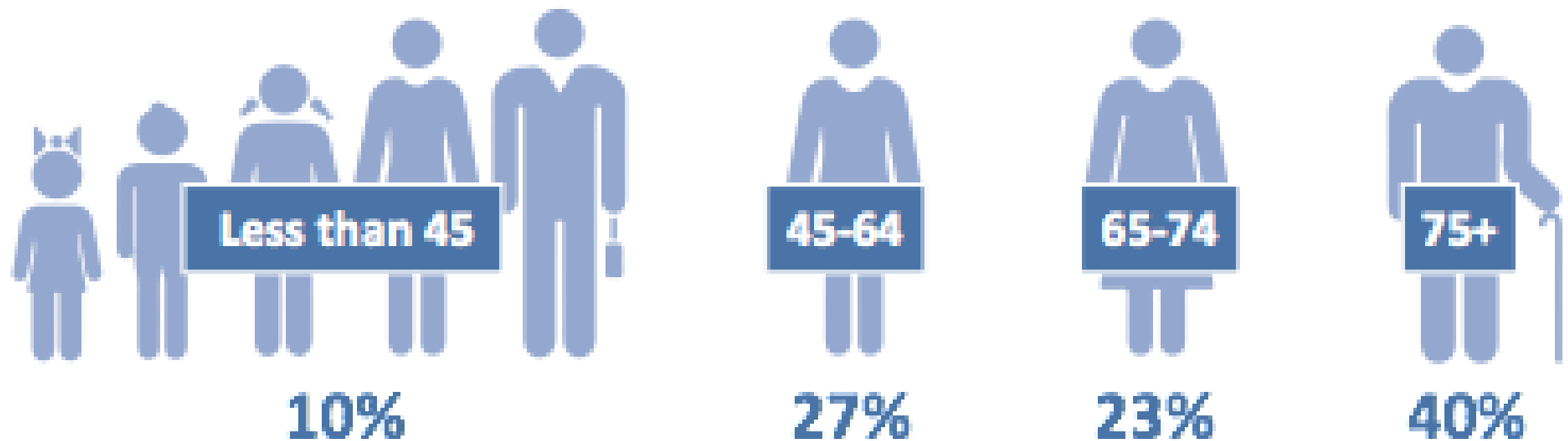


Improving Outcomes from OHCA The Starting Point

Average number of OHCA
3,000 per year

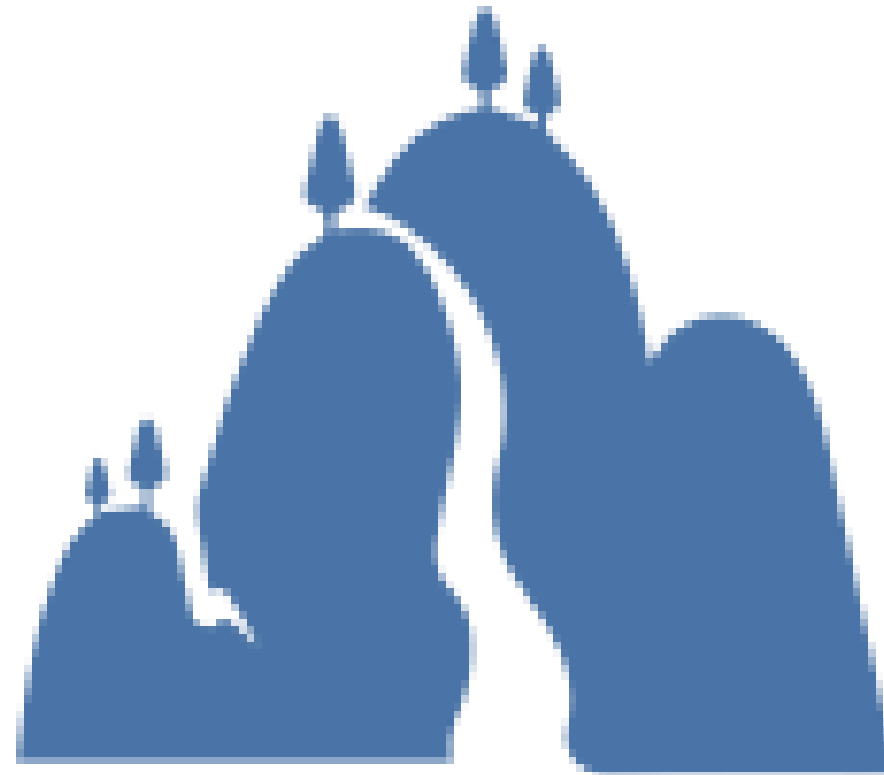


OHCA can affect people of all ages at any time



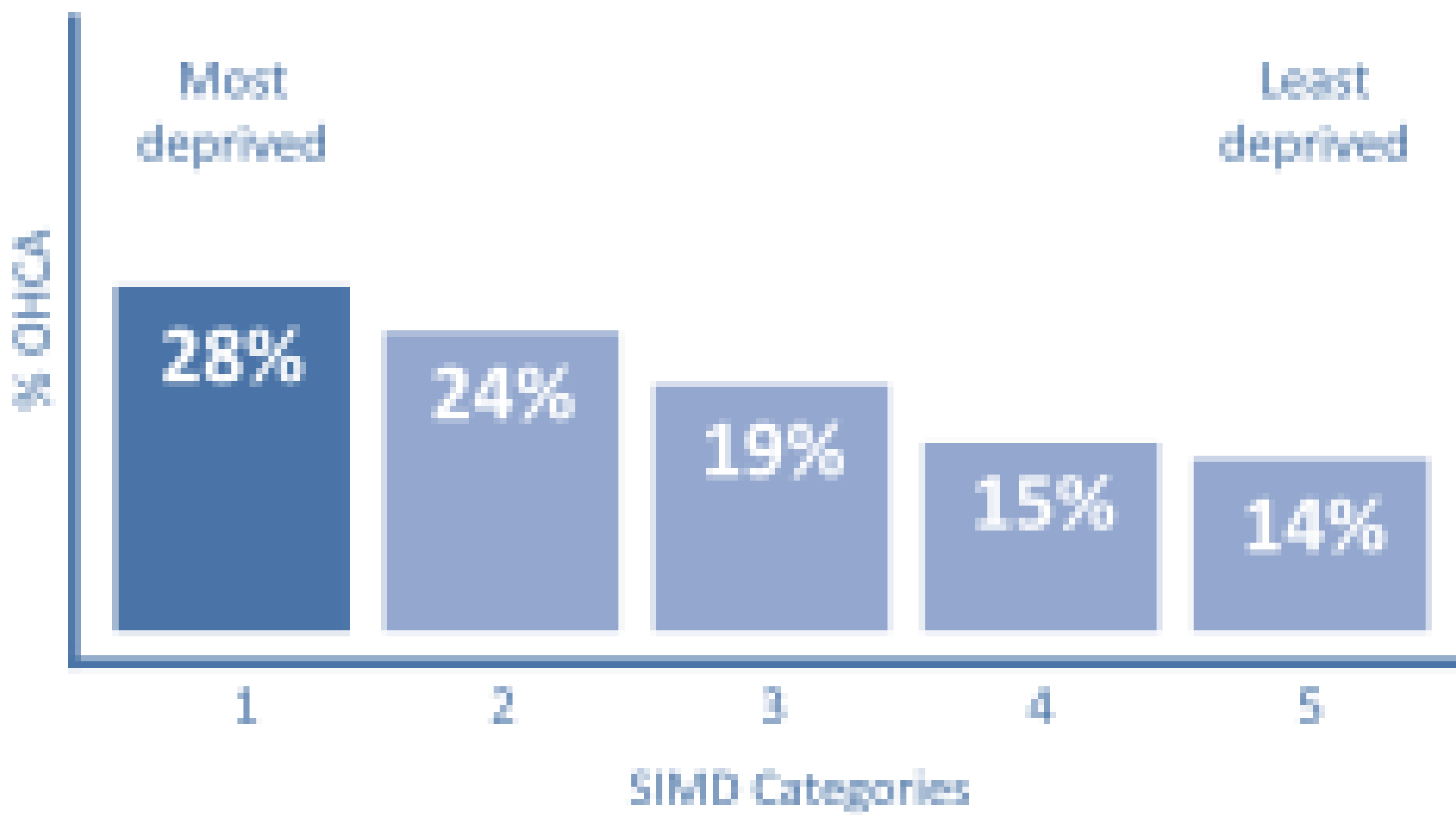


Only around
1 in 20
survive to leave
hospital

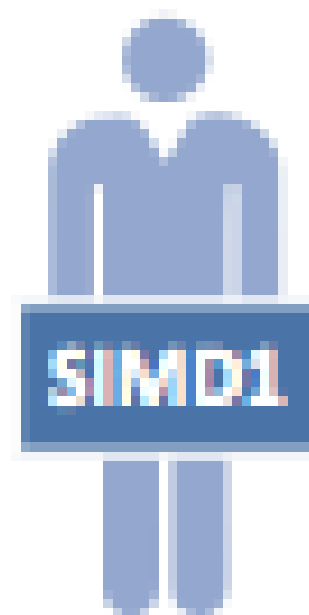


People who live in
rural areas are
32% less likely
to survive to leave
hospital

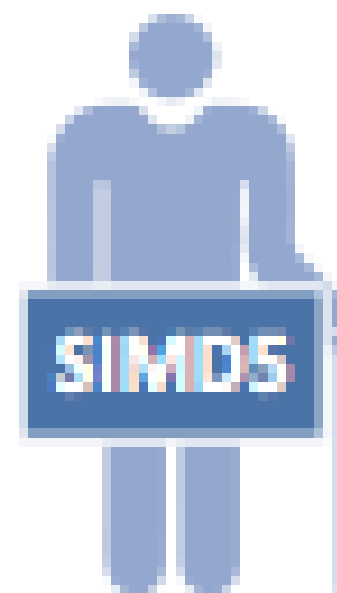
People in the most deprived areas are **twice as likely** to have an OHCA.



The **average age** of the people who have an OHCA in these deprived areas is **7 years lower**.



64yrs



71yrs

**People from most deprived areas are
43% less likely to survive to leave
hospital compared to those from
least deprived areas**



