



**Scottish
Ambulance
Service**

Working in Partnership with Universities



Health Inequalities Out of Hospital Cardiac Arrest (OHCA)

Dr Jim Ward

Health Inequalities

- Avoidable
 - Unfair
 - Systematic
-differences in health between different groups of people

Plan

- Scotland's OHCA Strategy
- Data reflecting survival rates by SIMD
- Other inequality considerations
- Bystander CPR and PAD use data
- What can we do differently in different communities?

Scotland's Strategy for OHCA 2021-26



Equitable access to a system of care producing an **increase in neurologically intact survival to 15%**, of all worked arrests, for those where resuscitation is appropriate, with aftercare for all affected by OHCA in Scotland

The Utstein Formula for Survival



- 1 The SALFS partnership will have equipped 1 million people in Scotland with CPR
- 2 All school aged children in Scotland will have the opportunity to be equipped with CPR skills.
- 3 We will target our work to address key inequalities in OHCA outcomes.
- 4 Bystander CPR rates will be increased to 85%.
- 5 Public Access Defibrillators will be placed optimally and be as accessible as possible.
- 6 20% of all OHCA's will have a defibrillator applied before the arrival of ambulance
- 8 All individuals who are affected by OHCA will be offered support afterwards.
- 9 We will address the challenge of timely communication of anticipatory care plans
- 10 We will use data to understand and address variation and seek innovative ways

We will use data to understand and address variation and seek innovative ways to improve outcomes after OHCA



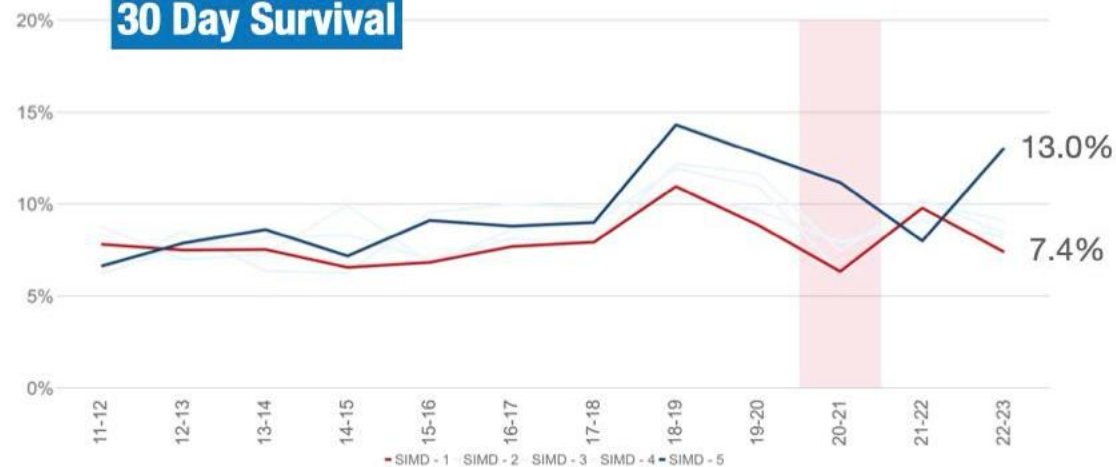
Scotland's Out-of-Hospital Cardiac Arrest Report 2019-2022

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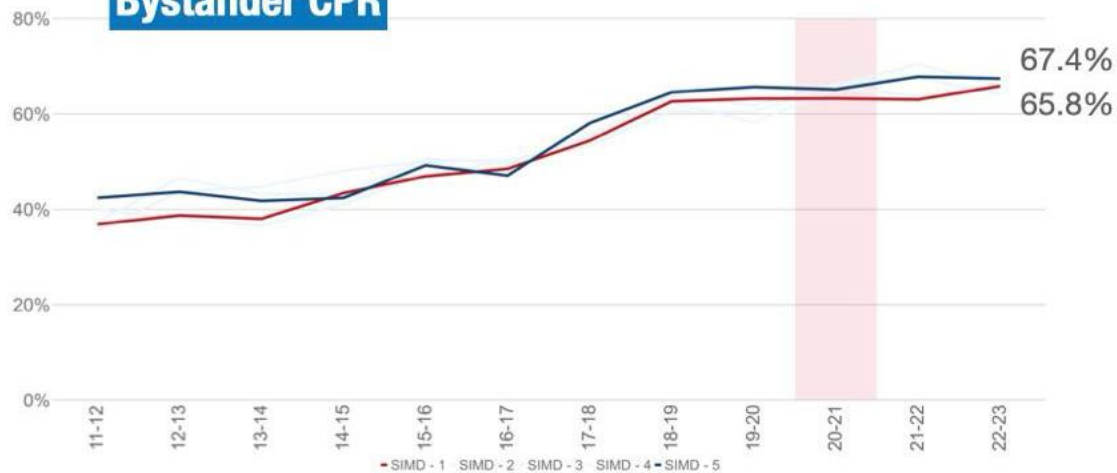


The story so far...

