Optimization of An Emergency Department Pathway for Management of Acute Venous Thromboembolism at Vanderbilt University Medical Center

**Background:** Venous Thromboembolism is comprised of both pulmonary embolism (PE) and deep venous thrombosis (DVT). There is a large body of literature to guide an evidence-based approach in the diagnosis, management, and treatment of acute VTE. Institutional guidelines have been identified in clinician surveys as an important driver to implement evidence-based practice in the ED. Incorporation of a multidisciplinary Pulmonary Embolism Response Team (PERT) has been effective in bringing stakeholders from multiple disciplines to care for critically ill patients with acute PE. The overall objective of this practicum is to optimize an emergency department (ED) pathway for the management of acute venous thromboembolism (VTE) at Vanderbilt University Medical Center (VUMC).

**Methods:** The existing ED pathway will be modified using national guideline recommendations and clinical evidence on the management of acute VTE. We will incorporate protocols from leading institutions in the United States. Multiple stakeholders at VUMC including cardiology, pulmonary critical care, as well as interventional radiology are being engaged and a digital software program will be used to illustrate ED flow charts.

**Results:** This is an ongoing MPH practicum. The scope of this project with affect both ED providers as well as providers within other specialties such as cardiology, pulmonary critical care, and interventional radiology. It will fulfill a public health need by improving the care of patients newly diagnosed with acute VTE in the ED at VUMC.

**Conclusions:** With the help of a multidisciplinary medical team, institutional guidance will be provided for emergency physicians at VUMC to more effectively manage patients with acute VTE.