hospital admissions. **RESULTS:** The study cohort included 36,914 patients (GOLD A: 33.8%, GOLD B: 21.0%, GOLD C: 18.1%, GOLD D: 27.0%). Average age at diagnosis was 66 years; 52.0% were male. Annual exacerbation rates increased with severity of COPD, ranging from GOLD A 0.83 (95% CI: 0.81–0.85) to GOLD D 2.51 (95% CI: 2.47–2.55) exacerbations per person-year (PPY). Annual rates of GP visits also increased with disease severity, from GOLD A 4.82 (95% CI: 4.74–4.93) to GOLD D 7.44 (95% CI: 7.31–7.61) visits PPY. COPD-related hospitalisations increased with symptom severity from less (GOLD A: 0.28, GOLD C: 0.39 admissions PPY) to more symptoms (GOLD B: 0.52, GOLD D: 0.84 admissions PPY). No differences were observed across severity groups in non-COPD hospitalisations. **CONCLUSIONS:** Patients in the most severe category (GOLD D) experienced nearly three times the number of exacerbations and COPD-related hospital admissions as those in the least severe category (GOLD A). Management of COPD in earlier stages to stabilize disease progression could be beneficial for reducing exacerbation frequency and healthcare resource utilisation.

PRS76
RELIABILITY OF MANUFACTURERS' BUDGET IMPACT ESTIMATES FOR ELIMINATION DIET IN PATIENTS WITH ALLERGY TO COW'S MILK IN POLAND

Tatara T[1], Iwanczuk T[1], Zawodnik S[1], Sliwczynski A[2], Brzozowska M[2]
[1]Agency for Health Technology Assessment and Tariff System in Poland (AOTMiT), Warsaw, Poland, [2]Medical University of Lodz, Lodz, Poland

OBJECTIVES: To compare the total value of payer's expenditures on Nutramigen LGG 1, Nutramigen LGG 2, Neocate LCP, Neocate Advance in patients with allergy to cow's milk protein estimated in the manufacturers' Budget Impact Analyses (BIAs) submitted with the reimbursement applications to AOTMiT and actual expenditures of the National Health Fund (NHF). **METHODS:** Annual public payer's expenditures estimated in manufacturers' BIAs for Nutramigen LGG 1/2, Neocate LCP/Advance and actual expenditures reported by the NHF were compared. RSSs were not taken into account. Analysed drugs were chosen on the basis of the same indication. Actual expenditures and number of package were taken from the financial reports of the NHF for the first and second year of the reimbursement for each drug. **RESULTS:** For drugs Nutramigen LGG1/2 and Neocate LCP/Advance in patients with allergy to cow's milk protein, the sum of total expenditures estimated in BIA submitted with the reimbursement applications was 55,158 million PLN in the first year and 57,637 million PLN in the second year, and they were higher than the actual expenditures reported by the NHF: 5,3 million PLN and 16,14 million PLN, respectively. The expenditures estimated in BIAs were overestimated by 939% in the first year of the reimbursement and 257% in the second year of reimbursement. The number of packages of the Nutramigen LGG 1/2, Neocate LCP/Advance also were analysed. The number of reimbursed packages estimated in BIAs in comparison to its actual number from the NHF reports was overestimated by 2029% in the first year and 492% in the second year of reimbursement. **CONCLUSIONS:** In the case of drugs chosen for this analysis, total payer's expenditures estimated in BIAs submitted with the reimbursement applications were overestimated in comparison to the real life expenditures of the NHF in Poland.