SAVE A LIFE
FOR SCOTLAND

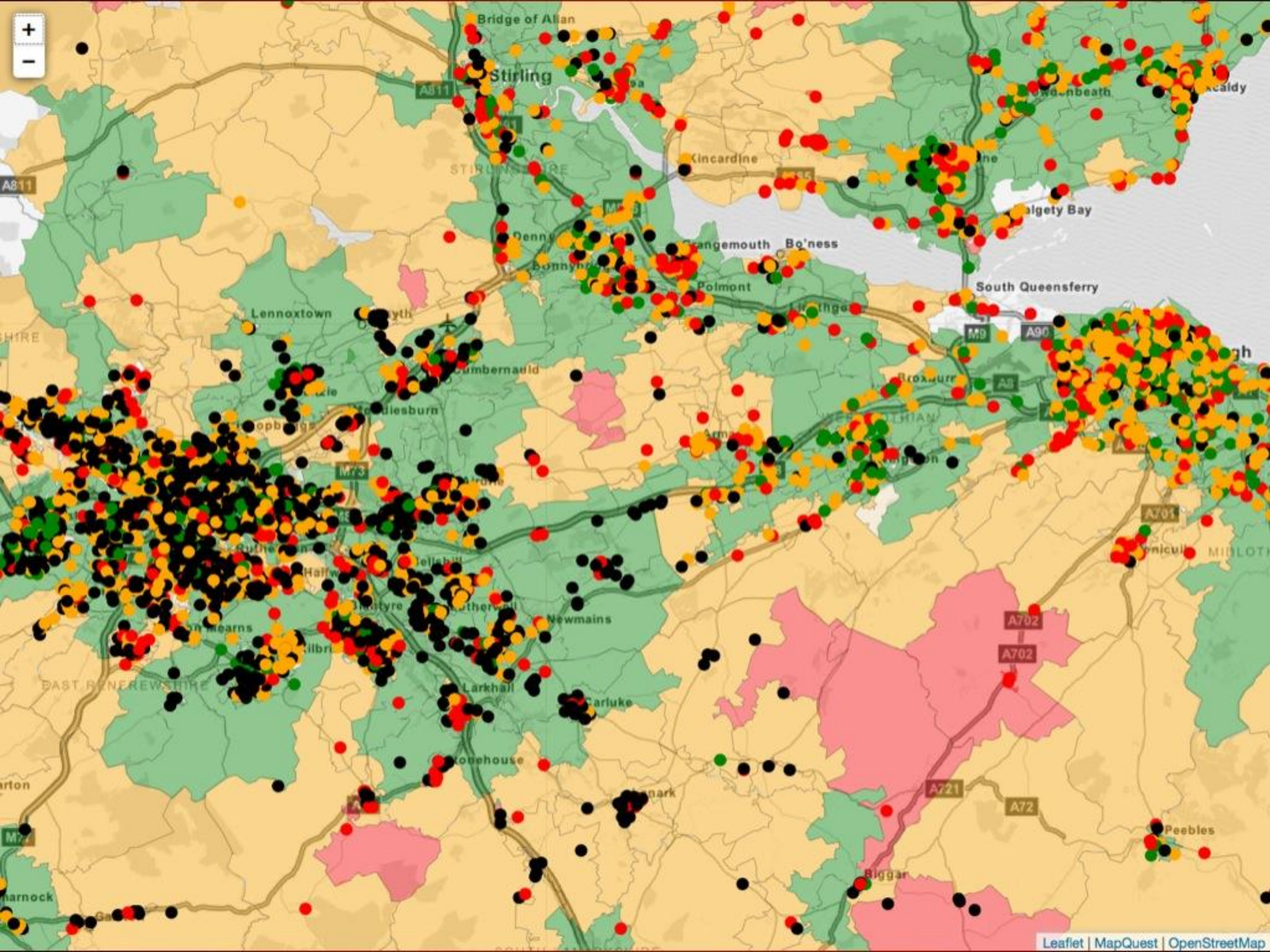
Co-Responding

- SFRS
- Police Scotland
- BASICS
- Community First Responders
- Others

High Performance CPR

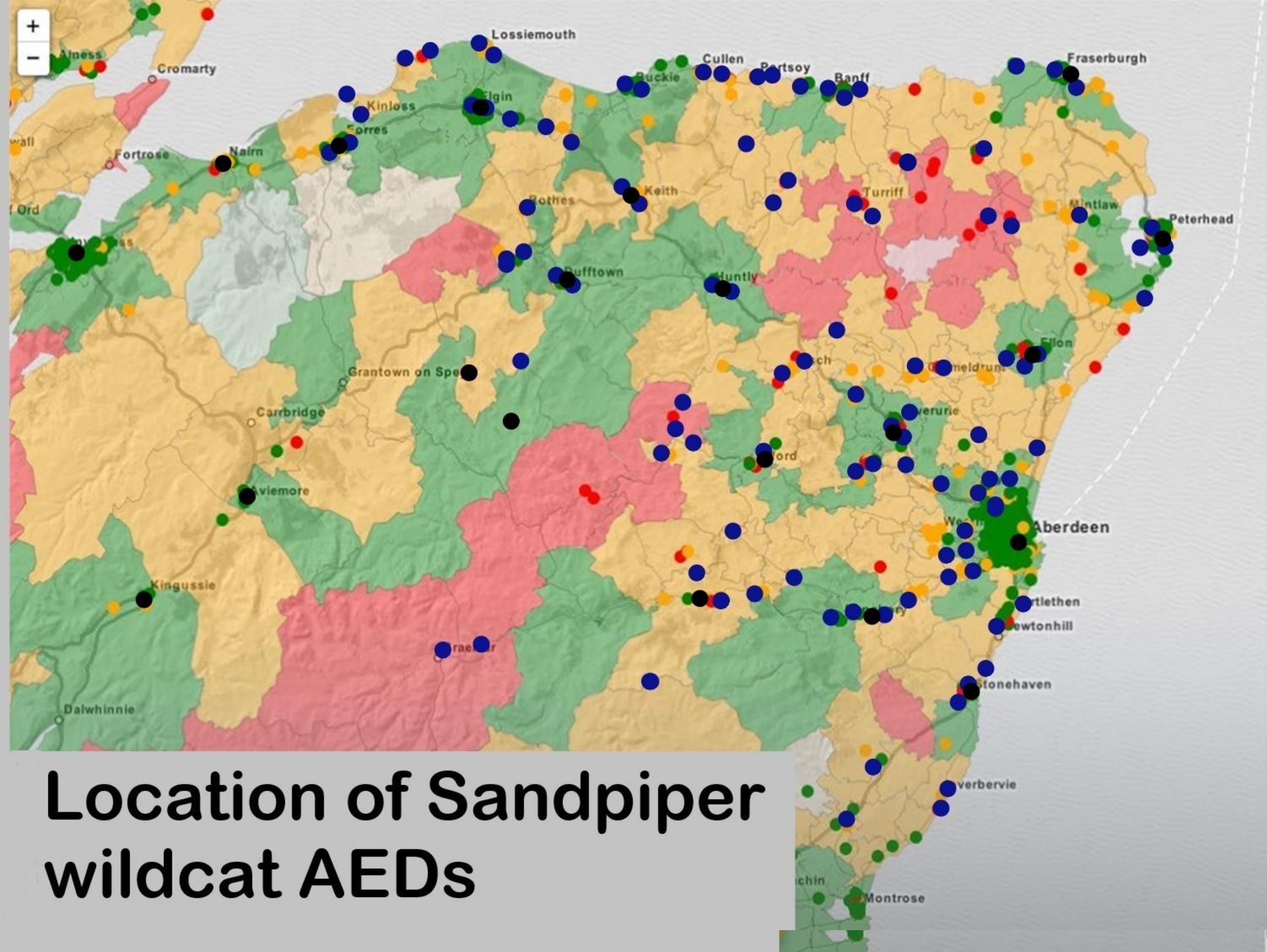
- Masterclasses
- Feedback; verbal. written, video
- Webinars etc

