according to the standardized guidelines for cross-cultural adaptation. Patients consecutively admitted with ischemic stroke were recruited, until 30 patients in each of three groups of stroke severity were reached. Stroke severity was evaluated with NIH stroke scale and categorized as mild (0–6), moderate (7–15), or severe (16–38). Patients were assessed 3 times, within 7 days of admission, 3 months and 6 months afterwards. Ten randomly selected patients were re-administered 2 weeks after first administration for test-retest study. **RESULTS:** We studied 50 mild, 36 moderate, and 33 severe stroke patients. Cronbach's alpha was high for 6 domains (0.95 to 0.98), moderate for emotion (0.69) and participation (0.77). Intraclass correlation coefficients ranged from 0.63 to 0.89, except for memory (0.13), hand function (0.47), and ADL/IADL (0.53). Based on first assessment, memory and communication may have potential for ceiling effects in mild stroke group, strength and hand function may have potential for floor effects in moderate stroke group, and all domains may have potential for floor/ceiling effects in severe stroke group. The correlations between each of the physical domains (strength, ADL/IADL, mobility, hand function) and Barthel Index were good (0.72 to 0.92). Memory domain showed a high correlation with MMSE (0.81). **CONCLUSIONS:** The Mandarin version of the SIS is an acceptable stroke-specific outcome measure in most domains. Further studies in determining the content should enhance confidence in its validity.

PST10

THE METHODOLOGY BEHIND A PROSPECTIVE, OBSERVATIONAL STUDY OF THE ECONOMIC BURDEN OF ISCHEMIC STROKE

Seung SJ[1], Mittmann N[2], Sharma M[3], Fisher A[4], Cousineau D[3], Liovas AM[5]
[1]HOPE Research Centre, Sunnybrook & Women's College Health Sciences Centre, Toronto, ON, Canada; [2]HOPE Research Centre, Sunnybrook & Women's College Health Sciences Centre, University of Toronto, Toronto, ON, Canada; [3]The Ottawa Hospital, Ottawa, ON, Canada; [4]The Ottawa Hospital, University of Ottawa, Ottawa, ON, Canada; [5]AstraZeneca, Mississauga, ON, Canada

OBJECTIVES: To present steps involved in launching the first national, prospective study determining resource utilization and direct (hospitalization, rehabilitation, outpatient, community care) and indirect (lost productivity, caregiver) costs of managing ischemic stroke in the first 6-months post-stroke. **METHODS:** A prospective, observational study was designed. A cohort (N = 200) of ischemic stroke patients will be recruited in a consecutive manner by stroke centres across Canada. Ethics approvals will be obtained and a minimum of one neurologist and one study coordinator per centre will participate to identify eligible patients, obtain informed consent, and interview patients. Three sets of questionnaires (baseline, 3-months, and 6-months) will be completed. Questionnaires include clinical and drug histories, stroke severity, disability, resource utilization, depression and utility. Patients will also complete diaries to quantify indirect costs. A pilot study will be conducted to evaluate the study tools. Data collected will be entered electronically via a secure website. **RESULTS:** Ten stroke centres across Canada (Ottawa, Toronto, Calgary, Montreal, Quebec City, Edmonton, Vancouver, Halifax, Saint John and Thunder Bay) will each recruit 20 eligible ischemic stroke patients into this study. Inclusion criteria such as age, language, neuroimaging evidence and non-interventional clinical trial involvement have been defined in order for the study to be launched on September 26, 2005 (with a 3-month recruitment period) and end July 2006. The primary analysis will provide an overall estimate of costs per ischemic stroke patient. Sub-analyses for atrial fibrillation and severity will also be conducted. **CONCLUSIONS:** The BURST study will be the first Canadian study that will determine the resource utilization and overall costs of treating ischemic stroke in both acute and post-acute settings with participation from tertiary-based and community-based stroke centres. The economic data collected will be critical for future stroke care funding systems.

PST11

THE USE OF MULTI-CRITERIA DECISION METHODS IN HEALTH CARE. DOES METHOD USED INFLUENCE OUTCOME?

