SDX group, their average costs per hospitalization were less ($8,145 versus $18,617) in part due to shorter ALOS (7.9 versus 14.3 days). Costs due to rehabilitation (8% versus 3%) and other services including surgical care and cast room (20% versus 5%) were higher in the SDX group, presumably due to 85% of these patients receiving acute rehabilitation, fractures, or falls related diagnoses. For both groups, nursing care was the major cost driver (73% and 58%). Services including radiology, laboratory, pharmacy, EKG, EEG, and EMG totaled 19% and 14% of the PDX and SDX group costs, respectively.

CONCLUSION: The study found that most patients were admitted for the treatment of Parkinson's disease–related (secondary) diagnoses rather than for primary diagnosis of Parkinson's disease. Providing better care at home and applying appropriate safety precautions may potentially impact a portion of these admissions and reduce associated resource use.

ND2

POTENTIAL SAVINGS IN THE COST OF TREATING ALZHEIMER'S DISEASE: PATIENT TREATMENT WITH RIVASTIGMINE

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OBJECTIVE: We estimated savings in the cost of caring for Alzheimer's disease patients during 6 months, 1 year, and 2 years treatment with rivastigmine. An intermediate objective was to estimate the relationship between disease progression and institutionalization.

METHODS: We assessed the relationship between Mini-Mental State Examination (MMSE) score and institutionalization using a piecewise Cox proportional hazard model. To estimate cost savings from treatments lasting 6 months, 1 year, and 2 years, estimates of the probability of institutionalization were integrated with data from a 6-month, Phase III clinical trial of rivastigmine and a hazard model of disease progression.

RESULTS: Our data suggest that savings in the overall cost of caring for patients with mild and moderate AD can be as high as $4839.00 per patient after 2 years treatment. Further, the probability of institutionalization increases steadily as MMSE score falls. Among our study subjects age, race, level of education, and marital status were significant predictors of institutionalization, while gender had little effect.

CONCLUSION: Using rivastigmine in treating Alzheimer's disease results in a delay in disease progression for patients who begin treatment during the mild or moderate stages of the disease. By delaying the probability that a patient will be institutionalized, the cost of caring for AD patients can be significantly reduced.

ND3

AN OUTCOMES MEASURE FOR NON-INSTITUTIONALIZED SCHIZOPHRENIC CONSUMERS

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OBJECTIVE: We developed and then validated a self-administered health-related quality of life survey for individuals with schizophrenia living in the community as part of the Schizophrenia Outcomes Assessment Project (SOAP).

METHODS: Fifteen hundred adult consumers with schizophrenia (61% male) were recruited from five states (AZ, MA, SC, WA, WI). Consumers completed four administrations of a 51-item survey assessment in 3 months. A staff version of consumer status was also completed at each administration.

RESULTS: Factor analysis, based on 1382 consumers who answered all 51 items, supports eight factors: satisfaction, self-concept, work/role, mental health, interpersonal, medication effects, activities of daily living, and physical function. The combined score of the instrument ranges from a low of 51 to a high of 204 with a population mean of 150.6 ± 20.2. Cronbach alpha of the 51-item survey is 0.9242 with all but one of the eight factors being over 0.700 (medication effects was 0.624). Each item had a stronger correlation with its factor score with that item removed than with other factors. Face and content validity were established by an expert panel and consumers. Convergent validity was established by comparing consumers' global assessment of their status for each factor to the companion actual factor scores; congruence was significant ($p < 0.0001$). Divergent validity was established by comparing staffs' placement of the consumers into four levels of functionality for each of the eight factors. Except for the medication effects factor, the association between staff assessment and consumer factor scores was significant ($p < 0.0001$).

CONCLUSION: The SOAP-51 is a valid and reliable health-related quality of life instrument for use in a population of individuals with schizophrenia living in the community.

ND4

ASSESSING UTILITIES FOR DEPRESSION OUTCOMES: PREFERENCES OF DEPRESSED PATIENTS AND THE GENERAL PUBLIC

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Depression is a public health problem with a lifetime prevalence estimate over 17% and the second leading cause of disease burden worldwide. Despite the existence of

efficacious treatments such as pharmacotherapy and psychotherapy, the effectiveness of care for depression is still highly variable; many patients who start medication do not complete the recommended treatment duration. To date, little work has examined how people "value" depression.

