CONCLUSIONS: The design of VBID initiatives in MS can inform outcomes and contracting strategies for manufacturers of MS therapies.

PND58

INTERCONNECTED HTA MAP FOR ALZHEIMER'S DISEASE – ANALYSIS OF DIVERGENCE AND COLLABORATION PATTERNS

Andreykiv M[1], Van Engen A[1], Wiebinga C[1], Zorzi O[1], Mark R[2]
[1]*Quintiles Global Consulting, Hoofddorp, The Netherlands,* [2]*Ni3 AG, Zürich, Switzerland*

OBJECTIVES: To gain insights into technology assessments of Alzheimer's disease and to reveal the diverse influences on reimbursement decisions in the interconnected HTA universe. **METHODS:** Eighty-four reports published by twenty two Health Technology Assessment (HTA) agencies between 2000 and 2012 were identified that evaluate treatments for Alzheimer's disease (fifty eight of them assessed pharmaceuticals). Data extracted from those reports was supplemented with published information from other sources and divided into data categories (agencies, institutions, assessments, and people). Multiple attributes such as location, affiliation, membership, type of technology, decision on technology, degree of influence, type of influence were assigned to each category and to connections between them. The visual analysis software and social networking analysis techniques were applied to this complex and densely interconnected dataset to observe the engagement and influence of various actors in reimbursement decisions. **RESULTS:** The visual analysis enabled to reveal commonalities and differences of approaches in evaluating Alzheimer's treatments between agencies (decisions vs patient population, decision drivers). It also allowed identifying patterns of collaboration on specific assessments where agencies were referring to each other, referring to the same sources such as Cochrane reviews, European Collaboration Initiatives (Alzheimer Europe, European Federation of Neurological Societies, European Medicines Agency Guideline), professional association guidelines (Alzheimer disease association, American College of Physicians). **CONCLUSIONS:** Alzheimer's disease HTA pathway is known for the disparities in decisions and approaches among agencies. Applying social network analysis allowed identification of patterns of mutual influence and indirect collaboration in the bigger context of these decisions.

PND59

TREATMENT, COMPLIANCE AND RELAPSE SEVERITY: USING COMPARATIVE EFFECTIVENESS RESEARCH TO GUIDE THE DESIGN OF OUTCOMES BASED CONTRACTING IN THE TREATMENT OF MULTIPLE SCLEROSIS

Lage MJ[1], Carroll CA[2]
[1]*HealthMetrics Outcomes Research, Delray Beach, FL, USA,* [2]*Teva Pharmaceuticals, Kansas City, MO, USA*

OBJECTIVES: To assess the utility of comparative effectiveness research in guiding the development of outcome based contracts. **METHODS:** The I3 InVision database was utilized to identify continuously enrolled patients between 18 and 64 years of age with 2 diagnoses of multiple sclerosis (MS) (ICD-9-CM of 340.xx).Receipt of a disease modifying therapy (DMT), with first such date was identified as the index date. Severe relapse was defined as either 1) a patient hospitalized with a diagnosis of MS in the post-period or a patient receiving a claim of an outpatient visit with accompanying use of IV methylprednisolone. Univariate statistics (ANOVA and Chi Square) were used to compare baseline patient characteristics.The probability of relapse was assessed using logistic controlling for patient characteristics (age, sex, region of residence, and insurance product), intent-to-treat, disease modifying therapy, general health (Charlson Index, medical ADL, prior relapse), and medication possession ratio (MPR). Differences in charges between the three groups were assessed using a generalized linear model with gamma distribution and log-link. **RESULTS:** A total of 2302 continuously enrolled patients met study criteria between the dates of January 1, 2006 through March 31, 2011. Fourteen percent (14.54%; n = 333) and 13.79% of patients experienced a severe relapse requiring hospitalization and/or outpatient IV Methylprednisolone use, respectively.Univariate statistics revealed differences across groups with individuals with higher pre-period Charlson Index ($p < 0.001$), higher pre-period Medical ADL limitation proxy ($p < 0.001$) and higher numbers of pre-period severe relapse ($p < 0.001$). Lower MPR across the duration of the post period ($p < 0.001$) and patients enrolled in independent or preferred provider organization ($p < 0.001$) more likely to experience a severe relapse in the post-period. **CONCLUSIONS:** Comparative Effectiveness Research (CER) is an important tool that can be beneficial to inform the design and implementation of outcome based contracting between health plans and pharmaceutical manufacturers.

