

Chapter 3

Organizational Integration of Decision Analytic Methods in Healthcare Settings

Christopher L. Pate
Brook Army Medical Center, USA

Mark D. Swofford
Brook Army Medical Center, USA

ABSTRACT

Healthcare organizations face a range of external and internal factors that both enable and hinder the organization's ability to provide safe, quality, timely and reliable healthcare services. The accessibility of data coupled with effectively integrated analytic methods can provide healthcare organizations with essential components of a solid framework for improving performance across the full spectrum of organizational contexts. However, data, methods, and a robust information infrastructure are only part of the solution. Healthcare organizations must consider characteristics of the organization and its strategy in order to effectively integrate analytic methods. Conceptual ideas from organizational theory, economics and strategic management can provide structure to the integration process.

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INTRODUCTION

The integration of analytics in healthcare settings can be a challenging undertaking for any organization desiring to improve decision making and organizational performance. Yet, effective integration of analytics requires an understanding of the organization, the organization's goals, the organizational structure, and other aspects of an organization's essence. This chapter bridges theoretical and practical lessons related to integration of analytics in healthcare settings.

Chapter Objectives

After completing the chapter, readers will be able to:

1. Define the concept of analytics.
2. Identify essential theoretical concepts related to the integration of analytics.
3. Discuss the importance of analytic integration in healthcare settings.
4. Discuss approaches to improving the integration of analytics in healthcare settings.

BACKGROUND

More than twenty years ago, Drucker observed that healthcare organizations are among the most complex of any organizational form (Drucker, as cited in Golden, 2006). Over these past two decades, changes in the healthcare landscape have only added to the complexity facing healthcare organizations across the full range of organizational forms encountered in the industry. These changes include growth of new technologies, demographic shifts, an aging population, efforts to decrease healthcare costs (Bernstein, Hing, Moss, Allen, Siller & Tiggie, 2003; Lee, 2009), increasing emphasis on accountability (Tabar, 2012), investment in and growth of health information technology, and increased requirements for data monitoring and management (Shortliffe, 2005). In terms of data content, the healthcare industry "is facing a tsunami of health and healthcare related content generated from numerous patient care points of contact, sophisticated medical instruments, and web-based health communities" (Chen, Chiang, & Storey, 2012, p. 1171). Krumholz (2014, p. 1169) notes that "massive repositories of potential knowledge, populated by data from health care visits, devices, administrative claims, and biospecimens, are increasingly available...(yet)...the promise of massive data assets lies not merely in their size, but in the way they are used."

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