medical and prescription claims collected over a 4-year study period (January 1, 2001–December 31, 2004) from more than 300,000 employees. Data from employees with and without (controls) functional dyspepsia were compared using 2-part regression techniques. Outcome measures included direct and indirect costs paid by the employer, absenteeism, direct costs by the place of service where care was performed, and objectively measured productivity output. **RESULTS:** Employees with functional dyspepsia (N = 1669) had greater average annual direct medical and prescription drug costs and indirect costs (due to sick leave, short- and long-term disability absences) than controls (N = 274,206). Compared with controls, the functional dyspepsia employees incurred health benefit costs that were $5,138 greater and had greater costs for each place of service (all $P < 0.0001$). The employees with functional dyspepsia had an additional 0.83 absence days per year and produced 12% fewer units per hour than controls (both $P < 0.05$). **CONCLUSIONS:** Employees with functional dyspepsia have greater costs at all places of service and lower productivity than employees without functional dyspepsia.

PGI13

THE DISEASE BURDEN OF IRRITABLE BOWEL SYNDROME IN KOREA

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OBJECTIVES: The aim of this study was to estimate the annual societal disease burden of irritable bowel syndrome (IBS) in Korea for the year of 2008. **METHODS:** The claim data with IBS were extracted from the Health Insurance Review & Assessment Service database in 2008 of Korea. After definition of patient with specialists, the prevalence and medical costs were calculated. The number of outpatient visits and length of hospital stay also were calculated to estimate transportation cost and productivity loss. **RESULTS:** The annual national patients with IBS were estimated to 1.30 million with 753,688 (57.79%) for female. The results showed that the crude prevalence of IBS was 2.68% (95%CI: 2.66%-2.71%, 2.25% for male and 3.12% for female) in 2008. The total cost due to IBS was 14.9 billion won (1$ = 1047.30 won, 2008) including 348 million won for direct medical cost (2.33%), 88 million won for nonmedical cost (transportation costs), and 14.5 billion won for lost work due to illness. **CONCLUSIONS:** The disease burden of IBS appears to be high because of the high morbidity although not a significant cause of death. The result is likely to underestimate due to using claim data and strict definition of patient. However, this data might be useful and necessary to support evidence based decision making for IBS.

PGI14

DIRECT AND INDIRECT COSTS OF HEPATITIS C VIRUS (HCV): COMPARISON OF NON-HCV, UNTREATED HCV, AND PEG-RBV TREATED HCV COHORTS

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OBJECTIVES: To compare direct and indirect costs between HCV patients on pegylated interferon with ribavirin (PEG-RBV), untreated HCV, and non-HCV controls. **METHODS:** We identified three cohorts using the MarketScan Commercial Claims and Encounters Database® from 2002–2007: HCV patients on PEG-RBV, untreated HCV, and non-HCV controls. We used propensity scores to match treated to untreated (1:1), and HCV to non-HCV patients (1:3). We compared direct costs and utilization across the cohorts. We performed subset analysis using the MarketScan Health and Productivity Management Database® to evaluate absenteeism and short-term disability costs. **RESULTS:** We identified 10,001 PEG-RBV patients. Compared to untreated patients, treated patients had higher total medical costs ($28,547 vs. $21,752; $p < 0.001$) outpatient pharmacy costs ($17,419 vs. $2,900; $p < 0.001$) and outpatient physician visit costs ($894 vs. $787; $p < 0.001$), but lower inpatient costs ($3,942 vs. $9,543; $p < 0.001$) and ER costs ($366 vs. $505; $p < 0.001$). Treated patients had similar absenteeism rates (93% vs. 88%; $p = 0.27$), higher short-term disability rates (33% vs. 30%;$p < 0.001$) and higher indirect costs ($11,528 vs. $9,316; $p < 0.05$). Non-HCV controls had significantly lower costs in all categories compared to patients with HCV. Total costs among matched non-HCV costs were $15,932, outpatient pharmacy costs were $1,796, outpatient physician visit costs were $429, inpatient costs were $2,181, and ER costs were $184; indirect costs were $7,654. After adjusting for demographic and clinical characteristics, including HIV and cirrhosis, differences remained significant but diminished. **CONCLUSIONS:** HCV patients engender a higher economic burden compared to non-HCV controls. Treated patients cost more than untreated patients; the cost differential is primarily driven by higher outpatient pharmacy costs. Indirect cost differences are driven by greater absenteeism duration and greater short term disability use and duration. These data provide insight into the economic burden of HCV and its treatment, and may be employed in future health economic analyses evaluating existing and emerging therapies.

