



NCRI INFORMATICS INITIATIVE

Paper 1 The Royal Society seeks your views

The Royal Society is launching its project on the developments in information and communication technology relating to health and healthcare in the next ten to fifteen years, and would appreciate your views and comments by 9 September 2005. Please feel free to forward this message to any individual or organisation you think might be interested in responding.

The Society has established a working group to investigate the developments in information and communication technology (ICT) relating to health and healthcare in the next ten to fifteen years. The membership of the working group is given below. The potential impacts and implications of these technological developments will be assessed. The study will involve the groups who are likely to use these new technologies, the developers of future technologies, and health policy makers.

To obtain a wide range of information for this study the Society is issuing an open call for evidence. The working group would welcome responses from individuals and organisations with expertise or interest in this topic such as academics (including scientists, social scientists and economists), bodies responsible for setting standards, civil society groups, Government policy makers, healthcare providers (both professionals and informal carers), healthcare provider organisations, industry (such as ICT, medical devices and pharmaceutical), the media, patient groups, the public, and any other interested parties.

Background to study

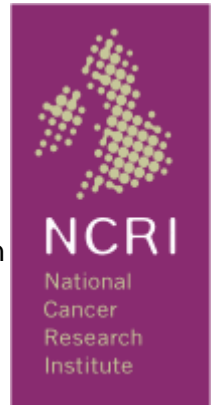
The Society's study will identify the relevant future technology trends that are likely to impact on health and healthcare in the next ten to fifteen years. In addition, it will assess the potential positive and negative impacts of these future technological developments and evaluate their wider implications.

The field of ICT is developing rapidly, leading to a shrinking in both the cost and size of sensors, monitors and other equipment. This shrinkage allows the creation of both novel uses for existing technologies and applications of completely new technologies. Some relevant trends in ICT include pervasive sensing networks, increasing processing power and the ability to transfer more information faster through both wired and wireless systems.

Such technologies might have health and healthcare benefits, but also raise issues about how any information generated is used, how it is analysed, who owns it and who should have access to the data. These technological developments also have potential wider social implications: will increasing the amount of data make patients feel better, or might it generate more uncertainty or concern? More specifically, the study will investigate concerns associated with the generation, release and subsequent use of personal health data.

These technologies will generate an ever increasing amount of health related data. It is important to ensure that these data are made available to appropriate groups, kept away from inappropriate groups, and processed to yield useful information. This study will investigate how best to establish and secure this communication.

All countries have finite resources that can be allocated to health and healthcare. Future developments in ICT might be one of a number of ways of ensuring that health and healthcare funding is prudently spent. The UK's National Health Service is evolving with programmes such as Connecting for Health in England, the National eHealth / IM&T Strategy in Scotland and Informing Healthcare in Wales. The study will assess the potential impact of the costs of





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future technologies.

The study will not be investigating the handling of health care records with current technologies in detail, but will focus on the impact of future technologies on health information management. The study will not investigate the technological aspects of national identity cards or the current electronic patient record. These issues are currently the subject of studies by other organisations.



Specific questions

The working group would particularly welcome responses to some or all of the questions below.

Identifying relevant future technological developments

1. What relevant technology trends are likely to impact on health and healthcare in the next ten to fifteen years?

Assessing the potential positive and negative impacts of relevant future technological developments

2. What areas in the provision of health and healthcare could be positively or negatively affected by these developments?

3. What actions should be undertaken now to maximise positive impacts, or to prevent or minimise adverse effects?

Evaluating the wider implications of relevant future technological developments

4. Do you have any concerns associated with the generation, release and subsequent use of personal data?

5. What medico-legal and ethical issues merit consideration when introducing new technologies, such as the responsibilities, processes and liabilities for decision making?

6. What regulations or other mechanisms (including standards) would facilitate the responsible development of relevant technologies?

7. What infrastructure would be required to allow any new technologies to be used effectively?

8. What are the most likely promoters and barriers to the take up of new ICT devices and systems?

9. What education and training would need to accompany the introduction of any technologies, and who would need to be involved?

10. How are professional roles and responsibilities likely to be affected by the increasing use of ICT?

11. How can the development of technologies that meet patients' and informal carers' needs and are practically useable be best facilitated?

12. What are the potential impacts of the costs of any of these new technologies?



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13 What are the implications of the international use of future technological developments, such as global use of health data, variability of ICT-enabled support, and interoperability?

Are there any other important issues that have not been addressed by the questions above and that you think the working group should address?

Responses

The deadline for submissions is **9 September 2005**, the Informatics Coordination Unit will collate the responses from the Task Force and submit on their behalf.

Responses are likely to have the greatest impact if they are restricted to four pages, plus appendices if appropriate. The final report will list the individuals and organisations who submitted evidence. The responses might be published on completion of the project, so please inform the Society if you do not want your submission to be made public. If you would like to submit evidence, but are unable to meet the deadline, please contact Dr Nick Green.

Membership of working group

Professor Peter Wells FRS (chair) - Cardiff University

Sir Mike Brady FRS - University of Oxford

Dame June Clark - University of Wales, Swansea

Professor Brian Collins - Cranfield University.

Dr Paul Garner - BT Exact

Dr Glyn Hayes - UK Council for Health Informatics Professionals

Professor Richard Kitney - Imperial College

Professor Frances Mair - Royal Society of Medicine.

Professor David May - University of Bristol

Professor Mandy Ryan - University of Aberdeen

Professor William Stewart - University of Southampton

Professor Andrew Webster - University of York

Dr Damon Wischik - University College London

