

## Chapter XVI

# Accountability, Beneficence, and Self-Determination: Can Health Information Systems Make Organizations “Nicer”?

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### **ABSTRACT**

*Existing literature often addresses the ethical problems posed by health informatics. Instead of this problem-based approach, this chapter explores the ethical benefits of health information systems in an attempt to answer the question “can health information systems make organizations more accountable, beneficent, and more responsive to a patient’s right to self-determination?” It does so by unpacking the accountability for reasonableness framework in ethical decision making and the concepts of beneficence and self-determination. The framework and the concepts are discussed in light of four commonly used health information systems, namely: Web-based publicly accessible inventories of services; Web-based patient education; telemedicine; and the electronic medical record. The objective of this chapter is to discuss the ethical principles that health information systems actually help to achieve, with a view to enabling researchers, clinicians, and managers make the case for the development and maintenance of these systems in a client-centered fashion.*

## **INTRODUCTION**

Can health information systems make organizations more accountable, beneficent, and more responsive to a patient's right to self-determination? In essence, can health information systems make organizations more ethical, "nicer" even?

This question is often implicit when decisions are made in practice settings, but it is seldom explicitly discussed in the context of health information systems. Rather, the field of "info-ethics" has arisen largely from the drive to explore and address ethical problems, rather than solutions, which result from health information systems (Fessler & Gremy, 2001). This chapter makes the case that health information systems can help organizations address issues related to beneficence, autonomy and accountability for reasonableness. It begins with a look at recent industry trends.

The evolution of health information systems can be conceptualized in terms of a number of shifts that have occurred over the past 2 years. These shifts include a movement from paper to electronic mediums and from alpha numeric to digital images; from being stationary to being ubiquitous and remote sensing; and from being departmental and local to system-wide and international. Shifts have also occurred in the manner in which health information systems are used. This includes a shift from the use of health informatics to compute and process information to their use in health planning, strategy and research (Haux, 2006). Finally, there are also two shifts that relate directly to the patient and consumer, the primary focus for this chapter. These include a shift from a professional end-user to a patient or consumer end-user and a shift from using the information to complement provider activities to health information systems which can replace patient care activity (Ibid).

Given the proximity of health information systems to the patient, standards of ethical practice performed by providers of healthcare services can also apply to health information systems.

The objectives of this chapter are to discuss three popular ethics-related concepts: accountability for reasonableness, autonomy, and beneficence. These concepts will be explored in terms of the extent to which they can be achieved through four different types of health information systems. Definitions, concepts, and an overview of the literature are provided in the next section, followed by a discussion of four different health information systems and the extent to which they succeed or fall short of enabling beneficence, respect for patient autonomy, and accountability. The chapter ends with a discussion of future and emerging trends, implications for clinicians and organizations, and possible opportunities for further investigation and research.

## **BACKGROUND**

Health informatics is the development and assessment of methods and systems for the acquisition, processing and utilization of health information (Imhoff et al., 2001). Health information systems can be thought of in terms of the technologies of health informatics. These technologies include telemedicine, telecare and tele-health in which assessment, treatment, consultation and monitoring are done remotely; computer based patient records, electronic communication or electronic mail, personal digital assistants in which can enable point of care access to information, data warehouses or clinical repositories, and e-health which includes smart cards, computer-based video conferencing and Web sites (Layman, 2003).

The field of ethics involves systematizing, discussing, and recommending concepts of behavior (Feiser, 2006). There are three commonly accepted subject areas. The first is meta-ethics, which looks at the history of what we think is right or wrong; normative ethics, which takes on the practical task of regulating conduct; and applied ethics which looks at controversial issues (Ibid, 2006).

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