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Practicum Site: Vanderbilt University Medical Center - Transgender Health Clinic

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Identifying and Understanding Transgender Through the Development of an Electronic Health Record Phenotype

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Introduction: Vanderbilt serves transgender patients across a variety of its clinical sites, but little is known definitively about the demographics of this patient population accessing care here. With the leadership of Dr. Kevin Niswender and Dr. Sally Friedman, the research team in the Transgender Health Clinic has developed an electronic health record (EHR) phenotype for the synthetic derivative to identify transgender patients in the medical record and further understand the demographic of these transgender patients. Additionally, the research team has compiled resources on initiating and managing gender affirming hormone therapy for a quality improvement project intended to educate Vanderbilt Internal Medicine residents on transgender health care.

Methods: After attaining IRB approval, the research team reviewed literature on EHR phenotyping and compiled a list of patient attributes, key words, diagnosis codes, and medication history that aims to identify transgender patient charts with high sensitivity and specificity. For the quality improvement project, the research team considered what primary care providers may not know about beginning or managing hormone therapy and addressed common first steps in beginning treatment as well as monitoring and times to consider a specialty consult. The EHR phenotype is still under validation for positive predictive value, and the goal is to continue refining the included terms and diagnoses until a phenotype with 95% positive predictive value is achieved. For the quality improvement project, the team created a short informational video and compiled a reference sheet.

Results: The results thus far convey that identifying trans patients in the EHR requires a combination of several types of characteristics (for example, hormone therapy combined with the keyword "transition" in a recent note). For the quality improvement project, the pre-survey results indicate that residents feel caring for transgender patients is an important part of primary care but that there is low confidence among residents in being able to provide this.

Conclusions: Once complete, the EHR phenotyping project will help better describe the trans population seeking care at Vanderbilt to better inform public health interventions, patient outreach, and/or quality improvement. The quality improvement project will help expand the number of available providers able to provide trans health care.