NEUROLOGICAL DISORDERS – Research on Methods

PND60

IDENTIFYING A CONDITION WITH NO ICD-9-CM DIAGNOSIS CODE FROM ADMINISTRATIVE CLAIMS DATA: POST-STROKE PATIENTS WITH PSEUDOBULBAR AFFECT

Halpern R[1], Yonan C[2], Kulakodlu M[1]
[1]*OptumInsight, Eden Prairie, MN, USA,* [2]*Avanir Pharmaceuticals, Inc., Grass Valley, CA, USA*

OBJECTIVES: Pseudobulbar affect (PBA) is a neurological condition characterized by uncontrolled outbursts of laughter or crying. It occurs secondary to brain injury or neurologic disease. PBA is often confused with other mental health (MH) conditions, and is challenging to identify retrospectively with claims data because an ICD-9-CM diagnosis code was not designated until late 2011. PBA is often treated with antidepressants, anticonvulsants, antipsychotics, or anxiolytics. Estimated prevalence of PBA secondary to stroke is 7% to 50%. Our study objective was to identify PBA in a population of post-stroke patients. **METHODS:** Commercial and Medicare Advantage members with incident stroke from January 1, 2007 to February 28, 2010 were identified with retrospective claims data from a large US health plan. Patients were continuously enrolled for 12 months pre- and post-stroke. Those with: stroke care, MH conditions (depression, bipolar, generalized anxiety or personality disorders), antidepressants, or diagnoses of emotional lability (ICD-9 799.24, 310.8x) pre-stroke were excluded. Post-stroke PBA was identified with: ICD-9 codes for emotional lability; ≥1 MH-related ambulatory visit; or ≥1 claim for a selective serotonin reuptake inhibitor (SSRI) or serotonin and norepinephrine reuptake inhibitor (SNRI) plus ≥1 claim for anticonvulsant, antipsychotic, or anxiolytic within 6 months post-stroke. Sensitivity of the criteria was tested by requiring more medication claims or adding MH-related hospitalization. **RESULTS:** The study population comprised 9408 post-stroke patients. The PBA criteria identified 605 (10.3%) of commercial and 253 (7.1%) of Medicare Advantage subjects. Less than 1% had diagnoses indicating emotional lability. Stricter medication criteria reduced the PBA cohort <2 percentage points, indicating most patients had multiple SSRI, SNRI, and other medication fills. MH-related hospitalizations increased the PBA cohort <1 percentage point. Overall, 8.6-11.1% of commercial and 6.6-7.9% of Medicare Advantage patients had potential PBA, depending on criteria. **CONCLUSIONS:** The criteria identified a stable potential PBA cohort within the range of estimated PBA prevalence.

URINARY/KIDNEY DISORDERS – Clinical Outcomes Studies

PUK1

THE EFFECT OF COADMINSTRATION OF NICOTINAMIDE AND CALCIUM-BASED PHOSPHATE BINDER ON HYPERPHOPHATEMIA IN PATIENTS UNDERGOING HEMODIALYSIS

Allam S[1], El-Hamamsy M[2], El Sharkawy M[2]
[1]*Misr International University, Cairo, Egypt,* [2]*Ain Shams University, Cairo, Egypt*

