Chapter 10

Health 2.0 and Medicine 2.0: Safety, Ownership and Privacy Issues

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ABSTRACT

The collaborative nature of Medicine 2.0/Health 2.0 and its emphasis on personalized health care clearly outlines it with respect to e-health and Web 2.0. The Semantic Web uses the notion that the meaning of a concept relates to other concepts. Therefore, it amplifies many of the existing challenges, but also offers new opportunities for the quality problems of Web 2.0 and enhances the potential to translate information into knowledge. Perhaps the most exciting expectation is that people will use the semantic web to search for healthcare providers of the highest quality, using services that take into account their own preferences and employ decentralized data from different sources. On the other hand, the Semantic Web magnifies privacy and may raise concerns about disintermediation between patients and health professionals and over reliance on virtual interactions. Therefore, the perspective of the chapter is to consider the key debates that occur in the literature with respect to the terms Medicine 2.0 and Health 2.0 acknowledging that any authentic solution to health problems has to originate from patient-centered care.

INTRODUCTION

The importance of healthcare information and communications technology (ICT) has grown in an exponential manner over the last 15 years (Institute of Medicine, 2001). Moreover, national strategies with respect to health information infrastructures are emerging across different parts of the world (National Committee on Vital and Health Statistics, 2001; Office of Health and the Information Highway, 1999; Australian Health Information Council, 2004; Department of Health and Children, 2005). Their vision is to improve the safety, quality and effectiveness of patient care by supporting clinical practice, resource management, research and training through the availability of relevant evidence and information. In addition, these strategies ensure interoperability...
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and data protection, and incorporate a commitment
to promote consumer empowerment and patient
self-care through the provision of electronic in-
formation and/or telemedicine facilities.

However, e-health definitions vary from the
speculative and diffuse to the most detailed. Most
definitions conceptualize e-health as a wide range
of medical informatics applications, which allow
the management and distribution of health care.
They include the dissemination of health-related
information, storage and exchange of clinical data,
inter-professional communication, computer-based
support, patient-provider interaction, education,
health service management, health communities
and telemedicine. They also vary with respect to
the targeted functions, stakeholders, contexts and
theoretical issues. Most of them incorporate a wide
range of specified medical informatics applications
or terms that are more general. Nevertheless, the
majority emphasizes the communicative functions
of e-health and specifies the use of networked
digital technologies, especially the Internet, thus
differentiating e-health from the field of medical
informatics. Finally, some definitions explicitly
target health professionals or patients while most
of them involve applications for all stakeholder
groups. In terms of the functional capacity, most
definitions conceptualize e-health as a broad range
of medical informatics applications, which facilitate
the organization and delivery of health care. In
terms of the stakeholders, many definitions empha-
size applications for providers—particularly those
stressing exchange of clinical and administrative
data. Several definitions emphasize the changing
educational context of health care; particularly
patient empowerment, and point to the capacity
of e-health to facilitate shared decision-making.
Overall, we might divide e-health into four domains:

• public health policy and prevention
• information service for citizens
• integrated patient care and patient health
  records
• telecare and independent-living services

We might also relate it to electronic com-
unication as most definitions associate it with
the use of networked digital information and
communications technologies, especially the
Internet, differentiating e-health from its parent
domain of medical informatics. One component
of electronic communication is when patients use
new technologies to try out information about
their health and health care options (Pagliari et
al., 2005). The potential of the Internet to store
large volumes of information provides an unprece-
dented opportunity to provide high-quality, in-
teractive evidence-based information. Interactive
components permit the provision of personalized
information to users and provide decision, peer,
or behavior modification support.

Health information and interactive components
constitute an interactive health communica-
tion application (IHCA). Initially, IHCA was
developed on non-Web-based platforms such
as CD-ROM (Murray et al., 2005). Lately, the
relative prominence has moved toward Internet
interventions (Ritterband et al., 2003), including
accuracy, completeness, readability, disclosure,
and references (Eysenbach et al., 2002). However,
we know little about the user perspective on health
websites but we do know that patients bring forth
different criteria for the value of traditional, non-
Web-based information materials (Coulter et al.,
1998). Overall, patients are likely to use different
criteria to assess the quality of health websites.
Although we have made steps developing criteria
to evaluate more interactive online health behavior
modification and disease management programs
(Evers et al., 2005), these also neglect the user
perspective. Thus, the perspective of the chapter
is to assess, in a patient-centered discourse, the
key debates that exist in the literature with respect
to the terms Medicine 2.0 and Health 2.0.