ferences in the appropriate prescribing of tegaserod in patients whose plan required PA (n = 998) compared with patients whose plans did not require PA (n = 1640) (94.1% vs 93.4%, respectively, p = 0.45). CONCLUSIONS: Most patients receiving tegaserod had a diagnostic claim for IBS or one of its cardinal symptoms (abdominal pain, bloating, or constipation), indicating that tegaserod is being prescribed appropriately. Moreover, our analysis revealed that PA for tegaserod did not have an effect on appropriate GI prescribing, thus bringing into question the value of PA.

**PGI16**

TRENDS OF GASTRIC ACID-SUPPRESSIVE DRUG USE IN THE GENERAL PRACTICE OF UK FROM 1995 TO 2005

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OBJECTIVES: to examine the utilization trends of gastric acid-suppressive drugs, including Proton Pump Inhibitors (PPIs) and Histamine-2 Receptor Inhibitors (H2RAs) between 1995 and 2005. METHODS: Patient records and prescription records were analyzed for patients enrolled in the General Practice Research Database in the UK. The prevalence of PPIs and H2RAs use from 1995 to 2005 was compared. The average number of prescriptions per person per month was calculated for users of PPIs and H2RAs, respectively. Age and gender of users of PPIs and H2RAs were compared between 1995 and 2005. RESULTS: One-year prevalence of PPIs use increased from 33.5 per 1000 persons in 1995 to 52.2 per 1000 in 2005. Alternatively, one-year prevalence of H2RAs use decreased from 33.0 per 1000 in 1995 to 13.1 per 1000 in 2005. In 1995, the average monthly number of H2RAs prescriptions was 0.34 (SE = 0.32), and the monthly number of PPIs prescriptions was 0.35 (SE = 0.33). In 2005, monthly mean number of H2RAs prescriptions was 0.34 (SE = 0.35), and the monthly number of PPIs prescriptions was 0.42 (SE = 0.40). The number of PPIs prescriptions is significantly higher in 2005 than that in 1995 (p < 0.01). From 1995 to 2005, the mean age of PPIs users decreased from 69.0(SE = 16.9) to 61.8(SE = 17.3) and the mean age of H2RAs users decreased from 68.7 (SE = 12.7) to 60.0 (SE = 19.6) (p < 0.01 for both PPIs and H2RAs). The proportion of users less than 60 years old significantly increased from 1995 to 2005 (p < 0.01 for PPIs and H2RAs).

CONCLUSION: In the general practice setting of the UK, the annual prevalence of PPI use increased with reduced prevalence of H2RA use in the past decade. The monthly number of prescription of PPIs significantly increased from 1995 to 2005. Users of gastric-acid suppressive drugs trended younger over time. The economic and epidemiologic impact of this trend needs to be studied further.

**PGI17**

TRENDS IN AMBULATORY CARE UTILIZATION FOR CONSTIPATION AND IRRITABLE BOWEL SYNDROME: 1993–2003

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OBJECTIVES: Determine the changes in utilization of physician, emergency department, and hospital outpatient services related to constipation and Irritable Bowel Syndrome (IBS) and the National Hospital Ambulatory Medical Care Survey (NHAMCS) from 1993–2003. The NAMCS and NHAMCS are national probability surveys of visits to office-based physicians and ambulatory services in hospital emergency and outpatient departments. Constipation visits were identified based on a reason for visit or a diagnosis of constipation (ICD-9-CM = 564.0). IBS visits were identified based on a diagnosis of IBS (ICD-9-CM = 564.1) or a prescription for alosetron or tegaserod. Sensitivity analyses were performed to explore the impact of various case definitions. RESULTS: In 2003, 8.81 million (95%CI: 6.73 million–10.90 million) visits were related to constipation, 7.04 million physician office visits, 1.15 million emergency department visits, and 0.63 million outpatient hospital department visits—representing over a 400% increase compared to the 2.20 million total visits made in 1993. In 2003, 67.0% of visits were made by females, 20.9% by those less than 10 years old, and 38.5% by those 65 and older, and 11.0% by blacks. There were over 3.53 million IBS related visits in 2003 which is 16% higher than the 2.97 million visits in 1993. In 2003, 92.0% of visits were made by females, 30.0% were made by persons between 25–44 years of age, and 9.0% were made by blacks. CONCLUSIONS: Over the past ten years, ambulatory visits to treat constipation have increased dramatically across all regions of the country, races, and ages, but have particularly increased for infants and children. Over a similar time period, IBS visits have remained relatively stable but represent a sizable reason persons, particularly women, contact the U.S. ambulatory care setting.

**GI DISORDERS—Methods and Concepts**

**PGI18**

A NEW APPROACH TO USING SELF-REPORTED UTILIZATION TO ESTIMATE COST ASSOCIATED WITH MILD, MODERATE, AND SEVERE GERD-RELATED SYMPTOMS

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OBJECTIVES: Previous literature reported patients with GERD have $240 more in medical care costs compared with patients without GERD (JCMC 2003;7:6–13). However, no data exist to differentiate these costs by symptom severity. This study’s purpose was to assess utilization and costs associated with mild, moderate, and severe GERD-related symptoms using a new approach. METHODS: An Internet-based survey of US adults was conducted using GERD Symptom & Medication Questionnaire (GERD-SMQ), a validated screening tool. Severity of heartburn and acid regurgitation symptoms were rated on a 10-point scale. The highest rating value of heartburn and acid regurgitation was used. Respondents were classified into the following severity strata: mild (1–4), moderate (5–7), and severe (8–10). Subjects were asked to report the frequency of hospitalizations, emergency room visits, physician office visits, tests, and procedures relating to GERD over the past six months. Utilization of each component was converted into monetary value using publicly available fee schedules. Imputed costs for each severity stratum were summed and divided by the average total imputed cost among all cases to determine the utilization weights relative to the “average” GERD case. Utilization weights were multiplied by $240 to estimate cost for each severity stratum. RESULTS: A total of 701 GERD cases were identified: 22.1%, 48.6%, and 24.0% were categorized as mild, moderate, and severe and the remaining 5.3% as having no active symptoms. Compared with “average” GERD cases, patients classified as having mild, moderate, and severe GERD-related symptoms had relative utilization weights of 0.404, 0.610, and 2.458 respectively, and GERD-attributable costs of $97, $146, and $590 per year.