IBS patient was 17.4 versus 10.9 for controls (p < 0.0001). The average number of prescriptions filled was 26.9 versus 19.2 for IBS patients and controls respectively (p < 0.0001). Medically-related work absence costs were $301 and $176 for IBS patients and controls, respectively (p < 0.0001).

CONCLUSIONS: IBS patients impose a significant financial burden on the employer, due to higher levels of medical and pharmaceutical care utilization and medically-related work absences compared to controls.

**A COST ANALYSIS OF DIAGNOSTIC AND TREATMENT STRATEGIES IN PATIENTS WITH SYMPTOMS OF POUCHITIS**

Shermock KM, Shen B, Lashner BA, Achkar JP
The Cleveland Clinic Foundation, Cleveland, OH, USA

OBJECTIVES: Many patients with symptoms of pouchitis respond to empiric antibiotic treatment. An alternate diagnostic strategy, endoscopic evaluation reserves antibiotics for those patients who truly have pouchitis (approximately 55% of symptomatic patients). The goal of this project was to compare the costs and cost-effectiveness of different strategies of diagnosis and treatment of patients with pouchitis symptoms.

METHODS: A decision-analytic model assessed the following strategies: empiric treatment with metronidazole, empiric treatment with ciprofloxacin, empiric treatment with metronidazole and then ciprofloxacin for non-responders, endoscopy with histology, and endoscopy with no histology. Data regarding the likelihood of pouchitis, diagnostic accuracy and precision of endoscopy, and response to empiric therapy were derived from several recent clinical studies. Redbook wholesale prices and 2001 Medicare reimbursement rates served as cost source data. The model was run to determine the least costly strategy and the most cost-effective strategy using the number of days during the study that a patient was diagnosed and treated as the unit of effectiveness.

RESULTS: The empiric treatment with metronidazole strategy was the least costly ($216) strategy, followed by the test with no histology ($228), empiric treatment with metronidazole and then ciprofloxacin for non-responders ($238), empiric treatment with ciprofloxacin ($284), and endoscopy with histology ($342). In cost effectiveness analysis, the test with no histology strategy cost $12 more and was associated with diagnosis and treatment 7 days earlier compared with the empiric treatment with metronidazole strategy (incremental cost effectiveness ratio $1.83 per additional day diagnosed and treated). All other strategies were dominated. Sensitivity analysis revealed that results were not sensitive to variation in model parameters.

CONCLUSION: Empiric treatment with metronidazole was the least costly strategy, but endoscopy with no histology might be considered the most cost-effective since it offers a substantial improvement in the time to diagnosis and treatment for little additional cost.

**THE COST-EFFECTIVENESS OF INTRAVENOUS PROTON PUMP INHIBITOR CONTINUOUS INFUSION (IV PPI) ADMINISTERED PRIOR TO ENDOSCOPY IN THE TREATMENT OF PATIENTS WITH NON-VARICEAL UPPER GI BLEEDING**

Barkun A1, Herba K1, Kennedy WA2, Fallone CA1, RUGBE Investigators A1
1McGill University Health Centre, Montreal, QC, Canada; 2University of Montreal, Montreal, QC, Canada

OBJECTIVES: Recent randomized trials have demonstrated that the use of IV PPI following endoscopic therapy lowers 30-day re-bleeding rates in patients with ulcers displaying high-risk stigmata. However, the cost-effectiveness of, in addition, using IV PPI routinely from the moment of initial presentation until the endoscopy is carried out in all bleeding patients is unknown.

METHODS: We assessed the cost-effectiveness of starting an IV infusion of pantoprazole (80-mg bolus followed by 8mg/hr) in all patients presenting with an upper GI bleed until endoscopy can be carried out. The analysis was conducted by creating a decision tree model in Data 3.5. Assumptions of probabilities and costs were derived from the literature, a local Canadian cost database, and a national Registry of patients with Upper Gastrointestinal Bleeding undergoing Endoscopy (RUGBE). Differential costs were attributed to ulcer, variceal, and non ulcer non variceal lesions. Efficacy was the proportion of patients without an episode of re-bleeding. Threshold and sensitivity analyses were conducted. The time horizon was 30 days following hospital admission. Costs are in 2001 Canadian dollars.

RESULTS: Using the base-case analysis, the dominant strategy was that of IV PPI following endoscopy as it displayed equal effectiveness at a lesser cost (average cost-effectiveness of $2,743 per patient who does not re-bleed) when compared to a strategy of starting IV PPI on all patients pre-endoscopy. When postulating increased benefit for patients who are subsequently found to be bleeding from high or low risk ulcer lesions, variceal, or non variceal non ulcer causes of bleeding, the results remain unchanged across a reasonable range of clinical assumptions both in one-way and multi-way sensitivity analyses.

CONCLUSIONS: The use of IV PPI following findings of urgent endoscopy appears to be the most cost-effective approach when compared to initiating IV PPI in all bleeding patients prior to endoscopy.