New hi-tech survey accelerates collection of vaccination data

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New technology now makes it possible to collect 'near real-time' data about whether people are having any side effects from vaccination. By studying people who received the 2009-10 swine flu vaccination in Scotland, researchers showed that this rapid reporting can add another layer of safety to future vaccination campaigns. In addition, the data collected revealed no significant safety issues in patients exposed to the vaccine. The project's report has just been published in the *British Journal of Clinical Pharmacology*.

In 2009, the UK Government recommended that some groups of people should be vaccinated against swine flu because the disease was spreading quickly around the world. To meet the timescales, vaccines were moved more rapidly than usual through the test and production phases, and some people were anxious that this could lead to them triggering unwanted reactions.

While there are long-standing mechanisms for collecting data about side-effects once a vaccination or medicine starts to be used, the processes are often slow, and it can take months or years before the data is analysed and the results made known.

A team of researchers in Scotland used new technologies to speed up the collection of data. Led by Dr. Isla Mackenzie from the Medicines Monitoring Unit at the University of Dundee and Dr. Deborah Layton from the Drug Safety Research Unit in Southampton, the team collected data from 3754 people at the time they were vaccinated, and a further

312 people who were offered vaccination, but declined. They used internet-based systems to encourage these people to provide follow-up reports on their health once a month for up to 6 months. "We asked people to let us know whether they had any serious health problems following being offered swine flu vaccination. We also followed up a group of pregnant women who were offered swine flu vaccination to check whether there were any problems with their pregnancies or their babies," explains Dr. Mackenzie.

Overall, they found no safety problems with swine flu vaccination, which fits well with findings from the Medicines and Healthcare products Regulatory Agency's safety monitoring.

"Our study adds to the pool of data which indicates that vaccination is generally safe and in the interests of public health," says Dundee researcher Professor Tom MacDonald, who took part in the study.

The study has a wider implication than just reporting on the safety of this particular vaccination campaign. "The use of web-based technology in the study was successful in reducing costs and allowing the collection of high quality data directly from patients. This method for near 'real-time' monitoring, with minimal additional workload for healthcare staff, should be considered as an additional tool for other safety studies," says Dr. Mackenzie.

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