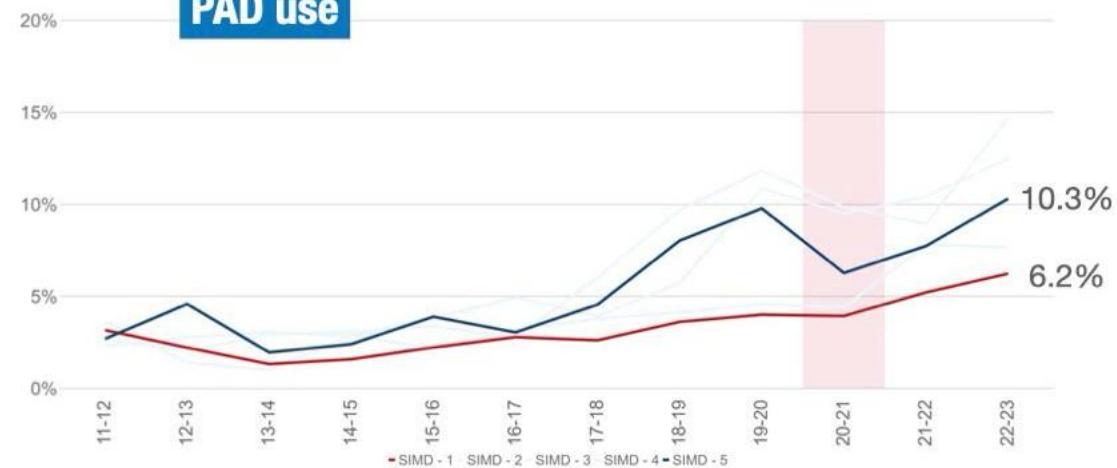
30 Day Survival



Bystander CPR



PAD use

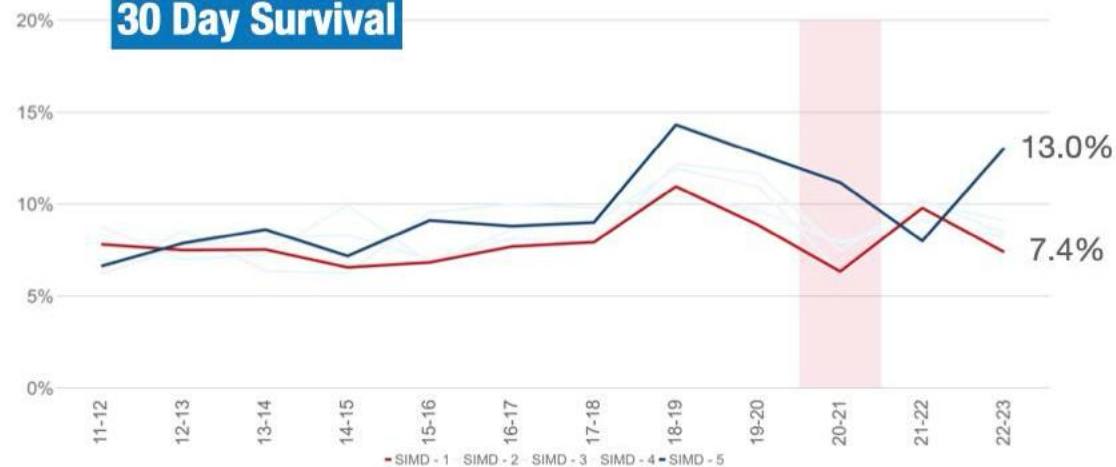


Other inequalities considerations

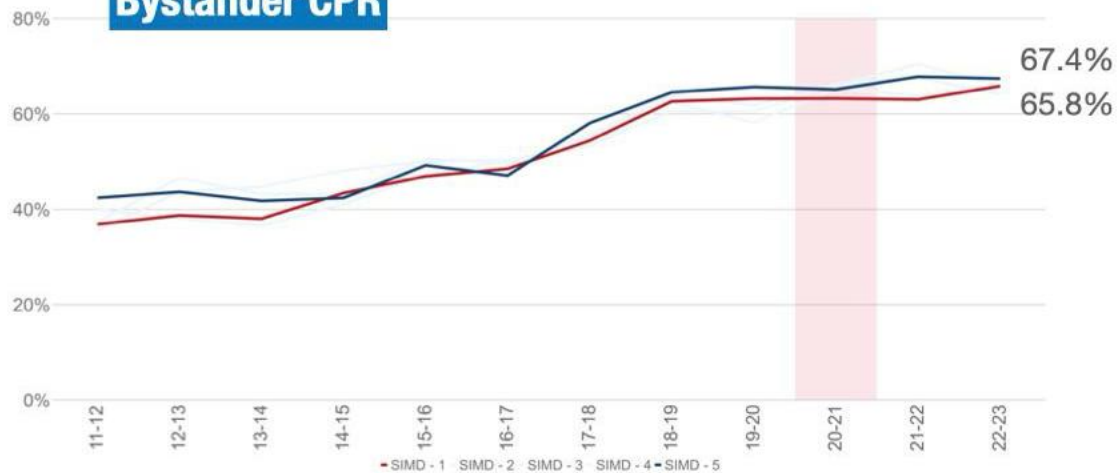
- Gender
- Geography
- Race
- Excluded groups
- Mental Health

The story so far...

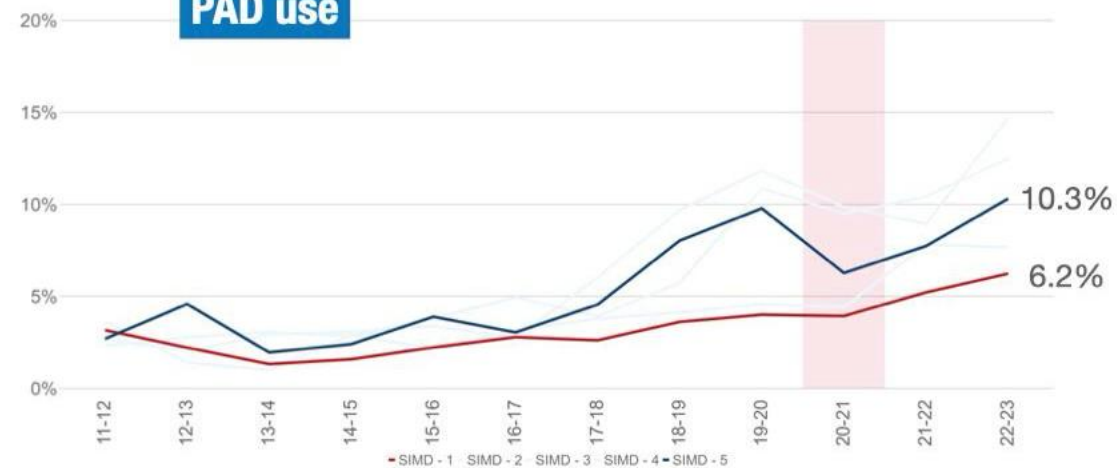
30 Day Survival



Bystander CPR



PAD use



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Mystery rise in fatal cardiac arrests for the most affluent

Mark McLaughlin

Paramedics are investigating a mysterious marked rise in fatal cardiac arrests among affluent Scots since the start of the coronavirus pandemic.

Overall the survival rates among people who had a cardiac arrest outside of hospital improved dramatically in the years before the pandemic. However, the gains were reversed during social distancing and the strain on hospitals resulting from coronavirus.

Figures show only 8 per cent of patients from Scotland's most affluent neighbourhoods survived a cardiac arrest last year compared with 10 per cent from the poorest households.

The Scottish Ambulance Service

prived die in greater numbers than the very rich.

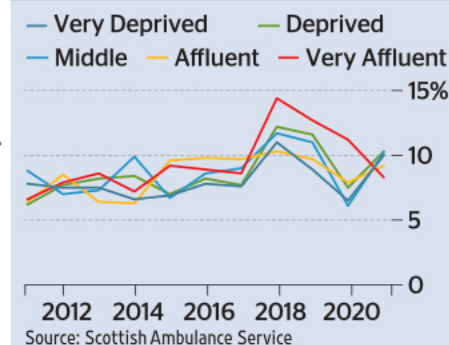
People in deprived areas are twice as likely to suffer a cardiac arrest as the most affluent. The SAS report states: "From 2011-12 to 2020-21, 30-day survival gap [between the very affluent and very deprived] was widening, however, this was not the case in 2021-22 as the gap narrowed. This may potentially indicate that concerted efforts by those involved in improving the system of care after out of hospital cardiac arrests are starting to bear fruit [for more deprived households]."

