completed the necessary documentation. Thirty-seven of 42 (88%) patients experienced at least one IV PCA-related problem, with an average of 3.3 problems per patient. The most common problems were drug-related (79%), including dose adjustments, syringe replacement, and medication changes. Patient-related problems were also common (45%), and included the need for patient re-education regarding IV PCA use, assisting patients in using the on-demand button, and addressing side effects related to opioid use. IV PCA line problems and pump-related problems were observed in 14% and 12% of patients, respectively. **CONCLUSIONS:** IV PCA administration requires a complex series of processes and coordination among several hospital departments. Problems with IV PCA are common and require staff time and effort to resolve.

PPN4

COST-EFFECTIVENESS OF THE COMBINATION TRAMADOL PLUS PARACETAMOL IN TREATMENT OF SUBACUTE LOW BACK PAIN IN A DUTCH HEALTH CARE SETTING

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OBJECTIVES: To determine the cost-effectiveness of a combination tablet of tramadol/paracetamol (Zaldiar) versus tramadol in the treatment of subacute low back pain in a Dutch Health Care setting. The hypothesis was that higher drug costs for the combination therapy are offset by a reduction of costs associated with the treatment of side-effects. **METHODS:** Decision analysis was used to model the health economic outcomes. A cost-minimisation approach was appropriate since the efficacy of the two treatments proved to be the same in the dosages used. Probabilities (side-effects), resource utilisation data (pain treatment and treatment of side-effects), productivity losses and unit costs were obtained from published literature, clinical trial reports, Delphi panel and official price and tariff lists (Dutch costing manual). The perspective taken was that of society and health insurance. **RESULTS:** Compared with tramadol IR, savings with combination therapy from a society perspective were 34.78€ per patient for ten days' treatment of subacute low back pain (costs of combination therapy: 62.58€; with tramadol IR: 97.36€). Savings with combination therapy from a health insurance perspective were 25.30€ (costs of combination therapy: 54.64€; with tramadol IR: 79.94€). Sensitivity analyses confirmed the robustness of the model. **CONCLUSIONS:** The results show that treatment with the combination tablet of tramadol/paracetamol compared with tramadol IR is cost-saving and has fewer side-effects. This is true despite the fact that with the dosages used the daily drug costs of combination therapy are higher than those of tramadol IR. The reason for the lower total therapy costs is the lower incidence of side-effects with the combination tablet of tramadol/paracetamol, resulting in favourable clinical and economic benefits.

PPN5

PROSPECTIVE ASSESSMENT OF THE HEALTH AND ECONOMIC BURDEN OF NEUROPATHIC PAIN

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OBJECTIVES: The current treatment of neuropathic pain (NeP) includes a wide range of drug and non-drug therapies, and patient outcomes are not very satisfactorily. The aim of this study was to assess the magnitude of, and to explore the relationship between the health and economic burden of the condition in patients treated at the specialist level. **METHODS:** Ninety-eigth patients with NeP were included at random cross-sectionally in 4 pain centres, and were followed up prospectively during one month. All medical resource use related to NeP as well as pain scores (daily Visual Analogue Scale), were collected via patient diaries. Quality of Life (MPI, MPQ and SF-36) was assessed at start and at the end of the one month observation period. Costs from the public insurance perspective were calculated by multiplying the medical resource use with charges. SF-36 scores were transformed into utility values, using the SF-6D algorithm. **RESULTS:** Patients had an average history of 4.5 years of NeP; 84% had peripheral NeP; 20% had mild pain, 80% moderate or severe. The total monthly cost was 438.4€ (+/ 105.8). Hospital stays represented 57% of total costs. The utility at start was 0.550 (+/– 0.012) and at the end date 0.578 (+/– 0.012) ($p = 0.005$). A multivariate regression analysis showed an independent and significant inverse relationship between utility at start and total cost ($p = 0.011$). In peripheral NeP, patients with moderate to severe pain had a more than doubled cost compared to patients with mild pain: 517€ (+/– 148) vs. 201€ (+/– 45) ($p = 0.045$). **CONCLUSIONS:** NeP is associated with rather utility values in the order of magnitude of some cancer types. Higher pain scores and lower utilities lead to higher cost of treatment. A possible explanation for the slight but significant increase in utility is the increased attention within the study environment.

