

Background

Research focusing on pulmonary embolism (PE) is often conducted at academic and tertiary hospitals. While data suggests that early identification and evidence-based management commensurate with risk can improve outcomes, little is known with respect to the capabilities of Emergency Departments (EDs) to both diagnose and manage high-risk PE.

Purpose

We present performance metrics for high-risk PE among a sample of EDs participating in the American College of Emergency Physicians' 2024 Emergency Quality Network (E-QUAL) PE collaborative

Methods

EDs participating in the 2024 E-QUAL collaborative submitted diagnostic and treatment data for a sample of ED visits in which a PE was diagnosed. For this study, we analyzed data deemed relevant to high-risk PE diagnosis and care delivery. EDs submitted data using a web-based submission portal. We present performance metrics among this cohort.

Results

Number of EDs	48
Rural, safety net, critical access	36%
Total number of unique PE diagnoses	1046
Complete risk stratification elements	67%
Median proportion of PEs with documentation of risk categorization	11%
Median proportion identified as high-risk	17%
Median proportion of PEs receiving anticoagulation	97%
Median proportion of high-risk PE receiving advanced care	46%

Conclusion

- Data to accurately determine risk was obtained in most PE cases, yet documentation of resultant risk categorization was low.
- Post-submission data analysis identified a higher percentage as high-risk than previously reported in the literature, though this may be related to our broader definition of high-risk PE.
- While rates of anticoagulation for PE are high, advanced treatment occurred in less than half of the high-risk PE population.
- Our data suggests an implementation gap in the diagnosis and treatment of high-risk PE.
- Results may be valuable for identifying areas for future research initiatives and quality improvement strategies.

Geographic Distribution of VTE Participation

