

MOBILE PHONES TO MONITOR HEALTH ON THE MOVE

IMPACT!

Engineering and Physical Sciences Research Council | IMPACT! Case study 02



Downloadable software for your mobile phone could help doctors monitor asthma, diabetes, and other chronic conditions remotely. The system was developed by Oxford University engineers and clinicians and healthcare company t+ Medical. The technology is based on EPSRC-supported research.

Professor Lionel Tarassenko led the team developing the t+ Medical system. Patients can easily send data, including blood pressure readings, blood sugar levels and notes about side effects, to the health service computer system, which will give them instant feedback on the state of their health.

The t+ Medical system could enable these patients to manage their own health much more effectively as well as reduce the pressure on overstretched National Health Service resources.

↗ **17 million**

Number of people in the UK with chronic conditions such as asthma, diabetes, and high blood pressure.

Self-monitoring

The new system allows patients to monitor their own condition and send blood pressure readings via their mobile phone to a healthcare server. The server would then provide instant medical feedback alerting them to any problems, advising on whether they need to increase or decrease medication or see their GP.

“Our system offers one way of delivering both self-monitoring and support from health professionals,” explains Tarassenko.

One version of the system is already available to help patients monitor the side effects of cancer chemotherapy as well as systems for diabetes, asthma and COPD.

“By keeping patients out of hospital, telehealth systems like t+ Medical’s can improve patients’ quality of life and save the NHS millions,” Tarassenko adds.

IMPACT ON HEALTHCARE AND TREATMENT

- Patients with chronic conditions could avoid many hospital visits thanks to t+ Medical telehealth system.
- Pressure on overstretched NHS resources will be reduced with associated benefits and lower healthcare bills.
- Millions of people across the UK could benefit from telehealth that helps them handle their symptoms.

MEDICAL MOBILE

Chronic health

Professor Lionel Tarassenko’s team and t+ Medical have developed a telehealth system that could help 17 million people across the UK who suffer chronic medical conditions. The technology is based on research supported by EPSRC.

Medical conditions such as diabetes, high blood pressure, asthma, and chronic obstructive pulmonary disease (COPD) affect a fifth of the UK population. Currently, around 80 per cent of GP consultations relate to chronic conditions and patients with such conditions use more than 60 per cent of hospital days.

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17m

**PEOPLE IN THE UK
COULD BENEFIT
FROM TELEHEALTH**

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