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 $\sim$ 4 times (\$24,247 vs. \$6,903). For the non-surgical group (N=3177), however, the total cost of all recurrences was slightly less than initial acute episode costs (\$2478 vs. \$2648). CONCLUSIONS: Costs associated with recurrent DV episodes are significant, with recurrences costing substantially more than initial acute episodes. Among those with a recurrence, significant variation in costs among those with and without surgical intervention exists.

# PGI17

### SOCIETAL BURDEN IN PATIENTS WITH LIVER TRANSPLANTATION: THE COME STUDY RESULTS

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OBJECTIVES: Little is known about the overall burden of chronic hepatic diseases (CHDs) for the health care third-payer, patients and their families. We performed a Cost of Illness study named COME, to assess the societal burden (direct, indirect and intangible costs) in patients with CHDs. The following results pertain to patients who received liver transplantation (LT). METHODS: The COME Study was a naturalistic, multicenter, retrospective (time horizon; 6 months) work involving 1088 adult patients with CHDs. Costs were assessed from the societal perspective and are reported as mean /patient-month (direct costs) and mean days lost from work/study/usual activities per patient-month (loss of productivity). Patients' Health Related Quality of Life was assessed with the EQ-5D questionnaire and is reported as percentage of patients with problems and as mean+SD visual analogue scale (VAS) score. RESULTS: A total of 11.8% of the study sample had a LT. These patients were 72.9% male, aged 19-72 (median=57.5) years. Etiological agents responsible for LT were: HBV (36.2%), HCV (43.1%), HBV-HCV co-infection (3.4%), other etiology (17.3%). Mean direct cost were 2628.8 €/patient-month. Hospitaliza tions contributed to 56.4% of costs, 40.2% generated from 11 patients who received LT during the observational period. Treatment contributed to 39.5% of costs. Outpatient contributed to 0.3% of costs. Non medical costs contributed to 3.7% of direct costs. Three days/patient-month of productivity was lost by the patients and their family caregivers. Thirty-four percent of patients reported problems in walking about, 12.4% had problems with self-care, 42.1% had problems in doing usual activities, 49.2% had pain or discomfort, and 40.2% had anxiety or depression. The mean+SD VAS was 69.1+20.5. CONCLUSIONS: High societal costs are generated from having CHDs and in particular among patients with LT. The implementation of efficient treatments aimed to reduce worsening of CHDs can help to improve patients' health and reduce societal costs.

#### PGI18

SOCIETAL BURDEN IN HEPATITS C PATIENTS: THE COME STUDY RESULTS

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OBJECTIVES: The burden of Chronic Hepatic Diseases' (CHDs) is little known. We aimed to assess costs (direct, indirect and intangible) in patients with CHDs. The following results pertain to patients with chronic Hepatitis C (HC). METHODS: We conducted a naturalistic, multicenter, retrospective Cost-of-Illness study, named COME. Costs occurring during the 6 months before enrollment were assessed from the societal perspective (i.e., NHS, patients and caregivers). Direct costs included non medical (traveling/accommodation, formal caregiver payments) and medical costs: conventional drug and unconventional treatment (e.g., homeopathy, herbal medicines, vitamins, etc), hospitalization, outpatient medical visits and diagnostic examinations. Loss of productivity was measured for patients and caregivers. Results are expressed as: €/patient-month (direct costs); days/patient-month (indirect cost). Patients' HRQoL was assessed with the EQ-5D questionnaire and is reported as percentage of patients with problems and as mean+SD visual analogue scale (VAS) score. RESULTS: A total of 31.8% of the study sample (1088 patients) had chronic HC. These patients were 54.6% male, aged 20-83 (median=60.2) years. Overall HC patients generated mean direct costs corresponding to 233,68€/patientmonth. Treatment contributed to 71.1% of costs. Ribavirin-INF protocol was adopted in 57.7% of patients. Hospitalizations contributed to 14.7% of costs and involved 11.6% of the patients. Outpatient accesses contributed to 7.4% of costs and involved 98% of the patients. Non medical costs contributed to 6.8% of direct costs and involved 92.1% of the patients. Patients and their family caregivers lost on average 0.7 days/patient-month of productivity. Twenty percent of patients reported problems in walking about, 12.5% had problems with self-care, 25.4% had problems in doing usual activities, 36.3% had pain/discomfort, and 44.7% had anxiety/depression. The mean+SD VAS was 68.8+20.3. CONCLUSIONS: Chronic HC generates high costs to the health care system. The use of efficient treatments is necessary to reduce worsening of patients' health, direct and indirect costs.

#### PGI19

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OBJECTIVES: The burden of Chronic Hepatic Diseases (CHDs) is little known. We aimed to assess social burden (direct, indirect and intangible cost) in patients with CHDs. The following results pertain to patients with chronic Hepatitis B (HB).

