DEVELOPMENT OF THE ALZHEIMER'S DISEASE CAREGIVER PREFERENCE QUESTIONNAIRE

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OBJECTIVES: This study aimed to develop a questionnaire to compare caregiver preferences and satisfaction for oral versus patch treatment for patients with Alzheimer's disease (AD).

METHODS: Twenty-three published articles in Medline and the Patient-Reported Outcome and Quality of Life Instruments Database (PROQOLID) were identified and reviewed to aid the development of an interview guide and draft questionnaire. Results from caregiver focus groups and clinician interviews in the US were analyzed, followed by face and content validity testing to assess the comprehensibility and relevance of the instrument. RESULTS: From the literary review, 22 domains were identified as measures of caregiver satisfaction, including those related to efficacy, tolerability, and ease of use. The focus groups consisted of 24 AD caregivers who had been providing care for an average of four years across a range of disease stages (25% mild, 58% moderate, 17% severe). Six key challenges regarding medication limitations, nine major categories of caregiver-perceived advantages, and nine categories of disadvantages were identified. The six clinicians interviewed, equally representing three medical specialties (psychiatry, geriatrics, neurology), reacted positively to the initial draft of the questionnaire. Content validity testing in 10 caregivers resulted in a reduction of answer choices and minor changes to order, structure, and language to improve clarity and flow. The resultant Alzheimer’s Disease Caregiver Preference Questionnaire (ADCPQ) consisted of three modules: module one (baseline) containing 11 items assessing treatment expectations; module two (8-week) containing 33 items on the treatment options; and module three (24-week), containing 10 items assessing treatment opinions throughout the trial. CONCLUSION: The ADCPQ may prove a useful research tool to better understand caregiver preferences for medication regimens and develop improved treatment algorithms for AD. It has already been used in one large, clinical study (n > 1000), and a blinded in-trial validation is underway to further refine the questionnaire.

ALZHEIMER'S DISEASE PROGRESSION HEALTHY-YEAR EQUIVALENTS: STATED RISK-BENEFIT TRADE-OFF PREFERENCES

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OBJECTIVES: The objective of this study is to quantify quality-adjusted disease-progression profiles based on the willingness of older Americans to accept treatment-related risk of death or permanent severe disability in exchange for modifying the course of Alzheimer’s disease (AD). AD is a progressive, fatal condition whose incidence is rising. Little is known about how the general public views the seriousness of the disease and what tradeoffs they would accept to modify its course. Data on hypothetical, but clinically relevant treatment tradeoffs can be used to construct quality-adjusted measures of disease-progression profiles.

METHODS: A representative sample of U.S. residents aged 60 years and older completed an online survey that included a series of stated-choice trade-off tasks. Subjects chose between 10 pairs of hypothetical treatment alternatives, each including different 7-year AD disease-progression profiles and risks related to adverse events that would result in death or permanent severe disability. We used mixed-logit methods to estimate healthy-year equivalents for several clinically relevant disease-progression profiles. RESULTS: A total of 2146 subjects completed the survey. Using the mixed-logit estimates from the risk-benefit trade-off preferences, a typical 7-year disease progression of 3 years mild AD (u = 0.73), 2 years moderate AD (u = 0.53), and 2 years severe AD (u = 0.28) has a mean healthy-year equivalence of 4.39 years. Using the same assumption above and assuming a utility for permanent severe disability of 0.32, a treatment with risks related to adverse events that prevents AD from progressing beyond the mild stage (7 years of mild AD) has a mean healthy-year equivalence of 5.71 years. CONCLUSION: Older Americans’ risk-benefit trade-off preferences indicate they regard AD as a very serious condition and that therapies, which could delay worsening from mild AD to moderate and severe stages could yield increases in healthy-year equivalents.

NEUROLOGICAL DISORDERS—Patient Reported Outcomes

THE RELATIONSHIP BETWEEN THE MEDICATION POSSESSION RATIO AND PATIENT OUTCOMES: EVIDENCE FROM THE USE OF GLATIRAMER ACETATE

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OBJECTIVES: Compare how changes in the medication possession ratio (MPR) affect patient outcomes among multiple sclerosis (MS) patients treated with glatiramer acetate (Copaxone®). METHODS: Data were obtained from i3’s Lab Rx Database from September 2001 to June 2006. Patients were included if they were diagnosed with MS, initiated therapy with Copaxone and had continuous insurance coverage from 6 months prior to 24 months post initial use of Copaxone (N = 872). Multivariate regressions examined the association between use of achievement of alternative MPR goals and two-year total direct medical costs or relapse, where relapse was defined as being hospitalized with a diagnosis of MS or an outpatient visit with a diagnosis of MS followed by a prescription for steroids within a seven day period. Regressions also controlled for difference in patient characteristics. RESULTS: Among patients who initiated therapy on Copaxone, increases in the MPR were associated with significantly lower odds of relapse. Specifically, patients who achieved an MPR of at least 0.7, 0.8 or 0.9 had odds ratio of relapse of 0.583, 0.530, and 0.437, respectively (P < 0.0001). Furthermore, while the use of medications to treat MS (e.g. Copaxone) resulted in significantly higher total direct medical costs, the marginal impact of medication use on total direct medical costs decreased as MPR increased. For example, patient with an MPR>0.5 increased costs of $22, 288 (P < 0.0001), while those with an MPR≤0.9 had increased costs of $11,707 (P < 0.0001). CONCLUSION: Increases in the MPR for Copaxone is associated with a reduction in patient’s marginal cost of medical treatment. This result suggests that, despite the higher costs associated with increased usage of Copaxone, there are costs offsets associated with “compliant” use of the medication. Furthermore, results from this study indicate that a higher MPR for Copaxone is associated with significant reductions the probability of relapse.