equipment costs (depreciation of equipment); medication-error and complication costs including bloodstream-infection (BSI) costs. Total costs were calculated per bag for neonates and infants. Data and resources utilized were derived from three Belgian hospitals. Medication-error and BSI costs were derived via literature. A bottom-up approach was used to assess total costs by assigning monetary values to the resource-utilization using published list prices, literature and interview data. **RESULTS:** The daily total cost of one compounded PN bag for neonates equaled 90.19€. Overall, labor costs accounted for 42% of total costs and represented the highest proportion, followed by costs due to medication-error and incremental BSI costs (22%). Disposables accounted for 22% and nutrients for 12%. Average costs per bag for infants <2yr were 108.37€, with labor costs also representing the highest proportion (35%). Nutrients represented 27% of total costs, while medication-error and incremental BSI costs accounted for 19% and disposables for 18%. **CONCLUSIONS:** This is the first time that complete costs of PN have been considered, including consequential costs of medication-error and BSI costs. The data showed that a significant proportion of the total costs of PN is due to these costs as well as labor costs. Ready prepared PN could reduce staff-time, error and infection rates.

PIH28
THE PROJECT SINCOPE IN TRIVENETO (PROSIT) STUDY. A MULTICENTER STUDY REGARDING SYNCOPE MANAGEMENT IN AN ITALIAN REGION

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OBJECTIVES: Syncope represents about 2% of Emergency Room (ER) admissions. The European Society of Cardiology (ESC) published in 2009 Guidelines for the diagnosis/management of syncope. Several studies have tried to investigate Guidelines adoption and clinical pathways for syncope care. The first objective of PROSIT was to relate syncope management in Italian hospitals, including clinical outcomes and costs. **METHODS:** This is a retrospective, longitudinal (6 months), multicenter study, considering every patients (pts) admitted in ER with the diagnosis of syncope. Data about ER, laboratory tests, hospitalizations, final diagnosis and related costs from the Regional Health Service (RHS) were considered since the ER admission till the hospital discharge **RESULTS:** A total of 1,632 pts (mean age: 61; SD±23) were recruited in 9 Italian hospitals. A mean of 4.5 laboratory tests per patient during ER stay were performed; unfortunately many pts did not undergo specific tests for syncope (e.g. ECG monitoring and carotid sinus massage) recommended by ESC guidelines. 40,3% of pts without definitive diagnosis were hospitalized in ER department. The mean cost of ER tests and ER hospitalizations was 174.09€ per patient. 28% of pts was admitted in different hospital departments (after first ER evaluation), with mean stay of 9 days (SD ±6). The cost sustained was 571.39 € per patient. The 35% of patients with syncope remained undiagnosed after ER or hospitalization discharge, with 26% of total costs sustained for these patients. **CONCLUSIONS:** Different approaches to achieve syncope diagnosis were founded in PROSIT study. The diagnosis of syncope has a clinical and significant impact on costs. Hospitalizations, for which the majority of costs are sustained, help to find a diagnosis but a greater adherence to guidelines could reduce undiagnosed syncope, actually still elevated, and related costs due to diagnostics and inappropriate admissions.

INDIVIDUAL'S HEALTH - Patient-Reported Outcomes & Patient Preference Studies

PIH29
IDENTIFICATION OF FACTORS AND THEIR INFLUENCE ON PATIENT ADHERENCE TO INTRAVENOUS MEDICATION FOR CHRONIC CONDITIONS: FINDINGS OF A LITERATURE REVIEW IN OSTEOPOROSIS AND CROHN'S DISEASE

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OBJECTIVES: Achieving optimal patient adherence to IV medication is a major challenge in clinical management of chronic diseases. The objectives of this literature review were to identify the factors that influence patient non-adherence to IV medication for chronic conditions and evaluate if an optimum relationship between dosing frequency and adherence exists. **METHODS:** A database search for adherence to IV medication was conducted through Medline, Embase and Biosis databases. Inclusion and exclusion criteria were applied before each published article or abstract (1990-May 2012) was appraised. Primary research studies, in English language, with an analysis of adherence rates and or factors in a chronic condition were included. **RESULTS:** Twelve primary studies were identified and reviewed across two chronic conditions: osteoporosis (8) and Crohn's Disease (4). Multiple patient-related and therapy-related factors were reported to influence non-adherence to IV medication. The most frequently identified factors influencing non-adherence were therapy-related: poor tolerability and side effects (3 studies) and inconvenience of location for therapy (3 studies). In two studies comparing directly IV dosing frequency in osteoporosis therapy, adherence was greater for annual therapy vs every 3 months (82% vs 58-62% and 65.6% vs 56.6% respectively). There was a wide range in the reported rate of non-adherence across studies in both osteoporosis and Crohn's Disease (17.1% to 43.4% and 27% to 40%, respectively). A threshold for IV dosing frequency that optimises adherence could not clearly be assessed. **CONCLUSIONS:** Dosing frequency appears to be one determi-

nant of non-adherence among chronic diseases along with multiple other factors, most notably tolerability and convenience. Further primary research is required to determine the relative influence of IV dosing frequency and other therapy-related factors in management of specific chronic diseases in clinical practice.