"However, further analysis is required to understand the long-term significance of this apparent shift."

A cardiac arrest, when the heart

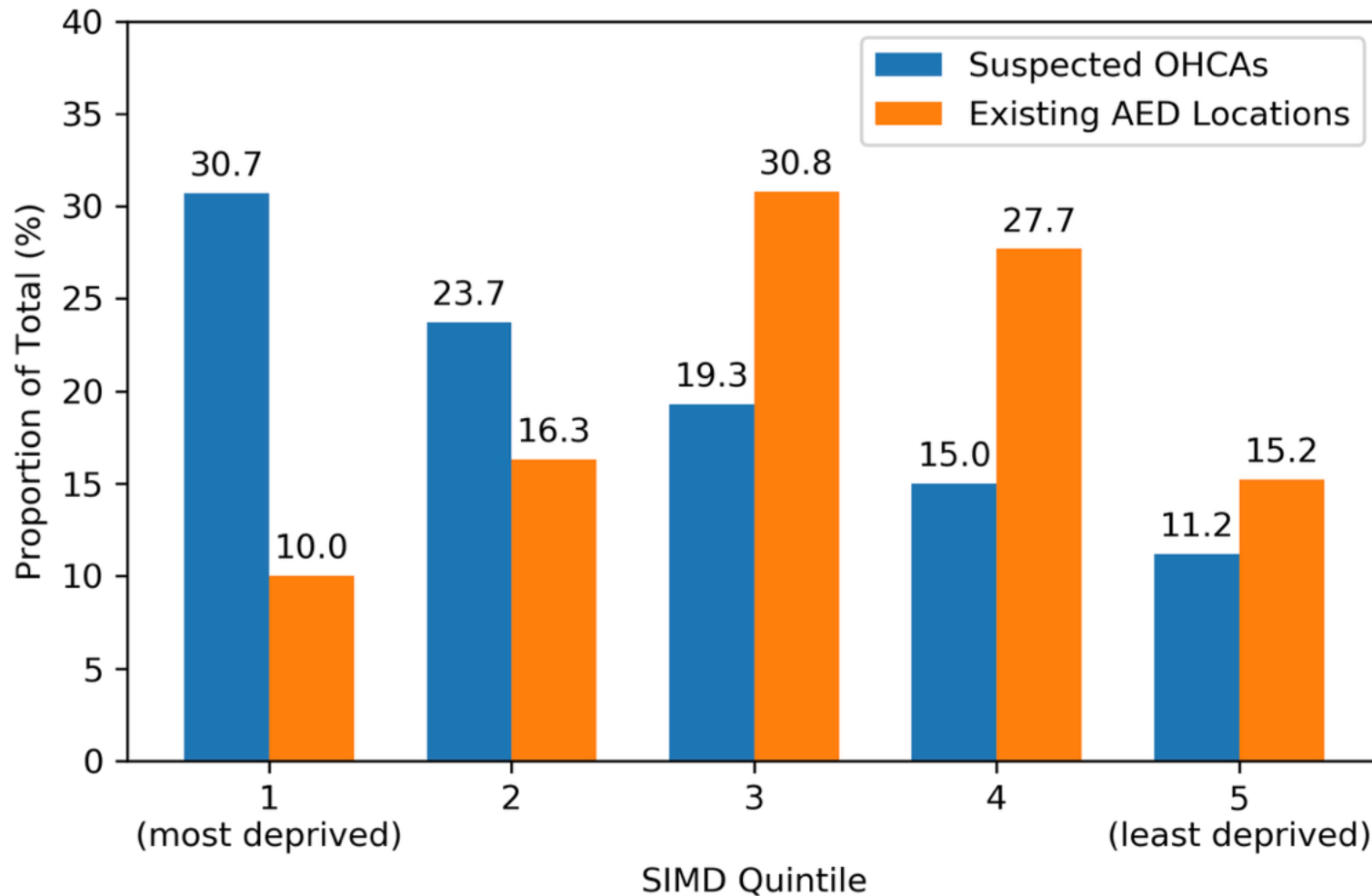
covering. Two thirds of cardiac arrest victims received CPR from a bystander last year, the highest since recording began in 2011-12.

