antibiotics increased from 53% to 56% at initial visits for AOM. The increase was statistically significant compared to controls. The increase was greatest among emergency room physicians, while remaining unchanged among family medicine physicians. Characteristics of prescribers who were most responsive to the intervention were further described using multivariate analyses. CONCLUSIONS: The intervention achieved a statistically significant increase of prescription rate of first line antibiotics in the treatment of initial visits for AOM in children after a single mailing, but the magnitude of change was not large.

RELIABILITY AND VALIDITY OF KINDL CHILDREN GENERIC HEALTH-RELATED QUALITY OF LIFE QUESTIONNAIRE IN AN ASIAN SCHOOL-BASED SAMPLE
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OBJECTIVES: To determine the feasibility, validity and reliability of KINDL in an Asian school-based sample. Introduction: KINDL-Kid and KINDL-Kiddo have been culturally adapted and tested in a sample of diabetic and healthy children in Singapore with promising results. Testing of KINDL was extended to a school-based sample more representative of the general children population. METHODS: Invitations for participations were sent to all schools in Singapore after permission was obtained from the Ministry of Education. Students aged 8–16 years old from participating schools were randomly selected. After the purpose of the study was explained, the questionnaires were administered and the participants were asked to complete the questionnaire without seeking their friends’ opinions. The students were asked to report if they had any of the chronic conditions such as asthma and diabetes. RESULTS: A total of 328 participants completed KINDL-Kid (mean score: 68.3 ± 12.57%) while 1026 completed KINDL-Kiddo (mean score: 59.3 ± 11.64%). 25 KINDL-Kid and 56 KINDL-Kiddo participants were asthmatics. Majority of participants in both groups were Chinese (KINDL-Kid: 74.1%, KINDL-Kiddo: 75.2%) and females (KINDL-Kid: 67.0%; and KINDL-Kiddo: 71.5%). The reliability coefficients (Cronbach’s alpha) ranged from 0.4040 to 0.7091 for KINDL-Kid and 0.3971 to 0.8448 for KINDL-Kiddo. The ceiling effect was significant (>5.0%) in four KINDL-Kid subscales but only one KINDL-Kiddo subscale, while significant flooring effect was observed in one subscale of both instruments. KINDL-Kiddo demonstrated discriminant validity (Healthy vs. Self-reported asthmatics: 56.6 ± 11.92% vs. 51.3 ± 13.21%, p < 0.005) but not KINDL-Kid (65.5 ± 12.76% vs. 66.3 ± 12.71%; p = 0.768). CONCLUSION: The scale reliability obtained suggested a need to re-evaluate the factor structures of KINDL. A factor analysis may be warranted before KINDL is used in Singapore on a large scale.

LONGITUDINAL EXAMINATION OF OUTCOMES ASSOCIATED WITH BOTULINUM TOXIN USE IN CHILDREN WITH CEREBRAL PALSY
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OBJECTIVE: The use of botulinum toxin type A (BTX) in the management of spasticity in childhood CP is increasing. Improvement of physical functioning has been demonstrated in short-term clinical trials, but not in prospective longitudinal studies. We examined both child physical functioning and parent-caregiver related psychosocial outcomes related to this treatment in a longitudinal setting. METHODS: A prospective cohort study with annual follow-ups for 2 years was conducted in 172 children with spastic type of cerebral palsy receiving Botulinum Toxin-A (BTX) injections for spasticity management in a large academic medical center setting. A mixed modeling procedure with baseline status confounder adjustment was used to identify changes in both physical functioning outcomes for the child (using the WEEFIM measure) as well as quality of life of the parent caregiver (using the Stein and Reissman Family Impact Scale) with increasing utilization of BTX injections. RESULTS: Each child received an average of 3 BTX injections each year (range: 1–13). Baseline values of outcome variables indicated poor physical functioning in children and significant quality of life burden on the parent caregiver. The study found that each additional BTX injection administration was associated with a 2.3% improvement in the WEEFIM, compared to average baseline score (p = 0.004). Similarly, the study found an improvement of 1% in the parents overall perception of the severity of the child’s condition Family Impact Scale with each additional BTX injection administration (p = 0.008). This reduced perception of severity was in turn, associated with a decreased family impact score. CONCLUSIONS: These findings suggest that treatment with BTX injections are associated with significant improvements in both physical functioning of the child with cerebral palsy as well as the quality of life of the child’s parent caregiver.

