Project Summary/Abstract

There is a fundamental gap in understanding how patients with chronic disease use social media to seek, find, appraise, and interact with health information to make health decisions. No instrument currently exists to measure interactive eHealth literacy (i.e., patient ability to use social media for health-related decision-making) in patients living with Chronic Obstructive Pulmonary Disease (COPD), the 3rd leading cause of death in the United States (U.S.) that affects over 1.2 million Floridians. Continued existence of this gap represents an important public health problem for patients living with COPD, because, until it is filled, pulmonary rehabilitation specialists, primary care providers, and public health researchers will be unable to identify the degree to which patients have the ability to use social media for patient education and self-management support. My long-term career goal is to become a leading public health scientist specializing in the study of translational health communication research that explores the effectiveness of interactive eHealth technologies in chronic disease self-management support interventions. The objective of this particular NRSA F31 application is to gain training and mentored research experience that will help me develop and field test an instrument with sufficient measurement properties to measure both self-efficacy and task performance related to interactive eHealth literacy in COPD. The objective of this research will be accomplished by pursuing two specific aims: 1) Develop a novel web-based instrument to measure interactive eHealth literacy among adults living with COPD; and 2) Administer one pilot ($n=50$) and one field test ($n=555$) of the novel instrument to measure interactive eHealth literacy in a random sample of Floridians living with COPD. This approach is innovative, because, for the first time, interactive eHealth literacy will be assessed among patients with COPD. To develop this new web-based instrument, I will complete a comprehensive series of sponsor-directed tutorials, doctoral-level courses, workshops, and research seminars that will provide me with training in: (a) consumer health informatics and human-technology interaction, (b) community-engaged research (CEnR) methods for patient recruitment in medically underserved communities; and (c) advanced measurement and psychometric testing. The rationale for this multidisciplinary training plan is to collect preliminary data for an NRSA F32 application that will examine associations between interactive eHealth literacy, functional, and clinical health outcomes among adults living with COPD. The proposed research is significant, because it is expected to be the first step in a continuum of research that will lead to identifying adults with COPD who are prepared to use interactive web-based patient education and self-management support tools to improve their health-related quality of life. Ultimately, the skills gained during this NRSA F31 fellowship will allow me to develop an independent line of research exploring the effects of interactive eHealth literacy on a variety of patient-centered health outcomes in COPD.