PGI15

MEDICAL SERVICE UTILIZATION AND COSTS BY DISEASE SEVERITY, SUSTAINED VIRAL RESPONSE, AND GENOTYPE IN EUROPEAN PATIENTS WITH CHRONIC HEPATITIS C VIRUS

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OBJECTIVES: To document variations in resource utilization and costs by disease severity, sustained viral response (SVR), and genotype in a European population with chronic hepatitis C virus (C-HCV). **METHODS:** Patient charts from the UK, France, Germany, Spain, and Italy were retrospectively reviewed. Inclusion criteria were: C-HCV diagnosis within past 5 years; age ≥18 years; no diagnoses of hepatitis B or HIV/AIDS; ≥1 year follow-up post-diagnosis; no clinical trial participation. All-cause utilization and costs (2009 €) for hospitalizations, emergency room (ER) and office visits, and specialty referrals were aggregated within patients over 1 year post-diagnosis. C-HCV severity was assessed via Metavir score. Among patients receiving C-HCV-directed pharmacotherapy, SVR was defined by viral RNA < 10 IU/mL at ≥6 months post-treatment. Utilization and cost differences across clinical factors were assessed with multivariate modeling. **RESULTS:** In total, 1016 patients were identified. Overall, 23% of severe patients were hospitalized versus 2.5% of mild. Hospitalization was 5 times more likely in severe C-HCV compared to mild (odds ratio [OR] = 5.39; $P = 0.008$), while the hospitalization rate, measured by Poisson incidence rate ratio (IRR), was 4 times higher (IRR = 3.98; $P = 0.010$). Hospital costs were €1380 higher in severe versus mild disease ($P = 0.001$). Hospitalization risk in SVR attainers was less than half that of non-attainers (OR = 0.22; $P < 0.0001$). ER, office, and specialist visit rates were significantly lower among SVR attainers. Genotype had little effect on utilization, but genotype 1 was associated with slightly lower (€90 per patient; $P < 0.0001$) hospital costs versus genotypes ≥2. **CONCLUSIONS:** Disease severity and SVR are important predictors of C-HCV costs. Awareness of these factors by public health systems, which bear the high cost burden of C-HCV, may help promote strategies for earlier disease detection and increased treatment initiation before progression occurs, as well as formulary access for more convenient therapies that increase treatment persistence and thereby SVR rates.

PGI16

PATTERNS OF LUBIPROSTONE UTILIZATION AND COSTS IN MEMBERS OF A LARGE HEALTH BENEFITS COMPANY

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OBJECTIVES: Assess patterns of utilization and costs of twice daily 24 mcg dosing of lubiprostone in a large managed care population. **METHODS:** Patients included Humana members 18 years and older with medical claims for chronic constipation (CC) and/or irritable bowel syndrome (IBS) between April 1, 2006 and April 30, 2008. The index date was the first diagnosis of CC or IBS. Patients had at least 180-days of continuous enrollment pre-index and at least 30-days post-index. Users and non-users were compared. Users were compared pre- and post-lubiprostone initiation. **RESULTS:** A total of 92,804 patients with a diagnosis of CC or IBS were identified during the study period; 1873 filled at least one 30-day prescription for lubiprostone. Seventy-five percent of users were female. Lubiprostone users were younger than non-users (61.6 vs. 66.2 yrs old) and more likely to be co-prescribed opiates (35.5 vs. 29.4%), antihistamines (14.8 vs. 9.5%) and tricyclic antidepressants (8.1 vs. 4.7%), all statistically significant. Common co-morbidities in lubiprostone users were back problems (23.6%) and abdominal pain (21.9%). A total of 1605 users had both 6-months pre- and post-lubiprostone initiation data. A total of 42.2% of these patients filled more than one 30-day lubiprostone prescription; 6.42% filled 6 or more. Usage of other prescription laxatives decreased by 4.6% ($p < 0.05$) subsequent to lubiprostone initiation. Monthly health care costs per utilizing member increased by $67.10 ($p < 0.0001$). Pharmacy costs rose by $71.73 ($p < 0.0001$) and ER costs decreased by $8.12 ($p < 0.05$). Pre-post changes in outpatient and inpatient costs were not significant. Monthly inpatient and ER visits for these 1605 members decreased by 0.31 and 0.08 per utilizing member respectively ($p < 0.05$) in the 6-months after starting lubiprostone. Changes in outpatient visits were not significant. **CONCLUSIONS:** Lubiprostone users were younger females who were co-prescribed opiates and had back problems. Higher health care costs were offset by a decrease in ER costs.

PGI17

COST-EFFECTIVENESS ANALYSIS OF TREATMENT WITH PEGINTERFERON-ALFA-2A VERSUS PEGINTERFERON-ALFA-2B FOR PATIENTS WITH GENOTYPES 2/3 CHRONIC HEPATITIS C UNDER THE PUBLIC PAYER PERSPECTIVE IN BRAZIL

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Hepatitis C affects approximately 180 million people worldwide and is one of the main causes of chronic liver disease. HCV infection progresses to chronicity in approximately 80% of infected individuals, from whom up to 20% can develop cirrhosis over 20 years, thus presenting high risk of complications related to hepatic insufficiency and/or hepatocellular carcinoma. OBJECTIVES: To compare treatment costs and outcomes of peginterferon-alfa-2a *versus* peginterferon-alfa-2b, both associated