care admittance, Charlson co-morbidity score, state of residence, and gender all were significant predictors of AD medication use ($p < 0.0001$ for all variables). Racial/ethnic disparities were observed with respect to exposure to a ChEI or memantine between Non-Hispanic Whites and Hispanics (in favor of Hispanics) in California ($p = 0.002$) and Florida ($p < 0.0001$), between Non-Hispanic Whites and Non-Hispanic Others (in favor of Non-Hispanics Others) across all states, between Non-Hispanic Blacks and Non-Hispanic Others (in favor of Non-Hispanic Others) in California ($p < 0.0001$) and New York ($p < 0.0001$), and between Hispanics and Non-Hispanic Others (in favor of Non-Hispanic Others) in California ($p = 0.001$), Florida ($p = 0.013$), and New York ($p < 0.0001$). **CONCLUSIONS:** Disparities in AD medication use among minority-to-minority populations are just as prevalent, if not higher, than minority-white disparities. Furthermore, geographical location was important predictor of health disparities.

PND53

DISCREPANCIES IN HOSPITALIZATION TRENDS BY EPILEPSY AMONG THREE LATIN AMERICA COUNTRIES

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OBJECTIVES: Epilepsy has been the focus of several primary care programs across Latin America region due to its high prevalence and related burden. Hospitalization could be used as an indicator for frequency of more severe cases with uncontrolled and frequent seizures. Thus, hospital admission trends could be instrumental to understanding treatment gaps and support decision making. Our objective was to evaluate hospital admission trend by Epilepsy in three Latin America Countries. **METHODS:** Hospitalization data were extracted from Public Healthcare Databases from Brazil, Chile and Mexico covering 2001-2008. Country and age-specific hospital admission frequencies due to Epilepsy (ICD G40) in people >14 years-old were calculated. Three age range categories were created: 15-29; 30-44; 45-59 and >60. We built general estimating equation models with Poisson distributions to evaluate hospital admissions time trends. Further, the differences between the age ranges were also estimated. **RESULTS:** Means of annual hospitalization rates were similar in Brazil and Chile (2.63 and 2.79, respectively) but comparatively low in Mexico (0.39). The three countries showed different in-hospital patterns over time. Brazil had a downward tendency with an annual ratio of 0.982 ($p<0.001$) and Chile a relatively flat one (p=NS). On the other hand, Mexico presented an upward trend, with an annual ratio of 1.043 ($p<0.001$). Mean hospitalization rates were higher in older age categories in Brazil and Chile and the younger ones in Mexico. The age categories were following the trends showed by their respective countries in the overall analysis. **CONCLUSIONS:** Despite having qualitatively similar assistance programs across the region, the countries showed different rates and patterns of hospitalization due to Epilepsy. Direct comparison between countries should be examined cautiously due to important differences in their health care systems and data collection process.

PND54

SHORT AND LONG-TERM VARIATIONS IN ALL CAUSE HEALTH CARE UTILIZATION AND COSTS FOR NEWLY DIAGNOSED MULTIPLE SCLEROSIS PATIENTS ENROLLED IN EITHER MEDICAID HMO OR COMMERCIAL HMO

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OBJECTIVES: To compare short and long-term all cause health care resource utilization among newly diagnosed multiple sclerosis (MS) patients enrolled in Managed Medicaid or Commercial health plans. **METHODS:** We used the I3 InVision Data Mart to identify continuously enrolled patients > 18 years of age with at least two ICD-9 codes for multiples sclerosis (340.xx) between the dates of June 1, 2006 and March 31, 2010. Baseline patient characteristics as well as thirty-day and 24 month all cause health care resource utilization and costs were assessed using Analysis of Variance (ANOVA) for continuous variables and Chi-squared statistics for continuous variables. **RESULTS:** Medicaid beneficiaries were more likely to have more psycho-social limitations (23.5%; $p < 0.0001$) than their counterparts insured through commercial plans. Within the first 30 days of diagnosis, Medicaid HMO beneficiaries were more likely to be hospitalized ($p = 0.006$) and utilize Emergency Department services ($p < 0.0001$). In addition, Medicaid HMO beneficiaries were 20% less likely to have a claim for a Neurologist vist and 50% less likely to be prescribed disease modifying therapies than commercial enrollees. Long-term access to medical services mirrored that observed in the short term with higher rates of hospitalization ($p = 0.006$) and emergency department use ($p < 0.001$) and less access to Neurologist ($p < 0.001$) and disease modifying treatment ($p = 0.027$). **CONCLUSIONS:** Opportunities exist to support newly diagnosed MS patients enrolled in Medicaid HMO plans. The development and implementation of innovative managed care strategies will ensure that Medicaid HMO beneficiaries received access to specialty care and approved treatments at the same rate as their counterparts enrolled in commercial health plans.

