

Creating a Foundation for the Design of Culturally-Informed Health Information Technology

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Organization:	University of Wisconsin Madison
Mechanism:	PAR: HS06-118: AHRQ Grants for Health Services Research Dissertation (R36)
Grant Number:	R36 HS 018809
Project Period:	February 2010 – July 2012
AHRQ Funding Amount:	\$34,003

Summary: When properly presented, consumer health information technology (IT) has the potential to increase the involvement of patients and their supporters in the improvement of their health. An approach to confronting racial and ethnic health care disparities has been to develop initiatives to enhance the cultural appropriateness of health care. To date, such efforts have focused predominantly on culturally tailoring provider-delivered care, health care systems, and health promotion campaigns. Given the expanding importance of health IT used by patients and their social network, and the fact that most technology is embedded with strong but unrecognized cultural orientations, expanding health IT design to purposefully include salient cultural dimensions may help reduce these disparities.

The long-term objective of this Health Services Research Dissertation (R36) grant is to reduce racial and ethnic health care disparities by creating new, culturally-responsive approaches to the design of health IT for use by patients and members of their social network (e.g., family, friends, neighbors). The goal is to create a foundation for a design strategy that leads to culturally-informed consumer health IT. A concurrent, mixed-methods approach drawing on both anthropological and systems engineering methods is being used to assess culturally diverse patients' daily routines of health information communication.

The outcome of this analysis will be a set of design considerations for culturally informed health IT. These design considerations will specify where similarities and differences in needed functionalities and means exist across individuals of diverse cultural identities.

Specific Aims:

- Determine the daily routines of health information communication exhibited by patients holding diverse cultural identities. **(Ongoing)**
- Determine what design considerations for consumer health IT result from knowledge of these daily routines. **(Ongoing)**

2011 Activities: Originally, Ms. Valdez proposed conducting one interview with each of the 30 participants to determine the health information communication routines of culturally diverse patients. Ultimately, however, two interviews with each participant were conducted in order to probe deeper into their social networks and their choices on health information communication. In the first interview, participants were asked to create a visual depiction of their social network. Participants were then presented with different types of health information—daily observations of health status, test results from clinical visits, information on diabetes self-care and self-management, and time and place of doctor's appointments—

and asked if and how they communicated this information to each member in their social network. At the second interview, conducted 1-to-2 weeks later, participants were asked to validate the information from the first interview, identify how certain aspects of their culture affects what kind of health information they share or do not share, and to describe their use of technology in general.

Data collection, a focus in 2011, was completed by the end of the year. A total of 34 individuals were screened, 18 of whom participated in two interviews. Qualitative data analysis is ongoing and will be completed in 2012.

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

Target Population: General

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: Knowledge Creation
