Chapter 19
Revisiting Project Definition/Initiation for Telemedicine Services:
Insights From a Multisite Case of TeleStroke Services

Suzanne J. Wood
University of Washington, USA

Cynthia M. LeRouge
Florida International University, USA

Bengisu Tulu
Worcester Polytechnic Institute, USA

Joseph Tan
McMaster University, Canada

ABSTRACT

Healthcare organizations and stakeholders are profoundly challenged in transiting a telemedicine project into a sustainable telehealth service line. While project management best practices have added values across multiple domains, a knowledge gap exists on informed execution of telehealth best practices. Project definition, or initiation, sets the strategic vision (and plan) for a project. It is the predominant stage in a project. As project initiation hugely defines project success, revisiting this stage for telemedicine may help to inform key actors on ways to achieve an optimal delivery of such services. Indeed, winning telehealth services require well-knitted intra- and inter-organizational collaboration on technology adoption across different organizational arrangements and among key stakeholders. Hence, a model redefining key project initiation components is used to drive our analysis. Drawing from collected data of a multisite telestroke implementation and anchoring on the model's conceptualization, the authors

DOI: 10.4018/978-1-5225-5460-8.ch019

explore in-depth how project initiation can be strategically framed within the telemedicine context. The interpretative findings from the data analysis, with each case surmising a distinct telemedicine business model, provide further insights on the collaborative uptake of telestroke programs. More specifically, the authors extend the analysis through comparative examination of key factors that promote or impede adoption via the lens of five distinct telecare business models: (1) the outsourced model; (2) the alliance model; (3) the not-for-profit private hospital network model; (4) the not-for-profit university sponsored network model; and (5) the for-profit private hospital network model. Together, the insights provided by this contribution will help efforts directed towards contextualizing key elements of project initiation in telemedicine and highlight the alignments of critical factors that can impact future telehealth efforts.

INTRODUCTION

Health Information Technology (HIT) is one area where governments and healthcare organizations continue to spend money with the hopes of improved outcomes and reduced costs. Due to the difficulty of producing sustainable workflow, however, about 91% of HIT initiatives fail (Maxfield, 2007). Telemedicine product lines, which represent one such area under the HIT heading, fall into this category. The start or expansion of a telemedicine service line is intrinsically collaborative as it requires both intra- (IT, administration, clinical) and inter- (hospital A, hospital B) collaboration efforts coming together to provide distance-based medical care using telecommunications technology. In addition, these initiatives operate within a complex legal, policy, and standards environment that can impose constraints as well as ambiguities (LeRouge & Garfield, 2013). Different components, some inside the organization and others in the external environment, need to be orchestrated from the beginning to avoid issues in implementation and to provide a foundation for a sustainable service line (Barney & Clark, 2007; Ginter, Duncan, & Swayne, 2013; Pfeffer & Salancik, 2003).

Within the healthcare sector, research in applying and adapting best practices from various domains (business, technology, etc.) is still in the early stages (Chiocchio et al., 2012; LeRouge et al., 2010), though the value of project management best practices for the healthcare sector is increasing in recognition (Deutsch, Duftschmid, & Dorda, 2010; Gertner et al., 2010). The project management discipline provides best practices and guidelines for project initiation. Although project management tenants are applicable to different fields, few studies link project management concepts to the application of telemedicine programs. Further investigation is necessary to determine the need for contextualization and adaptation of these tenants to best suit and benefit the healthcare sector. Moreover, it is not enough to understand key project initiation components; organizations also need to align these components to their business models to enhance contextualizing and application for the purpose of mitigating barriers to adoption and implementation.

A business model tells the story about how an organization will leverage a generic value chain and structure its operations so as to generate sustainable margins (Magretta, 2002). The business model story associated with telemedicine projects consists of variations on the same underlying theme of delivering more efficient and effective healthcare (Strauss & Corbin, 1990). Understanding the type of business model employed (e.g., formal health network, alliance of health organizations, outsource service) enables us to see how context, structure, and profit incentive interplay with stakeholder interests are mediated by a specific initiative or way of operating (Baden-Fuller, 2010). To appreciate the influence of contextual factors on telemedicine adoption, the authors must also extend the analysis to the environments in