OBJECTIVE: The study purpose was to assess and compare utilities of patients with major depression and non-depressed primary care patients for different depression health states that incorporated treatment side effects. For comparison, utilities for two HIV states were also obtained.

METHODS: Sixty-five patients with major depression were interviewed before their first visit using two preference assessment methods including the Standard Gamble. Sixty-five non-depressed primary care patients were also interviewed using matched (to the patient sample) depression health states. The duration of all health states presented was 1 year.

RESULTS: Preliminary results are from over 60% of the sample. Several differences in utilities for depression states between the two samples were obtained. First, severe untreated depression (SUD) had a median utility of 0.40 for the depressed group and 0.55 for the non-depressed group. Second, the depressed group's current health had a mean utility of 0.74 while the non-depressed group's current health had a utility of 0.91. For the depressed group, SUD had a utility intermediate between the two HIV states (0.51 and 0.30), while the non-depressed group rated SUD higher (0.47) than the two HIV states (0.45 and 0.40).

CONCLUSIONS: While the depressed sample had lower utilities than the non-depressed group, results from both groups highlight the substantial impact depression has, even within a 1-year duration, and compared to two HIV states. This has important implications for quality of life and pharmacoeconomic studies for depression.

ECONOMIC AND OUTCOMES ISSUES OF RESPIRATORY DISEASE

RD1

TREATING ALLERGIC RHINITIS IN PATIENTS WITH COMORBID ASTHMA: THE RISK OF ASTHMA-RELATED HOSPITALIZATIONS AND EMERGENCY ROOM VISITS

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Evidence of the coexistence of asthma and allergic rhinitis has been broadly discussed in the literature.

OBJECTIVE: In this study, patients with both conditions were studied and the hypothesis that treating allergic rhinitis reduces healthcare utilization for comorbid asthma was tested.

METHODS: The study design was a retrospective cohort study using 1994–1995 MarketScan® claims data. The cohort was limited to patients age 12–60 who were contin-uously enrolled and had no evidence of chronic obstructive pulmonary disease. Allergy treatment and asthma events (hospitalizations and emergency room visits) were identified. To estimate the magnitude of the association between allergy treatment and asthma events, we calculated an incidence density ratio (IDR) associated with exposure to allergic rhinitis treatment. A multivariate Poisson regression was estimated and the parameter estimates were transformed into IDRs for each explanatory variable. An allergic rhinitis treatment indicator was included in all regressions.

RESULTS: The final study population consisted of 4944 allergic asthmatics approximately 73% of whom were treated for their allergies. Asthma related events were more frequent in the untreated group compared to the treated, 6.6% compared to 1.3%. An IDR of 0.49 for the treatment group ($p = 0.001$) indicates that the risk of an asthma related event for the treated group was about half that of the untreated group.

CONCLUSION: Overall, we found that those who were treated for allergic rhinitis have a significantly lower risk of subsequent asthma related events (ER visits or hospitalizations) than those who were not treated.

RD2

COST-EFFICACY ANALYSIS OF AN INHALED CORTICOSTEROID VERSUS A LEUKOTRIENE RECEPTOR ANTAGONIST

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Given the increasing number of therapies, purchasers and payers of healthcare are becoming more sensitive to the overall cost of treatment in relation to the clinical outcomes achieved.

OBJECTIVE: The purpose of this economic analysis was to compare the value of an inhaled corticosteroid (ICS), fluticasone propionate 88mcg twice daily, versus a leukotriene receptor antagonist (LTRA), zafirlukast 20mg twice daily, in subjects with persistent asthma currently receiving short acting beta$_2$-agonists alone.

METHODS: The data utilized in the analyses was collected from a multicenter, randomized, double-blind, double-dummy, parallel group, placebo-controlled clinical trial. Effectiveness parameters included in this economic analysis were the proportion of symptom-free days (SFD), and QoL improvements (>0.5 change from baseline). Direct costs (D) included: costs of study drugs, emergency room visits, hospitalizations, unscheduled physician visits, treatment costs for drug-related adverse events, and rescue medication (albuterol). Indirect costs (I) included: lost wages and benefits associated with missed workdays or school days. All costs are reported in 1998 dollars.

RESULTS: Three hundred twenty-nine patients were randomized to receive ICS (n = 111), LTRA (n = 107), or PL (n = 111). The cost-effectiveness (CE) ratios in terms of SFD, were $6.62 (D); $8.86 (D + I) for ICS compared to $12.08 (D); $14.15 (D + I) for LTRA. The CE ratios for