PAIN

PAIN—Quality of Life/Utility/Preference Studies

PPN6

BURDEN OF ILLNESS SURVEY IN PATIENTS WITH PAINFUL NEUROPATHIC DISORDER (PNDS) IN GERMANY

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OBJECTIVES: Aim of the survey was: 1) to identify characteristics of patients with PND's; 2) to quantify burden of health resource utilisation among this patients; and 3) to investigate the impact of PND's and its treatment on productivity and daily functioning. **METHODS:** In this cross-sectional, one-time survey we focused on the documentation of self-reported functioning and well-being, pain exerience, MD's reported medication use, productivity and employment status. Well established questionaires / scals were used for data collection. **RESULTS:** A total of 202 patient questionnaires were eligible for data-analysis. Diabetic (n = 62) and Postherpetic (n = 33) neuropatic pain were most prominent where 86% of the patients reported their worst pain within the last 24 hours as moderate 33% or severe 53% (all indications). The pain severity index results where nearly similar but moderate was reported mostly (57%). EQ-5D-scores was comparable for worst pain within the last 24 hours and pain severity index and was low in patients reporting "severe pain experience" (0.3/0.13). Ten percent (10%) of patients were early retired, 12% were disabled due to neuropatic pain, 17% had to reduce scheduled work and 27% of the patients reported a sustantial reduction in work productivity because of their NeP. Analgesics (77%) were prescribed most commonly followed by antiepileptics (53%), antidepressants (37%) and Hypnotics (30%). Combination is common. Patient satisfaction by using the prescribed medication was high. In total, 21% were "extremely satisfied" and 55% were "somewhat satisfied". **CONCLUSIONS:** Treatment of NeP should be optimized since a high percentage of patients reported a considerable pain within 24 h. However, it is astonishing that in general patients satisfaction with their current treatment was high. The mismatch

between treatment quality and patient satisfaction is open to debate. Further investigations regarding the alternative "coping strategies" beyond pharmacological treatment are needed.

PPN7

USE OF THE NEUROPATHIC PAIN SCALE IN AN INTERNATIONAL STUDY

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OBJECTIVES: Measuring different qualities of pain in an international study required the linguistic validation of the 9-item Neuropathic Pain Scale (NPS) in 24 languages. The original scale was developed in US English. A rigorous methodology was required to ensure conceptual equivalence and cultural relevance across different languages. **METHODS:** The translation process was conducted by a specialist in each target country using the following standardized methodology: 1) two forward translations by professional translators who were native speakers of the target language and fluent in English; 2) comparison and reconciliation of the translations by the specialist in the target country and the translators; 3) backward translation by a native English speaker; 4) comparison of source and backward version; and 5) comprehension test on three patients suffering from general pain and two from neuropathic pain. **RESULTS:** Issues regarding the instructions and the translation of certain expressions used to describe the different aspects of pain emerged during the creation of the individual language versions. Patient feedback allowed the instructions to be placed in a more relevant location on the measure. For some of the pain descriptions and synonyms on the original US English version of the NPS, country-specific substitutes had to be identified. **CONCLUSIONS:** The 24-language versions of the NPS were established according to a rigorous translation methodology. The process aims to ensure conceptual equivalence across different language versions to facilitate international comparison and pooling of data. Issues encountered during the linguistic validation process support the advantage of integrating international feedback on concepts and wording before a questionnaire is finalized.

