Lay summary for **The impact of electronic prescribing systems on pharmacists' time and workflow: protocol for a time-and-motion study in English NHS hospitals.**

Behnaz Schofield, Kathrin Cresswell, Johanna Westbrook, Ann Slee, Alan Girling, Sonal Shah, Jamie Coleman, Aziz Sheikh. The impact of electronic prescribing systems on pharmacists' time and workflow: protocol for a time-and-motion study in English NHS hospitals. *BMJ Open* 2015, Vol 5.

NHS hospitals in England are putting electronic prescribing (ePrescribing) systems into place. ePrescribing systems have been successfully used in primary care settings. Introducing such systems in hospitals can be problematic because they force pharmacists to change the way they work. We do not know yet if such changes make hospital pharmacists work more or less efficiently or more or less safely. In order to understand such changes and the effects they bring, we need to develop a protocol to measure and analyse the impact of ePrescribing in hospitals. It is very important to identify and assess the impact if we wish to design HIT systems that aid (rather than hinder) the work of pharmacists.

We conducted a time-and-motion study in six wards at one NHS Trust in England, with two periods of observations (one before and one after introducing the ePrescribing system). Researchers followed the hospital pharmacists and recorded and time-stamped the details of all the work tasks they carried out. They made a record of all the tasks that the pharmacists completed, how often they completed each task, and the time they took for each task. Then the researchers analysed changes in these measures before and after getting an ePrescribing system.

We also interviewed pharmacists to ask their opinions of the impact of ePrescribing on their work. Pharmacists' expectations of the likely impact of ePrescribing were also explored.

This study has limitations. The results of the study relate to two English NHS hospitals. The pharmacists who took part may have altered their behaviour during the study, perhaps due to fears of being seen as ineffective. However, this is the first and only time-and motion-study of hospital pharmacists before and after using an ePrescribing system and as such it provides a useful baseline and guide for future studies.