METHODS: COME is a naturalistic, multicenter, retrospective cost of illness study. Costs occurring during the 6 months before enrollment were assessed from the societal perspective. Direct costs included non medical (traveling/accommodation, caregiver payments) and medical costs: conventional (drug) and unconventional treatment (e.g., homeopathy, vitamins, etc), hospitalization, outpatient medical visits and diagnostic examinations. Loss of productivity was measured for patients and caregivers. Results are expressed as: €/patient-month (direct costs); days/patient-month (indirect costs). Patients' HRQoL was assessed with the EQ-5D questionnaire and is reported as percentage of patients with problems and as mean+SD VAS score. RESULTS: Among 1088 adult patients enrolled, 221 had chronic HB (20.3%). These patients were 69.7% male, aged 19-81(median=56.1) years. Overall HB patients generated mean direct costs corresponding to 308.1€/patient-month. Treatment contributed to 76.9% of costs, involving 53.4% of the patients. In particular, 46.2% of patients were treated with antiviral drugs for systemic use (lamivudine, ribavirin, etc). Hospitalizations contributed to 12.9% of costs and involved 9.0% of the patients. Outpatient accesses contributed to 5.4% of costs and involved 99.1% of the patients. Non medical costs contributed to 4.8% of direct costs and involved 90.8% of the patients. Patients and their family caregivers lost on average 0.4 days/patient-month of productivity. As regards HRQoL, patients reporting problems were: 24.4% of patients in walking about, 12.0% in self-care, 30.5% in usual activities, 36.1% in pain/discomfort and 45.6% in anxiety/depression domain. The mean+SD VAS was 71.25+20.72. CONCLUSIONS: Chronic HB generates high costs to the healthcare system. The use of efficient treatments is necessary to reduce worsening of patients' health, direct and indirect costs.

# PGI20

PRE- TO POST-DIAGNOSIS INCREASE IN UTILIZATION AND COSTS OF CHRONIC-USE MEDICATIONS AND OTHER MEDICAL RESOURCES IN MANAGED CARE ENROLLEES WITH DIVERTICULITIS

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OBJECTIVES: We assessed changes in utilization of common chronic-use medications and generalized all-cause medical services and costs pre- to post-diagnosis in a real-world diverticulitis (DV) population. METHODS: Insurance claims from >40US health plans representing  ${\sim}50$  million lives were retrospectively analyzed. Inclusion criteria were: primary diagnosis of colonic DV (ICD-9 562.11, 562.13) between January 1, 2005 and December 31, 2008; antibiotic within 3 days post-diagnosis; ≥12 months pre- and post-diagnosis enrollment. Use of non-GI-related medications, as well as overall all-cause utilization and costs (2009 US\$), were descriptively evaluated pre- to post-diagnosis. All-cause costs were also evaluated for non-DV controls matched 2:1 on age, gender, and plan enrollment, with index date assigned as diagnosis date of each respective DV match. RESULTS: A total of 25,172 patients met all inclusion criteria (51.2% male, mean age 53 years). The top 5 most prevalent chronic-use medications during pre-index were antihyperlipidemics (30.0% of patients), antihypertensives (27.5%), antidepressants (20.9%), dermatologicals (20.0%) and beta blockers (15.7%). Post-index use of these medications increased by 8.9%, 8.2%, 7.3%, 9.1%, and 11.7%, respectively (all P<0.010). Mean all-cause hospital days and costs per patient increased significantly pre- to postindex (0.9 vs. 2.3 days, \$3223 vs. \$6341; all P<0.010). Other significant (P<0.010) increases pre- to post-index were seen for ER visits (0.7 vs. 1.2; \$432 vs. \$1012), prescriptions (22 vs. 27 fills, \$1910 vs. \$2081), office visits (10 vs. 12, \$1747 vs. \$2251), and other outpatient/specialty consultations (3 vs. 5, 2676 vs. 4288) (all P<0.010). Total all-cause costs increased by 60% post-diagnosis (\$10,419 vs. \$16,672; P<0.010). Minimal change occurred for controls (\$6299 vs. \$6493; P=0.010). CONCLUSIONS: Patients with DV have higher use of common chronic-use prescriptions after diagnosis, as well as significantly higher use and costs of general all-cause medical services. Payers should be aware of increased costs for not only disease-related services, but also other general health care.

#### PGI21

## A COMPARISON OF THE COST-EFFECTIVENESS OF FIDAXOMICIN, METRONIDAZOLE, AND VANCOMYCIN, IN THE TREATMENT OF CLOSTRIDIUM DIFFICILE-ASSOCIATED DISEASE

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OBJECTIVES: Clostridium difficile-associated disease (CDAD) is a nosocomial gastrointestinal infection that has been associated with increases in health care costs. Fidaxomixin was recently approved for CDAD but is costly compared to conventional agents. We evaluated the cost-effectiveness of fidaxomicin, metronidazole, and vancomycin in the treatment of CDAD. METHODS: A decision analysis model was created to estimate the cost-effectiveness of fidaxomicin, metronidazole, and vancomycin in clinical cure from the US health care payer perspective. Parameters for the model were determined from the published literature and indirect treatment comparison was performed using Bayesian methods to obtain the probabilities for responder and recurrence rates. Medication costs were determined from the AWP and resource costs were determined from CPT and HCPCS codes. All costs were adjusted for 2011 US dollars. Probabilities of responder and recurrence, costs, and resource utilization were fitted with a beta, gamma, and triangle distribution, respectively. Probabilistic sensitivity analysis with 10,000 trial simulations was performed to test the robustness of the model. Probabilities of cost-effectiveness for different treatment strategies were plotted on a cost-effectiveness acceptability frontier (CEAF). RESULTS: The total direct costs for fidaxomicin, metronidazole, and vancomycin were \$14,219.98, \$13,927.53, and \$13,554.08, respectively. The