# Chapter 12
# Incongruent Needs:
## Why Differences in the Iron-Triangle of Priorities Make Health Information Technology Adoption and Use Difficult

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## ABSTRACT

*Health Information Technology (HIT) has the potential to redefine the confines of traditional medicine. Yet, in over a decade, little has been shown in improvements from HIT investments. In order to understand the failures of health IT policy, this chapter examines the diverse priorities of stakeholders in the health system. Using kiviat diagrams as adaptations of the traditional iron-triangle of tradeoffs, the priorities of four stakeholder groups (patients, providers, pharmaceuticals, and payers) are mapped against the priorities of government and public health. The chapter finds that the priorities of these stakeholders within the United States healthcare system are incongruent and in conflict. To better understand the HIT needs of the future, policy makers and public health officials must understand these dichotomous priorities and work to bring them in line.*

## INTRODUCTION

Healthcare Information Technology (HIT) has been hailed by many to be the future of healthcare, a panacea that will lower costs, increase quality, and usher in a new age of personalized medicine.

DOI: 10.4018/978-1-4666-4321-5.ch012

However, the results of more than a decade of HIT research and development have been modest in the United States, at best (Lau, Kuziemsky, Price, & Gardner, 2010). HIT adoption has been slow, and as Vaitheeswaren (2011) notes, the "…zeal [for HIT innovations] has not extended to front-office transactions" (p. 133) in American doctors' offices. HIT has failed to make doctor's offices paper free and the risks of HIT adoption have

pushed many physicians away (Karsh, Weinger, Abbott, & Wears, 2010). Thus, the question remains, why haven't the vast investments in HIT yielded the promised improvements in patient and citizen health? Why, when HIT has the potential to advance America's health care system into a new era of care, have we seen the rise of ineffective products and incompatible systems? The recent spike in HIT federal funding through the HITECH Act has made understanding the failures thus far even more crucial.

In order to analyze the interactions and interdependencies of stakeholders in the healthcare system, and how HIT adoption in the United States has failed to facilitate these relationships, one must first understand the economics behind each stakeholder, the incentives that guide their practice, and thus the stakeholders' priorities related to cost, access, and quality. To aid in this understanding, this paper will use kiviat diagrams as adaptations of Kissick's (1994) iron triangle. Since each stakeholder has different priorities in the health field, each will have a different iron triangle of priorities. Our supposition is that Health Information Technology has failed to meet its expectations due to mismatched priorities of each of the HIT stakeholders. Hopefully, through studying these priorities and addressing the similarities and differences between the triangles, public health and public policy officials can work to better integrate the stakeholders and thus grow the iron-triangle.

## THE IRON TRIANGLE AND HIT'S PROMISE

Within the public health field, policy analysts refer to an iron triangle of trade-offs that confines medicine's ability to provide the low cost, high quality treatment to a large number of patients. William Kissick's *Medicine's Dilemmas: Infinite Needs Versus Finite Resources* (1994) introduces this idea, noting that when a health care system is in equilibrium, better performance of the health care system within one of the three dimensions (cost-containment, quality, and accessibility of care) can cause decreased performance in one or both of the other dimensions. Cost-containment, quality, and access are in constant conflict, and an increase in one must be offset by the reduction of the other two. For example, increases in quality would be offset by either a decrease in accessibility or an increase in cost.

Kissick did, however, note in some instances, these tradeoffs between cost-containment, quality, and accessibility of care are not always required, and health information technology may be one such occasion. Donald Berwick, former Administrator of the Centers for Medicare and Medicaid Services, echoes these sentiments that the iron-triangle may be expanded, recently noting that at least twenty percent of United States healthcare spending is "waste" in that it provides no value to the patient or system (Birnbaum, 2012, p. 719). He lists five reasons for waste, three of which HIT can meet head on: "overtreatment of patients, the failure to coordinate care, [and] the administrative complexity of the health care system" (Pear, 2011). Berwick argues that this wasteful spending prevents investment in those areas that improve patients' health, decreasing the quality of healthcare all while keeping costs high (Birnbaum, 2012, pp. 719-720). Taken together, HIT has the potential to answer Berwick's call for improvements in patient care through reduction of waste, breaking from the confines of Kissick's iron-triangle by saving the United States billions in health care costs all while improving patient health and access to care.

Electronic Health Records (EHRs) provide an example of how health information technology may circumvent the traditional limits of the iron-triangle. EHRs offer physicians the ability, over time, to reduce administrative expenses through lessened paperwork and clerical necessities. In larger settings, this leads to clerks and administrative staff spending less time handling paper,