PRS77
RESOURCE USE AND HEALTH CARE COSTS OF COPD PATIENTS AT THE END OF LIFE: A SYSTEMATIC REVIEW

Faes K[1], De Frène V[1], Cohen J[2], Annemans L[1]
[1]University of Ghent, Ghent, Belgium, [2]Vrije Universiteit Brussel, Brussels, Belgium

OBJECTIVES: Patients with COPD in their final months of life place a potentially high burden upon healthcare systems. The aim of this systematic review was to describe the resources used and costs incurred by patients with COPD at the end-of-life. **METHODS:** We performed a comprehensive literature search in Medline, Web of Science and Econlit and evaluated and synthesized existing evidence on resource use and costs at the end-of-life in COPD patients. We screened 886 abstracts and reviewed 80 full-text manuscripts. Inclusion criteria were at least one type of resource use and/or cost outcome reported in adults diagnosed with COPD during an end-of-life period (varying between 3 years and 2 weeks before death). Subsequently, we performed quality appraisal consistent with the ISPOR checklist for retrospective database studies and accomplished comprehensive data extraction. **RESULTS:** Nine studies fulfilled the inclusion criteria. Two, five and two studies described a European, North American and Asian healthcare setting, respectively. All studies had a retrospective design and were published between 2006 and 2014. We observed a very variable use of healthcare resources. An increased number of hospitalizations, ICU stay, primary care consultations and medication prescriptions and a lack of utilization of formal palliative care services were found to be the key drivers of resource use and costs of COPD patients during end-of-life. Palliative care also had a positive impact on costs in those patients. **CONCLUSIONS:** Despite a small number of existing studies, we found that the extensive and variable resource use and related costs of COPD patients during end-of-life applies to different aspects of the healthcare system. Especially the use of palliative care services is presumed to be effective in cost reduction at the end-of-life.

PRS78
SYSTEMATIC REVIEW ON THE CORRELATION BETWEEN LUNG FUNCTION OR EOSINOPHIL LEVELS AND HEALTH CARE RESOURCE UTILIZATION IN ASTHMA

Lachaine J[1], Bibeau J[1], Castonguay A[1], Piché-Richard V[1], Barakat S[2]
[1]University of Montreal, Montreal, QC, Canada, [2]Teva Canada Innovation, Montreal, QC, Canada

OBJECTIVES: Asthma is a very common chronic disease that can cause a significant economic burden. The objective of this review was to explore the evidence on the possible correlation between lung function or eosinophil levels and resource utilization in asthmatic patients. **METHODS:** A literature search was made using keywords such as "asthma", "eosinophil", "respiratory function", "resources", and "costs". The search was conducted in the electronic databases MEDLINE, EMBASE and PubMed from January 2000 to February 10th, 2015. To be eligible, studies had to focus on asthmatic patients, include pulmonary or eosinophil measurements, and resource uti-

lization data. **RESULTS:** The review allowed retrieving 4,768 studies and 11 fulfilled the eligibility criteria. Two articles presented their results in terms of correlation coefficient that were all statistically significant. The first one determined a correlation between FEV1 and inhaled corticosteroids (ICS) use with an R-value of -0.42 and between sputum eosinophils and ICS use with an R-value of 0.3. The second article evaluated the correlation between PEF and hospitalization rates and concluded to a correlation with an R-value of -0.51. A total of 9 articles presented raw data that could be used to establish a correlation between lung function or eosinophil levels and resource utilization. Seven studies presented data that indicate an inverse correlation between FEV1 and hospitalizations with decreased hospitalization rates, when FEV1 increases. Three studies indicate decreased emergency departments visit rates when FEV1 increases. Two studies also indicate an increased emergency department visit rates, when blood eosinophil levels increase. **CONCLUSIONS:** The correlation coefficients found in the systematic review indicate that when lung function improves or sputum eosinophil decreases, the resource utilization decreases. Furthermore, non-correlation studies that look at the same parameters support this hypothesis and suggest there may be a correlation between emergency department's visits and blood eosinophil levels.