Van Til JA[1], Dolan JG[2], Stiggelbout AM[3], IJzerman MJ[1]
[1]University of Twente / Roessingh Research and Development, Enschede, Overijssel, The Netherlands; [2]Unity Health System, Rochester, NY, USA; [3]Leiden University Medical Center, Leiden, Zuid-Holland, The Netherlands

OBJECTIVES: To investigate how the choice of multicriteria decision method influences outcome (ranking criteria and criteria weights). Population. A convenience sample of 28 subjects, 12 healthy and 16 cognitively impaired. **METHODS:** Based on a literature review, 5 multicriteria methods were chosen for comparison including: Kepner-tregoe analysis (KTA), simple multi attribute rating technique (SMART), SMART using swing weights (SWING), Analytic Hierarchy Process (AHP) and Conjoint Analysis (CA). Four attributes of treatment were identified (impact, duration, and end-result of treatment and associated risks). Subjects were asked to both rank and rate the importance of these attributes with each method. The order of methods was randomized and the total length of the interview was restricted to one hour. Some subjects therefore did not use all methods. Subjects were interviewed either once (n = 14) or twice (n = 14) (Only the results of the first measurement are presented) **RESULTS:** The highest percentages of rank reversals were found between CA and other methods (55–62%). The lowest percentage of rank reversals was between KTA and SMART (18%). The percentage of rank reversals was significantly higher in impaired population (An average of 54% compared to 36% in unimpaired population). When comparing actual weights, AHP and SMART correlate highly with all other methods except CA. **CONCLUSIONS:** The high percentages in rank reversal and divergent correlation between individual weights (especially CA compared to other methods) show that the method chosen influences outcome. This has to be taken into account when the ranks or weights are used in multi-criteria decision analysis to make actual treatment decisions. The dissimilar methodology of CA might explain the high percentages of rank-reversals and low correlation between this method and other. Also, the design of the survey might have influenced CA weights and ranking.

PST12

THE USE OF MULTI-CRITERIA DECISION METHODS IN HEALTH CARE. WHICH METHOD IS MOST SUITABLE FOR HEALTHY AND COGNITIVELY IMPAIRED POPULATION?

Van Til JA[1], Stiggelbout AM[2], Dolan JG[3], IJzerman MJ[4]
[1]University of Twente, Enschede, Overijssel, The Netherlands; [2]Leiden University Medical Center, Leiden, Zuid-Holland, The Netherlands; [3]Unity Health System, Rochester, NY, USA; [4]University of Twente / Roessingh Research and Development, Enschede, Overijssel, The Netherlands

OBJECTIVES: To select the best multi-criteria decision making method for use with cognitively impaired patients. Population. A convenience sample of 28 subjects, 12 healthy and 16 cognitively impaired. **METHODS:** Based on a literature review, 5 mul-

ticriteria methods were chosen for comparison including: Kepner-tregoe analysis (KTA), simple multi attribute rating technique (SMART), SMART using swing weights (SWING), Analytic Hierarchy Process (AHP) and Conjoint Analysis (CA). Four attributes of treatment were identified (impact, duration, and end-result of treatment and associated risks). Subjects were asked to both rank and rate the importance of these attributes. After using the methods to establish preferences for treatment, subjects were asked to judge the overall difficulty of the techniques on 1–10 score, and answer questions regarding clarity of explanation of method, difficulty in answering questions, understanding method in relation to goal, and use of the method in health care situations. Subjects were interviewed either once (n = 14) or twice (n = 14) (Only the results of the first measurement are presented) **RESULTS:** In the overall rating of methods CA scored best (mean score 3.65), followed by SMART (3.70), AHP (4.00), SWING (4.40) and KTA (4.67). CA also scored best on verbal/written explanation, understanding of method in relation to goal second and usefulness in health care situations, and scored second place on difficulty in answering questions. In the impaired population, AHP was rated best on the overall difficulty score. **CONCLUSIONS:** In this pilot study, conjoint analysis was the most preferred method of preference elicitation. Our main concern regarding CA is the time it takes to fill out a CA questionnaire and the fact that data analysis is most complicated of all methods included. Another concern regarding the use of multicriteria methods needing further study is the rate of rank-reversal between methods in the cognitively impaired population.

