**Patient and Public Research Advisory Group (PPRAG)**
**In-Situ Mobile Application for the Triage of Pedestrians (SENTINEL)**

When a vehicle hits a person, it can cause very serious injuries or even death. Getting help quickly from ambulance teams at the scene can make a big difference, helping the person survive and get better. Right now, there aren't good tools to check how badly someone is hurt after being hit by a vehicle, especially if they look okay and are acting normally. But sometimes, even if they seem fine, serious injuries can happen. In about 3.8% of these accidents, the person might die soon after, and in 4.8% of cases, they could have serious brain injuries.

**The SENTINEL project is working on a smart phone app to help ambulance teams decide if the person should go to a "Major Trauma Centre" for serious care or to a "non-emergency hospital" if it's not as bad.**

The SENTINEL app will be made using information from road accidents collected by the Department for Transport. To make sure the app gives the right advice, it needs to be tested using other accident data. This is why the project needs permission to use medical records (with all personal details removed) and pictures of the vehicle involved in the collision from people treated at the University Hospital of Coventry and Warwickshire (UHCW).

This research is sponsored by the **Road Safety Trust** charity, who has for mission to "*have zero road deaths and serious injuries on UK roads*".

**Impact from the project**

- Primarily, it will help save lives, help people get better faster, reduce long waiting times in A&E (Accident & Emergency), make it easier for ambulance teams and big hospitals to share information, and save money by using resources more wisely.

- Secondary, it will help in other ways:

    - It will create a new database about injuries when people are hit by vehicles. This will help scientists learn more in the future.

    - It will help scientists understand more about how brain injuries happen.

    - It will also help improve how computers can think and solve problems using artificial intelligence.

The SENTINEL project includes adults aged 16 and older, both men and women. Children are not included right now because the project is complicated, but they might be included in future studies.

A project on Vulnerable Road Users (VRU) protection, led by **Coventry University (CU)**, started in 2017 with help from **West Midlands Police (WMP)**, the **Road Safety Trust** charity, the **Parliamentary Advisory Council for Transport Safety (PACTS)**, and the **University Hospital of Coventry and Warwickshire (UHCW)**. They all wanted to make roads safer for pedestrians. **West Midlands Ambulance Services (WMAS) and The Air Ambulance Services (TAAS) teams also shared ideas to help improve the project and have joined forces with UHCW and CU to create SENTINEL.**

The results of the SENTINEL project will be shared through three big events with doctors, car makers, policy maker, government bodies, scientists, participants, and charities. Some STEM and conference presentations will be given, as well as scientific publications, podcasts and TV interviews. There is also a website with more information and updates (www.sentinel-rtc.coventry.ac.uk).