COSTS OF HEALTH CARE FOR HEPATITIS C-INFECTED MEMBERS IN A MANAGED CARE ORGANIZATION (MCO)
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The current literature provides limited information about the cost-burden of Hepatitis C. OBJECTIVES: To identify all medical and pharmacy costs accrued by members with Hepatitis C in a Medicaid MCO during 1999. METHODS: Hepatitis C-infected patients were identified from a database of continuously enrolled members from an inner-city Medicaid MCO in Philadelphia during 1999 using ICD-9 codes indicative of Hepatitis C. Medical and pharmacy claims for these identified members during this study period were obtained and analyzed. A subanalysis comparing patients prescribed combination ribavirin-interferon alfa-2b therapy with patients not prescribed combination therapy was performed. Costs were reported as reimbursements paid for medical claims and pharmacy claims (AWP—14.5%). RESULTS: From a cohort of 73,869 members, 395 members (0.535%) met inclusion criteria for Hepatitis C. The mean age was 46.5 years (SD = 9.5; range = 4–81) and 213 (53.9%) were male. These members had 17,507 medical claims resulting in payments of $4,073,082. Inpatient hospital services accounted for 48% of these costs. There were 27,681 pharmacy claims that totaled $1,495,096. Sixty patients received combination therapy, which totaled $375,468 in pharmacy claims (n = 444). Comparing patients prescribed combination therapy and patients not prescribed combination therapy, medical costs were $2,580/member and $11,702/member, respectively. In addition, pharmacy costs were $8,610/member and $2,920/member, respectively. Total costs in 1999 for patients prescribed combination therapy was $11,190/member and for patients not prescribed combination therapy was $14,622/member. These results were not adjusted for disease severity. CONCLUSIONS: Hepatitis C is a very costly disease. Total health care costs to this Medicaid MCO during 1999 for the 395 members identified with Hepatitis C exceeded $5.5 million. In addition, total costs were less for members prescribed combination ribavirin-interferon alfa-2b therapy compared with members not prescribed combination therapy. Further investigation is needed to explain the observed differences in health care expenditures between these two populations.

OBJECTIVE: To estimate the lifetime benefits and costs of interferon alfa therapy for active hepatitis C with cirrhosis (HC), cost-effective analysis was carried out. METHODS: Cost-effectiveness analysis (CEA) and cost-utility analysis (CUA) were carried out to estimate the lifetime benefits and costs of interferon alfa therapy (IFA) for HC. A Markov model base on a randomized controlled trial was developed. As a comparator, conventional therapy (CV) was used. A societal viewpoint was adopted for the estimation of costs, and both direct and indirect costs were evaluated. A Monte Carlo simulation was done to evaluate a confidence interval of cost-effectiveness or cost-utility ratio. Quality of life (utility) was measured by a time-trade off method among HC patients. RESULTS: At lifetime follow-up among 40 years of men, expected life years (15.2 years) for IFA were longer than those (9.0 years) for CT. Moreover, expected QALYs (9.86) for IFA were longer than those (5.30) for CT. On the other hand, expected costs ($548,500) for IFA were higher than those ($459,000) for CT. The incremental cost per life-year gained for IFA was $4,490 (discount rate of cost and effectiveness: 5%). The incremental cost per QALY gained was $6,240. Sensitivity analysis for age, costs, and health outcomes confirmed robustness of these results. CONCLUSION: On the basis of this analysis, IFA for HC should prolong length and quality of life at a reasonable incremental costs, from a societal perspective.
ship function for each individual (Mean survivorship). Adjusted LOS at quartiles of % discharged for each function was compared with unadjusted LOS using Kaplan-Meier method. RESULTS: Hospital unit type at randomization and number of comorbidities both differed significantly between groups and significantly affected LOS. With covariate controls in the log-logistic model, linezolid treatment significantly reduced LOS ($p = .04$). Adjusted/unadjusted LOS at quartiles of % discharged were:

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<thead>
<tr>
<th>% discharged</th>
<th>Adjusted LOS (days)</th>
<th>Unadjusted LOS</th>
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<tr>
<td></td>
<td>Individual correction</td>
<td>Mean survivorship</td>
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<tr>
<td></td>
<td>LZD VAN</td>
<td>LZD VAN</td>
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<td>25 (median)</td>
<td>6</td>
<td>10</td>
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<tr>
<td>50</td>
<td>14</td>
<td>16</td>
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<td>75</td>
<td>26</td>
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CONCLUSIONS: When adjusted for covariate differences, median LOS for linezolid patients was at least 2 days shorter than for vancomycin patients. Other differences in the LOS distribution are evident and may be important to decision-makers but off-median estimates may be sensitive to the adjustment method used. Methodologic considerations are explored further.

