

University of Massachusetts Medical School

eScholarship@UMMS

UMass Center for Clinical and Translational
Science Research Retreat

2013 UMass Center for Clinical and
Translational Science Research Retreat

May 8th, 12:30 PM - 1:30 PM

The Association Between Low Health Literacy and Attitudes, Behaviors and Knowledge that Influence Engagement in Cancer Screening and Prevention Activities

Nancy Morris
University of Massachusetts Medical School

Et al.

Let us know how access to this document benefits you.

Follow this and additional works at: https://escholarship.umassmed.edu/cts_retreat



Part of the [Community Health and Preventive Medicine Commons](#), [Health Services Administration Commons](#), [Neoplasms Commons](#), [Public Health Education and Promotion Commons](#), and the [Translational Medical Research Commons](#)

Morris N, Field TS, Wagner JL, Cutrona SL, Roblin DW, Gaglio B, Williams AE, Han P, Costanza ME, Mazor KM. (2013). The Association Between Low Health Literacy and Attitudes, Behaviors and Knowledge that Influence Engagement in Cancer Screening and Prevention Activities. UMass Center for Clinical and Translational Science Research Retreat. Retrieved from https://escholarship.umassmed.edu/cts_retreat/2013/posters/25

Creative Commons License



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 3.0 License](#). This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in UMass Center for Clinical and Translational Science Research Retreat by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.

Abstract

Title: The association between low health literacy and attitudes, behaviors and knowledge that influence engagement in cancer screening and prevention activities

Authors and Institutional affiliations: Nancy Morris¹, Terry Field^{1,2}, Joann Wagner², Sarah Cutrona^{1,2}, Douglas Roblin³, Bridget Gaglio⁴, Andrew Williams⁵, Paul Han⁶, Mary Costanza¹, Kathy Mazor^{1,2}

¹University of Massachusetts Medical School, Worcester, MA; ²Meyers Primary Care Institute is a joint endeavor of Fallon Community Health Plan, Reliant Medical Group and the University of Massachusetts Medical School, Worcester, MA; ³Kaiser Permanente, Atlanta, GA;

⁴Mid-Atlantic Permanente Research Institute/Kaiser Permanente Mid-Atlantic States, Rockville, MD; ⁵Kaiser Permanente, Honolulu, HI; ⁶Center for Outcomes Research and Evaluation, Portland, ME USA

Contact information: Nancy Morris, PhD, ANP (508) 856-3661, nancy.morris@umassmed.edu

Background: Health literacy is a complex, multifaceted phenomenon. While health literacy has historically been measured using instruments that assess reading and numeracy, comprehension of spoken information is also important. The purpose of this study was to identify adults with low health literacy using a multi-dimensional assessment of health literacy and to explore whether low health literacy was associated with variables likely to affect engagement in cancer prevention and screening activities.

Methods: A random sample of English speaking adults aged 40-70 were invited to participate from: Kaiser Permanente Georgia, Hawaii, Colorado, and Fallon Community Health Plan Massachusetts. The Cancer Message Literacy Test-Listening, the Cancer Message Literacy Test-Reading, and the Lipkus Numeracy Scale were all used to assess aspects of health literacy. We also assessed self-efficacy, provider trust, and fatalism. Participants self-reported demographic data, health seeking behavior, and media use.

Results: Out of 1074 adults, 48% were white, 73% were educated beyond high school, and 53% rated their health as very good or excellent. Compared to others, adults with low health literacy were more likely to avoid physician visits ($p < .001$), more fatalistic about cancer ($p < .001$), had less familiarity and knowledge about common cancer screening tests ($p < .001$), and were less likely to seek health information from sources other than physicians ($P = .001$).

Conclusions: In this population of insured adults, we identified differences among adults with low health literacy which may impact their engagement in cancer prevention and screening activities. These findings have important implications for health care interactions and public health communication. Understanding the reasons for these beliefs and behaviors may suggest ways to target and tailor communication for this vulnerable population.