Objectives: Peripherally inserted central catheter (PICC) placement in critically ill children for long-term intravenous access has increased due to the convenience of bedside placement and minimal sedation required. Following the increased trend in PICC line placement, the incidence of deep vein thromboembolisms has also trended upward. We determined Wesley Children's Hospital's incidence of DVTs associated with peripherally inserted central catheters.

Design: Retrospective, single-center, cohort analysis.

Setting: Wesley Children's Hospital.

Patients: Pediatric patients with a peripherally inserted central catheter placed from January 1st, 2016, to December 31st, 2019.

Interventions: None.

Measurements and Main Results: Patients less than eighteen years of age admitted to the PICU with a PICC line placed during their admission were included in this analysis. Data was obtained from the Virtual PICU system (VPS) and medical chart review. Of the 154 PICC lines, 13 patients (8.4%) developed a Doppler confirmed DVT during admission. In these 13 patients, three (23.1%) received pharmacologic prophylaxis, two (15.4%) received mechanical prophylaxis while eight (61.5%) received no DVT prophylaxis. Twenty-four of the 154 PICC lines placed were in trauma patients, three (12.5%) of these patients had a doppler confirmed DVT, one (33.3%) received pharmacologic prophylaxis and two (66.7%) received no DVT prophylaxis.

Conclusion: The incidence of PICC-associated DVTs at Wesley Children's Hospital is comparable to what is currently reported in the literature.

Key Words: peripherally inserted central catheter; deep vein thrombosis