improving national influenza vaccination rates among the elderly.

THE COST OF SEVERE SEPSIS AT A TERTIARY CARE TEACHING INSTITUTION
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OBJECTIVE: To determine the cost of treating an intensive care unit (ICU) patient with severe sepsis who expires while hospitalized at The Johns Hopkins Hospital (JHH), prior to the introduction of drotrecogin alfa (activated) for the treatment of severe sepsis. METHOD: The study utilized a cost-of-illness methodology. Data were collected through retrospective chart review. Patients with sepsis were identified based on their discharge summary in an integrated patient care database at JHH. Patient selection included those hospitalized between October 1, 2000 and September 30, 2001, in an adult ICU, who expired prior to hospital discharge. A random sample of these patients was chosen for chart review. Chart review identified patient status based on the PROWESS study inclusion criteria for the diagnosis of severe sepsis. Cost-of-illness calculation included direct medical costs (medications, hospital days, and ICU days). The cost to the hospital was calculated using the cost-to-charge ratio specific for JHH. Indirect costs were not included. RESULTS: A total of 60 patients were included in the study. The mean total hospital, non-ICU, ICU, and sepsis-related lengths of stay were 24, 8, 16, and 18 days, respectively. Patients spent a mean of 67% of hospitalized days in the ICU. The mean total hospitalization cost for a patient with severe sepsis who expires was approximately $54,000 and the mean sepsis-related hospitalization cost for one of these patients was approximately $40,000. The mean total costs per day (medication costs per day in parentheses) for the entire hospitalization, non-ICU stay, ICU stay, and sepsis-related stay were $2270 ($313), $1512 ($210), $2649 ($364), and $2245 ($339), respectively. CONCLUSION: Sepsis is a condition that has a significant impact on patient mortality and hospital costs. The results of this study will be used to monitor the effect of the use of drotrecogin alfa (activated) for the treatment of severe sepsis at JHH.

INFECTION—Quality of Life/Preference Based Outcomes

THE COST EFFECTIVENESS OF PI BASED THERAPY WITH NELFINIVIR (NLF) COMPARED TO RITONAVIR (RTV) FOR PATIENTS WITH HIV/AIDS
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OBJECTIVE: CPCRA-042/CTN-02, was a binational, open label trial in patients with advanced HIV receiving either Nelfinivir (NLF) or Ritonavir (RTV). A pharmacoeconomic (PE) sub-study of consenting Canadian participants prospectively captured health resource utilization (HRU) and Quality of Life (QOL) data. Our objective was to assess costs, effects and incremental cost-effectiveness of NLF compared to RTV as Protease Inhibitor therapy. METHOD: The PE sub-study recruited from 13 Canadian sites. Data collected included HRU and QOL as measured by a VAS and SF12 every 4 months. Costs were estimated using the St. Paul’s Hospital (SPH) formulary, SPH Cost Model, and BCMA fee schedule. Using intent to treat analysis, the overall incremental cost effectiveness ratio (ICER) was calculated. RESULTS: In the main study, there was no difference in the time to clinical progression, immunologic or virologic responses between the two study arms. In PE sub-study, 137 patients were randomized: NLF (n = 71) or RTV (n = 66). The median (Q1–Q3) baseline patient age was 38 years (33–44), with median CD4+ count of 36/mm3 (12–70). Total follow-up time was ≥3 years. Preliminary results show mean (SD) first year annual total cost for NLF patients to be $26,099 (14,800) and $20,475 (7591) for RTV patients; p < 0.001. QOL scores showed no significant difference among groups at one year. The number of patients switching initially assigned study drug due to toxicity was lower for the NLF group 19 (27%) vs. 26 (39%) at one year and 8 (12%) vs. 24 (36%) in the first 8 months. The annual ICER per switch avoided equaled $24,071 per patient. CONCLUSION: The overall total cost and tolerability with assigned therapy were both higher for NLF. Given equal efficacy and immunologic response, the choice for one drug over the other as initial therapy depends on the importance placed on tolerability of the start-up regimen and potential for the emergence of drug resistance.

