



“The Wessex SDE has transformed our ability to link data across government and the NHS, supporting research to advocate for patients through data.

This simply wouldn't be possible without the SDE.”

Dr Phil Hyde, PRANA Chief Investigator
University Hospital Southampton

Challenge

Clinicians and regulators lack access to linked, real-world patient data needed to reduce this and monitor the long-term safety and effectiveness of treatments.

Of the **8m ambulance call outs** per year, around 2-3% are for road traffic collisions (RTCs). These cause around **30,000 deaths and serious injuries** at a cost of around **£54 billion** annually.

Summary

For over seven years we have been trying to create a linked dataset for the full patient pathway, from the moment that an incident happens to rehabilitation.

This lack of linked patient data has meant that we are unable to see how the actions ambulance staff take during the ‘golden hour’ impact on patients’ outcomes and long-term prognosis. As such we were are unable to:

- Understand what treatments and interventions have the best, and worst, outcomes for patients
- Create a learning-loop to train paramedics and frontline staff and improve care
- Implement policy that is based on evidence and data to reduce the impact

PRANA has HRA approval and is working to close this gap by creating the first ever full patient registry following patients' pre-hospital to long-term care.

Outcomes

The research team has worked closely with the Wessex SDE team to:

- Establish secure national infrastructure and governance processes, including **HRA approvals** and **cross-government advisory group**
- Collect data across **9m population**, including **>1.4m unique patients** and **>9.2m care episodes**
- Successfully validated and link **9 diverse multi-agency datasets**, spanning DfT, Highways, Ambulance, Hospitals and NHSE
- Provide the foundations for a **world first national trauma registry**, as detailed in the national **Road Safety Strategy**

In the next 6 months, we will:

- Onboard all remaining regional and Wales data
- Optimise linkage performance and validation, including four new research projects
- Promote and engage the public in our work and decision making
- Publish early findings and policy ready insight reports

Partners