Dr Nick Green
The Royal Society
6-9 Carlton House Terrace
London SW1Y 5AG

9 September 2005

Dear Dr Green,

**The Impact of ICT on health and healthcare**

The Royal Society of Edinburgh (RSE) is pleased to respond to the call for evidence on the impact of ICT on health and healthcare. This response represents the views of the SCOTTIA project at Queen Margaret University College, rather than the RSE as a whole.

The specific questions identified in the call for evidence are addressed below:

**What Relevant Technology trends are likely to impact on Health and Health Care in the next ten to fifteen years?**

ICT technologies relating to the internet and the World Wide Web. These include faster connection speeds, enabling technologies for searching and mounting information on websites and portals.

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

Advances in Information and Communication Technologies (ICT) and the internet to date have led to an increased amount of information, including health related information, on the internet available to both health workers and the public. This information can help both parties keep up to date with developments and make informed decisions regarding health related issues. However, the ease with which information can be mounted on the internet using the enabling technologies available to date (web authoring tools, Blogging, RSS feeds) coupled with the lack of quality controls on the internet has led to a bewildering and often contradictory amount of information.

**What actions should be undertaken now to maximise positive impacts, or to prevent or minimise adverse effects? (Ref Q3)**

In today's world, and the health field in particular, having basic ICT skills and the ability to surf the net are not sufficient for effective practice. The need to identify, search, find, and evaluate the right information at the right time is imperative. This coupled with the drive for evidence-based practice in the health sector highlights the need to train and equip health professionals with information

literacy skills that will support them in making and providing the best clinical decisions and care for the patients.

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

Lack of ICT and information skills acts as a barrier to the take up and effective use of new systems and technologies. Information skills' training is essential to equip health workers and practitioners with the necessary skills to help them be more effective and confident in their "*e-encounters*" in an information society. Information skills training has to be embedded into the curriculum of the various health related courses at universities. Provision should also be made to insure that this type of training is available to existing health practitioners already employed within the health sector. This can be included as part of their continual professional development programmes (CPD) and provided by specialist trainers experienced in the field through workshops and courses.

**How are professional roles and responsibilities likely to be affected by the increasing use of ICT? (Ref Q10)**

Health Librarians and information professionals will have a more active role in disseminating quality health information through specialised web sites and portals that will enable health practitioners and the public access quality and reliable health related information. An example of this is already taking place in the NHS e-library Scotland available on the internet.

"*Information literacy is about people's ability to operate effectively in an information society. This involves critical thinking, an awareness of personal and professional ethics, information evaluation, conceptualising information needs, organising information, interacting with information professionals and making effective use of information in problem-solving, decision-making and research. It is these information based processes which are crucial to the character of learning organisations and which need to be supported by the organisations technology infrastructure*". (The seven faces of information literacy, C.Bruce, 1997)

Please do not hesitate to contact me if you require any further information or clarification of any points in this letter.

Yours sincerely

**Professor Andrew Miller CBE**
General Secretary