

Background note for the Committee of Experts on the impact of information technologies on health care — the patient and internet

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1 Committee's task

The Committee is to prepare guidance to member states on monitoring the impact of access to health information and to health care services on the Internet. This guidance should answer the following key questions:

- What are the advantages and disadvantages of the Internet for patients?
- What measures need to be taken to maximise the benefit patients derive from the Internet?
- What is the impact on health information and health services of electronic means of access, including what is the impact on the organisation of services and the quality of those services, from a patient's perspective?
- Are there any consequences for the training of health professionals?

From these questions, the Committee is required to deliver two specific results:

- A model framework for best practices regarding the offering of health information and medical services on the Internet;
- Recommendations for best Internet users' practice.

2 Background understanding of the issues at hand

The Internet is a new technology offering the public and professionals new ways of interacting with each other. It is also the infrastructure of a new 'nervous system' of our society, our economies and our world. It will change everything. And since it will change everything, what is the appropriate way to address the needs of patients and citizens.

The Internet comes from the relatively unregulated computer industry (both hardware and software). The enabling technology of the Internet is telecommunications, which at least in Europe is traditionally highly regulated and often state controlled or owned. The development of the Internet is largely in private sector hands, and this offers new opportunities to evolve democratic ideals which intersect with the interests of citizens and patients.

Unlike earlier institutions in health, often created by government with private or voluntary sector partners, the digital world is virtually unbounded by physical laws, legal jurisdictions and borders. These have in the past determined the structure of policy within countries. The Internet challenges the basic assumptions that we have made about how we structure social institutions.

The uptake of digital media is faster than any previous technological innovation. However, the pace of technological change and the impact it has on citizens, patients, others, is much faster than the ability of our societies' formal and democratic institutions to deal with it through regulation or policy development. The private sector is leading on the development of the digital world. However, the checks and balances consistent with democratic societies also make for slower policy making and implementation of policy and legal change. Often regulatory or legal intent is framed for one set of circumstances, only to be faced with new challenges.

The economics of the new digital world are not fully determined and it is still experiencing significant financial gyrations and instabilities. Therefore, many assumptions about likely impact on the citizen, patient, or society are not fully understood. In particular, the longer term impact on the environment, culture, quality of life etc., is not known. Importantly, we also do not yet understand how the Internet will alter the balance of power amongst organisations, societies, countries, and civilisations.

Finally, the digital world is characterised by information, and intellectual property a the key formal element of this as it bestows legitimacy and often value to services.

2.1 The *eras* of the internet

Historically, the Committee's activities can be seen as being the contemporary state of the very recent past, comprising the following 'eras':

The 'eras' of the internet		
Era	Features	Focus
1994-1995	Building the global information infrastructure, or network of networks	Technical standards Communications protocols
1996	Creation of the information society paradigm in the EU based on <ul style="list-style-type: none"> • Free movement of information • Linguistic choice • Cultural diversity 	Explanation, understanding
1997-1998	Electronic commerce and creating the sound basis for transactions over the Internet	Implementation and enablement <ul style="list-style-type: none"> • privacy • security • licensure • consumer protection
2000-2003	Disappearance of differences between key economic actors (computers, telecommunications), and within the regulatory spectrum (unregulated and largely private to heavily regulated and largely state-owned)	Structural change Sectoral convergence
2003-2010	Borderless 'cyberworld'	Own laws, norms, rules

2.2 Perspective for the Committee's work

The multiple stakeholders in health all share the flux of the digital world:

- Citizen
- Patient
- Informal carer or loved one
- Formal providers of care (institutional, such as hospital, or professional such as nurse)
- Private commercial sector (including insurance, telecommunications, medical device and other health industries)
- Voluntary non-profit sector
- Government (local, regional, state, federal)
- International treaty organisations and supranational organisations

2.3 The dimensions of policy and the vectors of change

The possible areas for discussion touches upon a number of dimensions, a few are suggested below, in no particular order.

All of these issues need to be addressed from both a national and international perspective, particularly to determine how should differences between health systems (actual practices, differences in reimbursement or funding model, public policy position) be accommodated in globally networked Internet health applications? It may also be that other international bodies need to be incorporated into the discussion to reflect the challenges the Internet itself presents to the ability of existing international bodies to frame their own positions.

These questions are illustrative designed to help scope the potential field of work.

1. Maturity: How do we know when and what particular policies are appropriate in specific jurisdictions or sectors based on their readiness for the Internet challenge?
2. Access: How do we ensure equity of physical access to Internet or new media health? Will market mechanisms achieve this or will governments need to intervene?
3. Reimbursement and insurance: Should Internet health care costs be reimbursed like other health services, including for home use telemetry and location independent care and services?
4. Licensing: How will we recognise qualifications of professionals or institutional provider fitness to provide information or services, when care or information crosses borders? Should there be licensing of health services, or professionals who provide those services, and who (public, professional) should do it?

5. Accreditation: How will patients, citizens, and carers determine the quality of health information from the diversity already available, and likely to become available? Will this be a public or private function?
6. Law: Do we need new laws to cover digital signatures, authentication, electronic records, fraud, and professional misconduct? How should these issues be dealt with in a global environment?
7. Public control and governance: How will we maintain public control of health in those areas where public control is important? And how do we ensure patient or citizen control where it is important? What challenges does this present to existing public standards of control and governance and in particular the boundary between public and private interest?
8. Privacy and security: Do we need different or new standards to protect the security of health information for patients. What privacy protections do patients and health consumers desire?
9. Regulation: Should new media technologies, including software, when used in health, be regulated like other medical device technologies or pharmaceutical products?
10. Objectionable content: Can health information be objectionable; should there be restrictions in dealing with routine, complex or controversial health matters without unduly restricting the patient's access to that information?
11. Intellectual property: How do we protect the value and content of health information owned by others without unduly complicating the patient's access to that information?
12. Measurement: What data or other information is needed in order to assess the impact on health of digital media; what counts as a positive benefit to patients and citizens in health?
13. Enablement: What are the ways that the public and private sectors can enable the development of the Internet to maximise benefits to patients and citizens?
14. International arena: What is the impact on the work of international bodies, or actors working together internationally, to address the Internet in health; are new international bodies, relationships or models needed?

3 Results of the Committee's work

The time over which this Committee will work itself will see significant technological and social change, and therefore, there is a risk of obsolescence even before the work is complete.

It is suggested, therefore, that the Committee adopt an essentially 'technology neutral' stance with respect to the specifics of technology, and indeed, not become too focused on the technological innovations themselves. The pace of innovation is extremely fast which means that new possibilities will emerge, and assumptions about what might be the case can become yesterday's headlines very quickly.