Pioneering the Health Care Quality Improvement in India Using Six Sigma: A Case Study of a Northern India Hospital

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EXECUTIVE SUMMARY

In India, the notion of Health Care Quality has become a relevant topic. Even though Quality Management processes such as Six Sigma have been proven in the health care industry in the United States, there is little record of Six Sigma implementation in India. Despite the lack of proven success in the country, Simplified Health Care, a prominent health care provider in North India, launched successful Six Sigma implementation, which was supplemented with other IT initiatives including Electronic Health Care Records. Simplified Health Care success is a testament for Six Sigma, despite challenges ahead.

Keywords: Electronic Health Care Records, Health Care, India, Quality Management, Six Sigma

ORGANIZATIONAL BACKGROUND

Simplified Health Care (SHC) is a subsidiary of Simplified National Corporation. Simplified National Corporation is a private and publicly traded company which trades over 30,000 shares in the Bombay Stock Exchange. Simplified National Corporation specializes in health care and related products. Besides SHC, Simplified National also owns and operates subsidiaries in three different industries, namely life and health care insurance, clinical research, and medical equipment manufacturing. Even though all four entities bear the name Simplified, they work separately with each other.

Structurally, SHC is the largest health care employer in New Delhi and other cities of northern India. It has over 200 doctors and physicians, 1,500 registered nurses, 6,500 full and part time employees. SHC serves a community of more than 15 million inhabitants. At its peak, SHC served more than 1,700,000 patients. SHC was planning to extend its inpa-
tient capabilities, growing the number of beds to 2,000 in 2012.

SHC offers both general and specific health care services, ranging from routine check-up to cancer detection and treatment. All four hospitals, which are located in Delhi and surrounding National Capital Region area, offer a full range of services in primary care. In addition to the hospitals, SHC operates various hospices and health care centers throughout the region. In Panchsheel Park and Noide, SHC runs Simplified Eye and Dental Care and Vascular and Neuro Sciences Institute respectively. In Pitampura and Saket, SHC organizes secondary care facilities along with Cancer Center and Center for Pediatrics. In addition, SHC also has tertiary care at Gurgaon and Patparganj. In Shilmar Bagh, orthopedics surgery is a tertiary care of SHC that focused on spinal and sport-related injuries (Figure 1).

Founded in 2000, SHC is arguably one of the state-of-the-art facilities. With $250 million (USD) in assets, SHC boasts of being one of the well-funded health care systems in India. All SHC hospitals have been certified with ISO 9001:2000 standards. The specialty hospices have been earned a national recognition and various awards. In spite of these achievements, SHC has not enjoyed much success financially. SHC struggled in 2008 with $1 million in loss but recorded a profit of $9.5 million in 2009. The situation changed again: despite a 20 percent growth in 2010 and 2011, SHC sales and operating revenue was stagnant. In 2012, SHC recessed into a slump with more than $6 million in loss.

SHC has a simple organizational structure. The top leader is a Managing Director (MD) who acts as a liaison between SHC and Simplified National Corporation. Under the MD, the CEO oversees the entire SHC operations direction and strategy. In addition to the CEO, there is a CFO, a CSO (Chief Services Officer), a CMO (Chief Medical Officer), a COO, and an Executive Director. On the clinical side, the CMO manages a wide range of medical specialties, ranging from neurology, neurosurgery to obstetrics. Each specialty has a Director, who

Figure 1. Delhi map (Maps Of India, 2013)
A Procedure Model for a SoA-Based Integration of Enterprise Systems