PRS79
THE OPPORTUNITIES OF INTERNET TECHNOLOGY AND TELEMEDICINE IN INTERACTION BETWEEN DOCTOR AND PATIENT

Namazova-Baranova L, Vishneva E, Smirnov V, Antonova E, Alekseeva A, Levina J, Efendieva K, Dobrynina E, Tomilova A, Voznesenskaya N, Selimzianova L, Promyslova E
Scientific Centre of Children Health, Moscow, Russia

OBJECTIVES: The characteristic properties of the modern healthcare system are presented by integration of information technology capabilities and harmonization of their use in industry. Aim. To create new system of telecommunication interaction between doctor and patient – specialized internet portal. **METHODS:** The study was carried out to create web portal. The software project - shell management website with two interfaces: for professionals and patients was developed. Simultaneously with design and creation of an internet portal, 156 children with bronchial asthma (BA) were examined and their medical data were reviewed. **RESULTS:** 19 children with severe atopic persistent uncontrolled BA (68% boys; mean age 13.6; basic therapy - 875 mcg fluticasone in combination with long-acting ß2-agonist and Omalizumab, the average dose - 450 mg / 4 weeks) were included in the project and had received the personal individual access (a couple of unique login/password to own page). The personal page after entering the own individual login / password allows patient to type in synchronous/asynchronous mode indicators of peak flow, symptoms, using of basic therapy and rescue medication in a special tables, the level of asthma control (ACT- test), and remotely – to ask a question to specialist. Patients with severe BA exacerbations, who were in the intensive care unit, also patients who don't perceive long-term significant decline in respiratory function, had issued devices to determine oxygen saturation (SpO2, pulsoximeter) to monitor this indicator and to exclude development of life-threatening conditions. The specialist interface contains information about each patient to evaluate remotely in synchronous/asynchronous mode patient condition, therapy adherence and control of BA **CONCLUSIONS:** The results of preliminary analysis of using of this web portal show increase of adherence to prescribed treatment, improving of quality of life, reduction the incidence of exacerbations, that confirms clinical and economic feasibility of using internet technologies.

PRS80
EFFECTS OF CLINICAL COMPUTING SYSTEMS DURING CONSULTATIONS ON SMOKING CESSATION - EVIDENCE LANDSCAPE FROM RANDOMIZED AND QUASI RANDOMIZED TRIALS

Kohli IS
University of Dundee, Dundee, UK

OBJECTIVES: Previous research to determine the effectiveness of web or computer based interventions, designed to reduce smoking have been reported. However, a lacuna regarding the use of same during consultations exists. The objective of this review was to improve understanding of the role of clinical computing systems during consultations on smoking cessation in general dental, medical, and community based practices or hospitals. **METHODS:** The Cochrane Library, PubMed, ISI Web of Knowledge, EMBASE, and Google Scholar were accessed up to January 2010 using a combination of various Medical Subject Headings and other keywords to retrieve relevant studies not restricted to any geography. Studies were included based on a range of predefined inclusion criteria. Each study was quality scored (0-10) using a validated scoring system. The PRISMA checklist was used as the critical appraisal tool. Pre-developed forms were employed for extracting the data. **RESULTS:** Five studies fulfilled the selection criteria. A descriptive comparison was drawn between different studies since a meta-analysis was not possible as results for the I2 statistic were approximately 50%, indicating moderate heterogeneity. A comparison of interventions was performed after extracting data from two studies using ExcelTM spread sheets, and presented as a forest plot. Findings indicated positive impact of clinical computing systems in physician consultations in increasing smoking abstinence in patients by 2% in clinical decision support system (CDSS) to up to 12 % (tailored letters). **CONCLUSIONS:** Tailored letters proved more effective when compared to brief advice and CDSS. Multi-faceted approaches involving elements of behavioral sciences, epidemiology, health promotion and health informatics will be the key for future research.

PRS81
PHYSICIANS' PRESCRIBING PATTERN FOR TUBERCULOSIS: EVIDENCES FROM COMMUNITY PHARMACIES IN PUNJAB, PAKISTAN

Iqbal MS[1], Iqbal MZ[2], Iqbal MW[3], Bahari MB[2]
[1]Faculty of Pharmacy, Bahauddin Zakariya University, Multan, Pakistan. Department of Clinical Pharmacy, Faculty of Pharmacy, MAHSA University, Selangor, Malaysia, [2]Department of Clinical