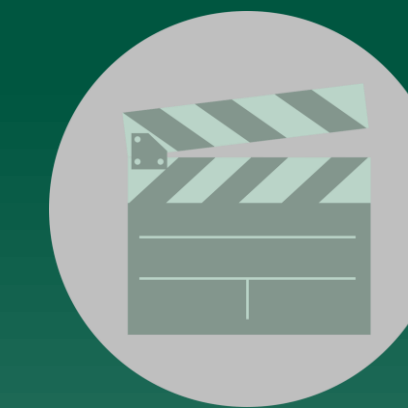




Using Digital Storytelling to Assess Patient Experience with Management of Diabetes in Everyday Life



Arati Joshi; Cardella Leak, PhD; Jim Bailey, MD, MPH

The University of Tennessee Health Science, Center for Health System Improvement

Introduction

Social Determinants of Health

- Social determinants of health are vital in determining disease risk in certain populations
- Type 2 diabetes is just one of many conditions upon which social determinants of health have an impact
- African Americans have an increased risk of acquiring diabetes and developing additional chronic conditions

The MODEL Program

- Three intervention arms: health coaching, text-messaging, and enhanced care through education materials
- Shown to reduce costs of care and improve outcomes for patients with improvements in adherence to medicines, healthier diets, and increased physical activity
- Patient- centered care that looks to improve self-care decisions

Digital Storytelling

- Allows a community to identify, represent, enhance, and present community concerns through a digital film or audio recordings
- Allows patients to have autonomy over their narrative and empowers them to share their own experience in their own words.
- Allows for analysis of body language, facial expressions, and emotions

Method

1. Recruitment

Participants for this project were recruited from a current pool of MODEL program participants (N=146) and randomly selected from each arm of the study (health coaching, text messaging, and enhanced care

Inclusion Criteria:

- 18 years or older
- African American
- Uncontrolled diabetes (HbA1C \geq 8)
- Diagnosis of \geq 1 additional chronic condition

2. Interviews

- UTHSC IRB approval # 17-05340-XP
- In response to COVID-19, interviews were conducted over Zoom, an online video teleconferencing software
- Theory: phenomenological model whose focus is on the description and analysis of lived experience
- Open- ended questions used to ask about their overall experience with the program and their quality of life thereafter

3. Analysis

The key informant interviews were transcribed. Responses were coded and categorized using a qualitative data analysis software, Nvivo, to identify certain themes and to compare and contrast the experiences of patients in each of the three intervention arms.

Results

Over the two-month period, six interviews were completed.

- Three patients were in the health coaching study arm
- Three patients were in the text messaging study arm
- Interviews with patients from the enhanced care study arm were not able to be scheduled.

Major Themes

Positivity

- Patients were very pleased with the MODEL program. They noted how MODEL has helped and encouraged them in self-management of their diabetes

"I can't say nothing negative about it...The health coach I got I really enjoyed him. He's a great motivator...It has been encouraging for me."
-Health Coach Participant

"The MODEL program has made me more aware and more conscious of my diabetes and to take it even more seriously. When you're sick you want to forget about being sick, but it helped keep it on your mind...it was something encouraging."
-Text Messaging Participant

Suggestions for Improvement

- Some patients provided suggestions on how to modify the MODEL program for future patients
- Suggestions included: cooking classes, exercise classes, and the provision of exercise equipment

"Some type of exercise equipment would've been helpful. If it came with a membership or some other tool...like exercise bands...or step aerobic boards... to help reach your goals."
-Text Messaging Participant

Conclusions

- Digital storytelling is a useful methodology in qualitative studies and patient-centered research
- This methodology is a useful way to develop and improve innovative patient-centered approaches like the MODEL program to better support diabetes self-management.
- In light of the recent COVID-19 pandemic where social distancing is necessary, this methodology can be modified, using online video technology software like Zoom to record patient stories.
- Future plans include conducting more interviews and implementing the suggestions in overall patient- centered research.

Acknowledgments

Memphis Summer Research Fellowship and UTHSC, Bill Pichette, Dr. Carolyn Graff, Dr. Mary Lou Gutierrez, and The MODEL Program and its participants. This work was supported through a Patient-Centered Outcomes Research Institute (PCORI) Project Program Award (SC15-1503-28336).

Disclaimer

All statements in this report, including its findings and conclusions, are solely those of the authors and do not necessarily represent the views of the Patient-Centered Outcomes Research Institute (PCORI), its Board of Governors or Methodology Committee.