## **Editorial**

# What is e-Health (2): The death of telemedicine?

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The first time I heard the term "e-health" I was at the 7th International Congress on Telemedicine and Telecare in London, at the end of November 1999. John Mitchell from Sidney, Australia, spoke about a national government study whose main result was the recognition that "cost-effectiveness of telemedicine and telehealth improves considerably when they are part of an integrated use of telecommunications and information technology in the health sector." [1]. This led to the identification of "e-health" as an umbrella term, with definitions such as "a new term needed to describe the combined use of electronic communication and information technology in the health sector of digital data - transmitted, stored and retrieved electronically - for clinical, educational and administrative purposes, both at the local site and at distance" [2].

In this talk, e-health was introduced as the death of telemedicine, because - in the context of a broad availability of medical information systems that can interconnect and communicate telemedicine will no longer exist as a specific field. The same could also be said for any other traditional field in medical informatics, including information systems and electronic patient records. e-health presents itself as a common name for all such technological fields.

Mitchell also pointed out that "e-health can be considered to be the health industry's equivalent of e-commerce," and this could be one key for understanding the sense of e-health: just medical informatics and telematics on the shop shelves, a fashionable name for something already existing but otherwise difficult to sell.

Without arguing anything about the consequentiality of the facts, in December 1999 the subtitle of *Telemedicine Today*- a non-peer-reviewed journal - changed from "Where healthcare + telecommunications converge" to "The eHealth Newsmagazine," and just some months later, even the *Telemedicine Journal*- a scientific, peer-reviewed journal - added an "and eHealth" to its title. Nice name? Fear of being left out of a possibly-new field? The Ace Allen editorial that introduces the change in the subtitle of *Telemedicine Today* [3] sounds slightly bitter: during the time the telemedicine market exploded, *Telemedicine Today*'s name suddenly changed, perhaps to satisfy the hundreds of healthcare-related dotcoms looking for a buzzword.

Shortly after the above changes, E. Rosen [4] rationally explained some differences related to the use of the words "telemedicine" and "e-health." Investors look for investments that can produce high returns even after several years. From this point of view, the specific term of telemedicine seems inadequate, as it identifies a market niche, while e-health, as any "e-thing", seems more open and promising (just like anything without a clear meaning). Rosen also points out the hardware-centric aspects of telemedicine, which is based on the traditional equipment sales model, while e-health is apparently oriented to service delivery, which is more interesting on the business side. The final remark of Rosen is that almost all "e-things" will again become simply things as soon as we become acquainted with the novelty of the Internet; after all, we all know that e-commerce is just commerce...

Allen, in a further editorial [5], discovered a new difference: telemedicine remains linked to medical professionals, while e-health is driven by non-professionals, namely patients (or, in the e-health jargon, consumers) that with their interests drive new services even in the healthcare field-mostly for their empowerment through access to information and knowledge.

Interestingly enough, even after the name change, *Telemedicine Journal and eHealth* did not publish any paper directly mentioning e-health; also, the other major scientific journal related to telemedicine, the *Journal of Telemedicine and Telecare*, seems not to care much about e-health. This could be related to the business role the term e-health seems to have: when researchers describe their work, the classical categories of, for example, Medical Informatics, Telemedicine, and Electronic Patient Records are more meaningful than the generic term e-health.

As a researcher, I can see some sense in the term e-health; coming from the integration perspective it suggests: integrated-healthcare-systems' properties, possibilities, and consequences that are (in a holistic approach) more than the sum of the single-component outcomes. However, even these aspects are already studied in some computer science fields - for example Artificial Intelligence (at least inside the multi-agent paradigm), Information Economics, and Dynamic Systems; thus, there is nothing new again, except for the specific interest in healthcare.

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#### **Conflicts of Interest**

None declared.



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