HIV/AIDS PATIENTS: EXPERIENCES WITH HOSPITALIZATION
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OBJECTIVES: Even with the advent of new pharmacotherapies (e.g., HAART) that minimize inpatient care, HIV/AIDS patients are sometimes hospitalized for acute problems. Patients’ responses to specific aspects of hospitalization determine their satisfaction and have implications for hospitals’ quality improvement efforts. The objective of this study was to examine ratings of hospitalization experiences of HIV/AIDS inpatients and compare them with ratings of other, non HIV/AIDS inpatients. METHODS: A set of surveys from 78 patients discharged from 32 US hospitals in 2001 was assembled. Surveys contained 49 items pertaining to aspects of hospitalization as well as several patient demographic items. Surveys had been pre-coded to include diagnostic information (Diagnosis-Related Group (DRG)) and were
mailed to patients within a week of their hospital discharge, with a return rate of approximately 25%. Surveys from patients whose DRG indicated HIV/AIDS were selected for further analysis. Groups of patients who were treated at the same hospitals as the HIV/AIDS sample, but whose diagnoses were not related to HIV/AIDS, served as comparisons. RESULTS: HIV/AIDS patients' ratings differed in several respects from those of other patients. Nursing care, staff concern, and handling of tests/treatments were rated significantly (p < .05) worse than those of comparison patients. But ratings of admission procedures, room amenities, and physician care did not differ from those of non-HIV/AIDS patients, eliminating general response bias as an explanation for the findings. An index pertaining to how hospitals might improve quality of care for HIV/AIDS patients showed that they would gain the most from attending to HIV/AIDS' patients spiritual and emotional needs; helping them to arrange home care after discharge, and giving better explanations about tests and treatments. CONCLUSIONS: HIV/AIDS patients' reported experiences with hospitalization were worse than those of hospitalized non-HIV/AIDS patients. Hospital personnel can use specific findings to improve treatment experiences of such patients.

OBJECTIVE: To examine the burden of side effects in patients receiving anti-retroviral therapy METHODS: We reviewed literature on relationships between side-effects, adherence and quality of life in HIV infected patients and developed an exploratory survey to assess impact of side-effects of anti-retroviral therapy on patient's lives. We pilot tested the survey in a small sample of HIV infected patients. The revised survey was web-enabled and made accessible to patients through HIV/AIDS web sites. The survey contained questions on presence of side effects, their impact on work, social life, family, lifestyle and self-perception as well as strategies used by patients to manage their side effects. An exploratory factor analysis using maximum likelihood estimation and oblique rotation was performed on questions about impact to determine the latent dimensional structure of “burden” of side effects as perceived by HIV patients. RESULTS: Four hundred one respondents (mean age = 43 years, 88% male) completed the survey. More than 80% of respondents were on regimens with 3 or more anti-retroviral medications. Fatigue (reported by 64% of respondents), diarrhea (62%), sleep problems (49%), lipodystrophy (48%) and sexual dysfunction (44%) were the most commonly reported side-effects. More than 80% of patients indicated that side effects impacted their life at least moderately when reporting impact on a 5-point Likert scale. To make the side-effects less bothersome 26% reported skipping or spacing out doses, 50% reported requesting their physician to change their medication and 20% reported discontinuing their medication altogether. Exploratory factor analysis suggested a unidimensional factor structure accounting for 84% of the variance in underlying latent trait. CONCLUSIONS: Side effects of anti-retroviral therapy can impose significant humanistic burden on HIV patients that should be more thoroughly assessed in clinical trials.

OBJECTIVES: Acute otitis media (AOM) is a common pathology in children usually treated with an antibiotic given 2 or 3 times per day for 10 days. Non-compliance is often an issue and may explain in part the development of antimicrobial resistance. We conducted a Willingness to Pay study (WTP) to identify parents’ preferences and assess the value given to a unique dose treatment in comparison with classical treatments. METHODS: Patients were accrued between February and November 2002. The study population was composed of parents of children with AOM who were interviewed by phone at the end of the AOM treatment. The questionnaire included three main topics: demographic characteristics, past medical history and history of present illness, quality of life assessment and treatment compliance. A multivariate analysis will be performed to estimate the various predictors of WTP. RESULTS: An analysis was performed on 595 respondents. Forty-six percent of the children were <2 years and 33% were between 2 and 5 years of age. The majority (72%) attended day care center or school and most had received an antibiotic for AOM in the previous 6 months (45%). Parents were willing to pay an average (CAD mean, 95% CI) $31.54 ($29.42–33.65) for a unique dose treatment (n = 562). The AOM treatment which had been received modified the parents’ WTP (Anova, p = 0.016) with azithromycin ×5 days (n = 102) producing the smallest value $24.05 (19.75–28.34). Other treatments produced higher values: $32.31 (29.42–35.20) for amoxicillin (n = 249); $32.83 (22.67–43.00) for amoxicillin-clavulanic acid (n = 60) and $35.42 (31.47–39.37) for cefprozil (n = 119). CONCLUSIONS: Parents of children who received azithromycin gave the smallest value while those whose children had received amoxicillin, amoxicillin-clavulanic acid or cefprozil gave the highest values. Therefore, previously received antibiotic affects the magnitude of the WTP which is smaller for parents whose children had received shorter duration treatment.