OBJECTIVES: Although opioids play a central role in the treatment, and palliation of many medical conditions, there is a large and growing problem of abuse nation-ally and in South Carolina particularly. According to the 2009 National Survey on Drug Use and Health, more than 5 million Americans abused prescription opioid painkillers in January 2011. Reports show an increase in cases of doctor shopping, prescriptions for unknown or forgery, prescribing and dispensing, and other diversion activi-ties. We determine patterns of opioid prescribing in South Carolina through an epidemiologic analysis and geo-spatial mapping of South Carolina prescription data for 2010-2014. METHODS: We conducted a literature review of state Medicaid claims data from 2010-2014. Reporting and Identification Prescription Tracking System (SCRIPTS) was used to conduct a state-wide epidemiologic analysis of patient and prescriber opioid prescribing patterns including distributions of numbers of prescriptions, number of prescribers and of pharmacies used by each patient. Additionally, we conducted county- and Zip-code level analyses of opioid prescribing patterns. RESULTS: Prescriber declines were created representing 10% groupings of prescribers based on controlled substances (CS) prescriptions. The top 10% prescribers (N=2,158,574) of the total CS II – IV prescriptions in 2010, and 58% of total opioid prescriptions. The top pharmacy decline dispensed about 44% of total prescriptions and about 37% of opioid prescriptions. Five Zip Codes had the highest percent of opioid prescriptions out of total prescriptions (Charleston, Richmond, Greenville, Barnwell and Aiken). In 2010 counties with the highest percent of prescriptions (>61%) were Greenville, Richland, Barnwell and Charleston, whereas in 2011 the counties with the highest percent of prescriptions were Greenville, Chester, Richland and Charleston. CONCLUSIONS: Our findings indicate a relatively small percentage of providers, concentrated in a few counties, account for most opioid prescriptions. This group represents a potential target for physician education and engagement in halting pain management and appropriate use of opioids.

PSY64

TREATMENT PATTERNS AMONG CHRONIC USERS OF IMMEDIATE-RELEASE OXYCODONE INITIATING TREATMENT WITH EXTENDED-RELEASE OPIOIDS

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OBJECTIVES: Chronic use of immediate-release opioids (IROS) are more frequently used towards generic options, even if switching molecules is required. Switching may introduce uncertainty for patients regarding dosing, titration and efficacy. This study assessed treatment patterns among patients chronically treated with IR oxycodone who initiate ERO treatment, and describes differences between patients initiating treatment on the same molecule and those who switch molecules. METHODS: Commercially-insured patients aged >65 were selected from de-identified OptumHealth Reporting and Informational Services/Charting Clinics claims data, 2011-2014. Chronic users were defined as patients with ≥2 continuous prescriptions and ≥60 days supply leading up to initia-tion of ERO treatment (index). Patients were excluded if they had claims for EROS during a 6-month baseline period or possible opioid replacement therapy (methadone/buprenorphine) during the 6-month follow-up period, and were required to be continuous users of opioids throughout follow-up. The sample was stratified based on whether ER therapy was initiated on the same molecule (ER oxycodone) or different molecule (ERO oxycodone). Treatment patterns and pill count were assessed for both cohorts. RESULTS: During baseline, 2,318 chronic IR oxycodone users initiating EROS were identified, with 933 (40%) initiating ER oxycodone and the remainder switching molecules. Switching-molecule patients more likely to continuously use index therapy (41.9% vs. 33%), and less likely to switch to a different ERO (12.3% vs. 26%). Among different-molecule patients switching EROS, nearly half switched to oxycodone. Persistence of IR oxycodone was observed in both groups, but continuous index ERO users in the same-molecule cohort showed a greater decline in IR pill count compared with the different-molecule cohort (-173 vs. -105.9). CONCLUSIONS: Chronic IR oxycodone patients initiating EROs on the same molecule were more likely to remain on index treatment, and those remaining on treatment experienced a greater decline in IR oxycodone pill count.

PSY65

CROSS-STATE COMPARISON OF MEDICAID ANTI-OBESITY MEDICATION

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OBJECTIVES: More than one third of the U.S. are considered obese (body mass index ≥30 kg/m²). Because of their relatively low socioeconomic status, the Medicaid population is disproportionately affected by obesity. The objective was to compare the utilization of and spending on anti-obesity medication, specifically orlistat (ampheta-mine-based weight-loss drugs were highly restricted by Medicaid because of their potential for abuse), by state Medicaid programs from 1999-2013. Orlistat, approved by the FDA in April 1999, is a gastric and pancreatic lipase inhibi-tor that reduces dietary fat absorption. METHODS: Using the individual state files for Medicaid outpatient drug utilization targeting the Centers for Medicare and Medicaid Services (CMS) quarterly utilization (relative to the previous year). 15,435 prescriptions from 1999-2013 were excluded for all branded and generic orlistat prescriptions for Medicaid beneficiaries. Descriptive statistics were computed. RESULTS: In 1999, North Carolina, Wyoming, and Massachusetts had the highest Medicaid orlistat utilization. From 1999-2013, Wisconsin, Arizona, and Michigan had the lowest Medicaid orlistat utilization. Over the study, the most likely representing a policy shift. In 2001, when Medicaid utilization was at its peak, a total of 87,811 prescriptions were reimbursed across the country. By 2013, due to several factors including the over-counter version of orlistat approved by the FDA in 2010 and a loss in popularity due to gastrointestinal side effects, only 3,424 prescriptions were reimbursed. Reimbursement per prescription varied by state, with the national average was $107. CONCLUSIONS: Despite an obesity epidemic, very few states reimbursed pharmacies for weight-loss medica-tions, including orlistat. Understanding the different states with respect to weight-loss pharmacotherapy is a goal for future research.

