



Lucy Spalluto, M.D.

M.P.H. Candidate, Epidemiology Track
lucy.spalluto@vanderbilt.edu

Practicum Site:
U.S. Department of Veterans Affairs, Tennessee
Valley Healthcare System
Nashville, TN

Practicum Site Supervisor:
Christianne Roumie, M.D., M.P.H.

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 (LDCT) lung screening has been found to improve overall survival in two large, multi-center randomized-controlled trials. The Tennessee Valley Healthcare System (TVHS) is committed to implementing lung screening, and has been selected to participate in the Veterans Administration-Partnership to increase Access to Lung Screening (VA-PALS), a program that provides resources to implement lung screening programs (a program coordinator and a comprehensive electronic data management system) at 10 select VHA healthcare systems. The purpose of this practicum was to develop collaborative team with strong background in radiology, oncology, and implementation science to move towards a common goal of increasing high-quality, evidence-based lung cancer screening implementation. A secondary goal was to design a mixed methods study to assess organizational readiness for implementation of a lung screening program in the *Radiology Department* at TVHS.

Structure, Design of Program/Project: A radiologist and thoracic oncologist collaborated extensively to engage local TVHS stakeholders (including radiologists, primary care physicians, thoracic surgeons, pulmonologists, and ancillary support staff) with interest in developing a lung screening program. The team further engaged VA-PALS executive leadership and the Vanderbilt Center for Clinical Quality and Implementation Research to design a quantitative electronic survey on organizational readiness and semi-structured

interview guide on facilitators and barriers of lung screening, which will be distributed within *Radiology* at TVHS. The team members surveyed in *Radiology* will include radiologists, technicians, administrators, schedulers, and leadership at the Nashville and Alvin C. York main TVHS campuses as well as the community-based outpatient clinics.

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 *Radiology* revealed a high level of concern regarding implementation of the new electronic data management system and regarding the anticipated increase in the number of LDCT lung screening studies. Radiologists and leadership indicated that the new reporting system and increased number of studies would significantly increase their current workload and might impact their ability to provide service to other Veterans. This information informed the team's decision to further evaluate organizational readiness at TVHS. A final quantitative electronic survey was developed and distributed to *Radiology* on November 27, 2018. In-depth interviews in *Radiology* will be performed to supplement this data to assess barriers and facilitators of lung screening at TVHS. Further, these organizational readiness tools will be used in the future at the 9 additional VA-PALS sites. As a direct result of this work, we were selected by the VA-PALS leadership 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.

Lessons learned: Engaging stakeholders and developing collaborative relationships is not only fundamental for project 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 that this research team has been selected to perform. This evaluation will provide an opportunity for *radiology* to more effectively and efficiently manage lung screening programs in the Veterans Health Administration.