OBJECTIVES: Assessment the safety and the efficacy of nicotinamide as adjunctive therapy to calcium carbonate (as phosphate binder). **METHODS:** Study design and setting: A prospective, interventional, open-labeled, case control randomized trial was performed at Ain Shams University Specialized Hospital and Al Motamayz hemodialysis center, Cairo, Egypt, from August 2010 to December 2010. **PATIENTS AND METHODS:** Sixty hemodialysis patients with serum phosphorus level ≥ 5.0 mg/dl were classified into two groups; group I (control group) in which patients received calcium carbonate tablets in dose of 500mg to 1000mg three t.i.d. And group II (study group) in which patients received calcium carbonate in dose of 500mg to 1000mg t.i.d. and nicotinamide tablets in a dose titrated to 1000mg/day for 8 weeks. Serum calcium, phosphorus and intact parathyroid hormone were measured at week 1 and 9 to assess the efficacy of treatment. **RESULTS:** Fifty-six patients successfully completed the trail. Serum phosphorus level falls significantly from 6.75 to 5.47 mg/dl with group II and not with group I (from 6.46 to 6.53 mg/dl). A concurrent fall in calcium- phosphorus product was seen with nicotinamide treatment (from 58.7 to 48.55 mg2/dl2), whereas serum calcium, intact parathyroid hormone, uric acid, platelet count, total cholesterol, hemoglobin, AST, and ALT remained stable in both arms. A trend toward increasing HDL and reducing LDL and triglycerides were reported in nicotinamide group however the overall changes were statistically non significant. Diarrhea and other gastrointestinal disturbances symptoms were the major adverse effects seen with nicotinamide treatment. **CONCLUSIONS:** Nicotinamide in single dose of 1000 mg daily can effectively reduce serum phosphorus level when administered with calcium carbonate (as phosphate binder) with less potential side effects.

PUK2

ODDS OF MISSED HEMODIALYSIS SESSIONS ARE INCREASED DURING HOLIDAY PERIODS AMONG IN-CENTER HEMODIALYSIS PATIENTS

Crawford SO, Wang X, Oberai PC, Sibbel SP
DaVita Clinical Research, Minneapolis, MN, USA

OBJECTIVES: Missed dialysis sessions place a significant economic burden on dialysis facilities, compromising dialysis delivery and increasing the cost of hemodialysis. Longer interdialytic intervals have been shown to increase morbidity and mortality and may result in increased time on dialysis. We therefore assessed the likelihood of missed dialysis sessions during holiday periods, which may prolong interdialytic intervals. **METHODS:** We evaluated missed sessions during holiday and non-holiday periods among 2474 in-center hemodialysis patients from 2006-2010. We assessed 5 holidays (Memorial day, Independence Day, Labor Day, Thanksgiving, and Christmas/New Years) and compared the proportion of missed sessions in the week surrounding the holiday relative to non-holiday periods. A 3-week interval was utilized for Christmas/New Years. Generalized binomial models were fit over time and adjusted for potential confounders including age, race, gender, dialysis vintage and vascular access. **RESULTS:** From 2006-2009, we observed a higher proportion of missed sessions over Thanksgiving and Christmas. In particular, Christmas was associated with a 5.8-fold (0.218 vs. 0.038, $p<0.0001$) and 3.7-fold (0.241 vs. 0.065, $p<0.0001$) higher proportion compared to the non-holiday periods in 2008 and 2009, respectively. Conversely, the proportion of missed sessions during Memorial Day, Independence Day, and Labor Day did not differ from non-holidays. Thanksgiving (OR: 1.21, 95% CI 1.10, 1.32) and Christmas (OR: 3.88, 95% CI (3.68, 4.09) were both associated with a higher odds of missed sessions, even after adjusting for potential confounders. **CONCLUSIONS:** The Thanksgiving and Christmas travel periods were associated with a higher likelihood of missed dialysis sessions. Increased travel away from dialysis facilities, overeating, and higher fluid intake may all contribute, suggesting a continued need for vigilant patient communication during holidays to help mitigate the economic and adverse impacts of missed dialysis sessions. Further research should verify the association in larger samples and assess the economic impact of missed hemodialysis sessions.