3RU roll out





Rural approach - Wildcat



Location of Sandpiper wildcat AEDs

RESPONDER NUMBERS

Number of individuals signed
up as responders = 358

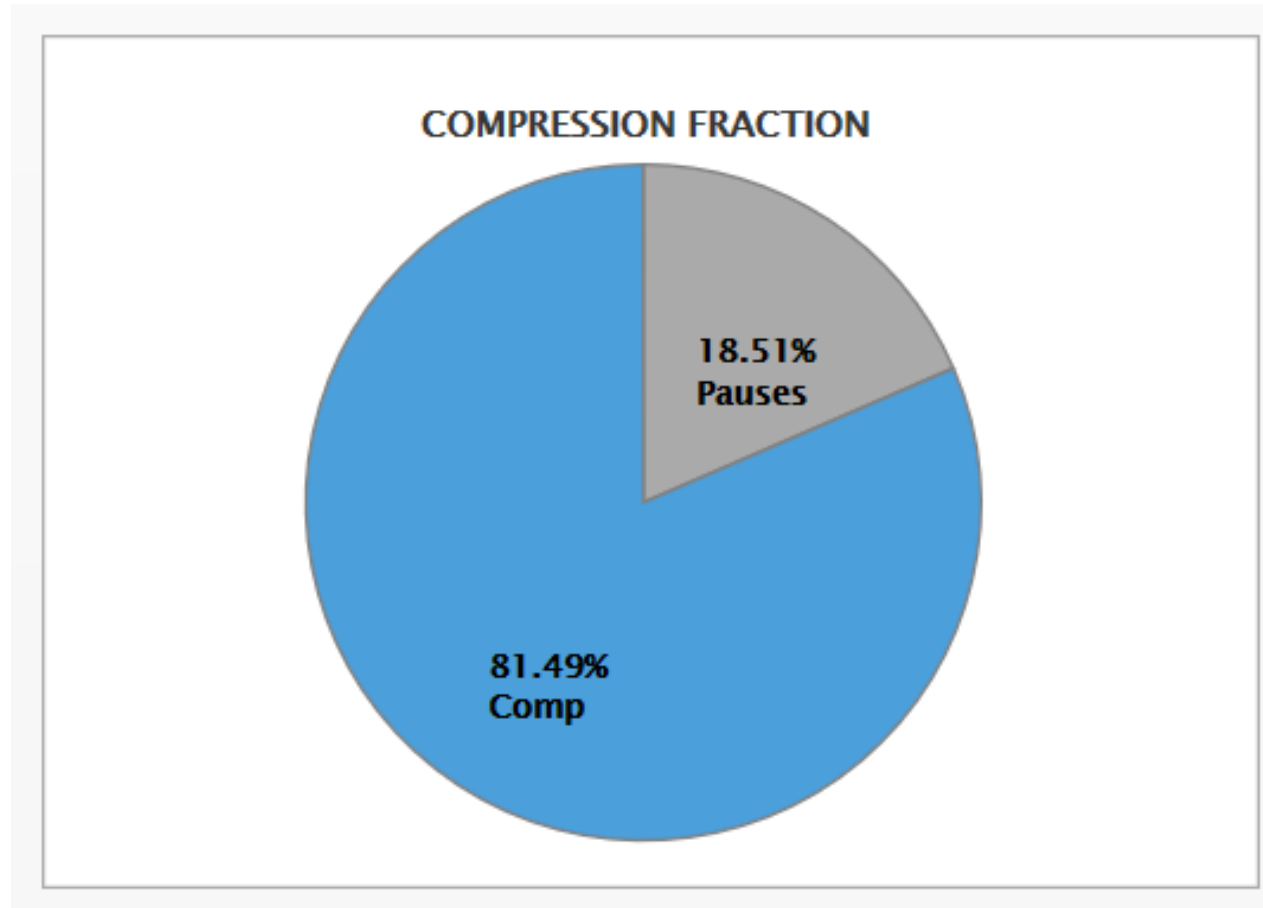
Number of Surgeries signed up
to respond = 23

Sandpiper Wildcat Responses

109 INCIDENTS ATTENDED

- 53% arrived prior to the next SAS resource
- 17% arrived at the same time as the SAS resource
- 17% of calls resulted in a stand down or the responder arrived after the SAS resource

