



United Kingdom - A life and death situation – How Human Factors can help to improve Pre-Hospital Stroke Care

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In April 2014, my partner and mother of my child collapsed at work. London Ambulance Service (LAS) Paramedics swiftly arrived on the scene. My partner could not speak. She could barely move her right arm or her right leg. However, the Paramedics claimed she was just having an “anxiety attack”.

After being on the scene for over an hour, they feared that her condition could be more serious. They performed the Face, Arms, Speech, Time (FAST) test three times. They said it was “inconclusive” because she was “unable to speak (so her speech could not be assessed)”.

Once they eventually took her to a Hyper-Acute Stroke Unit (HASU), the HASU confirmed she had suffered a stroke. She needed to have one third of her skull removed to stop her from dying.

The LAS said, “we do not have any concerns about the clinical care provided.”

I would later find out that my partner’s experience was not an isolated one, as the LAS’ Clinical Update (issued a month before my partner’s stroke) confirmed that a number of Paramedics were missing signs of stroke because they were interpreting the speech element of the FAST test incorrectly. As a Human Factors expert, I felt compelled to look into why this was happening.

I carried out extensive research on stroke and FAST, and sent emails to the world’s leading stroke authorities. They confirmed that being unable to speak is a definitive FAST positive symptom and a major warning sign of a stroke.

I put together a document illustrating how to improve the speech element of the FAST test on the Patient Report Form (PRF) from a Human Factors perspective. I also applied to the Parliamentary Health Service Ombudsman, who upheld my case.

I wrote to Boris Johnson (Mayor of London at the time) about these problems with the speech element of the FAST test. The Deputy Mayor wrote to the Chief Executive of the LAS, who provided a substantive response to the Mayor of London’s Office confirming that they would make substantial improvements to their pre-Hospital stroke care.

I then worked with the LAS to develop a stroke training video, which has been well received by Paramedics.

The LAS Independent Patients' Forum 2020 Annual Report states "data on LAS performance on stroke care has improved enormously."