Cardiac arrest survival rate



The PAD problem

The proportion of suspected OHCA incidents and existing AED locations within each SIMD quintile





Recommended PAD location ⓘ

This yellow dot has a 200m diameter.

Aim to place your PAD close to the centre of the yellow dot. If you can't find a suitable location within the dot, place your PAD nearby.

Placing your PAD here will increase the chances of having a PAD nearby for future cardiac arrests.

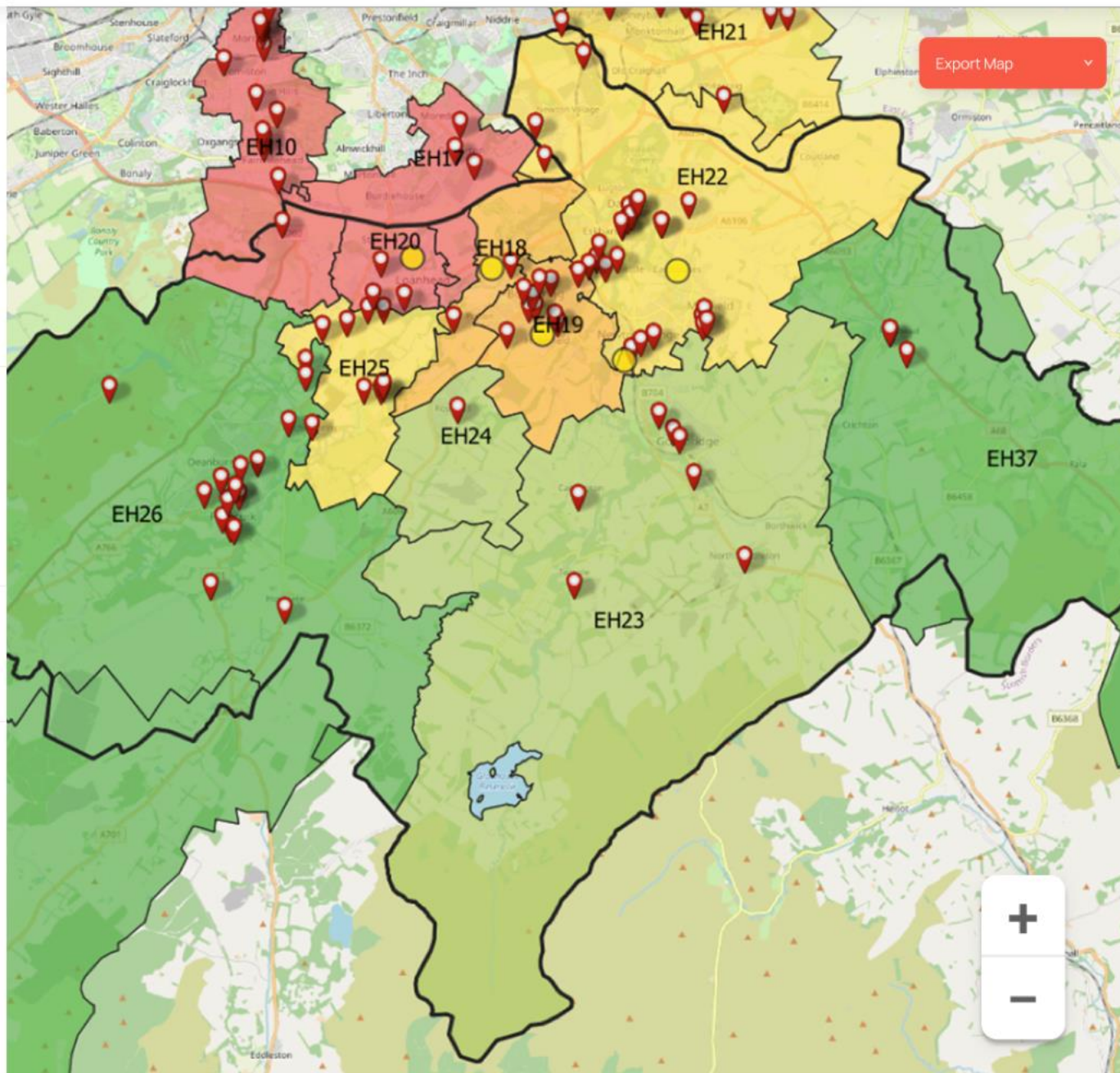
Out-of-hospital cardiac arrest (OHCA) risk level ⓘ