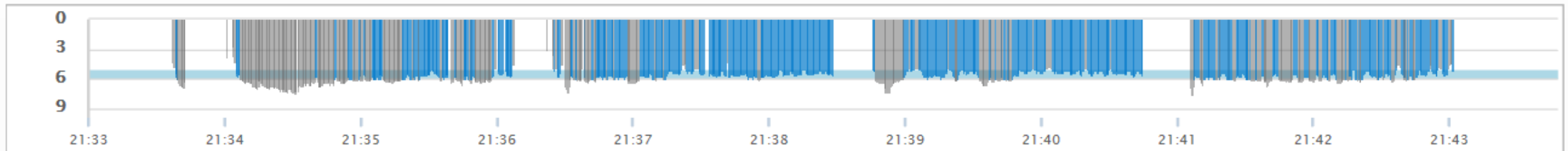
Utilising Technology



Depth: Adult Target (5.0 - 6.0 cm)

60% in target depth

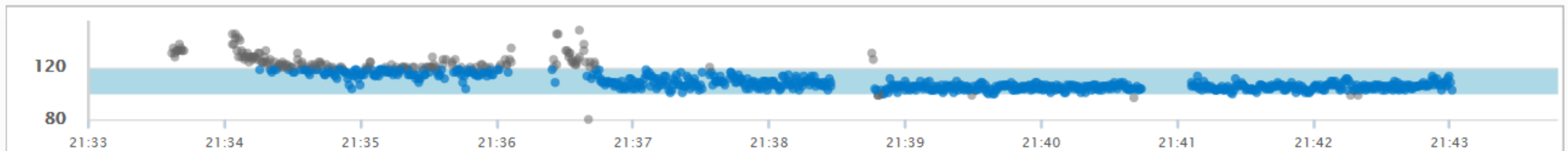
Average CPR depth: 5.8 cm



Rate: Target (100 - 120 cpm)