PND55

DETERMINANTS OF PRESCRIPTION DRUG EXPENDITURES IN PATIENTS WITH MULTIPLE SCLEROSIS: AN ANALYSIS OF MEDICAL EXPENDITURE PANEL SURVEY DATA, 2002 - 2009

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OBJECTIVES: The study examined determinants of prescription drug expenditures in patients with Multiple Sclerosis (MS) in United States (US). **METHODS:** Retrospective cross-sectional study was conducted using the 2002-2009 Medical Expenditure Panel Survey (MEPS) data, a nationally representative data on the community dwelling, non-institutionalized US population. The study sample included patients diagnosed with MS (ICD-9-CM: 340). Weighted descriptive statistics were performed to estimate the total and prescription drug expenditures. Multiple Ordinary Least Square regression analysis within the conceptual framework of Anderson Behavioral Model was performed to identify factors associated with prescription drug expenditures. The log transformation of the prescription drug expenditures was carried out to address skewed nature of cost data. **RESULTS:** An estimated of 4.1 million patients were diagnosed with MS during 2002-2009. The total average expenditure for MS patients was $17,619 (95% CI: 16,385-18,913). Of which 44% was attributable to the prescription drugs cost, i.e. $7760 (95% CI: 7169 – 8350). The linear regression revealed that predisposing (region), enabling (health insurance coverage) and need (charlson comorbidity score) factors were significantly associated with prescription drug expenditures. Patients from the Midwest region had 65% higher prescription expenditure than the west region patients. Patients with public insurance had 164% higher prescription expenditures than uninsured patients. One unit increase in charlson comorbidity score was associated with 28% higher prescription drug expenditure. **CONCLUSIONS:** The total prescription drug expenditures accounted for nearly half of total medical expenditure in patients with multiple sclerosis. In addition to need factors, the predisposing and enabling factors played an important role in influencing prescription drug expenditures in patients with multiple sclerosis.

PND56

MANAGED CARE AND PHYSICIAN PERCEPTIONS OF NOVEL TREATMENTS IN MULTIPLE SCLEROSIS

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OBJECTIVES: The objective of this research is to understand emerging value perceptions of novel treatments in Multiple Sclerosis from the perspective of US Managed Care Organization decision makers and prescribing physicians. **METHODS:** Explorative primary research interviews (n=35) were conducted with a sample of Managed Care Organization decision makers, practicing neurologists, hospital pharmacy directors, and specialty pharmacy distribution managers. The sample was composed of national and regional payers representing various patient populations with commercial or government-funded coverage. Interviews were conducted from April to June 2011 and consisted of individual one-hour phone interviews. Survey questions were focused on identifying payer perceptions of unmet need in current Multiple Sclerosis (MS) disease management, payer and physician reactions to the first oral treatment entrant (Gilenya), and projections for changes in treatment algorithms and benefit design upon availability of additional oral therapies. Qualitative survey methods for eliciting stated preferences for formulary management decisions were used. **RESULTS:** Payers and physicians described the unmet need in MS treatment being driven by the absence of optimal disease-modifying treatments and evidence correlating available treatments to long-term outcomes. Payers are sensitive to recent price increases in the category and management practices in MS may become more aggressive in the near-term as competition for value increases. Payers and physicians anticipate future oral treatments in development to induce increased in oral drug initiation but do not anticipate rapid conversion from injectable therapy to oral therapy. **CONCLUSIONS:** Payers and prescribers acknowledge oral therapy options for MS as an expansion in treatment options offering more convenient administration. Rising cost of therapy and evidence of long-term outcome improvement with their utilization remain concerns in supporting the value of these treatments.

PND57

VALUE-BASED INSURANCE DESIGN IN MULTIPLE SCLEROSIS (MS): EMERGING MODELS AND IMPLICATIONS FOR DEVELOPMENT OF REAL-WORLD DATA

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BACKGROUND: US payers often employ a fail-first approach to multiple sclerosis (MS), imposing multiple steps through therapies as patients relapse, progress and accumulate disability. However, within the past year, one managed care organization has piloted an outcomes-based contract in MS. Tier status and discounts will be tied to medication adherence, avoidance of relapses and subsequent hospitalizations. At the same time, the MS therapy pipeline is rapidly evolving, and may offer opportunities for contracting based on volume, or a portfolio of products for multiple lines of therapy. **OBJECTIVES:** To gauge the level of interest among payers in piloting value-based insurance designs (VBID) for oral and intravenous therapies in MS. Additionally, to identify characteristics of plans most likely to implement VBID; and to highlight implications for development of real-world outcomes data to support innovative contracting. **METHODS:** Pharmacy and medical directors of managed care payers will be asked to rate their level of interest in different benefit designs for oral and intravenous MS therapies. Benefit designs include integrated medical/pharmacy benefits; open access plans; pathways based on futility rules; outcomes-based contracting; and risk-sharing tied to avoidance of hospitalizations. The interview sample will include a mix of plans with different approaches to use of specialty pharmacy in MS and additional management practices. **RESULTS:** Critical success factors for VBID (such as ability to link datasets from pharmacy and medical claims) will be identified. In addition, specific outcomes required to design or implement VBID, such as impact of time on ineffective therapy and/or medication non-adherence, will be prioritized based on payer feedback. Lastly, metrics for demonstrating return on investment from VBID in MS, including PMPM as well as drug budget impact and medical cost offsets, will be elucidated.