PIH30
POTENTIALLY INAPPROPRIATE PRESCRIBING AND ADVERSE HEALTH OUTCOMES IN COMMUNITY DWELLING OLDER POPULATIONS

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OBJECTIVES: To determine the association between potentially inappropriate prescribing (PIP) defined by STOPP (Screening Tool of Older Person's PIP) and adverse drug events (ADEs), health related quality of life (HRQOL) and hospitalisation in older primary care patients. **METHODS:** A cross-sectional study of 904 patients aged ≥70 years recruited from 15 general practices in Ireland in 2010. PIP was defined by the STOPP criteria. ADEs defined as any injury resulting from drug therapy, were measured by patient self-report for the previous 6 months and reviewed by two independent clinicians. HRQOL was measured by the EQ-5D and utility values calculated based on UK population values. Hospitalisation was measured using patients' medical records and self-report. Multilevel logistic, linear and poisson regression was used to examine how ADEs, utility and hospitalisation varied by PIP after adjusting for patient and practice level cofounding variables including socioeconomic status, co-morbidity, number of different repeat drug classes and adherence. Adherence was measured by the medication possession ratio using patients' national pharmacy claims data and self-report. **RESULTS:** The overall prevalence of PIP was 42% (n=377). Patients with ≥2 PIP indicators were twice as likely to have an ADE (OR, 2.21; 95% CI, 1.02, 4.83, p<0.05), had a significantly lower mean HRQOL utility (coefficient, -0.11, SE 0.03, p<0.001) and a 34% increase in the expected rate of hospitalisation (IRR, 1.34; 95% CI, 1.15, 1.57, p<0.001) after adjustment. The number of repeat drug classes and adherence were also significantly associated with ADEs, impaired HRQOL and increased hospitalisation. **CONCLUSIONS:** PIP defined by the STOPP criteria was significantly associated with patient reported ADEs, HRQOL and hospitalisation. There is limited data regarding the association between PIP and adverse health outcomes in older patients. Studies are important to facilitate the design of better interventions to improve medication safety in older patients.

PIH31
INTENTIONAL AND UNINTENTIONAL NON-ADHERENCE DIFFER ACROSS PREVALENT CONDITIONS IN A RUSSIAN PATIENT POPULATION

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OBJECTIVES: Medication non-adherence is associated with poorer health status; yet, intentional (INA; e.g., purposefully skipping doses) and unintentional (UNA; e.g., forgetting) non-adherence levels may differ across disease areas and associated therapies. This study investigated non-adherence across prevalent conditions in a Russian patient population. **METHODS:** Russia 2011 National Health and Wellness Survey data included 2,285 (of 10,039) respondents who completed the Morisky Medication Adherence Scale (MMAS) for the following treated conditions: pain, arthritis, asthma, depression, diabetes, and hypertension. MMAS items were summed to create INA ("stop taking medicine when feeling better" and ". . .when feeling worse") and UNA ("forget to take medicine" and "careless about taking medicine") scores: 0=adherence to 2=high non-adherence. Logistic regressions predicted INA/UNA (1+ vs. 0) from condition, gender, age, Charlson Comorbidity Index score, BMI category, marital status, exercise ≥12 times monthly, and cigarette smoking. **RESULTS:** Among patients reporting MMAS for pain (n=719), arthritis (n=209), asthma (n=87), depression (n=177), diabetes (n=87), and hypertension (n=1,006), 51.3% were male, mean age was 49.3 years (SD=16.2), and 77.7% and 52.3% exhibited INA and UNA, respectively (rINA/UNA=0.36, p<0.001). Pain had the highest INA rate (89.2%). Diabetes had the lowest non-adherence (INA=UNA=44.8%). Asthma had low UNA (41.4%). Depression had the highest UNA (66.6%) and second-highest INA (81.4%). Adjusting for covariates, respondents in any condition vs. pain had lower relative odds of INA, from OR=0.12 (diabetes) to 0.52 (depression), all p<0.01; respondents with arthritis and depression vs. pain had higher relative odds of UNA (OR=1.45 and 1.74, respectively), both p<0.05. Covariates of INA were non-significant. Younger age, lack of exercise, male sex, obesity, and recent divorce/separation/widowhood were associated with UNA, all p<0.05. **CONCLUSIONS:** High, varying levels of non-adherence were found across prevalent conditions in Russia. Adherence may be improved by matching pharmacotherapy profiles to specific conditions (e.g., favorable tolerability for high-INA conditions such as pain).

PIH32
THE IMPACT OF PERIODS ON WOMEN'S QUALITY OF LIFE IN WOMEN REPORTING A PROBLEM

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OBJECTIVES: To measure the impact of periods on the lives of women reporting a problem, through the use of health related quality of life instruments in a real-world setting. **METHODS:** The evaluation was conducted throughout the UK using the web-based PROBE system (patient reported outcomes based evaluation). As women may not seek professional health care advice for this issue, recruitment was tailored to identify a sample representative of all women with problem periods. An initial screening questionnaire was used to programme the timing of the