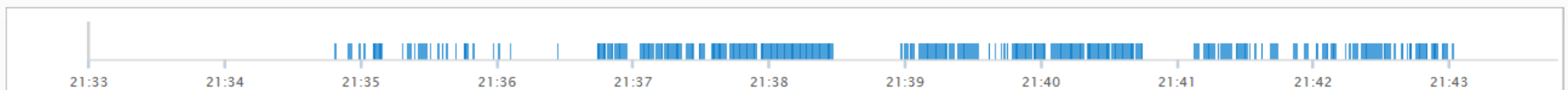
80% in target rate

Average CPR rate: 110 cpm



Compressions in target

53% Compressions in target

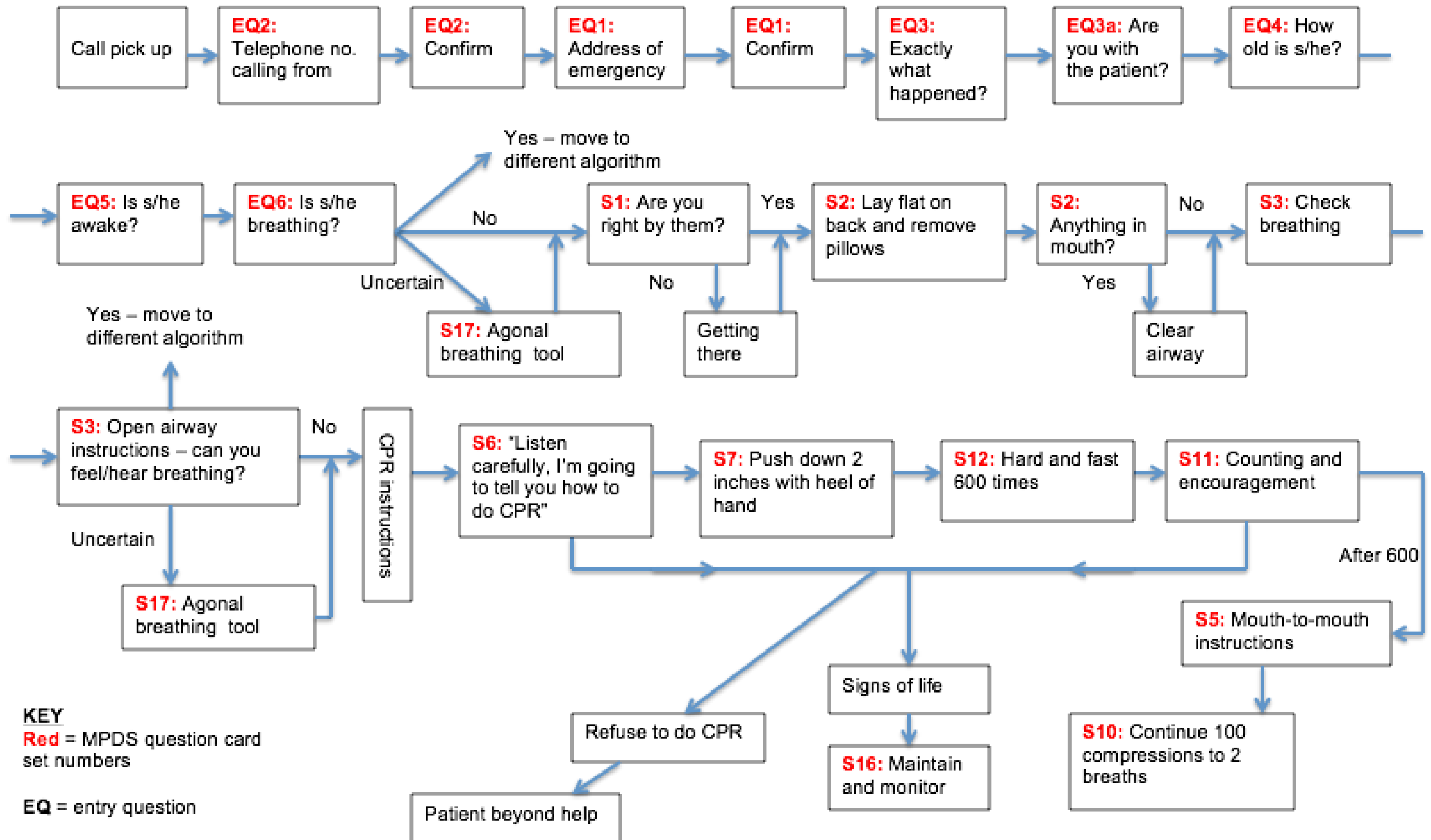


ACC

