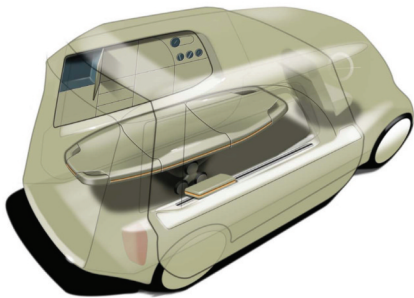


# NEW DESIGNS FOR 21ST CENTURY HEALTHCARE

**IMPACT!**

Engineering and Physical Sciences Research Council | Case study 09



➔ **50%**

Potential cut in A&E admissions as a result of 999 calls using 'Smart Pods' concept.

## **Innovative equipment and vehicle design, supported by EPSRC, could help healthcare professionals treat more 999 patients on the spot.**

The 'Smart Pods' concept could help save lives and relieve pressure on hospital accident and emergency departments.

### **IMPACT ON HEALTHCARE**

- ➔ 'Smart Pods' could allow more people to be treated at home by providing emergency care practitioners (ECPs) with greater equipment options and flexible treatment spaces.
- ➔ Research shows 50 per cent of patients taken to hospital following a 999 call could be treated at home if the correct technology was available – so the 'Smart Pods' concept could drastically reduce pressure on accident and emergency departments.

### **Designs for life**

Healthcare professionals, called emergency care practitioners (ECPs), receive special training to assess and treat patients on the spot. However, research into the technologies needed to support this new role has lagged behind – until now.

Teams from the Royal College of Art, Loughborough University and the Universities of the West of England, Bath and Plymouth have created the 'Smart Pods' concept.

'Smart Pods' incorporate innovative vehicle and equipment design that will allow ECPs to assess and treat more patients on the spot, instead of taking them to hospital by ambulance.

Increased on the spot care will mean quicker treatment for patients and will help relieve pressure on NHS staff in A&E departments and hospital resources in general.

The concept focuses on providing a range of innovative design features that will transcend the limitations of current ambulances and equipment.

'Smart Pods' include a suite of proposals for the delivery of mobile healthcare, including 360° access to the patient, more modularised and portable equipment and treatment packages, plus greater flexibility of the treatment space itself.

Professor Dale Harrow, head of the department of vehicle design at the Royal College of Art and 'Smart Pods' project leader said: "Our research shows that delivering urgent healthcare more efficiently and effectively poses a range of challenges. But it also presents many opportunities, especially in terms of improving the patient experience, safety of patients and staff, fewer journeys and a reduced carbon footprint."

**For more information about EPSRC and the impact it is making visit [www.impactworld.org.uk](http://www.impactworld.org.uk)**

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**'SMART PODS'  
COULD CUT  
A&E ADMISSIONS**

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