

ended and open ended multi-country questionnaire was designed to collect data from 715 participants (186 Barbers and 529 Clients). Blood samples were withdrawn after obtaining an informed consent and were tested for HBV and HCV markers by Chromatography, enzyme-linked immunosorbent assay (ELISA) and polymerase chain reaction (PCR). **RESULTS:** The mean age was 28.47±9.7 years in both groups of Barbers (n=186) and Clients (n=529). Among both groups, the sero-prevalence of HBV and HCV was 5.7% and 14.4%, respectively. Clients knew about hepatitis B and C viruses while barbers were not quite aware. The knowledge about the route of transmission was poor among barbers and good among clients. Half of the respondents in both groups knew about hepatitis B vaccination and only 15% were vaccinated. Sixty percent of the barbers claimed disinfecting the instruments between clients and (88.9%) claimed using of new blades. During actual observation of practices, only 28% disinfecting instruments between clients and 62% used new blades for each client. **CONCLUSIONS:** There is some awareness among barbers and clients about hepatitis B and C viruses but poor knowledge about the mode of transmission. This warrants conducting health education campaigns to increase awareness about these two blood borne viruses and the risk factors associated with their transmission particularly at barbers' shop and to implement interventions to prevent spreading Hepatitis.

#### GASTROINTESTINAL DISORDERS – Cost Studies

##### PGI6

#### AN ASSESSMENT OF THE ECONOMIC IMPACT OF MECHANICAL VERSUS HAND-SUTURED FIXATION OF INTRA-PERITONEAL ONLY MESH (IPOM) IN OPEN VENTRAL HERNIA REPAIR

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**OBJECTIVES:** Reduction in operative time has been shown to offer significant clinical benefits in many procedures including hernia repair surgeries. Ethicon Securestrap™ Open, a new mechanical absorbable strap fixation device, takes significantly shorter time compared to hand-sutured fixation of IPOM mesh in open ventral hernia surgery. This analysis assesses the potential economic value of reduction in operative time with mechanical fixation compared to suture fixation. **METHODS:** An economic model was developed to evaluate the budget impact to hospitals of adopting Ethicon Securestrap™ Open repair of ventral hernia. A reduction in mean fixation time comparing suture to mechanical fixation was included based on a preclinical study that demonstrated about 89% reduction. Related benefits in terms of risk of surgical site infections, owing to shorter operative duration were included based on the literature. Costs of the mechanical fixation device and suture supplies, OR time, anesthesia time, and potentially avoided surgical site infections were considered in the economic model. **RESULTS:** Based on the model inputs, an overall potential saving of \$259,604 (43%) was estimated for 100 fixations if they were done using Ethicon Securestrap™ Open versus sutures. Although the use of Ethicon Securestrap™ Open added \$50,000 in supplies costs, this was completely offset by potential savings in OR time costs (\$186,570), potential reduction in avoided surgical site infection or seroma costs due to shorter operating room time (\$104,210), and in anesthesia costs (\$14,324). Use of Ethicon Securestrap™ Open was also estimated to be potentially freeing up a total of about 58 hours in OR time per 100 conversions. **CONCLUSIONS:** This analysis represents the first economic evaluation of Ethicon Securestrap™ Open use in open ventral hernia surgery. Adoption of Ethicon Securestrap™ Open fixation device would likely result in significant savings for hospitals, driven by shorter procedure time and its related clinical benefits.

##### PGI7

#### COST ANALYSIS OF A FIBRIN SEALANT PATCH FOR PARENCHYMAL BLEEDING DURING ELECTIVE HEPATIC SURGERY: A GERMAN HOSPITAL PERSPECTIVE

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**OBJECTIVES:** Hemostasis after liver resection may be difficult to achieve and there is thus an increased focus on reducing blood loss and resource use with hemostatic products. This study estimated the cost impact of a novel fibrin sealant patch (i.e., EVARREST) vs. standard of care (SoC) for bleeding control in hepatic resection. **METHODS:** An economic analysis quantified 30-day cost impact of EVARREST vs. SoC from a German hospital perspective. This analysis used data from a randomized trial, which included aggregated resource use reported within 30 days. Resources included initial treatment and re-treatment, operating time, hospitalization, transfusions, and ventilator. SoC was composed of manual compression with a small percentage using hemostats. The primary analysis included resources clinically related to the significant hemostasis benefit of EVARREST vs. SoC (i.e., initial treatment and re-treatment with hemostasis methods, operating time, transfusions, and blood units). A secondary analysis included all resources evaluated in the primary analysis with the addition of hospital stay, proportion of patients using ventilator, and mean ventilator hours. A projected global price for EVARREST was used based on average USD to Euro exchange rate over the last 10 years. Published data on German costs were applied to resource use. Sensitivity analyses were conducted on several variables including EVARREST costs (€472 to €735) for available sizes. **RESULTS:** The primary analysis predicted that EVARREST acquisition cost is offset with cost impact reduced to €82 per patient vs. SoC (sensitivity range: -€86 to €225). Secondary analyses predicted further resource reduction with EVARREST leading to cost-savings (i.e., -€458 per patient). Operating time and hospital stay were important analysis drivers. **CONCLUSIONS:** This analysis suggests that EVARREST may result in cost savings, in addition to meeting an important unmet need for controlling bleeding in hepatic surgery. Further study in more patients may be required to confirm findings.

