Chapter 4
Challenges Implementing Telemedicine at Children's Hospital of Philadelphia (CHOP)

Christopher E. Gantz
Drexel University, USA

David Gefen
Drexel University, USA

ABSTRACT

This chapter discusses the challenges faced by one pediatric medical institution as it worked in partnership with a local school district to provide access to pediatric care through a telemedicine unit embedded in the nurse's office of the various schools within the district. The chapter touches on perceptions the community had about sharing sensitive personal health information in a school setting using mobile technology, fears related to immigration status, and operational issues encountered when deploying a new technology across multiple sites. Despite the challenges, potential benefits to the health and well-being of the community far outweighed the difficulties faced during these early days of telemedicine adoption.

INTRODUCTION

Telemedicine represents a game-changing opportunity to increase access and empower parents and caregivers who might otherwise face significant challenges accessing healthcare for their children. This chapter explores the potential of the technology to profoundly improve the lives of the children, their parents, and the larger community – and the role that trust plays in the acceptance of the technology within a specific community where the program is being piloted in a school nurse office setting. An overview of a currently underway research study, the objective of which is to understand the social context of the interaction of trust on the well-studied Theory of Planned Behavior as it relates to the communities' willingness to embrace a novel approach to healthcare delivery, will also be discussed. That study is looking into the consequences of the lack of empowerment that parents feel related to the health care

of their children and the factors that are theorized to be affecting their decisions related to signing up to take advantage of the new telemedicine program. These factors include the perception that the government is actively working to identify and remove undocumented members of their community and may use information shared with the school or pediatric institution to identify and deport family members, that the school or pediatric institution themselves may not be promoting the program for truly altruistic reasons, and that sensitive information about their child's health might be viewed by school staff.

The following paragraphs explore the challenges encountered by the groups working to deploy the service within the school district of an urban community and the design of a research project looking to gain insight into why parents would choose to *not* participate. The initial thinking when the service was conceptualized was that it would be extremely popular and well received, however, the staff of both the school district and the pediatric hospital were surprised to find that very few parents signed up and that the program was not embraced. The hypothesis that was developed to explain the tepid response focused on the idea that trust in the students' school district, the pediatric medical center offering the service, and more broadly, the government, was having a moderating effect on the likelihood that parents will be willing to have their children enrolled in the program. Of particular interest to the research team conducting the study is how the large undocumented population that resides in the community perceives the government's intentions towards them and how those perceptions lead them to make decisions about accessing services when they are offered. The objective of the study described in this chapter was to gather an initial understanding within a theoretical framework of challenges to the adoption by parents of this telemedicine implementation project.

The chapter summarizes the justification for the research model and the crucial role that trust plays in it. The insights that led to the development of the study are based on questions asked by parents and concerns they raised during outreach events where the Children's Hospital of Philadelphia (CHOP) presented information about the program to families. The recurring themes are presented in this chapter, including concerns about potential exposure to ICE (U.S. Immigration and Customs Enforcement). In the interest of eliciting honest and open answers, and especially in view of parents' concerns about ICE, no recordings were made. Rather, the lead author summarized his impressions shortly after each information session.

CHOP is well known to the local community and is the oldest pediatric hospital in the United States. The hospital started with only 12 beds and in its first year had only 67 inpatients and just a little over 300 clinic patients. It has since grown to be a world-renowned hospital with 546 beds and conducts more than a million visits annually (Philadelphia, 2018). A key part of the hospital's mission is to provide the highest level of health care to the community it serves. To support that mission, and in recognizing the successes of telemedicine in developing countries, CHOP decided to create its own telemedicine initiative. That telemedicine service is seen as a way to provide expanded access to care through its digital health team to schools within its service area. To that end, CHOP initiated the telemedicine pilot during the 2017/2018 school year. The telemedicine initiative is being conducted in partnership with the Norristown Area School District located in Norristown, Pennsylvania which has 7,468 students in grades K-12.

While the study discussed in this chapter focuses on this one group's experience with implementing telemedicine within a public school system in an urban setting and may not be representative of how the technology is received by other communities, the pilot and the public's response to it have offered insights into the challenges of telemedicine in a school setting, as well as how the broader community views the technology. The challenges identified could potentially inform both the ongoing attempts to increase utilization of the service within the Norristown area school district and other attempts to imple-

13 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/challenges-implementing-telemedicine-at-childrens-hospital-of-philadelphia-chop/273458

Related Content

Artificial Intelligence in Mental Health: The Novel Use of Chatbots to Support Trainee Counsellors and Recovering Addicts
Lisa Ogilvie, Julie Prescott, Terry Hanleyand Jerome Carson (2022). *Digital Innovations for Mental Health Support (pp. 296-319).*
www.irma-international.org/chapter/artificial-intelligence-in-mental-health/293413

Disease Awareness Campaigns: Education for Citizenship in Medical Schools
Nancy de los Angeles Segura-Azuara, Jose Guillermo Guzman-Segura, Nancy María Guzmán-Seguraand Juan Pablo Guzmán-Segura (2022). *Advancing Health Education With Telemedicine (pp. 113-122).*
www.irma-international.org/chapter/disease-awareness-campaigns/293533

Role of Smart Wearable in Healthcare: Wearable Internet of Medical Things (WIoMT)
Jana Shafiand Amtul Waheed (2021). *Research Anthology on Telemedicine Efficacy, Adoption, and Impact on Healthcare Delivery (pp. 366-388).*
www.irma-international.org/chapter/role-of-smart-wearable-in-healthcare/273475

Multiple Feature Fusion in Particle Filter Framework for Visual Tracking
Singaravelan Shanmugasundaram, V. Selvakumar, S. Balaganesh, P. Gopalsamyand R. Arun (2024). *Improving Security, Privacy, and Connectivity Among Telemedicine Platforms (pp. 238-258).*
www.irma-international.org/chapter/multiple-feature-fusion-in-particle-filter-framework-for-visual-tracking/343245

Information Systems Management: Good Practices Case Application
Nuno Geada (2024). *Improving Security, Privacy, and Connectivity Among Telemedicine Platforms (pp. 1-29).*
www.irma-international.org/chapter/information-systems-management/343234