



A COLLABORATION

# TRIFECTA

COMMUNICATION>ENGINEERING>NURSING

## Evaluating the Impact of Message Features and Network Structures on the Effectiveness of Social Media in Preventive Health Information Propagation

A variety of health organizations have turned toward online social media to disseminate health information and connect with patients. However, there is a lack of research on how successful health organizations are disseminating their messages on social media and what strategies they should adopt to capitalize on social media to inform the public or patients of decision-making about disease prevention. The goal of this proposed research is to determine message- and network-related antecedents to the propagation of preventive health information broadcasted by health organizations through social media. In the process of achieve the research goal, this project will generate validated methodologies to systematically study preventive health information on social media, and generate strategies for health organizations to propagate preventive health information so that they can promote prevention more effectively using social media. The project is innovative because it will 1) focus on information propagation strategies of health organizations, including federal public health institutes and healthcare systems, which have received little scholarly attention; 2) leverage big data technique to mine message and network data from social media and a scalable, online machine learning technique to automatically classify messages based on communication theories; 3) integrate the theoretical perspectives of message design and network structures, which have been disconnected in the examination of information propagation processes on social media. Our research team draws expertise from communication, media and info

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