##### PGI8

#### MEDICARE HEPATITIS C PATIENTS – ARE PATIENTS UNDER 65 DIFFERENT?

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**OBJECTIVES:** Previous studies have shown that the majority of Medicare patients with HCV are under age 65. This study examines how patient characteristics and cost differ between Medicare patient age groups. **METHODS:** An analysis of HCV patients was conducted using the 2010-2011 Centers for Medicare and Medicaid Services Parts A and B fee-for-service claims. Patients with an HCV ICD-9 code and 6 months of follow-up were included. Patient characteristics, resource utilization and 6-month costs were compared between patients age<65 and age≥65. The impact of age on medical costs adjusting for demographics, reason for entitlement (OREC), Medicaid status, and overall health status (measured by CCI) was assessed using generalized linear models fit with a gamma distribution and log link function. **RESULTS:** 16,417 HCV patients with complete data were identified. Patients under 65 (n=11,286) were more likely to have an OREC of disability (89%), while patients 65+ OREC was primarily due to old age and survivors insurance (80%). ESRD accounted for 8.8% of patients age<65 and 1.7% aged 65+. Medicaid dual-eligibility was twice as common among younger patients (38.0% vs. 66.8%, p<0.01). Younger patients had a higher prevalence of alcoholism (35.6% vs. 30.6%, p<0.01) and drug abuse (43.3% vs. 12.2%, p<0.01), comorbidities that are also risk factors for HCV. Yet overall health, as measured by CCI, was higher for younger patients (1.82 vs. 2.51, p<0.01). Younger patients had more hospitalizations (0.48 vs 0.33, p<0.01) and emergency department visits (2.04 vs. 1.77, p<0.01). 6-month medical costs for patients age<65 were \$1,285 higher than those 65+ (p=0.01). After adjusting for OREC, HCV-related comorbidities, CCI, demographics and Medicaid status, age was no longer associated with cost. **CONCLUSIONS:** Medicare HCV patients under 65 are more expensive to treat. However, this appears to be due to higher rates of disability, ESRD and comorbidities, rather than age itself.

##### PGI9

#### COST OF ILLNESS (COI) ASSOCIATED WITH GASTROINTESTINAL AND LIVER DISEASE: A STUDY CONDUCTED AT AN INDIAN TERTIARY CARE HOSPITAL

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**OBJECTIVES:** To study cost of illness (COI) by calculating direct and indirect cost in the patients with gastrointestinal and liver disease from societal perspective. **METHODS:** Study was conducted in general medicine ward of government tertiary care hospital, north India by including inpatients diagnosed with gastrointestinal and liver disorders. In terms of time perspective prevalence approach was used to study COI. Direct cost was estimated using admission fee, cost of bed, diet charge, cost of medications and diagnostic tests/surgical procedures. Indirect cost was estimated using loss of wages, travelling cost, food cost, and cost of bed for attendant/s of patient due to hospital stay. Estimated costs were converted to purchasing power parity dolor (PPP\$) for cross country comparison. To estimate the productivity loss, human capital approach was used with assumption that income reflects productivity. **RESULTS:** A total 202 patients (83% males) were included in the study. Most prevalent disorder includes alcoholic liver disease (32.5%) and most common class of drug prescribed was proton pump inhibitor (94%). Majority of the patients (53%) with these diseases has hospital stay of 1 to 7 days. The total direct costs and indirect cost of disease for study patients were PPP\$ 23518 and PPP\$ 30187 respectively. Direct and indirect cost of disease for each patient was PPP\$ 231 and PPP\$ 277 respectively. The cost of medication (17.8%) and loss of wages (43.9%) contributes major component of direct and indirect cost respectively. Total cost for males (PPP\$ 276.0±145) is significantly higher (P <0.05) than the total cost for females (PPP\$ 232.6±146.6). Mean direct and indirect costs incurred by female patients were significant less than that of male patients. **CONCLUSIONS:** Cost of medication and loss of wages of patients contributes major component of COI. Increasing the number of day of hospital stay leads to higher cost of burden.

##### PGI10

#### ESTIMATION OF HEPATITIS C COSTS IN TURKEY VIA EXPERT OPINION: DELPHI PANEL

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**OBJECTIVES:** The aim of the study is to estimate the cost of Hepatitis C in Turkey through reaching consensus on the current clinical practice, resource use and the course of treatment. **METHODS:** This study uses the Delphi method to reach experts' consensus on the clinical practices currently being used in Turkey. Delphi method has been widely used in medical areas where empirical data is scarce. The survey developed for this study includes questions to understand the clinical resource use in order to calculate the associated costs. According to the literature, the panelists' answers are unlikely to change after the second iteration. Similar to theory, a two-iteration panel was needed to reach a consensus in practice. The consensus is then used to calculate the cost of chronic hepatitis C, compensated cirrhosis, decompensated cirrhosis, hepatocarcinoma and liver transplant health states from the payer's perspective. **RESULTS:** The Delphi panel included gastroenterologists, infectious diseases specialists and a gastroenterologist with transplantation experience. According to panel consensus, among all of the patients that an expert follows, the rate of patients who need hepatitis C treatment (regardless of diagnosis) is 1% for gastroenterologists and 20% for infectious diseases specialists.