Chapter II
Medical Privacy and the Internet

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ABSTRACT

E-health technology has started to become commonplace in the clinical world, with practitioners setting up their own Web sites to disseminate educational information to patients, with physicians and nurses working as team members to access clinical information about a patient using an electronic patient chart, and with patients even conducting their own research to make informed decisions about clinical options.However, these potential benefits must be tempered from the perspective of medical privacy. Ever since the Hippocratic Oath of antiquity, protecting the privacy of patients has been an important precept of medical ethics. With technological developments, however, health information has come into use by many organizations and individuals that may be unsensitized to medical privacy concerns. This report is concerned with these issues.

INTRODUCTION

Whatsoever things I see or hear concerning the life of men, in my attendance on the sick or even apart therefrom, which ought not be noised abroad, I will keep silence thereon, counting such things to be as sacred secrets. (Oath of Hippocrates, 4th Century, B.C.E)

E-health technology based on the Internet has much to offer to the clinical world: integrated and easily-accessible electronic medical records, educational resources for clinicians, patient education Web sites, e-mail communication between patients and care givers, and a great deal more. The abundance of such capabilities and resources, it has been argued, has had a salutatory effect on patient empowerment, at least in the case of

individuals on the endowed side of the "digital divide" (Pitts V, 2004; Sadan B, 2002; Akerkar SM & Bichile LS, 2004).

Such technologies can potentially benefit clinical care and patient education in a number of ways. Patients just given diagnoses of conditions such as diabetes mellitus or migraine headaches can be referred by their physicians or by health agencies to reliable sites to further learn how to manage their conditions and review the latest treatment developments. Patients can also conduct their own research to make a more informed decision about clinical options. Practitioners sometimes set up their own Web sites to disseminate educational information to patients, as well as to provide more mundane information such as office hours. Clinical Web sites can play a fundamental role in patient education and can be cheaper, more convenient, and more readily updated than the paper brochures that are ordinarily used to provide health care information, practitioner credentials, and advertising.

E-health technologies can also allow physicians working as team members, perhaps in geographically disparate locations, to access clinical information about a patient by using an electronic patient chart similar to the current paper record. By using this model, for instance, a doctor could annotate a digitized radiograph as to a possible fracture site and then send the radiograph file to a radiologist at home, with a request for a quick verbal reply by telephone. This would allow for quick second-opinion consults without requiring the doctor to leave his or her home. Laboratory reports could also automatically be sent to physicians carrying e-mail capable pagers to ensure that they are immediately notified of important test results.

However, these numerous potential benefits must also be viewed from the perspective of medical privacy. Just as privacy issues of a more general nature (such as a person's demographic information, shopping habits, travel interests, etc.) are a matter of concern with the Internet (Crichard M, 2003; Oliver H, 2002; Pincus LB & Johns R, 1997), so is the privacy of medical information. Ever since the Hippocratic Oath of antiquity, protecting the privacy of patients has been an important precept of medical ethics. However, with technological developments, health information has come into use by many organizations and individuals that may be less sensitive to medical privacy concerns. These include employers, insurers, police agencies, government administrators, vendors of health products, attorneys and others.

A CLINICAL ANECDOTE

Now that Internet access has become more commonly available, some patients are using this technology to assist in their medical care. The following personal anecdote (Doyle DJ, 1996) illustrates this point. A middle-aged man noted that for several years food would get caught in what he believed to be a pouch in his esophagus. Although usually not problematic, he noted with increasing frequency that filling of the pouch would sometimes lead to vomiting in socially embarrassing circumstances. Not having a family doctor, he sought information on his condition via friends, relatives, and the "Merck Manual", a well-respected medical reference available in both paper and electronic format. Suspicious that the description of "Zenker's diverticulum" given there matched his condition, he then did a search over the Internet (using the Lycos search engine), and came upon a reference to Zenker's diverticulum in an online article written by the author (Doyle DJ, 2007). As a result, the patient searched the Internet for my address and telephone number and later contacted me by telephone seeking clinical advice. As this patient was not in a locale where I had a medical license, this information was provided informally, outlining what investigations might be done and providing the patient with the names of some clinicians known to be experienced in esophageal conditions.