PST13

EFFECTIVENESS OF AN EARLY REHABILITATION STRATEGY WITH HOME FOLLOW-UP FOR PATIENTS WITH ISCHEMIC VASCULAR CEREBRAL DISEASE IN MEXICO

Torres-Arreola LDP[1], Flores-Hernández S[2], Constantino-Casas P[2]
[1]Instituto Mexicano del Seguro Social, Mexico, D.F, Mexico; [2]Instituto Mexicano del Seguro Social, México, D.F, Mexico

OBJECTIVE: To evaluate, in cases of ischemic vascular cerebral disease (VCD), effectiveness in terms of functional recovery and quality of life of an early hospital rehabilitation intervention with follow-up in the patient's home by a nursing team. Material and **METHODS:** Patients with VCD >45 years of age were randomized for inclusion in an intervention program or control group. The patients were selected from three Mexican Social Security Institute (IMSS) hospitals in Mexico City between March 2003 and May 2004. The intervention consisted in a physical and social rehabilitation program involving a nursing team which began in the hospital and continued in the patient's home; it had three phases: a) intensive, with daily visits over 15 days, b) intermediate, with two weekly visits during the following two weeks, and c) support, with a weekly visit over the following two months. The control group received only information regarding VCD and patient care and weekly visits. Barthel, Frenchay and SF 36 were evaluated on admittance in hospital, and at 3 and 6 months after discharge from hospital. **RESULTS:** Of a total of 187 patients recruited, 90 completed the follow-up, 45 in group 1 (intervention) and 44 in group 2 (control). Average age was similar in both groups (72 years). Around 82% in both groups present chronic disease. An increase of 43 points was observed in the Barthel index at the end of the follow-up period for both groups (p = 0.21). General health was better at the end of the follow-up for group 1 (p = 0.05). **CONCLUSIONS:** Early rehabilitation in hospital with subsequent follow-up improves the perception the VCD patient has of his/her health. It is also a useful support to the patient's functional recovery.

DIABETES

PDB1

DIABETIC PERIPHERAL NEUROPATHY: EVALUATION OF THE INTER-ASSOCIATION BETWEEN THE RANGES OF NEUROPATHIC SYMPTOMS

Currie CJ[1], Cawley S[2], Morgan CL[1], McEwan P[1], Price P[1], Covington M[3], Peters JR[4]
[1]Cardiff University, Cardiff, Wales, UK; [2]NHS Wales, Cardiff, UK; [3]Eli Lilly and Company, Indianapolis, IN, USA; [4]University Hospital of Wales, Cardiff, UK

OBJECTIVES: Diabetic peripheral neuropathy (DPN) results in not only pain but a range of debilitating symptoms. The Neuropathy Total Symptom Score 6 (NTSS-6 [self administered]) characterises the frequency and severity of the range DPN symptoms, the purpose of this study being to examine the inter-association between symptoms. **METHODS:** A postal survey using various instruments including the NTSS-6 was mailed to subjects identified at random from hospital records as having either type-1 or type-2 diabetes using the same methods as the Health Outcomes Data Repository (HODaR). Cross-sectional analysis was used to test for these inter-associations. This is a preliminary analysis of the first 604 returns. The NTSS-6 provides a score of 0 to 3.66 in each of 6 domains. The total score (which can range from 0 to 21.96) is simply summed with zero meaning no neuropathic symptoms. **RESULTS:** Of the 604 patients, 24% reported no symptoms; the characteristics of those without and with DPN symptoms was: 58 vs. 64 years; males 56% vs. 60%; diabetes duration 16 vs. 13 years; history of cardiovascular disease 31% vs. 50%; number of days in hospital in the last year 3.4 vs. 7.7 days and 4.4 vs. 7.0 ambulatory care attendances in the previous year, respectively. The proportion of patients experiencing symptoms was for Aching, Prickling, Allodynia (sensitivity), Numbness, Burning and Lancinating Pain: 62%, 58%, 46%, 44%, 42% and 39%, respectively. Multiple combinations of symptoms occurred at the following rates: 11% had one symptom type, 12% two, 12% three, 9% four, 12% five and 21% all 6 symptoms. **CONCLUSIONS:** DPN has a range of debilitating symptoms, although there is a tendency to focus on pain. DPN symptoms occur frequently, in combination and one fifth of respondents reported experiencing all six categories of symptoms.

PDB2