Between group comparisons (before, after, and change) were all non-significant except for Rx drugs ($19 higher for IBs+C, P < 0.05) and other ($8 higher for C, P < 0.05) in the after period as well as the change for Rx drugs ($16 higher for IBs+C, P < 0.05). Within groups, costs for Rx Drugs significantly increased in both cohorts and outpatient and ED significantly increased for the C cohort. CONCLUSION: Patients with constipation and IBs+C incur similar costs throughout the health care system.

HEALTH CARE COSTS RELATED TO THE TREATMENT OF CROHN’S DISEASE
Tian H1, Marehbian J1, Hass SL1, Panjabi S1, Arrighi HM2, Chen JY1
1Health Benchmarks Inc, Woodland Hills, CA, USA, 2San Francisco, CA, USA
OBJECTIVE: To estimate differences in health care costs between Crohn’s disease (CD) patients and controls and to examine differences in CD costs by prescription therapy. METHODS: Administrative claims data from geographically diverse private US health plans with service dates between January 1, 2002 and December 31, 2005 were utilized. CD patients (ICD-9-CM code 555.x) were identified and matched to controls in a 1:5 ratio on age, gender, health plan, and duration of enrollment. Two part models (logistic regression for likelihood to incur any costs and log-transformed regression for costs) were used to estimate costs (amounts paid by health plans for medical services and pharmaceuticals), controlling for socio-demographic characteristics and medical co-morbidities. CD patients were grouped by drug regimen as follows: steroids, immunosuppressants, infliximab, any combination of the three drug classes, and no regimen or regimens not including the three studied drug classes. Average per patient per day medical and pharmaceutical cost was estimated for each group and projected annually. RESULTS: A total of 9,302 CD patients and 46,510 matched controls were identified. The mean age in each group was 46.9 and 55.8% were females. Annual total predicted costs per patient were over 3 times higher in the CD group ($11,569) than the control group ($3,564, p < 0.01). Medical and pharmacy costs were the lowest in the group receiving no regimen/regimens not including studied classes. Medical costs were at least 50% higher in patients receiving combination therapy that included steroids than those receiving combinations not including steroids. CONCLUSION: CD patients incur significantly greater costs than matched controls. CD patients on no regimen/regimens not studied incur few costs suggesting that they may be experiencing remission or mild symptoms. Steroids are associated with significantly higher medical costs, which may be suggestive of uncontrolled symptoms or flares requiring medical resources.

COST-EFFECTIVENESS OF PROTON PUMP INHIBITORS FOR PATIENTS WITH GASTROESOPHAGEAL REFUX DISEASE: SHOULD EMERGING SAFETY CONCERNS AFFECT THERAPEUTIC DECISION-MAKING!
Ryan PB, Biddle AK
University of North Carolina at Chapel Hill, Chapel Hill, NC, USA
OBJECTIVE: Studies have shown that continuous and on-demand use of proton pump inhibitors (PPI) are more efficacious and cost-effective strategies than continuous histamine-2 receptor antagonist (H2RA) use for maintenance therapy of gastroesophageal reflux disease (GERD). Recent research has raised questions about potential safety concerns of hip fractures and acute myocardial infarction (AMI) associated with long-term PPI use. This study integrates treatment efficacy with emerging safety data to compare the cost-effectiveness from the payer perspective of continuous PPI use, on-demand PPI use, and continuous H2RA use for maintenance therapy for GERD. METHODS: A Markov model was designed to simulate, over five years, the clinical and economic outcomes of GERD patients asymptomatic after initial acute treatment on maintenance therapy with PPIs or H2RA. The transition probabilities, costs, and utilities were derived from the peer-reviewed literature. Sensitivity analysis was conducted to examine the robustness of the model and to determine the thresholds at which safety issues may alter therapeutic decisions. RESULTS: In the base-case efficacy model, intermittent PPI treatment was the least costly and least effective strategy, whereas the step-down PPI strategy was most costly and most effective, with an incremental cost-effectiveness ratio (ICER) of $24,636 per quality-adjusted life-year (QALY), relative to the intermittent PPI strategy. The maintenance H2RA strategy was dominated throughout the sensitivity analysis. The results were consistent when hip fracture events were introduced into the model, with the step-down PPI strategy ICER increasing to $29,113/QALY. Threshold analysis for AMI showed the hypothesized relative risk (RR) would need to be 11.9 before maintenance H2RA therapy would be considered a cost-effective therapy over continuous H2RA therapy.