Poster

Utilization of an Embodied Conversational Agent in an Integrative Medical Group Visit for Patients with Chronic Pain and Depression

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Abstract

Background: This abstract will report on the feasibility of introducing an innovative eHealth technology called an Embodied Conversational Agent (ECA) into a diverse patient population with chronic pain and depression.

Objective: The Integrative Medical Group Visit (IMGV) is a 9-week curriculum designed for patients with chronic pain and depression. The IMGV consists of 9 weekly group medical visits during which patients learn self-management for chronic pain and depression. Tablet computers with an ECA are given to each participant to reinforce the curriculum and self-care practices. The ECA reviews material covered in IMGV sessions and allows for participants to set healthy nutritional, exercise, and mindfulness goals. This clinical trial is ongoing across 3 sites in Boston, MA.

Methods: Patients were recruited from Boston Medical Center, Codman Square Community Health Center, and DotHouse Health. Demographic characteristics collected include age, gender, race, ethnicity, and sexual orientation. Patients in the intervention were given a Dell tablet with an ECA for the duration of the study and were encouraged to interact with the ECA on a regular basis. The ECA reviewed material covered during group medical visits and served as a tool for participants to practice self-management and stress reduction techniques. Usage data were collected from the tablets at 9-weeks and at 21-weeks post enrollment.

Results: In total, 75 patients were enrolled in the intervention. The majority of patients were female (83%), 60% identified as black/African American, and nearly 90% identified as non-Hispanic. The mean age in this sample was 50 years old. Approximately half of patients reported regular computer use prior to the study (56%). For this abstract, usage data and pain and depression outcomes are reported on. Patterns of utilization will be assessed from tablet usage data. This data will be used to assess potential associations between demographic data, amount of time spent using ECA, and content delivered by ECA.

Conclusions: ECAs may represent one strategy to encourage patient use of self-management for pain and depression.

ClinicalTrial: Clinicaltrials.gov NCT02262377; https://clinicaltrials.gov/ct2/show/NCT02262377 (Archived by WebCite at http://www.webcitation.org/6maRgLIT7).

(*iproc 2016;2(1):e6*) doi: <u>10.2196/iproc.6099</u>

KEYWORDS

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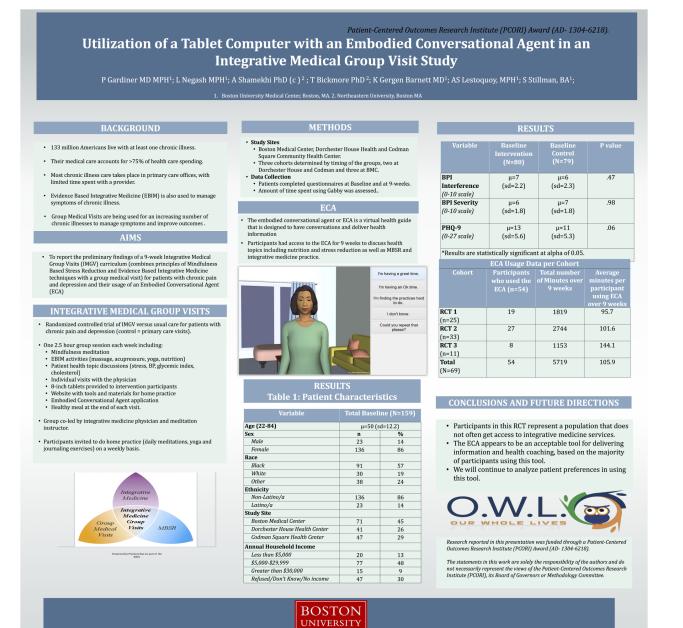
integrative medicine; embodied conversational agent; group visits

This poster was presented at the Connected Health Symposium 2016, October 20-21, Boston, MA, United States. The poster

is displayed as an image in Figure 1 and as a PDF in Multimedia Appendix 1.

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Figure 1. Poster.



Multimedia Appendix 1

Poster.

[PDF File (Adobe PDF File), 636KB-Multimedia Appendix 1]

Edited by T Hale; submitted 03.06.16; peer-reviewed by CHS Scientific Program Committee; accepted 02.08.16; published 09.12.16 <u>Please cite as:</u> Gardiner P, Negash NL, Shamekhi A, Bickmore T, Gergen-Barnett K, Lestoquoy AS, Stillman S Utilization of an Embodied Conversational Agent in an Integrative Medical Group Visit for Patients with Chronic Pain and Depression iproc 2016;2(1):e6 URL: <u>http://www.iproc.org/2016/1/e6/</u> doi: <u>10.2196/iproc.6099</u> PMID:



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