Existing PAD locations registered on The Circuit ⓘ



Number of recommended PAD locations displayed ⓘ





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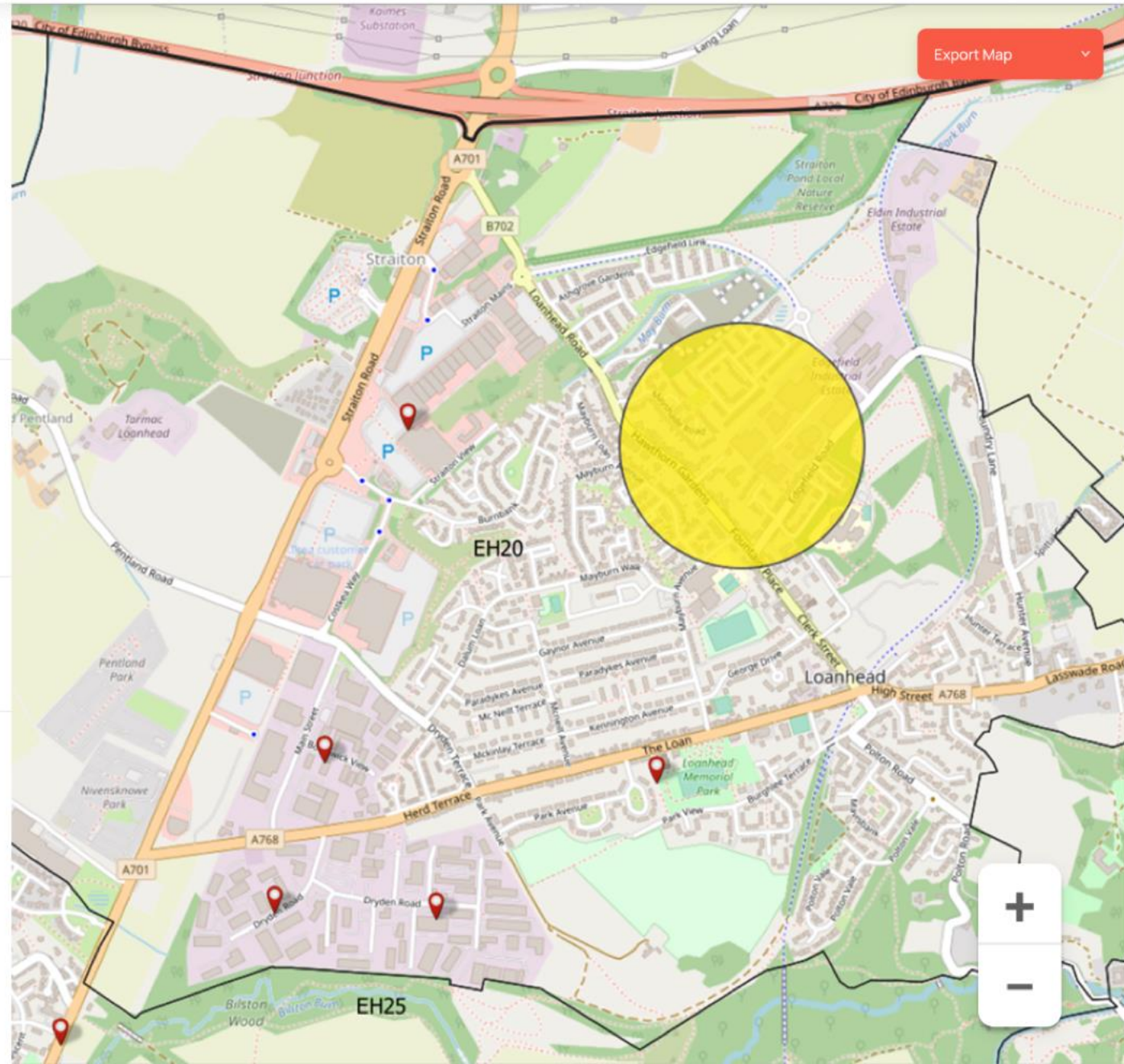
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Existing PAD locations registered on The Circuit ⓘ



Number of recommended PAD locations displayed ⓘ


[Export Map](#)


Summary

- Data is essential
- Devise strategies to reduce inequality of provision and outcome
- Deliver and measure
- Reflect - change and improve
- Questions/Feedback