### PID 11

PEGYLATED (40KDA) INTERFERON ALFA-2A (PEGASYS®) SIGNIFICANTLY IMPROVES TOLERABILITY, QUALITY OF LIFE, AND WORK PRODUCTIVITY IN PATIENTS WITH CHRONIC HEPATITIS C

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BACKGROUND: Several studies have demonstrated the negative impact of chronic hepatitis C (CHC) and respective treatments on patient health-related quality of life. Studies suggest PEGASYS provides an improved sustained virological response compared with interferon (IFN) monotherapy (30–39% vs 10–19%) and may provide safety, quality of life (QoL), and work productivity benefits compared with standard interferon/ribavirin (IFN/RBV, REBETRON™) combination therapy. OBJECTIVE: To compare the safety and tolerability of treatment with PEGASYS vs REBETRON in previously untreated patients with chronic hepatitis C (CHC). METHODS: A 72-week, multicenter study randomized 412 patients to PEGASYS 180 μg qw or REBETRON (IFN-26 3 MIU tiw + RBU 1000-1200 mg qd). Tolerability was assessed by the Hepatitis Quality of Life Questionnaire (HQLQ, assessed at weeks 4, 12, 24, 48, 60, and 72; SF-36 plus 4 Hepatitis-specific domains) and the Work Productivity and Activity Impairment (WPAI) instrument. RESULTS: After 12 weeks of treatment, HCV-RNA was negative in 46.8% of PEGASYS and 50.3% of REBETRON patients. Patients on PEGASYS showed a clinically significant difference compared to REBETRON in several AEs: anemia (2.0% vs 32.4%), dyspepsia (9.5% vs 18.1%), pruritus (6.7% vs 17.5%). At weeks 4 and 12, patients on PEGASYS compared to REBETRON had significantly better work productivity (Estimated Wkly Work Productivity Lost: $32.10$, PEGASYS; $86.60$, REBETRON) in 7 of 7 domains. Week 4 and 12 HQLQ assessments indicated patients on PEGASYS vs those on REBETRON had clinically and statistically better QoL scores in 8 of 8 SF-36 domains, both physical and mental summary scores, and 4 CHC-specific domains ($p < 0.05$). CONCLUSIONS: The 12-week data demonstrate that patients treated with PEGASYS had a superior tolerance to therapy, were more productive as measured by the WPAI, and had better health related quality of life profiles compared with patients treated with REBETRON, while maintaining similar virological response.

### PID 12

AVERTING FUTURE AIDS CASES: MODELING COSTS OF INTERVENTIONS WITH OUT-OF-TREATMENT SUBSTANCE ABUSERS

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OBJECTIVE: The North Carolina Cooperative Agreement (NCCoOp) for AIDS Intervention Research implemented an AIDS intervention in an urban, high-risk, primarily African-American, crack and injection drug-using population. Estimated costs for the standard intervention are $242 per person. How many future AIDS cases will be averted by making this expenditure? METHODS: We constructed an epidemic model to assess the long-term impacts of intervention related changes on HIV incidence and prevalence. Our model is a dynamic compartment model focusing on 8 distinct sexual and drug use risk groups within the community. Cost data are available from existing intervention analyses. RESULTS: 778 persons were enrolled in the NCCoOp intervention in Wake and Durham counties, NC. Of these, 80 (11.5%) were HIV positive. Using data collected prior to intervention, our model predicts that HIV prevalence will rise to 18% of the NCCoOp population in five years. The epidemic is driven predominantly by high-frequency needle users (HFNU), primary needle users (PNU), and primary crack users (PCU) who account for 79% of new infections over this time period. Using data collected after intervention, our model predicts HIV prevalence will decline to 7% of the NCCoOp population in five years. However, HFNU, PNU, and PCU account for 89% of new infections in this case. Risky drug use and sexual behaviors were dramatically reduced by intervention and this accounts for most of the reduction in HIV prevalence. Other factors influencing the reduction in HIV prevalence are AIDS mortality and growth in the drug using population. CONCLU-