been published. The mean number of doctor’s appointments (medium), or dermatology (5.3), and sickle cell (5.7). Patients used 1–3 (low), 4–6 (medium), or 7 (high) therapies 32%, 38%, and 30% of the time. The mean number of doctor’s appointments (p = 0.04) and work hours missed (p = 0.03) significantly increased with increasing CAM use (low, medium, or high). CONCLUSION: CAM use often included CAMs related to low back pain. The costs of low back pain were assessed by measuring both direct costs of providing health care to patients, and indirect costs as the value of productivity losses. Furthermore a decision tree was constructed to demonstrate different ways of managing recurrent low back pain. Data was obtained from two German health insurance funds for all identified back pain patients in 2005. The estimation of potential cost savings was based on assumptions of the Bertelsmann foundation expert-panel. RESULTS: In Germany, total cost of low back pain reached €6.3 billion in 2005. The indirect costs due to productivity losses accounted for 39% of the total costs. Total annual direct costs amounted €3.8 billion, with an average direct cost of €230 per patient. Nearly 42% of the direct costs were induced by outpatient treatment, 24% by physical treatment, 18% by pharmaceuticals and 14% by hospitalisation. Patients with chronic or recurrent back pain (21% of the study’s population) were accountable for 43% of the direct costs. By modelling scenarios of best practice medical care, potential cost savings add up to 24% of the direct costs of the patient sub-population with recurrent back pain. CONCLUSION: Overall, the study confirms the high economic burden of back pain for the German society. Best practice medical care was associated with substantial cost saving opportunities. Further research is needed to establish the cost-effectiveness of treatment based on guidelines in a prospective study design.

**SYSTEMIC DISORDERS/CONDITIONS—Patient-Reported Outcomes**

**PSY38**

**FACTORS ASSOCIATED WITH LOWER HEALTH-RELATED QUALITY OF LIFE (HRQoL) IN ADULTS WITH FACTOR VIII DEFIciency—the Hemophilia Utilization Group Study-Part V (HUGS-V)**

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OBJECTIVE: To examine whether predisposing, enabling and need variables in the behavioral model of health services use, described by Andersen *et al.*, are associated with lower HRQoL as measured by SF-12 in adults with hemophilia A. METHODS: Data were from HUGS-V, a prospective multi-center study examining hemophilia costs and impact of disease among patients at six U.S. Hemophilia Treatment Centers. Adults with hemophilia completed questionnaires and variables were selected according to the Andersen’s model, including socio-demographics, self-reported co-morbidities, joint pain and motion limitation. A linear regression model was used to assess factors associated with SF-12 Physical Component Summary (PCS) and Mental Component Summary (MCS) scores. RESULTS: Complete data from 152 patients were analyzed. Mean age was 33.7 years (range 18–65). Sixty-four percent had severe hemophilia. 82% reported one to seven co-morbidities. Thirty-eight percent reported severe joint pain and 57% reported severe motion limitation in at least one joint. Mean PCS was 43.2 ± 10.8 and mean MCS was 50.9 ± 10.1. Adults with severe hemophilia had lower PCS scores compared to those with mild or moderate hemophilia.

**PSY37**

**RESOURCE USE AND COSTS ASSOCIATED WITH BACK PAIN IN GERMANY**

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OBJECTIVE: This study aimed to determine the total costs of back pain and spinal disorders (ICD10: M50–M54) to German society in 2005 as well as to identify different patterns of health care utilization of a patient sub-population with recurrent back pain. In addition, potential cost savings by implementing guidelines were estimated. METHODS: The costs of low back pain were assessed by measuring both direct costs of providing health care to patients, and indirect costs as the value of productivity losses. Furthermore a decision tree was constructed to demonstrate different ways of managing recurrent low back pain. Data was obtained from two German health insurance funds for all identified back pain patients in 2005. The estimation of potential cost savings was based on assumptions of the Bertelsmann foundation expert-panel. RESULTS: In Germany, total cost of low back pain reached €6.3 billion in 2005. The indirect costs due to productivity losses accounted for 39% of the total costs. Total annual direct costs amounted €3.8 billion, with an average direct cost of €230 per patient. Nearly 42% of the direct costs were induced by outpatient treatment, 24% by physical treatment, 18% by pharmaceuticals and 14% by hospitalisation. Patients with chronic or recurrent back pain (21% of the study’s population) were accountable for 43% of the direct costs. By modelling scenarios of best practice medical care, potential cost savings add up to 24% of the direct costs of the patient sub-population with recurrent back pain. CONCLUSION: Overall, the study confirms the high economic burden of back pain for the German society. Best practice medical care was associated with substantial cost saving opportunities. Further research is needed to establish the cost-effectiveness of treatment based on guidelines in a prospective study design.

**PSY36**

**COMPLEMENTARY AND ALTERNATIVE MEDICINE AND HEALTH CARE UTILIZATION IN PATIENTS WITH NON-CANCER CHRONIC PAIN**

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OBJECTIVE: Complementary and alternative medicine (CAM) represents an important group of medical treatments that are frequently excluded from health economic assessments. Chronic non-cancer pain is one area where CAM may provide significant patient benefit. The purpose of this study was to describe CAM use in outpatients with non-cancer chronic pain and to describe variables of interest in CAM users. METHODS: Prospective observational analysis at a tertiary care university teaching hospital conducted among outpatients with non-cancer chronic pain. We collected data using a daily log completed by patients during a one-week period. Variables included gender, ethnicity, pain source, type(s) of CAM used, health care utilization, and work hours missed. RESULTS: Of the 263 patients (75% female, 25% male), 95% used CAM (mean age 50.6, standard deviation 13.8). CAM was used by 94% of Caucasians, 97% of African-Americans, and 95% other (mean number of CAM 5). Frequently used CAMs included rest (77%), changing position (66%), hot/cold packs (58%), prayer (41%), exercise (39%), massage (36%), epidurals (26%), and talking to someone (25%). Mean number of CAM used by pain source was cancer (3), headache (4.1), >1 pain source (5.3), musculoskeletal (5.2), rheumatology (5.3), and sickle cell (5.7). Patients used 1–3 (low), 4–6 (medium), or ≥7 (high) therapies 32%, 38%, and 30% of the time, respectively. The mean number of doctor’s appointments (p = 0.04) and work hours missed (p = 0.03) significantly increased with increasing CAM use (low, medium, or high). CONCLUSION: CAM utilization is common among patients with chronic non-cancer pain and should be considered in health economic assessments. Most patients used one CAM and many used more than one. Patients using more CAMs had higher health care utilization and missed more work. Future research aimed at measuring the incremental cost-effectiveness of CAM in relation to and in addition to pharmaceutical treatments would be worthwhile.