THE ROYAL SOCIETY

The Academy of Medical Sciences

Summary of oral evidence: Sir Liam Donaldson and Dr David Harper

26 July 2006

Sir Liam Donaldson is Chief Medical Officer for England and the Government's principal medical adviser and the professional head of all medical staff in England.

Dr David Harper is Chief Scientist and Director General, Health Protection, International Health and Scientific Development in the Department of Health. Dr Harper chairs the Department of Health's Pandemic Influenza Scientific Advisory Group.

Members of the working group present were: Sir John Skehel, Dr John McCauley, Professor Karl Nicholson, Dr Geoffrey Schild, Richard Stubbins and Professor Robin Weiss.

Key points

Science into policymaking

Sir Liam explained that there are a number of processes in place for incorporating scientific information into policy making including a number of committees which meet on a regular basis, including the high level cross-Government Pandemic Influenza cabinet committee. Sir Liam and Sir David King (Chief Scientific Advisor) attend on this committee, which is responsible for evaluating the scientific basis for decisions. Sir David plays a challenge role within Government and its committees. Dr Harper chairs the Department of Health's (DH) pandemic influenza Scientific Advisory Group (SAG).

Sir Liam was asked for specific examples of where advice has been used to identify and fill gaps in knowledge. Sir Liam noted that there can be a problem for people who give advice to Government in knowing how their advice has been used unless they sit on one of the Government committees. Pieces of information are synthesised with others and may not be in the public domain until decisions have been signed off. Dr Harper described as an example how advice from the scientific community concerning the field of near patient testing has been taken forward in the development of specific and sensitive diagnostic tests.

Gaps in research

Scientists working on both the animal and human sides of influenza research have been bought together recently with the WHO to identify gaps in research but a broad range of uncertainties still remain. Dr Harper and Professor Sally Davies (Director of R&D, DH) are to jointly chair a funder's coordination group which aims to get the best from UK research in this area.

Sir Liam explained that he would find it helpful if the scientific community were proactive in identifying gaps in the evidence that is available to inform policy development around issues such as pandemic influenza at an early stage.

Vaccine research and development

Dr Harper explained that the Department of Health is in close contact with the vaccines industry which undertakes most vaccine research. Some companies have already published data on their vaccine trials and the use of adjuvants for antigen sparing. Further work is ongoing in the areas of cross-protection and nucleic acid and cell based vaccines.

Pandemic influenza vaccines
Sir Liam and Dr Harper were asked about the decision, and the scientific data behind it, to purchase H5N1 vaccines from Novartis and Baxter. Dr Harper said that limited data were available and both vaccines are currently unlicensed. The policy decision for procurement of two different vaccines was taken to spread the risk: the Novartis vaccine is egg-based vaccine and uses MF59 as the adjuvant, whereas the Baxter vaccine is cell-based and uses alum as the adjuvant. DH had spoken with international colleagues including the Austrian Government about their reasons for purchasing vaccine from Baxter. DH has offered the vaccine to the MRC for research. It is important to keep the scientific discussions with the industry separate from the procurement policy decisions.

Antivirals
Dr Harper explained that the strategy around stockpiling and use of antivirals in a pandemic was constantly under review. The review process includes consideration of alternative options to oseltamivir (Tamiflu) such as zanamivir (Relenza), containment strategies including school closures, the lead-in times to supply and replenishing stockpiles with limited shelf lives. To date the UK Government stockpile of antivirals is solely made up of Tamiflu. Any risk management strategy involving the use of antivirals has a price tag associated with stockpiling the relevant drugs which also has to be weighed up against a number of other factors competing for the same limited resources. The Department is keen to improve the evidence base around the effectiveness of antivirals and combination therapies such as the use of remantadine with oseltamivir.

International
Sir Liam outlined the international links the United Kingdom has in the areas of human and animal health. The rate at which information and material come out of a country was described as a limiting factor as well as the lack of communication in some countries between those responsible for human and avian health. Sir Liam commented positively on the speed at which information about the recent avian influenza cases in humans in Turkey had been made available. It was also noted that WHO has substantially improved its pandemic preparedness planning leading to improved information sharing and communication when outbreaks of avian influenza in humans arise.

Social science and behavioural modelling
Sir Liam explained that Department of Health has worked extensively on the communication of risk in a number of areas over a number of years. This experience is being used to develop the Department's communication plan in the event of an influenza pandemic which is publicly available on the Departments website. Sir Liam explained that there is a well established body of literature in this area which indicated that policies should be based around openness and informing individuals of the risks. The Department are also looking at the ethics of research in a pandemic and who might get supplies of treatments in a pandemic if they were limited.

The Department has not so far commissioned or been involved in work examining specifically the behaviour of the workforce in a pandemic. Dr Harper said that the Civil Contingencies Committee was looking at the issues across the board and was feeding relevant information into discussions.