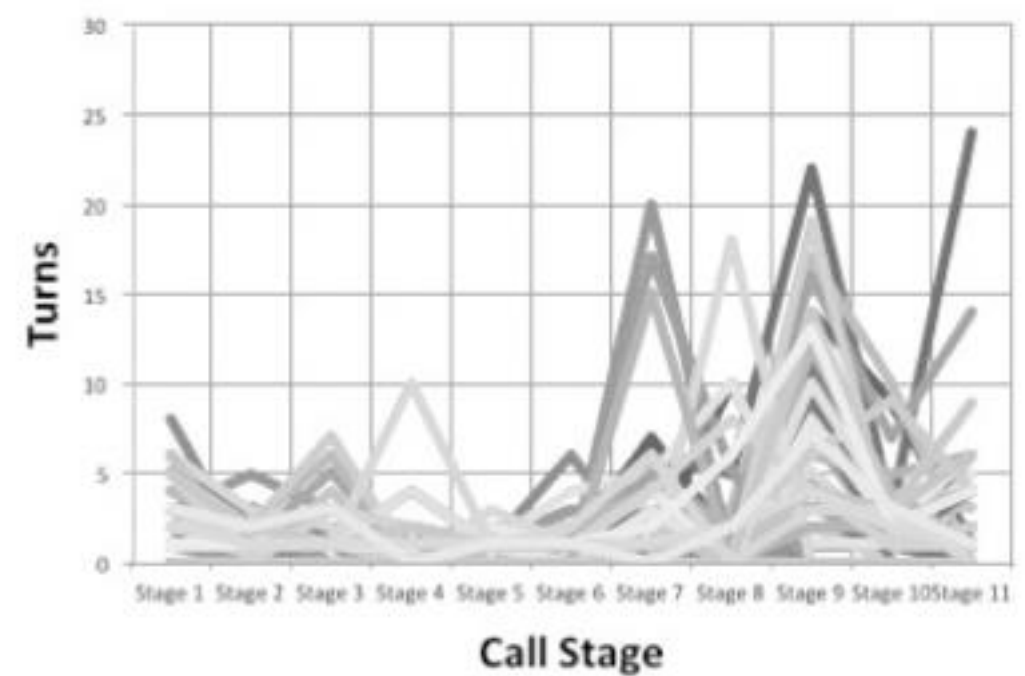
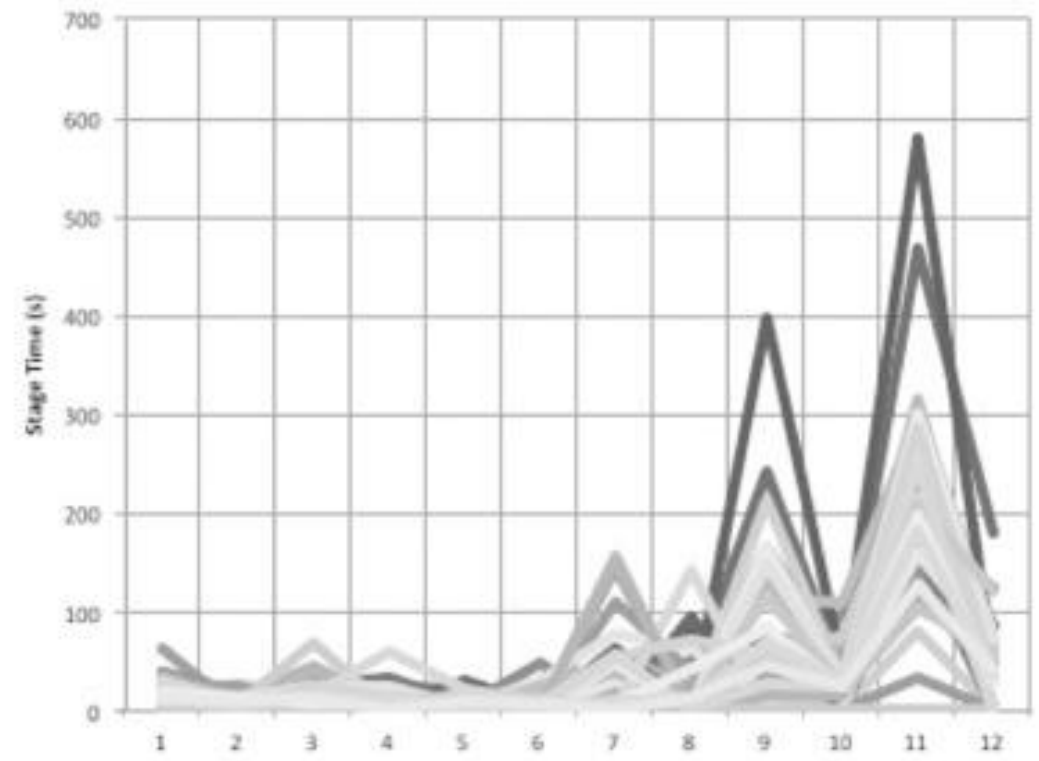
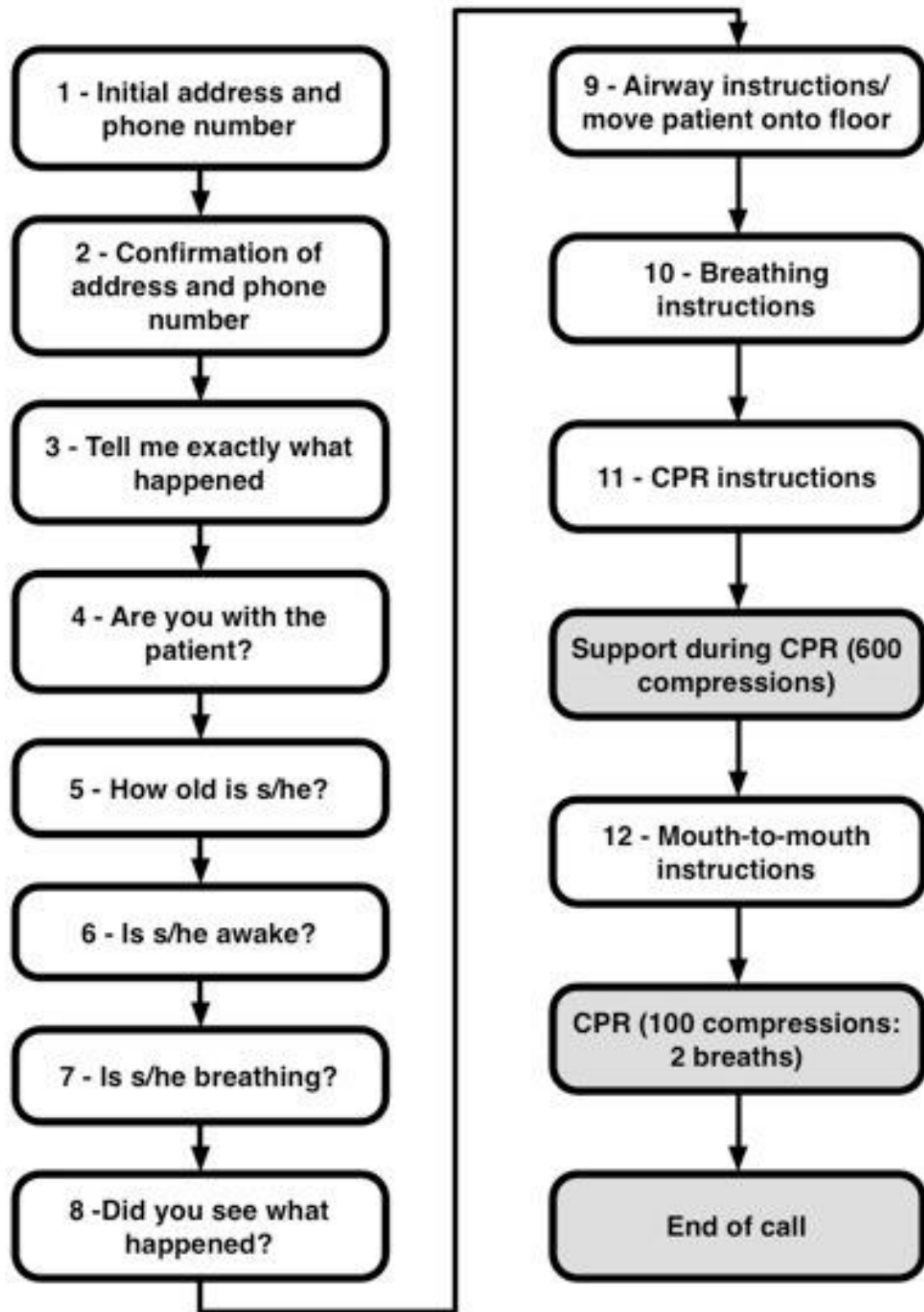
- Training and Feedback
- New Clinical response Model
- Revised DCR table
- Dispatch on Disposition



