parison purposes, the mortality rate of all inpatients with *S. aureus* infections was 7.3%. Patients with *S. aureus* cSSSIs were older (mean age 54 years vs. 46 years for the comparison group) and were more likely to have congestive heart failure, diabetes with chronic complications and bacteremia/septicemia. Relative to the comparison group, patients with *S. aureus* cSSSIs had significantly (P < 0.0001) longer mean length of stay (9.7 vs. 4.4 days) and higher average costs per stay ($16,941 vs. $9,154). After controlling for potentially confounding factors, the excess mean costs associated with *S. aureus* cSSSIs were estimated to be $3,396. CONCLUSION: Our findings suggest that the clinical and economic burden of complicated skin and skin structure infections (cSSSIs) due to *Staphylococcus aureus* among hospitalized patients is substantial.

PIN22

IMPACT OF *S. AUREUS* INFECTIONS ON EXPENDITURES AND LENGTH-OF-STAY IN U.S. HOSPITALS

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OBJECTIVES: Evaluate the incremental impact of *S. aureus* infection stays on hospital charges and length-of-stay in U.S. hospitals in 2003. METHODS: The 2003 Nationwide Inpatient Sample data were analyzed. Hospital discharges were classified as either a *S. aureus*–related infection stay or a non-*S. aureus*-related infection stay using a combination of several ICD-9 codes. Incremental effect of *S. aureus* infection on hospital charges and length-of-stay was estimated using multivariate regression models adjusting for hospital fixed effects and patient variables including age, gender, race, payer, diagnosis-related grouping and concomitant conditions including diabetes, dialysis and lung disease. RESULTS: *S. aureus* infection was reported as a discharge diagnosis for 1.0% of all hospital inpatients, or 389,963 stays, in 2003. *S. aureus* infection hospital stays were significantly more likely among male, older patients, stays that were paid by Medicare, white or non-Hispanics and hospital stays among individuals with diabetes, lung disease or dialysis. After adjusting for covariates, the mean incremental impact of *S. aureus* infection on hospital charges and length-of-stay was $37,251 (95% Confidence Interval (CI): $34,678–$39,823) and 8.2 days (95% CI: 7.9–8.5) among all inpatient stays, $40,637 (95% CI: $37,683–$43,591) and 9.2 days (95% CI: 8.8–9.6) among surgical stays, $83,952 (95% CI: $75,853–$92,052) and 16.8 days (95% CI:15.7–17.9) among invasive cardiovascular stays, $34,202 (95% CI: $29,612–$38,791) and 9.6 days (95% CI: 9.0–10.2) among invasive orthopedic stays and $119,292 (95% CI: $106,209–$132,374) and 19.8 days (95% CI: 17.5–22.2) among invasive neurosurgical stays. CONCLUSION: *S. aureus* infections present a considerable economic burden to U.S hospitals. Based on the prevalence of *S. aureus* infection and its incremental impact, the total economic impact of *S. aureus* among all hospital admissions was estimated at $14.5 billion in 2004 U.S. dollars.

PIN23

DETERMINANTS OF TOTAL HOSPITAL COSTS AMONG INPATIENTS WITH CANDIDEMIA

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OBJECTIVES: To identify factors associated with total hospital costs among patients with candidemia in a large, urban, tertiary care, teaching hospital. METHODS: This retrospective cohort study examined hospitalizations during calendar years 2004 and 2005 at Thomas Jefferson University Hospital in Philadelphia, PA, using data from various hospital systems. Candidemia cases were identified via the microbiological laboratory information system as those patients with at least one confirmed positive blood culture for any Candida species at any point during the study period. Demographic, economic, and clinical data, including length-of-stay (LOS), payer types, total costs, and Diagnosis Related Group (DRG) assignments were collected from the hospital cost accounting system. Pharmacy data (i.e. medications administered and associated costs) were retrieved from the pharmacy electronic information system. A multivariate regression analysis, using the natural logarithm of total hospitalization costs as the dependent variable, was conducted. Independent variables included demographic information, relative DRG weights, and Candida species. RESULTS: Among 68,526 total hospitalizations during the study period, 287 cases were confirmed positive for candidemia. The mean age of cases was 58 years, 52% were female, and 60% were Caucasian. The mean LOS was 43.3 days and the average inpatient cost for candidemia cases was $130,759 (SD = $116,560; median, $97,869). The most common Candida species was C. albicans (n = 127; 44%). The most commonly used antifungal treatment was fluconazole (N = 176, 61%). Age, and relative DRG weights (p < 0.05) were significantly positively correlated with total hospital costs. Older patients with higher relative DRG weights were associated with the higher total costs. Race, gender, and marital status were not associated with total costs. CONCLUSION: Relative DRG weights, as well as age are associated with total hospital costs among patients with candidemia. Candidemia is expensive to treat and results in lengthy hospital stay. Early detection and treatment may significantly reduce resource use as well as improve outcomes.

PIN24

THE ECONOMIC IMPACT OF METHICILLIN RESISTANCE IN STAPHYLOCOCCUS AUREUS BACTEREMIA IN KOREA

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OBJECTIVES: The objective of this study is to examine the economic outcome of Methicillin resistance in Staphylococcus aureus bacteremia in Korea, where MRSA is endemic in majority of hospitals. METHODS: We conducted retrospective case-control study of patients admitted to three university-based teaching hospitals in Seoul, Korea in 2005. Cases were defined as patients with Methicillin-resistant S. aureus (MRSA) bacteremia and controls were Methicillin- susceptible S. aureus (MSSA) bacteremia selected according to a priori matching criteria. 58 cases and 58 controls were identified. Hospital charges were collected from hospitals' billing system. RESULTS: The median hospital charge after the development of bacteremia was higher for cases with MRSA bacteremia ($8245) than for controls with MSSA bacteremia ($6569). The median hospital