

Facilitators and Barriers to Adoption of a Successful Urban Telemedicine Model

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Organization:	University of Rochester
Mechanism:	PAR: HS08-270: Utilizing Health Information Technology (IT) to Improve Health Care Quality (R18)
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Summary Status as of:	December 2010

Target Population: Inner City*, Pediatric*

Summary: Since its inception in 2001, the Health-e-Access telemedicine network (HeA) in urban Rochester, NY has been used to manage acute childhood illness efficiently. Three telemedicine service models have evolved from HeA's ability to bring care directly to children, instead of children having to travel to see their care provider. The three models focus on child care, school care, and after-hours neighborhood care. These models give families in Rochester several options for care of children with acute illnesses. The researchers have hypothesized that families will embrace the use of telemedicine via these new service models once they recognize their clear advantages over traditional care models, such as the use of emergency department care.

The goal of this project is to use HeA to replace inconvenient, inefficient, and expensive traditional models of care with convenient, high-quality, and less-expensive models. It aims to deploy and solidify sustainable business models for each of the three telemedicine service models in four inner-city zipcode areas. Additionally, it will identify facilitators and barriers of implementation, monitor the impact on utilization patterns, and create and disseminate an implementation and sustainability toolkit. The research team will use both qualitative and quantitative methods of research, including key informant unstructured interviews, semi-structured interviews, and statistical analysis of utilization patterns. Identification of facilitators and barriers to replication of an existing telemedicine model may promote widespread replication in other communities and for a broader range of patients.

Specific Aims:

- Achieve substantial deployment and solidify sustainable business models for each of the three urban telemedicine service models. **(Ongoing)**
- Identify facilitators and barriers to dissemination of the three telemedicine service models. **(Ongoing)**
- Monitor impact of the HeA models on utilization patterns. **(Upcoming)**
- Create and disseminate an implementation and sustainability toolkit. **(Upcoming)**

2010 Activities: This first quarter focused on key informant interviews to assess barriers to and facilitators of telemedicine implementation. Key informants include parents, nurses who manage calls, telemedicine assistants who enable visits, providers, site staff, and leadership from various collaborating organizations.

Grantee's Most Recent Self-Reported Quarterly Status (as of December 2010): The project is meeting most milestones on time. The budget is somewhat under spent due to major upcoming milestones.

Preliminary Impact and Findings: The preliminary information gathered from key informant interviews with nurses indicated that the nurses believe that telemedicine is valuable and would use it for their own children. Additionally, the researchers found that the call center records the rate of dropped calls, the number of times a caller hangs up while on hold, and noted that they had increased. The interviews revealed that the process of explaining telemedicine requires significant time because most parents are not familiar with the concept. This causes lengthy on-hold times leading to the high dropped call rate. The team therefore developed a script to help nurses explain telemedicine to parents more efficiently.

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

Business Goal: Implementation and Use

* AHRQ Priority Population