Chapter 5.16 Information Imbalance in Medical Decision Making: Upsetting the Balance

Jimmie L. Joseph

The University of Texas at El Paso, USA

David P. Cook Old Dominion University, USA

ABSTRACT

This chapter explores the ethical implications of a reduction in information asymmetry between health care providers and their patients. In many human interactions, asymmetry of information and experience typically raises ethical dilemmas for the party with the greater degree of information. This chapter illustrates that it is the reduction in information asymmetry that is raising ethical dilemmas in dealing with medical issues. Understanding this phenomenon may assist in identifying and managing future ethical quandaries that may occur as Internet resources provide broad access to information previously distributed only to a subset of the population.

INTRODUCTION

Information asymmetry is an imbalance in the information available to the parties in an interac-

tion. This situation is not atypical and can be considered the basis for many of our most meaningful conversations. Human interactions would be far less interesting if everyone knew and "shared" the same thoughts, feelings, and discoveries at all times. While information asymmetry makes questions such as "How is the weather?" and "How was your day?" at least superficially interesting, in numerous human interactions, asymmetry of information and experience can raise ethical dilemmas for the party with the greater degree of information.

Significant academic research exists in the area of information asymmetry (e.g., finance and economics). The presumption of much of this research is that market efficiency can be increased by reducing the degree of asymmetry (Akerlof, 1970; Milgrom & Roberts, 2001; Payne, 2003). Furthermore, it is commonly held that information parity (or information access that moves the parties towards this point) can be the linchpin for the elimination of the ethical quandaries

introduced by information asymmetry (Akerlof, 1970; Diamond, 1984; Hellwig, 2001).

In the field of medicine, for example, it is clear that the physician has historically possessed more information than the traditional patient. This disparity has created a peculiar set of ethical issues for medical providers, based on their fiduciary responsibility to their patients. As with many relationships, the relationship between caregiver and patient changes, however, as information asymmetry diminishes. Relaxing the assumption that there is a significant difference in the information available to the physician and patient causes a new set of ethical issues to arise. In the extreme case, information inversion exists: the patient knows more about his or her condition than the attending medical personnel. The anecdotes about doctors making poor patients approach the status of urban myth (Porter, 1992). This chapter focuses on these very issues: how do the physician-patient relationship and the resultant ethical issues change as the patient's information disadvantage decreases.

This chapter examines the effects of changes in technology and societal norms on the ethical posture of practitioners in the medical profession. Ethical, social, technical, and regulatory issues associated with consumers' increased access to medical information are explored. It is posited that situations exist where a reduction in information asymmetry does not lead to fewer, or less severe, ethical dilemmas—it leads to more severe ethical quandaries. This chapter illustrates a counterintuitive example to the presumption that increased information parity enhances market efficiency and diminishes the number of ethical quandaries in the provision of medical care. While the chapter seeks to illustrate a counterintuitive example and the ethical dilemmas it raises, it does not purport to provide a solution to these still evolving ethical issues.

INFORMATION ASYMMETRY AND ITS COSTS

Problems resulting from information asymmetry are generally classified as either moral hazard or adverse selection (Akerlof, 1970; Diamond, 1984; Payne, 2003). Moral hazard problems are related to the buyer's inability to observe the actions taken by the seller (Holmstrom, 1985). Adverse selection problems are related to the buyer's inability to observe either pertinent seller characteristics or the contingencies under which the seller operates (Nayyar, 1990). Adverse selection can occur in the medical environment due to the patient's inability to determine on an *ex ante* basis the competence of the physician, the value of the service, or its quality.

Given the existence of such problems, and that they arise as a result of information asymmetries, numerous strategies have arisen to attempt to remedy or mitigate the effect of these asymmetries. Several potential remedies (e.g., contingent contracts, certification, monitoring, and reputation) exist for information asymmetries (Holmstrom, 1985; Nayyar, 1990). Each of the mentioned remedies has its shortcomings. In contingent contracts, for example, the capability must exist to identify all relevant contingencies prior to the enforcement of the contract.

Certifications only indicate an entity has met some minimum standard of performance or knowledge (as established by the certifying authority). For certification to be of benefit, it is necessary for the party with the information paucity in a transaction to understand the nature or quality of the certification or certifying agency (Diamond, 1984; Hellwig, 2001). Further, some certifying authorities may not make their criteria for certification public knowledge (Diamond, 1984; Hellwig, 2001).

Monitoring introduces additional information asymmetries between the monitor and the entity being monitored. An agency problem can arise if the party depending on the monitoring organiza12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/information-imbalance-medical-decision-making/18284

Related Content

Assessing the Dimension of Magnitude in Computer Self-efficacy: An Empirical Comparison of Task-Based and Levels of Assistance-Based Methodologies

James P. Downeyand R. Kelly Rainer (2011). Organizational and End-User Interactions: New Explorations (pp. 331-351).

www.irma-international.org/chapter/assessing-dimension-magnitude-computer-self/53098

Development of an Educational Video Game That Can Be Modified by End-Users

Noah L. Schroeder, Alexandrea Oliver, Kenneth Deffetand James Morgan (2018). *End-User Considerations in Educational Technology Design (pp. 184-204).*

www.irma-international.org/chapter/development-of-an-educational-video-game-that-can-be-modified-by-end-users/183019

Working toward Expert Status: Love to Hear Students Go Tweet, Tweet, Tweet

Tamara Girardi (2013). Social Software and the Evolution of User Expertise: Future Trends in Knowledge Creation and Dissemination (pp. 259-272).

www.irma-international.org/chapter/working-toward-expert-status/69764

The Influence of Perceived Source Credibility on End User Attitudes and Intentions to Comply with Recommended IT Actions

Allen Johnstonand Merrill Warkentin (2012). End-User Computing, Development, and Software Engineering: New Challenges (pp. 312-334).

www.irma-international.org/chapter/influence-perceived-source-credibility-end/62802

A Path Analysis of the Impact of Application-Specific Perceptions of Computer Self-Efficacy and Anxiety on Technology Acceptance

Bassam Hasanand Mesbah U. Ahmed (2010). *Journal of Organizational and End User Computing (pp. 82-95).* www.irma-international.org/article/path-analysis-impact-application-specific/43753