ICD-9 codes were used to identify patients' comorbidities and advanced liver disease complications. **RESULTS:** The 5-year prevalence rate (2007-2011) of chronic HCV among commercially-insured individuals was 0.18% (95% CI 0.16%-0.20%). In Multichannel, total of 27,843 chronic HCV patients were identified. The average age of these chronic HCV patients was 53 years (SD 14). Chronic HCV patients exhibited a wide array of health problems. The prevalence rates of comorbidities and advanced liver disease were higher in the resistant group (31.6% vs. 16.6%, p<0.001) than in the susceptible group. Similarly, the 2011 prevalence rates of advanced liver disease were higher in the chronic HCV population (p=0.001), including non-compensated liver disease (20.5% vs. 0.1%), decompensated cirrhosis (13.0% vs. 0.0%), hepatocellular carcinoma (3.4% vs. 0.0%), and liver transplant (2.6% vs. 0.0%). **CONCLUSIONS:** Chronic HCV patients have a wide array of significant health problems and stages of advanced liver disease relative to non-HCV patients.

**PIN22**

SEASONAL TRENDS IN INCIDENCE OF HERPES LABIALIS (“COLD SORES”) OUTBREAKS: AN INFODEMIOLOGICAL ANALYSIS USING INTERNET SEARCH ENGINE QUERY DATA

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**OBJECTIVES:** The Internet is an important source of health information and Google search queries are an increasingly useful source of health information. The study objective was to analyze Google search query data about herpes labialis (“cold sores”) to determine if information-seeking behavior on the topic substantially changed and if evidence that herpes labialis outbreaks have cyclical, seasonal trends. **METHODS:** Google search engine query data (April 1, 2005 and March 31, 2011 in Cerner Health Facts database) were downloaded and ingested into weighted mean monthly values in three datasets: (2) Worldwide; (2) USA; and (3) Australia. Descriptive statistical analyses and rankings were performed to identify/calculate cyclical trends (peaks/troughs) in search volume activity. **RESULTS:** Plots of search volume for herpes labialis information over time reveal striking intra-annual cyclic patterns—moving from high search volume in fall/winter months to low volume in spring/summer months. December was the most frequent (67%) month in the Worldwide and USA analyses and February (48%) was the most frequent June (67%) and May/June (equalley 33%) ranked lowest. In Australia (with reversed, southern hemisphere seasons), search volume most frequently (50%) occurred in May. In May/June search volume was lowest (63%). Quartile analysis (i.e., "top 3 months" in search volume frequency) showed November/December/January peaking in the Worldwide and USA analyses, while June/July/August predominated in Australia. Conversely, May/June/July and June/July/August ranked lowest in the Worldwide and USA analyses, respectively. February/March/May ranked lowest in Australia. **CONCLUSIONS:** Analyzing Internet search data provides valuable insights into health-related behavior and disease epidemiology. Results of this study show that Internet research activity about herpes labialis has intra-annual cycles, presumably motivated by actual outbreaks of herpes labialis and treatment needs. Results loosely correlate with seasons, suggesting connections between herpes labialis outbreaks and changes in meteorological/climatological conditions.

**PIN23**

USE OF AN ELECTRONIC HEALTH RECORD (EHR) DATABASE TO STUDY DRUG RESISTANCE AMONG HOSPITALIZED PATIENTS WITH COMPLICATED INTRA-ABDOMINAL INFECTION (IAI)

