

Access to Pediatric Voice Therapy: A Telehealth Solution

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Organization:	University of Cincinnati
Mechanism:	PAR: HS08-269: Exploratory and Developmental Grant to Improve Health Care Quality Through Health Information Technology (IT) (R21)
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Summary: Children with voice disorders are at a social and educational disadvantage and need behavioral therapy that requires specialized clinical skills. Because such therapy is often difficult for families to access, this project is testing a telehealth model of service delivery for children with voice disorders.

This project will test a pilot program of personalized voice therapy using a telehealth approach and will assess the quality and stability of Internet and Web-based audio and video data transmission. The project will also explore the personal and interpersonal benefits of and obstacles to telehealth delivery of pediatric voice therapy. Outcome measures will include satisfaction, compliance, and cost. As a pilot, the project will identify adaptations that clinicians must make to improve the delivery of voice therapy via the Internet. The progress of the therapy will be assessed throughout.

The findings will provide proof of systems capability and reliability of the technical equipment and the Web-portal access. This research will inform providers about the use of telehealth technology for children with voice disorders and will lay the groundwork for a large outcomes-based efficacy study.

Specific Aims:

- Test a pilot program of personalized voice therapy in 10 children using a telehealth approach. **(Upcoming)**
- Explore the personal and interpersonal benefits and obstacles surrounding delivery of pediatric voice therapy using telehealth. **(Upcoming)**

2012 Activities: In October, the research team worked with the University of Cincinnati and Cincinnati Children's Hospital institutional review board to submit and receive approval for their research protocol. Dr. Kelchner hired a research coordinator and assistant to revise the forms to be used for the research process. The first technical task is to build and design the interactive Web site for children ages 8 to 15. As part of the telehealth model, the Web site will enable children to do exercises to support their voice therapy. Web site design and content development in collaboration with the bioinformatics department at Cincinnati Children's Hospital has begun. The clinicians providing the telehealth clinical sessions began developing the interactive and information content forms available for the synchronous sessions, which include both Internet and Web-based audio and video data transmission. They plan to field test the Web site in the spring and summer of 2013.

As last self-reported in the AHRQ Research Reporting System, project progress and activities are mostly on track and project budget funds are somewhat underspent. This is because of a small delay in finalization of a sub-contract which has since been signed.

Preliminary Impact and Findings: This project has no findings to date.

Target Population: Children with Special Health Care Needs*, Pediatric*

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to support patient-centered care, the coordination of care across transitions in care settings, and the use of electronic exchange of health information to improve quality of care.

Business Goal: Knowledge Creation

**This target population is one of AHRQ's priority populations.*