PSY66

HYDROCODONE: A REVIEW OF THE LITERATURE

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OBJECTIVES: An estimated 100 million adults suffer from chronic pain in the US. The total cost of pain ranges from $560 to $635 billion in 2010, exceeding that of heart disease (639 billion), cancer (243 billion), and diabetes (188 billion). The 2010 IOM report on pain states that effective pain management is “a moral imperative” for health care providers. Many pharmaceutical options are available to prescribers, most notably for chronic pain. Recent studies have shown how effective EROs can be effective for the treatment of pain when monitored appropriately. Hydrocodone combination products are among the most commonly prescribed opioids in the US. The objective of this study was to perform a comprehensive literature review of prescribing patterns in the US. METHODS: A comprehensive literature review was conducted regarding the use and impact of hydrocodone in the US. RESULTS: The US consumed 80% of the global supply of opioids and 99% of the global hydrocodone supply. From 1997 to 2007, hydrocodone use increased 280%. Due to their potential for harm and abuse, hydrocodone combination prod-ucts were recently rescheduled from Schedule III to Schedule II by the U.S. Food and Drug Administration (FDA). Single entity hydrocodone extended release was recently released by the FDA and has been met with much controversy due to its potential for abuse. CONCLUSIONS: Hydrocodone use is highly prevalent in the US. Long-term use of hydrocodone and single entity hydrocodone use need to be actively monitored for appropriateness. Future studies should assess the rescheduling of hydrocodone.

PSY67

ESTIMATION OF MEDICAL EXPENDITURE ASSOCIATED WITH OPIOIDS USAGE IN CHRONIC NON-CANCER PAIN: A CROSS-SECTIONAL STUDY BASED ON MEDICAL EXPOSURE SURVEY AND PANEL DATA

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OBJECTIVES: Chronic or long-term pain disturbs numerous lives, which is one of the most common reasons for doctor visits and reduces people’s quality of life. The mean treatment for long-term non-cancer pain (CNCP) is long-term opioid therapy. However, the effectiveness of opioids for CNCP is still controversy and associated medical expenditure is vague. We investigated the impact of opioid treatment on the U.S. government general expenditure. Since 2010, CMS patients who used the 2011 Medical Expenditure Panel Survey, a nationally representative survey for health care use, expenditures and health insurance coverage of the U.S. civilan non-institutionalized population. After excluding individuals with the priority condition of cancer and current diagnosis of cancer, we used response to the SF-12 question-naire and ICD codes to identify chronic pain conditions. The final sample includes 11,858 individuals with 355 receiving opioid treatments. We conducted bivariate statistical analysis to compare demographic characteristics, clinical conditions and total expenditures for CNCP patients’ on and off opioid treatment groups. Using a multivariate generalized linear model (GLM), we estimated the impact of opioid prescription on medical expenditure. The likelihood of seeking care for CNCP patients, after adjusting for covariates. RESULTS: The bivariates analysis results show statistical significant differences in the use of opioid treatments associated with race/ethnicity, education level, smoking status, physical activity, and health. The total annual medical expenditure were $29,914 for opioid users and $8,564 for non-opioid users. The GLM regression results show the opioid treatment is associ-ated with $3,419 to $9,120 in additional medical expenditure, after adjusting covari-ates. CONCLUSIONS: Appropriate guidelines and inpatient management may improve their perceived health and wellbeing and to decrease medical expenditures. However, due to the cross-sectional design, there might be some higher spending for opioid users results from unobserved patient severity, as well as no treatment outcome measures, which needs further study.

PSY68

DOING PATTERN ANALYSIS FOR BIOLOGICS IN THE TREATMENT OF PSORIASIS IN CANADA: INDICATION-SPECIFIC INFORMATION RETRIEVED FROM ADMINISTRATIVE CLAIMS DATABASE

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OBJECTIVES: High cost biologic treatments for diseases such as plaque psoriasis, raise growing concerns over the increasing cost to the health care systems that are funding these treatments. Administrative databases can generate important information about the way these drugs are prescribed in a “real world” setting. The objectives of this study were to determine the initial dosing and identify dose escalation patterns for biologics in the treatment of psoriasis in Canada. METHODS: A sample of data from patients covered by the public (Quebec and Ontario) and pri-vate drug plans in Canada, who received a biologic between January 2010 and August 2012 for at least 12 months, were retrieved (IMS Brogan, IMS Longitudinal Claims Dataset, Jan 2010 - Aug 2013, reported Nov 2013). A specific algorithm was developed based on prescriber information and concomitant medications to capture claims assumed to be associated with psoriasis. Dosing data was performed for four biologics approved for psoriasis in Canada: adalimumab, etanercept, infliximab and ustekinumab. Dose escalation was defined as a 20% dose increase above the previous dose, excluding induction. RESULTS: A total of 4,510 patients were identified and met inclusion criteria. The average first year dose was higher than years 2 and 3, consistent with


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