Pg11

BUDGET IMPACT ANALYSIS OF HEPATITIS C DRUGS IN MED-Cal.

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OBJECTIVES: The objective of this study is to estimate the annual budget impact and the cost Per Member Per Month of the testing and treatment of hepatitis C in the Medi-Cal population using the current testing guidelines. METHODS: A budget impact analysis was constructed from a state Medicaid perspective to depict the financial consequences of implementing the testing and linkage to care guidelines recommended by the CDC, AASLD and USPSTF for persons born between 1945 and 1965. The model included disease testing and drug reimbursement cost. Of the 102,081,161 people on Medi-Cal, 106,000 were identified as eligible to receive screening. The model considered all four new therapies with a high magnitude of savings relative to their current environment. Savings were expected when rifaximin was administered for up to 2 courses of therapy annually. RESULTS: The total cost in one budgetary year of testing and treating the birth cohort ranged from between $5,230,285,332 to $21,807,965,240.39. The cost per member per month increases from $0.55 to between $77.76 and $357 if the birth cohort testing recommendation is implemented. CONCLUSIONS: In the base case analysis we estimated cost savings of $8,818,430,000. The testing increased the cost by $80,000. The sensitivity analysis shows a 78% increase from the base case estimates if adjustments are made for the initial cost impact of the birth cohort. Treatment involves the biggest budget impact followed by the treatment of Genotypel interferon ineligible persons. This research was conducted without the authorization of the California Department of Health Care Services and is not endorsed or validated by the Department.

Pg15

FINANCIAL IMPACTS OF USING OMEPRAZOLE ORAL SUSPENSION FOR PREVENTING UPPER GASTROINTESTINAL BLEEDING EARLY AFTER INTENSIVE CARE ADMISSION

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OBJECTIVES: The objective of the present study was to estimate the financial consequences of using omeprazole immediate-release (IR) oral suspension versus intravenous (IV) infusion of pantoprazole for preventing stress-related upper gastrointestinal bleeding in critically ill patients from the perspective of the health care system. METHODS: An Excel®-based model was developed to compare the cost of preventing upper gastrointestinal bleeding early after intensive care admission using the current IR pantoprazole formulation versus omeprazole IR oral suspension. Total costs included the cost of acid-suppressive drugs (proton pump inhibitors) and related clinical outcomes. Inputs were obtained from a local clinical trial, the Ministry of Health database, insurance organizations, hospital and pharmacy registries, the relevant literature, and expert opinion. The robustness of the input data was investigated by one-way sensitivity analysis. During the study period (November 2012 to September 2013), 4,150 patients were admitted to intensive care units in the different provinces of Iran. The model was developed based on the results of a randomized controlled trial in which an experimental group and a control group received omeprazole IR oral suspension and pantoprazole IV, respectively. RESULTS: According to the proposed model, the cost of prescribing IR pantoprazole was $395,000, while $765,000 was spent on omeprazole IR oral suspension. Replacement of IV pantoprazole by omeprazole IR oral suspension would lead to an annual cost saving of almost US$200,000 ($84 per member per month) to the health care system. CONCLUSIONS: In the present study, a budget impact analysis was performed to assess the financial consequences of using omeprazole IR oral suspension in place of pantoprazole IV for prevention of upper gastrointestinal bleeding. The better preventive effect of omeprazole IR oral suspension when compared with conventional therapy using pantoprazole IV was the major reason for the final comparative budgetary savings.

Pg16

A COST-UTILITY ANALYSIS OF BIOLOGICS FOR MODERATE-TO-SEvere CROHN’S DISEASE: EVIDENCE SYNTHESIS USING A BAYESIAN NETWORK META-ANALYSIS

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OBJECTIVES: To evaluate the cost-effectiveness of infliximab, adalimumab, certolizumab pegol, and vedolizumab in Moderate-to-Severe Crohn’s disease from a US payer perspective with evidence synthesis from a Bayesian network meta-analysis (NMA). METHODS: A Markov model was constructed to evaluate the lifetime cost-effectiveness of biologics and active control (azathioprine) in Crohn’s disease. The model used a 3-month cycle with six health states: Moderate-to-Severe, Mild-to-Severe, Remission, Severe/Fulminant, Post-Surgery, and Death. Transition probabilities from Moderate-to-Remission to Remission were synthesized using a Bayesian NMA. Other transition probabilities were derived using published studies. Additional costs were based on Medicare Part-B Drug and Biological Average Sales Price Payment files. Costs and QALYs were discounted at 3%-percent/year. One-way and probabilistic sensitivity analyses (PSA) were performed to quantify the uncertainty of the results. RESULTS: New therapies have higher costs and yield higher QALYs than beocprevir. Simeprevir at 12 and 24 weeks have the highest INMB ($85,335.02 and $19,069.64, respectively). Sofosbuvir has a net monetary benefit of US$6,470.01 ± 6,927.64 to MELD >15 and 209.1 ± 208.23 days to MELD >15 (<0.01%). Usual care patients are less likely to benefit from the cost of maintaining the cirrhotic patients on the waiting list for liver transplantation. The model considered all four new therapies with a high magnitude of savings relative to their current environment. Savings were expected when rifaximin was administered for up to 2 courses of therapy annually. RESULTS: The model predicted that the treatment of IV-B-D with rifaximin, despite its higher unit cost, may be associated with savings when used up to twice per year.

GASTROINTESTINAL DISORDERS – Cost Studies