OBJECTIVES: To assess pill burden, health care resource utilization (HRU), and costs among subpopulations of immediate release (IR) hydrocodone users.

METHODS: We performed a retrospective analysis of health care claims from 2011-2012 Truven MarketScan® Commercial, Medicare supplement, and Medicaid Multistate databases. Patients with IR hydrocodone prescription for ≥ 90 days during 6 month baseline period (July 2011 - December 2011) with at least one claim during baseline and 12 month follow-up periods were selected. The final population was sub-categorized by prescribed coverage days (PCD) of IR hydrocodone during baseline line into 90-119, 120-179, and ≥ 180 days. Claims data from 2014 were used to test pill burden, HRU and costs (standardized to 2013 US dollars) during baseline and follow-up periods across subpopulations. RESULTS: A total of 36,174 commercial, 52,699 Medicaid, and 8,873 Medicare IR hydrocodone users were selected. In the baseline period, subgroups with longer PCD had significantly higher counts of hydrocodone pills per month yet fewer HRU and medical costs (all p<0.05). However, during the follow-up period, groups with longer PCD had greater increase in number of inpatient discharges for HRU (including ER visits, office visits, and emergency room visits). The subgroup of patients with PCD <120 days had lower annual all-cause medical costs during follow-up compared with baseline (decreasing $2,624, $955, $4,205 per patient year in medicare, Medicaid and commercial patients, respectively), while patients with longer PCD during baseline had increased costs (p<0.05). For example, Medicaid patients with 120-179 PCD had an increase of $1,874 and those with ≥ 180 PCD had an increase of $4,348. These trends were similar for all insurance types. CONCLUSIONS: Extended length of PCD, particularly after 120 days, corresponds with higher patient burden including elevated pill burden and rising HRU and costs in both commercial and public insurance patients with long-term IR hydrocodone use.

PSY36 Prevalence-Based Measurement of the Economic Burden of Rare Disease: Case Review to Determine the Annual Cost of AcrIomegaly in France

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OBJECTIVES: Although acromegaly is acknowledged as requiring resource-intensive treatment, its ultimate economic burden is unclear. As an extension of work presented at IFSCOR 2013 International Conference on Economic Evaluation (New Orleans, USA), the objective of this research is to measure the annual economic burden of acromegaly in France using a case-review methodology with a prevalence-based sample of patients diagnosed with acromegaly. METHODS: A case-review method was used with a sample of 208 acromegaly patients; reviewing 58 patient cases (4 cases per physician) diagnosed with acromegaly. The patient case histories included: resource utilization including office visits and hospitalization, diagnostic procedures and labs, medications prescribed, medical procedures performed, and an estimate of lost productivity. A micro-costing analysis was conducted to obtain costs in the prior 12 months for each patient case reviewed using published literature, medical fee schedules, and pharmaceutical cost databases to assign costs to treatments and medical procedures. Costs were calculated and reported in the survey data. Annual costs were examined across a broad range of patients of different ages, gender, and time from diagnosis. Two biomarkers were used to categorize acromegaly patients as Controlled vs. Uncontrolled: Insulin Growth Factor-I (IGF-1) and Growth Hormone (GH). Several patient characteristics were used as control factors when comparing annual economic costs: age, sex, and time from diagnosis. Statistical tests and confidence intervals were calculated to determine the significance of patient characteristics on overall economic burden. RESULTS: Three patient subgroups were used to classify uncontrolled acromegaly patients: IGF-1, GH and both IGF-1 and GH. The per-patient economic burden of disease costs ranges from € 29,000 to € 79,400 across these groups. These costs range are benchmarked to other studies and provide context and validity. CONCLUSIONS: The total economic burden of acromegaly in France is significant. Understanding the factors impacting burden of illness will inform future improvements in treatment practice.