A Collaborative Interdisciplinary Approach to Implementation of a Lung Screening Program in the Tennessee Valley Healthcare System

Program/project purpose: Early detection of lung cancer with low-dose computed tomography has been found to improve overall survival. The Tennessee Valley Healthcare System (TVHS) is committed to implementing lung cancer screening (LCS), and has been selected to participate in Veterans Administration-Partnership to increase Access to Lung Screening (VA-PALS), a project that provides resources to implement LCS (a Nurse Practitioner program navigator and a comprehensive electronic data management system) at ten VA locations. The purpose of this practicum was to develop a collaborative team to move towards a common goal of increasing high-quality, evidence-based LCS. A secondary goal was to gain implementation science skills through designing a mixed-methods study to assess organizational readiness, barriers, and facilitators of LCS.

Structure, design of program/project: A radiologist and thoracic oncologist collaborated to engage local stakeholders (including radiologists, primary care physicians, thoracic surgeons, pulmonologists, and ancillary support staff) with interest and prior work towards developing a lung screening program. The team further engaged VA-PALS leadership and the Vanderbilt Center for Clinical Quality and Implementation Research to design an electronic survey on organizational readiness and semi-structured interview guide on facilitators and barriers of LCS. Participants surveyed in Primary Care will include TVHS providers, staff, and leadership.

Outcomes, evaluation, and final practicum product(s): The unique, collaborative research team of a radiologist and thoracic oncologist with shared interests in early detection of cancer and implementation science was successfully established. The team’s preliminary discussions with Primary Care revealed the need to have our program navigator conduct the shared decision-making visit, follow up on screenings, place consults to appropriate specialties, follow up tests, and contact patients in follow-up. The TVHS Executive Leadership Team expressed the need for Primary Care to be involved in all screening activities. The nurse navigator has been hired, and an interdisciplinary Steering Committee has been formed. We developed an electronic survey on organizational readiness, which was first distributed to Primary Care on November 26, 2018, and will be distributed for twelve weeks. In-depth interviews in Primary Care will be performed to assess barriers and facilitators. These implementation science tools will be used in the future at the other nine VA-PALS sites. As a result of this work, we were selected to conduct the national program evaluation of VA-PALS and have been awarded over $65,000 for the first year from the VA Office of Rural Health. Through this work, I have also become a member of the American Cancer Society’s National Lung Cancer Roundtable’s Provider Engagement and Outreach Task Group, and am leading our white paper focused on provider engagement and outreach in LCS.

Lessons learned: Engaging stakeholders and developing collaborative relationships is not only fundamental for project / program success, but can also lead to career success. Final interpretation of organizational readiness at TVHS and the additional VA-PALS sites will be used in a full evaluation of the VA-PALS program. This evaluation will provide an opportunity for Veterans Health Administration to more effectively and efficiently implement and manage lung screening programs within VA-PALS and beyond.