

## EDITORIAL ΑΡΘΡΟ ΣΥΝΤΑΞΗΣ

### eHealth: A challenging issue for users and consumers

The introduction of information and communication technologies (ICT) probably constitutes one of the most radical innovations for health care at the beginning of the 21st century. Use of these technologies (called “eHealth” in a generic way) will modify the health system in depth and change the practice of medicine as we know it (for review, see<sup>1</sup>). This fact is particularly relevant for general practitioners, who are the essential actors in primary care and among the first users of electronic health records and other eHealth services.

Adoption of eHealth will lead to considerable evolution on at least three levels:

- The use of health and medical data: The widespread utilization of electronic health records and the development of biomedical grid technologies will favor closer interaction and data exchange between doctors, but also between various types of health professionals, between doctors and their patients and between doctors and researchers. In general, data processing will be very different from that in current practice, related to the traditional medical record primarily maintained by individual medical practitioners.<sup>2</sup>
- Health care organization and practice: Health care practice has already been changed by the possibility of remote consultations with specialists located even outside regional or national borders, by the use of expert systems for therapeutic and diagnostic support, and by telemedicine which is likely to increase the efficiency of home care.<sup>3</sup>
- The patients: Their empowerment will increase, through becoming active users, intervening in their medical records, accessing medical information through health portals and, finally, interacting with the doctors by modern communication tools (electronic mail, discussion fora, etc.).<sup>4</sup>

Whereas great benefits are expected from these transformations (in particular, reduction of medical errors, economic savings, building of professional networks and better access to information), these techniques encounter reservation, not to mention resistances, from the users including doctors, health professionals, patients and citizens. The latter are worried about the safety and privacy issues of their personal data. Patients may also feel uncomfortable with a less personalized relationship with their doctors. The physicians do not always grasp the immediate benefits of tools which may disorganize their practices and which require special training that is not always a simple procedure. The intrusion of an “ICT culture” (based on data sharing and immediate access to information and knowledge) into the “medical culture”, which until now has been based on doctors’ personal knowledge, their communication with the patients, the reciprocal and interpersonal confidence in the diagnosis reliability and respect of patients’ privacy, may upset the professionals.

Thus, beside the technological problems which remain to be solved, including interoperability, standardization and safety of personal data, many challenges need to be faced concerning the social and organisational aspects of eHealth.

The implementation of eHealth is a highly political issue. It is supported by the European Community, which is very determined to promote eHealth (see the 2004 communication<sup>5</sup>). Many European countries, including Greece, are included in this objective. Since the early 1990’s, the European Community has funded many research programmes that support eHealth development and is also very concerned to understand the socio-cultural resistance and to play a role in either erasing or solving it. The *European eHealth Consumer Trends Survey* project is in line with these considerations and aims at carrying out a broad survey in several European countries with respect to the consumers. The main objectives of this project are to monitor European health consumers’ uses of, their attitudes towards, and their needs for information and communication technologies for health

purposes. In this project, health consumers refer to patients and citizens in general. The survey sample includes ages 15 to 80 years and is being conducted in seven European countries including Greece.

Greece constitutes a remarkable and particularly interesting case. On the one hand, there is still a digital divide in Greece, in comparison to the other European countries.<sup>6</sup> It is at the bottom of the ranking with regards to Internet access and there is quite a notable contrast when comparing the urban to the rural areas. On the other hand, Greece is particularly well positioned in regards to R&D in eHealth.<sup>7</sup> As an example, HYGEIAnet,<sup>8</sup> the regional health information network of Crete, received an eEurope award in eHealth in 2003. With a less developed infrastructure (Internet network and access to data processing) and high R&D, the Greek data from the *European eHealth Consumer Trends Survey* provides interesting indications about the attitudes of consumers in 2005. The results presented in the paper by Chronaki et al, published in this issue, are particularly interesting, indicating that nearly four in ten persons view the Internet as a significant source of information about health and illness, while half of the Internet users consider that information on the Internet helps them decide whether it is necessary to consult a health professional. Differences are observed according to age, gender, level of education, and employment status, but also according to the place of residence. Despite growing awareness, strong resistance still remains for certain uses of ICT such as telemedicine. Survey results provide important lessons to be taken into account when addressing various concerns of the public.

As can be imagined, the results of such a survey can provide invaluable insight. The policy makers can use them as a guide when identifying the main priorities for eHealth investments in Greece. Accordingly, necessary measures can be adopted for overcoming citizens' concerns. Useful tools for policy development and implementation could include information and awareness-raising, as well as participation of consumers at the various stages of the process. Citizen participation constitutes a key factor to the success of broad adoption of very innovative systems.<sup>9</sup>

The results of the survey can also be very useful to those practising medicine. Medical professionals would be able to use these insights to reflect on their practice, taking into consideration patients' needs and concerns and whether these needs are being met. In addition, it will increase physicians' awareness of the essential issues of privacy and data confidentiality.

The *European eHealth Consumer Trends Survey* will be reproduced in 2007. The results of the two surveys will provide a clear view of how consumer attitudes evolve over time, and provide an indication of citizens' capacity for adapting or resisting the rapid evolution of eHealth services.

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