

## Lay summary for **Protocol for a workshop to elicit and quantify expert opinion for the effectiveness of ePrescribing systems and prototype for other health service interventions**

Medication errors are mistakes made during the process of prescribing a medicine for a patient, or during the process of giving patients their prescribed medicines. There are many small steps in each of these processes, with different people involved, and mistakes can happen. For example, if the handwriting of a doctor is difficult to read, a nurse or pharmacist could misread the doctor's instructions. Mistakes can sometimes lead to harm for the patient. When a medication error leads to harm, it is called an adverse drug event.

Using electronic prescribing systems (ePrescribing systems) may reduce medication errors and adverse drug events in hospitals. Before a hospital introduces an ePrescribing system, it is helpful to estimate how much the new system might reduce the chance of such errors as compared to the chance of errors happening when using a paper-based prescribing system. It is also helpful to estimate how much money an ePrescribing system might save a hospital by reducing errors.

One way to make these estimations is to bring together a group of experts who have worked with the process of prescribing medicines and with ePrescribing systems. This paper describes the step-by-step process that experts can go through to make accurate estimations.

In brief, experts are given a list of possible medication errors. For each error on the list, experts use their clinical knowledge to estimate the chance of that error happening. After each expert writes down their estimate, there is discussion between experts. This allows experts to understand the clinical experiences of other experts, which will give each individual more insight into his or her estimation. Experts are allowed to change their responses after the discussion. Then all responses are combined, ending up with the average chance that an error will happen.

This step-by-step process is important because it makes sure that no one expert is estimating the chance of medication errors happening. If only one expert did this, that expert's personal opinion might influence the estimation too much. With a bigger group of experts, the estimated chance of an error happening is combined from many different people. This helps to make the final estimation more accurate.