



Smart Ambulance 5G trials aim to transform NHS patient care

Telehealth trials using 5G allow consultants to video link with paramedics for fast, accurate assessment and treatment in ambulances, saving time and lives, while maximising NHS resources.

Smart Ambulance Trial



O₂
business



Telemedicine technology using 5G to revolutionise patient care

Smart Ambulance trials used O₂'s 5G network to video link paramedics with consultants for on-the-spot evaluation and treatment.



Challenges

- Increasing pressure on the NHS and hospital resources
- Shortage of beds on wards
- Delays in treatment can be fatal – for example stroke patients treated in the first hour have a higher survival rate
- More patients are admitted to hospital than necessary because they can't be treated sooner



Products

- O₂ network with 5G connectivity
- Samsung devices for 5G capability and easy-to-use functionality
- Visionable video collaboration platform for pixel-by-pixel picture quality and unlimited data feeds
- Array data collection app to help digitise previously paper-based processes



Results

- Patients assessed by consultants to receive timely treatment in the ambulance
- Paramedics undertake treatment under direction of experienced consultants
- Timely intervention leads to better patient care and saves lives
- NHS bed and hospital resources freed up, since some patients may not require hospital admission
- More efficient use of resources and potentially more patients treated



For the trial, the ambulance became the consulting room. Paramedics were able to share details of the situation via HD, latency-free video link using O₂'s fast and reliable 5G network. While this is extremely useful for many types of health emergency, it's particularly essential with stroke patients (the focus of the trial), who require accurate diagnosis as quickly as possible, preferably within the 'golden hour' when they're first encountered by paramedics. With different types of strokes requiring different treatment, patients would typically be assessed in the ambulance, but would need to wait until they got to hospital before a consultant could administer life-saving drugs.

The 5G technology in the Smart Ambulance allows a consultant to see and interact with the patient and paramedic crew – in real time, and in high definition. Treatment can therefore be given before they arrive at hospital, where time is saved at admission, as they've already been assessed, or they may be treated in the ambulance and sent home, without the need for a hospital visit or a bed.

Each time the technology is used, data is also collected which can be invaluable for treating future patients and for allocation of resources.

“ The traditional medical model says that we go to the doctor when we're ill. But Smart Ambulance brings the doctor to the patient. Working with O₂ and Visionable is really helping us to move healthcare forward. ”

**Lynda Sibson, Stroke Telemedicine Manager East of England
Stroke Telemedicine Stakeholder Partnership**

1.1m hours

Estimated time NHS could save by 5G video conferencing per year.*

* O₂ research



Better use of NHS resources

Savings made by more efficient use of beds and staff can be prioritised elsewhere.

Less patients requiring hospital treatment

Patients can be assessed in the ambulance and may not require treatment at hospital, saving time and money.

Fast, efficient patient care

Consultants can see more patients via video link than in person, so they can maximise their time.

Partners



“ Healthcare is one of the areas set to benefit most from 5G technology, with faster, more effective treatment and significant efficiency savings. These Smart Ambulance trials are really just the start. ”

Derek McManus, COO, O₂

Read more customer stories at:
www.o2.co.uk/enterprise/insights

Published in February 2020.
All information is correct at time of going to print.
Telefónica UK Limited Registered in England no. 1743099.
Registered Office: 260 Bath Road, Slough, SL1 4DX
o2_business_0220/046