

# 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

26 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/revisiting-project-definitioninitiation-for-telemedicine-services/205138](http://www.igi-global.com/chapter/revisiting-project-definitioninitiation-for-telemedicine-services/205138)

## Related Content

---

### Rethinking Standard Protocols: Innovative Quality Management Approaches in Public Healthcare Systems

Blessing Takawira, Martha Chadyiwaand David Pooe (2025). *Resiliency Strategies for Long-Term Business Success* (pp. 201-232).

[www.irma-international.org/chapter/rethinking-standard-protocols/356728](http://www.irma-international.org/chapter/rethinking-standard-protocols/356728)

### Scaffold for Tissue Engineering Design Fabrication and Applications

Nida Iqbal, Muhammad Asad Ullah, Muhammad Zaeem Khalidand Syed Tasawar Hussain (2025). *Innovations and Applications of Advanced Biomaterials in Healthcare and Engineering* (pp. 335-366).

[www.irma-international.org/chapter/scaffold-for-tissue-engineering-design-fabrication-and-applications/377591](http://www.irma-international.org/chapter/scaffold-for-tissue-engineering-design-fabrication-and-applications/377591)

### Strategic Pathway Determination for a State Hospital in Terms of an Integrated Facility Management System

Erman Gedikliand Yeter Demir Uslu (2023). *Handbook of Research on Quality and Competitiveness in the Healthcare Services Sector* (pp. 404-438).

[www.irma-international.org/chapter/strategic-pathway-determination-for-a-state-hospital-in-terms-of-an-integrated-facility-management-system/320862](http://www.irma-international.org/chapter/strategic-pathway-determination-for-a-state-hospital-in-terms-of-an-integrated-facility-management-system/320862)

### Comparative Insights into Biomaterials from Animal-based and Non-Animal Sources in Biomedical Applications

Imade Armadi, Abdessamad Abana, Youssef Ait Hamdan, Souad Loqmanand Anass Belbachir (2025). *Innovations and Applications of Advanced Biomaterials in Healthcare and Engineering* (pp. 531-566).

[www.irma-international.org/chapter/comparative-insights-into-biomaterials-from-animal-based-and-non-animal-sources-in-biomedical-applications/377596](http://www.irma-international.org/chapter/comparative-insights-into-biomaterials-from-animal-based-and-non-animal-sources-in-biomedical-applications/377596)

### Sustainable Health System Through Corporate Social Responsibility Towards Promoting Health Equity Inferring SDG 3

Bhupinder Singh, Christian Kaunert, Anjali Raghavand Kamalesh Ravesangar (2025). *Corporate Social Responsibility in Health and Social Care* (pp. 1-24).

[www.irma-international.org/chapter/sustainable-health-system-through-corporate-social-responsibility-towards-promoting-health-equity-inferring-sdg-3/360388](http://www.irma-international.org/chapter/sustainable-health-system-through-corporate-social-responsibility-towards-promoting-health-equity-inferring-sdg-3/360388)