PPN8

RESPONSIVENESS OF THE SHUTTLE WALKING TEST COMPARED WITH DISEASE SPECIFIC AND GENERIC OUTCOME MEASURES IN PATIENTS WITH CHRONIC BACK PAIN

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OBJECTIVES: To determine the responsiveness of the Shuttle Walking test (SWT) (a dimension specific outcome measure measuring metres walked) compared to a disease specific measure Oswestry Disability Index and two generic outcome measures (SF-36 and EQ-5D). Although there are a number of studies assessing the responsiveness of outcome measure in back pain, no study has explored the responsiveness of the shuttle walking test relative to other outcomes measures for patients with chronic back pain. **METHODS:** The shuttle-walking test was administered at a rehabilitation clinic. The Oswestry disability index, SF-36 and EQ-5D were assessed by questionnaire at baseline and 12 months. Responsiveness was assessed using conventional measures such as effect size, standardised response mean (SRM) and receiver operating (ROC) curves. **RESULTS:** Mean figures of each instrument suggest an improvement in outcomes over time. The physical component of the SF-36 yielded the highest effect size (1.65) and the ODI the highest SRM (1.23) in the improved group. The lowest effect size and SRM for the improved group was recorded on the mental component of the SF-36 at –0.20 and –0.18 respectively. The greater responsiveness in the ROC curves among the instruments was achieved by the ODI and the SF-36 physical component. **CONCLUSIONS:** The results presented in this paper appear to demonstrate that the ODI, EQ-5D and the SF-36 physical component are more sensitive to change in patients with chronic low back pain than the SWT. The large sample size and the consistency of the different methods across the improved and non-improved groups support the results achieved.

PPN9

AGREEMENT BETWEEN PATIENTS' AND CLINICIANS'-REPORTED OUTCOMES IN 3 CHRONIC DISEASES

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OBJECTIVES: Irritable bowel syndrome (IBS), chronic venous insufficiency disease (CVID), and peripheral arterial occlusive disease (PAOD) are prevalent diseases in general practice (GP). Their impact on QoL is often underestimated by clinicians. The objective of the study was to compare patients' and clinicians' perception on pain and QoL using validated QoL questionnaires. **METHODS:** A cross-sectional survey included patients with IBS (n = 239), CIVD (n = 240) and PAOD (n = 68), recruited by respectively 163, 120 and 61 GP's. Patients completed a specific QoL questionnaire according to their disease (FDDQL, CIVIQ or CLAU-S), and scored their pain on a 10-cm VAS [0–10 (maximal pain)]. GP's were asked to estimate the pain intensity and the QoL of their patients. **RESULTS:** Pain perception is underestimated by clinicians vs patients in IBS and CIVD (respectively 3.0 ± 2.1 vs. 3.9 ± 2.5 and 3.0 ± 2.0 vs. 4.2 ± 2.5) and overestimated in PAOD (4.3 ± 2.1 vs. 3.5 ± 2.0). Similarly, clinicians underestimate QoL impairment in most dimensions of the IBS questionnaire (i.e. diet, sleep, discomfort, coming, control, stress), and in CIVD (global score 28 ± 19 vs. 39 ± 20 patients, 100 = worst QoL). Clinicians overestimate the impact on QoL in PAOD (global score 54 ± 21 vs. 66 ± 23, 100 = best QoL). Levels of correlations between PROs and clinicians-reported outcomes are moderate (e.g. r = 0.47 for pain score and r = 0.43 for QoL between CIVD patients and clinicians). Correlations between PRO's are also not perfect (e.g. r = 0.63 for pain vs QoL in IBS patients). **CONCLUSIONS:** Clinicians' and patients' perspectives although overlapping to some extent, are not similar. Thus, perception of pain cannot be accurately inferred from the clinician's point of view. Similarly, patient's perception of pain cannot completely reflect the impact on QoL.

PAIN

PAIN—Health Policy

PPN10

QUANTIFICATION OF SUSPECTED ADDICTION TREATMENT OF NARCOTIC ANALGESICS USING PRESCRIPTION SEQUENCE ANALYSIS: EXPERIENCE OF A STATE-BASED WORKER'S COMPENSATION SYSTEM

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OBJECTIVES: To describe the utilization pattern of narcotic analgesics and estimate the incidence of suspected addiction