Lay summary for **Evaluation of the medium-term consequences of implementing commercial computerized physician order entry and clinical decision support prescribing systems in two 'early adopter' hospitals.**

Electronic prescribing (ePrescribing) systems may help to improve the quality and cost of healthcare. Many studies have investigated the short term outcomes of setting up ePrescribing systems in hospitals but there is a lack of research looking into the longer term effects of ePrescribing systems.

This paper looks at differences and similarities between two English hospitals where ePrescribing systems have been used for at least two years. The two hospitals are using different systems. One set up an ePrescribing system to help with ordering patients' medications, called a Computerised Physician Order Entry (CPOE) system. The other set up an ePrescribing system which also includes Clinical Decision Support (CDS). This second system is more integrated with that hospital's other computer systems and it provides more advice for health professionals while they are prescribing. We used a combination of interviews, observations and analysis of ePrescribing system documents to carry out our study.

We found there were not many differences between the two different types of ePrescribing systems we looked at. We found that both of the hospitals reported benefits as well as negative effects from setting up an ePrescribing system. The reported benefits mostly came from using the data collected from the systems in order to improve quality of care. Staff members in both hospitals were frustrated that not enough computers were available for accessing the ePrescribing systems. In both hospitals, staff members were also frustrated by the amount of time it took to log in whenever they wanted to look at a patient's medications or to write a prescription.

We conclude that these two different types of systems are similar in the sorts of challenges and benefits they had produced in a two year period after being set up. We believe that two years is too short a time fully to understand all the benefits that an ePrescribing system could bring, and that the information held in these systems is not yet being used as much or as well as it could be to benefit the hospitals. We recommend that hospital staff and policymakers have more realistic expectations about the costs, benefits and timelines for benefits from ePrescribing systems. We also recommend that future research tracks the benefits from ePrescribing systems after a longer period of the systems being in place.  It is important that future research into the longer-term effects of having ePrescribing systems should study a wider range of hospitals than we looked at in this study.