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**OBJECTIVES:** Develop a methodology to characterize drug resistance among inpatients treated for complicated intra-abdominal infection (cIAI) using a hospital-based electronic health record (EHR) database. **METHODS:** This retrospective observational study used qualifying inpatient encounters between April 1, 2005 and March 31, 2011 in Cerner Health Facts, a de-identified database derived from contributing facility EHRs. cIAI encounters required a primary or secondary discharge diagnosis of intra-abdominal infection, a qualifying surgical procedure and qualifying culture (defined by source/site description and culture type). A total of 953 patients from 62 hospitals met cIAI criteria; 339 (35.6%) in the resistant group, but did not reach statistical significance. Risk factors associated with resistance across at least two guideline empirical antibiotic classes included HAI status, infection at the level of the appendix, blood dyscrasias and atypical or metastatic neoplasms. **CONCLUSIONS:** Resistance to antibiotics recommended for empiric treatment of cIAI was common, and among those with resistance, nearly half had resistance across ≥2 antibiotic classes. Risk factors associated with multi-class resistance included HAI subgroup, appendicitis, blood dyscrasias and atypical/advanced cancers.

**PIN24**

THE IMPACT OF RENAL IMPAIRMENT, INFLAMMATORY BOWEL DISEASE AND ADVANCED AGE ON MORTALITY AMONG HOSPITALIZED PATIENTS WITH CLOSTIDIUM DIFFICILE-ASSOCIATED DIARRHEA

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**OBJECTIVES:** CLOSTIDIUM difficile-associated diarrhea (CDAD) increases the risk of hospital mortality. Factors associated with CDAD-related mortality include renal impairment (RI), inflammatory bowel disease (IBD) and advanced age (>65 y). These factors may also affect mortality risk; how CDAD modifies their effect on mortality is unknown. This cohort study analyzed these effects among hospitalized patients with hospital-origin CDAD (HO-CDAD) and community-origin CDAD (CO-CDAD) vs. non-CDAD controls. **METHODS:** A retrospective analysis (4/2005-6/2011) of the Health Facts dataset (Cerner Corp., Kansas City, MO) identified hospitalized adult patients with a positive C. difficile toxin collected ≥48 hours (HO-CDAD) or <48 hours (CO-CDAD) after admission. Generalized estimating equation models measured the effects of HO- and CO-CDAD, risk factors (RI, IBD, age >65), and their interactions on hospital mortality. **RESULTS:** 4,505 patients with HO-CDAD, 2,825 with CO-CDAD, and 276,486 controls were identified. Unadjusted hospital mortality was 13.0% in HO-CDAD, 10.7% in CO-CDAD and 2.7% in controls. There was no interaction with Age and CDAD; the odds ratio of approximately double regardless of CDAD status. However, the effect of RI on mortality in HO-CDAD was 1.35 times higher than in controls (interaction odds ratio [OR] =1.35; 95% CI, 1.01-1.79). Considering the interaction term was still OR of dying with RI and HO-CDAD was 1.48 (95% CI, 1.12-2.00). Among controls, IBD had no significant effect on mortality (OR = 0.77; 95% CI, 0.52-1.14). The interaction term for CO-CDAD and IBD was 3.05 (95% CI, 1.20-7.79), for an overall OR for IBD with CO-CDAD = 2.36 (95% CI, 1.08-5.14). **CONCLUSIONS:** The effect of RI on mortality varies by CDAD status. RI and IBD have a synergistic (multiplicative instead of additive) effect on CDAD mortality, if patients develop CDAD, their risk of dying greatly increases versus controls.

**PIN25**

BUDGET IMPACT ANALYSIS OF LIPOSOMAL AMPHOTERICIN B AND AMPHOTERICIN B LIPID COMPLEX: Apong A1, Bhat H1, Bandyopadhyay J2, Dean R1, Patel B1, Price J1, 1OptiStatim LLC, Longmeadow, MA, USA, 2Optimer Pharmaceuticals, Inc., Jersey City, NJ, USA

**OBJECTIVES:** To estimate the budget impact of changing the market shares of liposomal amphotericin B (L-AmB) and amphotericin B lipid complex (ABLC) for the treatment of invasive fungal infections (IFI) in a US hospital. **METHODS:** An Excel-based budget impact model was developed to estimate the costs associated with using L-AmB and ABLC for treating adult patients with