to-moderate bleeds in a hemophilia patient with inhibitors is very high. When considering the impact of rebleeding over multiple lines of treatment, the rFVIIa-only regimen, versus APCC-containing strategies, may provide cost savings of up to $60,000 annually per patient.

HEMATOLOGICAL DISORDERS—Patient Reported Outcomes

PHM4

COSTS AND CONSEQUENCES OF INADEQUATE COMPLIANCE WITH DEFEROXAMINE THERAPY IN PATIENTS WITH TRANSFUSION-DEPENDENT THALASSEMIA

Delea T1, Sofrygin O1, Thomas S1, Baladi JP2, Coates TD1, Phatak P1

1Policy Analysis Inc. (PAI), Brookline, MA, USA, 2Novartis Pharmaceuticals Corp, East Hanover, NJ, USA.

OBJECTIVES: Patients with transfusion-dependent thalassemia require chelation to prevent complications from transfusional iron overload. Deferoxamine (DFO) is an effective iron chelator, but must be administered as a subcutaneous or intravenous infusion over 8–12 hours 5–7 times per week leading to poor compliance and/or quality of life in many patients. METHODS: We developed a Markov model using data from published studies and other sources to estimate the lifetime incidence and medical care costs of complications of iron overload that are attributable to inadequate compliance with DFO therapy in patients with transfusion-dependent thalassemia. Complications considered included cardiac disease, diabetes, hypogonadism, hypoparathyroidism, and death due to cardiac disease. Current compliance with DFO therapy as well as costs of complications were obtained from an analysis of health insurance claims data. Adequate compliance was defined as 260 infusions per year (i.e., five per week). Costs were discounted at 3% annually. RESULTS: Current mean DFO use was estimated to be 169 infusions annually. At this level of compliance, 95% of patients are projected to experience cardiac disease during their lifetime; diabetes 46%, hypogonadism 77%, hypoparathyroidism 32%, and hypothyroidism 26%. Cardiac-disease-free life expectancy is projected to be 23 years; overall life expectancy, 28 years. The expected lifetime cost of complications of iron overload is $54,151 per patient. If mean compliance were to increase to 260 infusions annually, the lifetime risk of cardiac disease would decline to 60%, diabetes to 9%, hypogonadism to 47%, and hypothyroidism to 14%. Cardiac-disease-free and overall life expectancy would increase by 22 and 19 years respectively. The expected lifetime cost of complications of iron overload would decline by $30,222. CONCLUSIONS: Inadequate compliance with DFO therapy in patients with transfusion-dependent thalassemia results in substantial morbidity and mortality. Treatment of haemophilia is the result of interactions between patients, physicians, pharmacists and budget holders, each carrying their own set of preferences. A pilot study was conducted to identify which characteristic of coagulation products are considered more important to treat patients with inhibitors: these characteristics will be included with a price proxy characteristic in a Discrete Choice Experiment, with the objective to elicit preferences and willingness to pay towards treatments of patients with inhibitors. METHODS: Eight characteristics were identified during focus groups with patients and clinicians and rated from 0 (not important) to 10 (very important) by 35 people (adult patients, caregivers, physicians, pharmacists). RESULTS: The following median (mean) scores were found: “viral safety”: 10 (8.9); “time to stop bleeding”: 9.5 (9.0); “risk of anamnestic response”: 9.0 (8.5); “possibility of undergoing major surgery”: 9.0 (8.8); “regular use in prophylaxis”: 9.0 (8.4); “time to pain recovery”: 9.0 (8.3); “number of injections to stop bleeding”: 8.0 (7.9); “time to prepare and give/have the injection”: 7.0 (6.6). All groups of respondents considered as more important “viral safety”, “possibility of undergoing major surgery”, “risk of anamnestic response”, “time to stop bleeding”, while “time to prepare and give/have the injection” was considered the least important. Different preferences were attributed to “time to pain recovery”, considered more important by patients; “regular use in prophylaxis”, considered more important by caregivers. CONCLUSIONS: Viral safety and effectiveness are considered as the most important characteristics in the treatment of haemophilic patients with inhibitors. Different levels of preferences are present between patients, or their caregivers, and physicians. Understanding these differences is important to guide optimal therapeutic strategies in patients with inhibitors.

