J. Patel[2]. [1]Division of Vascular Surgery, Medical College of Wisconsin, Milwaukee, Wisc; [2]Division of Interventional Radiology, Medical College of Wisconsin, Milwaukee, Wisc; [3]Division of Vascular Surgery, UT Houston, Houston, Tex; [4]Department of Biostatistics, Medical College of Wisconsin, Milwaukee, Wisc

Objectives: To assess trends over a decade in utilization of Inferior Vena Cava (IVC) filters in the U.S by indication, hospital and patient demographics.

Methods: Retrospective cross-sectional study utilizing the Nationwide Inpatient Sample Database, 2000-2009. IVC filter placement was identified with ICD-9 codes. Survey-weighting, bivariate and multivariate analysis was performed.

Results: The number of IVC filters placed in the US increased by 234% over a decade, from 56,380 in 2000 to 132,049 in 2009 (Fig). 84.7% of patients had a PE or DVT. 94.6% of IVC filters were placed in urban hospitals. The largest number of IVC filters was placed in the South, followed by the Northeast, Midwest, and Western regions (38.7%, 25.8%, 22.4%, and 13%, respectively). Adjusting for other patient and hospital factors, independent predictors of IVC filter placement were year, hospital size, location, teaching status, patient age group 50-79 years, insurance status, and urgency of admission.

Conclusions: The use of IVC filters has dramatically increased over the last decade in the USA, with the largest utilization of filters among patients aged 50-79 years, Medicare recipients and the Southern region of the US. The majority of patients receiving IVC filters have an appropriate indication (PE or DVT). Future studies are required to understand differences in utilization and to optimize selection of patients for IVC filter placement.

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PS156.

Venous Thromboembolism Risk Assessment Scoring in the Critically Ill: The Impact of Misclassification

Andrea T. Obi[1], Rafael Alvarez[1], Christopher Pannucci[1], Shipra Arya[1], Andrew Nackashi[2], Newaj Abdullah[3], Vinita Bahl[1], Lena Napolitano[1], Thomas W. Wakefield[1], Peter K. Henke[1]. [1]Surgery, University of Michigan, Ann Arbor, Mich; [2]West Virgina College of Osteopathic Medicine, Lewisburg, WV; [3]Wayne State University School of Medicine, Detroit, Mich

Objectives: This study aims to retrospectively validate a VTE risk score, and compare with physician entered scores in a previously unstudied high risk cohort: the critically ill.

Methods: VTE risk factors from the ACCP guidelines via Caprini risk scoring and events were identified for 4,856 patients admitted to our Surgical Intensive Care Unit from 2007 to 2012, of which the majority had both clinician-entered VTE and retrospectively calculated scores. Logistic regression was used to calculate odds ratio for each level of VTE risk.

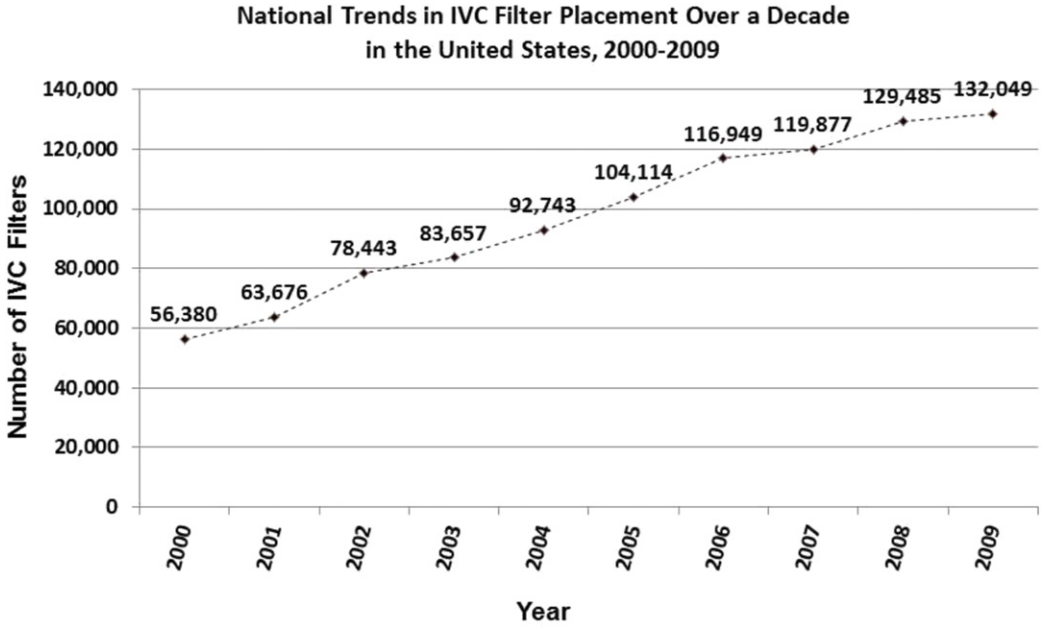

Fig.