SESSION II
CARDIOVASCULAR DISEASE II

THE COST OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE FROM A STATE MEDICAID PROGRAM PERSPECTIVE
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OBJECTIVE: To estimate the annual cost of chronic obstructive pulmonary disease (COPD) to the California Medicaid (“Medi-Cal”) program. METHODS: This study employed a retrospective matched cohort design and administrative claims data for a 20% random sample of Medi-Cal recipients. Patients selected were 50+ years of age, with a diagnosis of COPD in 2000, and eligible for Medicaid as of January 1, 2000. The comparison cohort consisted of patients without COPD matched on age, gender, race, and dual (Medicare/Medicaid) eligibility status. The cost of COPD was estimated as the difference in mean Medi-Cal payments between the COPD and comparison cohorts during 2000. RESULTS: A total of 12,538 patients with COPD met study inclusion criteria. Approximately 8% were diagnosed with emphysema, 37% with chronic bronchitis, and 55% with unclassified chronic airway obstruction. COPD patients and their matched controls (n = 12,538) averaged 70 years of age; 55% were female, 55% were white, and 65% were eligible for Medicare benefits. Charlson comorbidities, especially congestive heart failure and vascular disease, were more common in the COPD cohort. The proportion of patients hospitalized was higher in the COPD cohort both for respiratory-related conditions (19% vs. 2% for controls, p < 0.05) and for any reason (38% vs. 15%, p < 0.05). The annual per-patient cost of COPD was estimated to be $3185 ($9537 for the COPD cohort minus $6352 for the control cohort), 35% ($1765) of which was due to hospitalizations. Annual per-patient costs of COPD were $4679 for patients <65 years versus $2322 for those 65+ years. Disease costs also were higher among patients with emphysema ($7094) versus chronic bronchitis ($3131) or unclassified chronic airway obstruction ($2694). CONCLUSIONS: On an aggregate basis, COPD costs the Medi-Cal program $200 million annually. Acute hospitalizations drive costs, despite coverage available through Medicare for the use of these services by elderly patients.

NONCONFORMANCE WITH NCEP-ATP III RECOMMENDATION ON LIPID/LIPOPROTEIN MEASUREMENT AT BASELINE: A RISK FACTOR FOR EMERGENCY OR HOSPITALIZATION?
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OBJECTIVES: According to National Cholesterol Education Program—Adult Treatment Panel III, baseline lipid and lipoprotein measurements should be documented prior to initiating lipid-lowering therapy. This study describes the patterns of nonconformance to the measurement guideline, and assesses whether the non-conformance is associated with emergency department or hospital utilization. METHODS: Data were obtained from an administrative database of a managed care organization. The study sample consisted of all continuously eligible adult patients newly initiated with statins from June 1998–June 2000. All patients were followed for one year. Patients without lipid or lipoprotein measurement within six months prior to or on initiation date were identified as nonconforming. CPT codes were used to identify lipid/lipoprotein measurements. Cox proportional hazard regression evaluated the impact of laboratory nonconformance to time to the first emergency department or hospital utilization. Logistic regression was performed to assess the risk factors for nonconformance. RESULTS: Among 25,854 selected patients, 10,205 (39.5%) patients have any claim record for lipid/lipoprotein measurement before initiation of statin therapy. After controlling for 38 covariates including patient demographics, payer type, physician specialty, previous drug, and medical utilization pattern, and comorbidities, patients with nonconformance have 9.2% higher likelihood of earlier emergency department or hospital utilization conforming patients (p = 0.006). Logistic regression revealed that older age, HMO in contrast to PPO are risk factors of nonconformance, while prescribing physician specialty (cardiology or internal medicine), previous use of Niacin, and patients with comorbidities are more likely to receive baseline measurement. CONCLUSIONS: The use of administrative claims to determine conformance with ATP III on lipid/lipoprotein measurement is subject to reporting limitations, but it appears that recorded rate of conformance to the guideline recommendation is low. Nonconformance to the guideline recommendation is significantly associated with emergency department or hospital utilization.

COST-EFFECTIVENESS OF CLOPIDOGREL IN PATIENTS WITH ISCHEMIC STROKE, MYOCARDIAL INFARCTION, OR PERIPHERAL ARTERIAL DISEASE
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OBJECTIVE: Clopidogrel is an antiplatelet agent that has been shown to reduce the risk of ischemic stroke (IS), myocardial infarction (MI), and vascular death (“atherothrombotic events”) compared with aspirin in patients with recent IS, recent MI, or symptomatic peripheral arterial disease (PAD). The objective of this study was to estimate the cost-effectiveness of clopidogrel versus aspirin in these patients. METHODS: We developed a Markov model in which patients with recent IS, recent MI, or PAD were assumed to receive lifelong therapy with clopidogrel or aspirin. Reduction in risk of atherothrombotic events for clopidogrel (vs aspirin) was estimated using data from the Clopidogrel versus Aspirin in Patients at Risk of Ischemic Events (CAPRIE) clinical trial. Costs considered in the model included those of