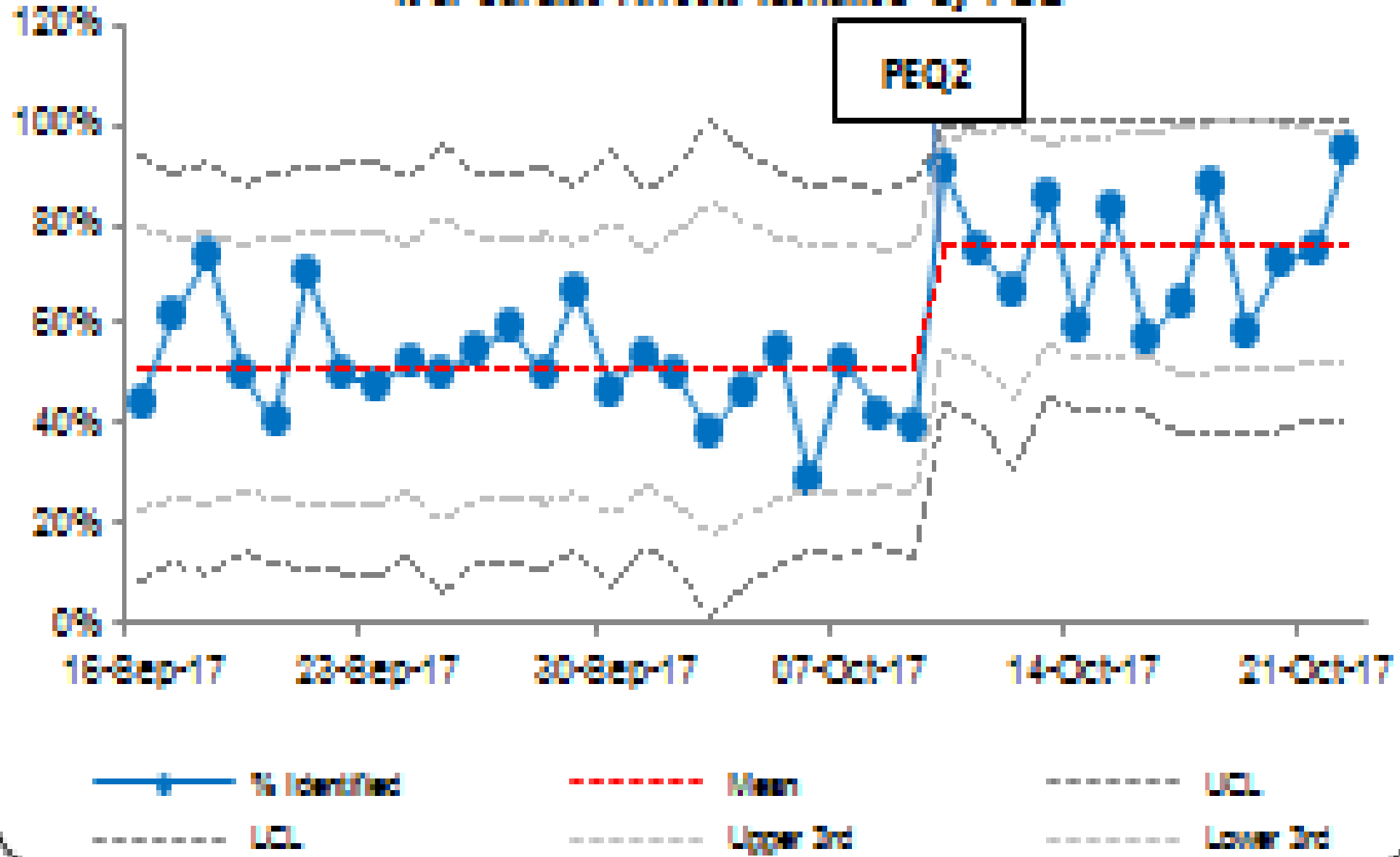
AMPDS OHCA Algorithm



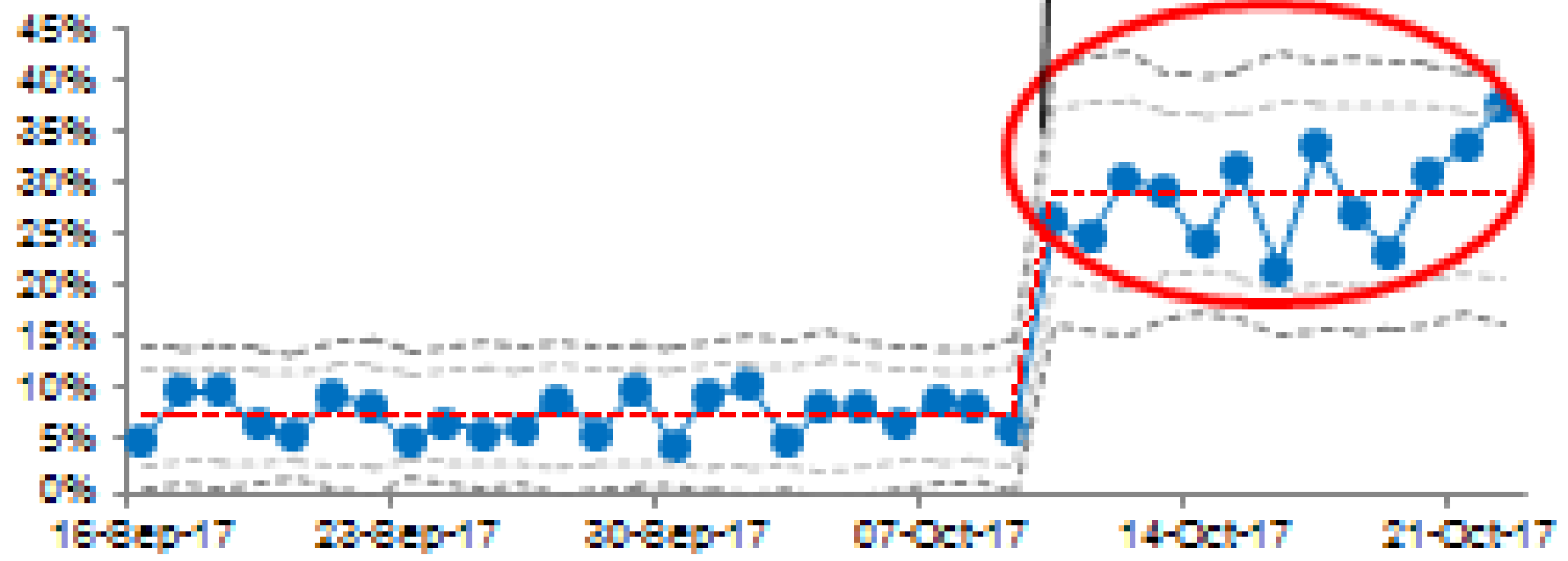
Anatomy of a 999 call



% of Cardiac Arrests Identified by PEG



% of ILT Identified by PEG



PEQ2

—●— % Identified - - - - - Mean - - - - - UCL
- - - - - LCL - - - - - Upper 3rd - - - - - Lower 3rd

ROSC Data

- ROSC All Rhythms; 23% (35%*)
- AI VF/VT ROSC: 43% (67%*)
- EMS Witnessed VF/VT; 67%

* SINCE LAUNCH OF DoD

Slainte