Results: Overall incidence of VTE was 7.4% and increased with risk level: 0% in low risk patients, 3.5% in moderate risk patients, 5.5% in high risk patients and 8.3% in highest risk group. The difference between highest and high risk patients was statistically significant ($P = .005$). Incidence of acquired VTE accelerated in the highest risk group according to cumulative risk score, which was significant in the 7-8 (8.4%; $P = .0217$) and 8+ (11.5%; $P = .0015$) cohorts. The four risk levels were significantly associated with development of VTE during hospitalization. Clinician-entered scores were within 1 point of the retrospectively calculated score in 74% of cases. However, in 26% of cases there was significant disagreement by ≥2 points between the scores. The clinician-entered score significantly underestimated risk in 80% of these cases. In patients misclassified from the highest risk group downwards, the risk of VTE was higher ($P = .0007$) than the physician score predicted.

Conclusions: The VTE risk assessment score is valid in the critically ill and supports the use of individualized risk assessment upon admittance to the ICU.

Clinician entered scores significantly diverge from retrospectively calculated scores in one quarter of cases and result in poor discrimination of VTE risk. Discrepancies were usually the result of under-scoring.

The impact of misclassification on thromboprophylaxis prescribing regimen and incidence of VTE requires further study.

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PS158.

Reproducibility of the Clinical Class of CEAP When Selecting Patients with a Medical Indication for Treatment of Varicose Veins

Helen Sinabulya[1], Anders Holmberg[2], Lena Blomgren[3]. [1]Department of Surgery, Capio St Gorans Hospital, Stockholm, Sweden; [2]Scandinavian Venous Centre, Stockholm, Sweden; [3]Department of Vascular Surgery, Karolinska University Hospital, Stockholm, Sweden

Objectives: The CEAP classification (Clinical-Etiology-Anatomy-Pathophysiology) is the golden standard for classification of chronic venous disease (CVD) today and is often used as part of local guidelines when selecting patients for treatment within the national healthcare system. Many clinicians find both CEAP and local guidelines difficult to apply in clinical reality, and patients often seek a second opinion if they disagree with the examining doctor. The aim of this study was to evaluate the reproducibility of the clinical class of CEAP when used in a clinical situation where the decision for reimbursement of treatment was made.

Methods: At a high-volume center in Stockholm, an unselected series of 78 patients (106 limbs) with varicose veins or CVD were examined by three independent surgeons with regard to CEAP "C". It was also determined whether there was a medical indication for treatment according to the local guidelines, which would allow for treatment to be funded by the Stockholm County. Pairwise comparison with simple kappa was used to investigate the inter-observer reproducibility.

Results: The simple kappa for "C" between all observers was 0.55-0.68 (95% CI), where least agreement was noted in class C3. Medical indication had a simple kappa of 0.35-0.57 (95% CI).

Conclusions: There was a considerable discrepancy between the surgeons assessing the clinical class of CVD and even more so when deciding the medical indication for treatment. This may be due to inherent difficulties in the CEAP, lack of specific training, or the simultaneous assessment of reimbursement that may influence the grading of clinical class.

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PS160.

High Quality, Appropriate Primary Care: A Key Component in Access to Vascular Care

Philip P. Goodney, Benjamin S. Brooke, Randall R. De Martino, Kristina A. Giles, David H. Stone, Brian Nolan, Jack L. Cronenwett. Section of Vascular Surgery, Dartmouth-Hitchcock Medical Center, Lebanon, NH

Objectives: Differences in access to vascular care remain unexplained for patients with lower extremity PAD. We studied relationships between the quality of medical care for patients with PAD and access to vascular care.

Methods: We identified a cohort of 52,505 Medicare patients with pre-existing diabetes, PAD, and foot ulceration who required hospitalization for foot cellulitis. Across regions in the Dartmouth Atlas, we determined the proportion of patients that received appropriate, high quality medical care, defined as (1) hemoglobin A1C testing, (2) podiatric care, and (3) non-invasive vascular testing, all within 1 year of hospital admission. We assessed regional relationships between quality of medical care and vascular care, defined as diagnostic/therapeutic vascular care for CLI patients.

Results: Across the United States, only 36% of diabetic patients with PAD and tissue loss received all three components of high quality medical care; 76% received 2 of 3 components. A non-invasive vascular study was absent in 41%. Provision of high-quality medical care varied across regions, from 4% of patients in Mason City, Iowa to 58% of patients in Sun City, Arizona. Regions most likely to provide high quality medical care were 24% more likely to provide invasive vascular care ($P < .001$; Fig).

Conclusions: Fewer than 4 out of 10 Medicare diabetics with PAD and tissue loss receive appropriate, high quality medical care. Quality improvement efforts at