

Patient-Centered Online Care Model for Followup Management of Atopic Dermatitis

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Organization:	University of California Davis
Mechanism:	PAR: HS09-085: Mentored Clinical Scientist Research Career Development Award (K08)
Grant Number:	K08 HS 018341
Project Period:	November 2009 – November 2014
AHRQ Funding Amount:	\$713,340
Summary Status as of:	December 2010

Target Population: Adults, Condition Specific: Atopic Dermatitis, Pediatric*

Summary: Access to timely, high-quality dermatologic care poses a significant challenge in the United States. Store-and-forward teledermatology—defined as the practice of dermatology through digital capturing and storage of clinical images and information, followed by asynchronous review of the clinical information by a dermatologist—presents an opportunity to improve patient satisfaction and access to dermatological specialist care.

The project, started in November 2009, introduced a patient-centered, technology-enabled model for delivering followup specialty care. Specifically, dermatologists from the University of California Davis Medical Center participate in an asynchronous, online model for delivering direct followup dermatology care to patients with atopic dermatitis, a chronic skin disease from which millions of Americans suffer. In this online model, patients communicate directly with their dermatologists, capture and transmit digital skin images, and receive online treatment recommendations and prescriptions via RelayHealth software.

The year-long randomized controlled trial (RCT) will compare clinical outcomes, quality of life, patient satisfaction, and knowledge about their skin disease of dermatology patients receiving conventional, face-to-face followup care to patients receiving followup care via the patient-centered care online model. This model has the potential to be adapted for patients suffering from other medical conditions that require regular followup visits to specialists.

In addition to the research project goals, Dr. Armstrong aims to further her long-term career goal of increasing access to specialist care for patients in rural and medically underserved communities. Funding from this Mentored Clinical Scientist Research Career Development Award will allow Dr. Armstrong to advance her skills in health services research through structured coursework and regular seminars and mentoring with leaders in health services research, dermatology, and telemedicine.

Specific Aims:

- Assess the effect of this asynchronous, online model for delivering direct, followup dermatologic care on clinical outcomes in patients with atopic dermatitis. **(Ongoing)**
- Evaluate the effect of this asynchronous, online model for delivering direct, followup dermatologic care on quality of life in patients with atopic dermatitis. **(Ongoing)**
- Determine the level of patient satisfaction and patient knowledge about atopic dermatitis in the

asynchronous, online model for delivering direct, followup dermatologic care. **(Ongoing)**

2010 Activities: The main activity in 2010 was the initiation of the RCT. The project achieved its recruitment goal of 150 patients and by mid-December, approximately 30 patients had completed the year-long study, which included five dermatology visits, either online or traditional office visits, conducted at 8-week intervals. Attrition of patients has been low in both arms of the study. Patients in both the intervention and the control groups complete multiple self assessment tools at each visit, including the Patient-Oriented Eczema Measure to assess disease severity and the Dermatology Life Quality Index or Children's Dermatology Life Quality Index to assess dermatology specific quality of life.

Preliminary Impact and Findings: The RCT is ongoing, thus the project is still in the data collection phase and does not have any findings to date.

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

* *AHRQ Priority Population*