New research to revolutionize healthcare through remote monitoring of patients

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Researchers from the University of Surrey have today launched a new programme of research called eSMART (Electronic Symptom Management using ASyMS Remote Technology), that uses mobile phone technology to remotely monitor patients who are undergoing chemotherapy to treat breast, bowel and blood cancers.

The Advanced Symptom Management System (ASyMS) allows patients to report the side effects from their chemotherapy via a mobile phone. This information is immediately sent securely to a computer, which assesses their symptoms and triggers alerts to doctors or nurses within minutes if they require specialist intervention.

The system also provides patients with real-time information and advice on how to manage their symptoms at home, without the need to travel to hospital.

Researchers believe that using ASyMS will reduce the side effects of chemotherapy, and help to identify and treat those which are life-threatening much quicker than current care systems. In addition, it is anticipated that the use of ASyMS will significantly reduce healthcare costs.

A €6 million grant from the European Union will fund a large 1,000 patient trial in England, Austria, Greece, Holland, Ireland and Norway, with the hope that the new system will be integrated into routine cancer care in the future. The research team is also developing and testing the system for use by people with other types of cancer and long-term conditions such as heart failure.

"Over 3 million people are diagnosed with cancer each year in Europe and it is likely that this number will increase by at least 65% over the next 20 years," said Nora Kearney, Professor of Cancer Care at the University of Surrey and Principal Investigator.

"Given this predicted increase, the need for personalised cancer care is becoming even more crucial. Our system will give patients continual support both during and after chemotherapy, while allowing them to remain in the comfort of their own homes. It will revolutionise the way our healthcare system supports people with cancer."

Kathi Apostolidis, Vice President of The European Cancer Patient Coalition (ECPC) one of the partners on the eSMART project, said: "In many European countries, patients undergoing chemotherapy, experience great difficulties in coping with the adverse events and the anxiety during their therapy and between treatments.

"Usually, patients with cancer are given instructions on how to cope with side effects, at the beginning of their treatment. However, in many European countries, it is not possible, or very difficult for patients to consult their oncologist or oncology nurse to discuss problems or concerns arising from their chemotherapy, outside pre-arranged medical appointments. ECPC believes that eSMART will be an urgently needed solution to get a quick response to the problems and anxiety that cancer patients face during chemotherapy."

Provided by University of Surrey