HEALTH CARE USE & POLICY

PHP1

A COMPARISON OF CLINICAL TRIAL PARTICIPANTS TO THE GENERAL PATIENT POPULATION

Bolce SC, Mills DL

Consumer Health Sciences, Princeton, NJ, USA

OBJECTIVE: To determine and quantify the unique characteristics of clinical trial participants in comparison to the general patient population. METHODS: Data were obtained from the U.S. National Health and Wellness Survey, an annual, nationally representative, Internet-based study of the health care attitudes and behaviors of non-institutionalized adults age 18+. The sample for analysis included 18,419 respondents who reported a diagnosis of hypertension, high cholesterol, or diabetes. Respondents reported ever participating in a clinical drug trial. They also provided information on demographics, healthcare attitudes, health habits, quality of life measured by the SF-8, and healthcare resource use in the past six months. RESULTS: Among respondents diagnosed with hypertension, high cholesterol, or diabetes, 7% (n = 1,333) have participated in a clinical drug trial. Clinical trial participants significantly differ from the general patient population in many key characteristics. Clinical trial participants are significantly older (mean age 60.5 versus 55.1, p < 0.001) and more educated (college graduates 43% versus 36%, p < 0.001). They experience worse physical well-being (sf-8 physical component summary score 43.1 versus 45.3, p < 0.001), though are more likely to maintain a healthy diet (50% versus 46%, p = 0.002) and less likely to smoke (18% versus 23%, p < 0.001). Clinical trial participants are more...
Abstracts

Impact of Consumer-Directed Health Plan on Pharmacy Utilization

Moore J, Marks A
Caremark, Scottsdale, AZ, USA

OBJECTIVES: CDH benefit plans use financial incentives for plan participants to reduce utilization of health services and are attractive to low utilizers. This study assesses the impact of CDH design on subsequent utilization by controlling for adverse selection with a control group. METHODS: Continuously eligible plan participants of a pharmacy-only CDH plan were analyzed as a study group identified through Caremark 2003–2004 pharmacy claims and eligibility data. A control group matched to the CDH group was drawn from the non-CDH plan participants within the same plan sponsor, using stratified random sampling within 8 groups based on age, health-risk index, prescription count and gross costs. Pharmacy utilization patterns were studied pre-to-post and compared to control. Wilcoxon rank sums test was used to assess significance of differences between groups and over time, using a p-value of 0.05 for significance. RESULTS: The control (N = 2403) matched the CDH group (N = 2403) in age (29.8 vs. 29.5), HRI score (4.5 vs. 3.9), and prescriptions (5.0 vs. 4.6). No baseline differences were identified (p-values from 0.1751 to 0.4564). Utilization increased between 2003 and 2004 for the control but not for the CDH group. The CDH group increased prescriptions from 4.61 to 4.90, days’ supply from 101.89 to 111.60 and gross costs from $171.59 to $190.55, (p = 0.7651 to 0.3501), while the control increased prescriptions from 5.03 to 5.99, days’ supply from 113.89 to 142.24, and gross costs from $187.56 to $253.44, (p < 0.0001). Mail utilization increased for both but substantially more for CDH (57% increase vs. 19%, p < 0.0001). Generic utilization and formulary compliance did not differ. Medical costs will be presented. CONCLUSION: The CDH benefit plan limited an increase in drug utilization as compared to the traditional plan. Also, mail utilization increased with CDH.

Withdrawn

OUT-OF-POCKET PRICE OF OUTPATIENT MEDICATIONS IN THE UNITED STATES

Craig B1, Deb P2
1University of Arizona, Tucson, AZ, USA, 2Hunter College, New York, NY, USA

OBJECTIVES: To determine the out-of-pocket prices of outpatient prescription drugs using methods that account for the multimodality of their distributions. METHODS: Using data from the 1992–2002 Medicare Current Beneficiary Survey and the 1996–2003 Medical Expenditure Panel Survey, we demonstrate the multimodality of prices for 175 of the most commonly prescribed medications in the United States. Through the application of Gaussian and gamma mixture models, we estimate the cash price and covered price paid by consumer for each of these medications, and estimate the percentage of consumers paying each price. RESULTS: The results suggest that simple averages of out-of-pocket prices are not applicable for economic evaluations and policy studies in pharmaceutical economics, except in the case of multisource medications. Without the integration of price disparities, analyses of single source medications may lead to erroneous policy conclusion. CONCLUSIONS: Price disparities may have been the motivation for recent coverage expansion endeavours, such as Medicare Part D. Our results demonstrate the prevalence and extent of these price disparities, which appear particularly grave in the price distributions of branded medications.