OBJECTIVES: Malnutrition affects between 30%-50% of hospitalized adults globally. To date, no multi-center studies in Colombia have been conducted to estimate the prevalence of malnutrition for patients with heart and lung diseases, and its impact on patient's health and healthcare costs. This prospective observational cohort study assessed primarily the prevalence of malnutrition, and the impact it had on patients' hospital length of stay, readmission rates, and healthcare costs. **METHODS:** Data from the first 402 patients enrolled in the study in 2017 (total sample size is 800) were analyzed per proposed interim assessment plan. Patients were adults (18≥years) with congestive heart failure (CHF), acute myocardial infarction (AMI), community-acquired pneumonia (CAP), or congestive obstructive pulmonary disease (COPD) who had nutrition screening via the Malnutrition Screening Tool (MST) within 24 hours of hospital admission and were admitted at the four participating hospitals. Patients were categorized as at-risk/malnourished (MST≥2) or well-nourished (MST<2), and were followed for 30 days after discharge. **RESULTS:** At interim, the prevalence of malnutrition among all patients was 23.9%. Disease-specific prevalence was: 31% for patients with COPD; 26% for patients with CHF, 25% for patients with CAP, and 15% for patients with AMI. At-risk/malnourished patients had significantly higher length of stay (7.89 vs. 5.17 days), 30-day readmission rate (11% vs. 8%) and incurred higher healthcare costs ($2,320 vs. $1,455) than their well-nourished counterparts (all p values < 0.05). Only 2% of patients in both groups received oral nutritional supplements (ONS) in addition to regular diet. **CONCLUSIONS:** Malnutrition is prevalent among hospitalized Colombian patients with heart and lung diseases, and is associated with poor health and economic outcomes. ONS, an effective treatment approach to address malnutrition is infrequently used and is not always informed by patient's nutrition status. Future studies assessing the impact of effective nutrition programs in Colombian hospitals are needed.

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SHIFT IN THE STATUS QUO: HOW BIOSIMILAR INTERCHANGEABILITY CAN LEAD TO SIGNIFICANT COST SAVINGS

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OBJECTIVES: Biosimilars offer potential for significant cost savings and enhanced patient access. Two new biosimilars have been approved by Food and Drug Administration for reference biologic, Remicade® (Inflectra® and Renflexis™) for Crohn's Disease, ulcerative colitis, and rheumatoid arthritis. To the best of our knowledge, this is the first budget impact (BI) analysis of biosimilars in the United States (US) drug formulary. **METHODS:** BI was conducted over three years using cost and market share inputs from 2017 for each of the biologics. Base case model assumed current market landscape for infliximabs (17% share) and no interchangeability between Remicade and it's biosimilars. Two scenario analyses assumed interchangeability of reference biologic with biosimilars and increased market uptake for infliximabs due to cost reduction of treatment. Scenarios were calculated with varying price discounts from 20% to 35%. The robustness of the model was tested by extensive sensitivity analyses. **RESULTS:** The projected cost savings from the introduction of the biosimilars increased, amounting to $25.3 million over three years. Assuming interchangeability among infliximabs, the cumulative savings would be $38.3 million. With an increasing number of infliximabs, it is anticipated that infliximabs would acquire market share from other biologics, such as adalimumab. An overall 35% market share for infliximabs would result in cumulative savings of $52.0 million without and $78.9 million with interchangeability. **CONCLUSIONS:** This analysis employs a unique approach to understanding the BI of two or more biosimilars from regulatory and healthcare policy perspective. The model predicted that the introduction of infliximab biosimilars in the US is associated with significant cost savings at the payer-level. Additionally, it is anticipated that a greater number of biosimilars would further drive the costs down, resulting in improved patient access. BI analyses should consider all available biologics and biosimilars to accurately and precisely predict cost savings.

PHP86

CORRELATES OF ONCOLOGY DRUG PRICES IN THE U.S

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OBJECTIVES: This study aimed to examine factors associated with the price of oncology therapeutics in the USA. **METHODS:** The FDA archive was used to extract a complete list of cancer drug approvals during 2009-2016. Micromedex REDBOOK was used to obtain the average wholesale price per unit for each drug. Monthly costs of therapy were calculated for adults using a standard weight of 70 kg and BSA of 1.73 m2 unless the drug was specifically indicated for the treatment of pediatric patients. The following variables were examined for association with monthly costs: approval mechanism, novelty of the mechanism of action, indication at approval, route of administration, orphan designation, company size, and disease prevalence. **RESULTS:** A total of 53 oncology drugs were included in this study with 68% approved under New Drug Application and the rest under Biologic License Application. The mean (SD; ranges) monthly cost of therapy was $20,068 ($18,194; $2,570-91,850). Of the included agents, 53% were oral therapies with the rest being injectables. The majority of drugs received priority review (81%) and orphan designation (72%) during the regulatory approval process. Over half of the products were indicated for the treatment of blood (34%) and hormone-related cancers (25%). With regards to novelty, 47% were first-in-class, 42% advance-in-class, and 11% addition-to-class agents, respectively. The mean (SD; ranges) revenue in millions for applicant companies was $30,830 ($26,629; $0-80,062). Disease prevalence for the first approved indication ranged between 650 to 245,525 patients. There was a strong significant association between BLA approval and the drug administration route with monthly cost being in the top quartile (>=$18,751). No significant associations between other examined variables and monthly cost were observed (p>0.05). **CONCLUSIONS:** Our study indicates that the monthly costs of biologics and injectable cancer therapies are significantly higher. Other examined variables were not associated with higher costs.

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COST-MINIMIZATION ANALYSIS OF DEXMEDETOMIDINE COMPARED TO PROPOFOL AND MIDAZOLAM FOR SHORT-TERM SEDATION IN THE UNITED STATES

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OBJECTIVES: Dexmedetomidine, propofol, and midazolam are commonly used in the intensive care unit (ICU) to sedate mechanically ventilated patients in the United States. This study estimates the ICU, mechanical ventilation, treatment, and monitoring costs for individuals receiving dexmedetomidine compared to propofol or midazolam. **METHODS:** A cost-minimization analysis was conducted from the hospital provider perspective. The costs associated with the use of dexmedetomidine compared to propofol or midazolam were evaluated for patients requiring sedation in the ICU. Clinical outcomes and healthcare resource utilization including ICU length of stay, duration of mechanical ventilation, treatment duration, use of rescue sedation and pain medication, and the occurrence of adverse events were obtained from clinical trials. Costs were estimated based on published literature and Medicare payment fee schedules and included costs associated with the ICU, mechanical ventilation, medications, adverse events, and monitoring. Medication errors rates and costs, as well as medication preparation time and costs, were estimated based on published literature and considered when comparing concentrate versus pre-mix formulations of dexmedetomidine. **RESULTS:** In patients requiring short-term sedation (≤ 24 hours), the per-patient costs associated with dexmedetomidine were estimated to be $9,327 compared to $9,580 with propofol. The per-patient costs associated with dexmedetomidine compared to midazolam were estimated to be $11,037 and $10,240, respectively. The cost associated with sedative use was driven by time spent in the ICU and on mechanical ventilation. The introduction of a pre-mix formulation for dexmedetomidine was demonstrated to lead to increased savings due to improved workflow efficiency and a reduction in medication preparation errors. **CONCLUSIONS:** Dexmedetomidine use for sedation was associated with reduced costs when compared to propofol and slightly increased costs when compared to midazolam. The main cost drivers were ICU length of stay and the duration of mechanical ventilation.

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PREDICTORS OF ANNUAL SALARY FOR HEALTH ECONOMICS, OUTCOMES RESEARCH, AND MARKET ACCESS PROFESSIONALS

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OBJECTIVES: To determine key predictors of annual salary for health outcomes, outcomes research, and market access (HEOR/MA) professionals employed in biopharmaceutical companies, healthcare consulting, and managed care who participated in the 2017 Global Salary Survey by HealthEconomics.Com. **METHODS:** In the cross-sectional study, 501 professionals from the HealthEconomics.Com global subscriber list participated in a self-reported survey assessing salary, bonus, benefits, job satisfaction, and job success factors in June 2017. A multivariate regression model identified significant predictors of annual base salary. Interaction between gender and organizational size, current job title, and number of people managed were separately evaluated. Statistical Analysis Software 9.4 (SAS Inc.; Cary, NC) was utilized to conduct the analysis. **RESULTS:** Of 501 respondents, 391 answered questions required for multivariate analyses. Males represented 52% (n=203) of the respondents; 212 (55%) were employed in biopharma; and 237 (62%) resided in the United States (US). The average salary was $147,091 (SD 86,376). The multivariate regression model accounted for 68.4% of variance in annual base salary (p<0.001). Significantly higher salaries were associated with professionals >40 years of age, biopharmaceutical employment, having hiring and budget management authority, PhD or MD degree, United States employment, working in organizations with >5,000 employees, and job title of president or director (all p <0.05). There was no significant difference in salary between males and females. There were no significant interaction effects between gender and organizational size, current designation, and number of people managed. **CONCLUSIONS:** Surprisingly, gender did not seem to play a significant role in predicting annual base salary within HEOR and market access jobs, refuting the notion of income disparity across gender in HEOR/MA. Organization type, terminal degree, geography, and hiring/budget authority were significant predictors of higher salaries. Additional research should be conducted to increase the generalizability of these results, which were based on a convenience sample.

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COST DRIVERS IN PUBLIC DRUG PLANS IN CANADA, 2016/17

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OBJECTIVES: After a sharp 9.9% increase in 2015/16, the growth in public drug plan expenditures dropped to 2.6% in 2016/17. This analysis provides insight into the factors that contributed to this decline and explains whether it is transient or it reflects a lasting return to the lower rates of growth in previous years. **METHODS:** The analysis uses a cost-driver model to isolate the key factors contributing to changes in drug and dispensing costs based on claims-level public drug plan data from the Canadian Institute for Health Information's NPDUIS Database. **RESULTS:** The decline in public drug plan expenditures in 2016/17 was mainly the result of lower costs related to hepatitis C drugs compared to the previous year when part of the backlog of patients was treated. At the same time, the sustained pressure of higher cost drugs pushed cost levels up by 4.7%, while the counteracting effect of generic savings was limited and the low biosimilar uptake provided only modest savings. The growth in dispensing costs continued a downward trend, falling from 3.6% in 2015/16 to 1.6% in 2016/17, although methadone use added pressure in some public drug plans. **CONCLUSIONS:** A greater understanding of the forces driving