and then translated into Urdu by using standard translating procedure which consists of 18 questions to evaluate the knowledge and awareness. Convenient sampling technique was used and around 330 questionnaire were distributed among teachers. Descriptive analysis to demonstrate patients' demographics. Knowledge score is calculated as 18 as there are 18 questions with one score for each. Therefore, knowledge score is divided into three grades with level of knowledge (0-9 score) and high grade score (10-18 score). Inferential statistics (Mann-Whitney and Kruskal Wallis test, p<0.05) were used to differentiate or relate the study variables. RESULTS: A total of 330 questionnaire were distributed with the response rate of 90%. One hundred ninety nine (64.4%) were from Private schools. Majority of respondents 114 (34.8%) belong to age 25-31 years. One hundred and ninety (64.0%) teachers were female. The graduates were 58 (19.5%). Majority of respondents 191 (64.6%) have experience of 1-5 years in teaching. One hundred recognize the early symptoms of asthma. The tobacco industry is actively developing modified risk tobacco products (MRTP) and 24 as applied to MRTPs. Codification and thematic interviews (CDI) to understand how consumers interpret the risk-sharing) until drug effectiveness/tolerability is confirmed in clinical trials eligibility criteria. This made it possible to achieve adherence and persistence with data on EAi use, 77.4% (n = 205) were treated by EAI. A stock EAI from the Epipen® Schools program was used to treat 60.0% of individuals (96/160) experiencing an event. Of the 702 schools with information on staff training on anaphylaxis, 47.7% (335/702) provided training and most staff, respectively. Most schools (62.3%, 437/702) permitted the school nurse and select staff to administer EAI to treat anaphylaxis, 12.8% (90/702) and 18.9% (133/702) permitted most or all staff, respectively, to administer EAI. CONCLUSIONS: Sixty percent of individuals experiencing anaphylaxis were treated with EAs from the Epipen® Schools program, emphasizing the value of stocking EAs. Notably, most schools permitted only the school nurse and select staff to administer delayed treatment of anaphylactic reactions with epinephrine, there is a continued public health need to remove barriers to EAI access and improve training in schools to recognize and manage anaphylaxis.

**PRSS56 COPD PERFORMANCE INDICATORS IN AN INTEGRATED CARE PROGRAM AND ITS IMPACT ON HEALTH OUTCOMES: THE RECODE CLUSTER RANDOMIZED TRIAL**

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OBJECTIVES: To present recent experiences about the Italian model for granting the reimbursement of biologicals and therapeutic procedures to chronic diseases patients. The aims of these programs is to enhance patients’ health by improving quality of care. Performance indicators are used to measure quality of care. However, the real benefit to patients remains largely uncertain. This study investigate if implementation of an integrated care program improves performance indicators and the correlation performance indicators with health outcomes. METHODS: This is a sub-study of the RECODE cluster randomized controlled trial, the largest clinical trial of an integrated care program for Chronic Obstructive Pulmonary Disease (COPD) patients in primary care to date. From 38 Dutch GPs, we collected three-year prospective data on performance indicators (mostly process indicators) and health outcomes (smoking status, level of physical activity, health-related quality-of-life (HRQoL) of 913 COPD patients. Multilevel repeated measurement models were used to assess the impact of integrated care on performance indicators and correlation of performance indicators with health outcomes. RESULTS: COPD performance indicators improved over time and these improvements were higher in the integrated care group than in the usual care group, indicating improved quality of care in the integrated care group. However, BMI was measured, whether physical activity was checked, whether functional status was monitored, whether a spirometry test was done) were associated with an immediate improvement (i.e. in the same year) in disease-specific HRQoL, as measured with the SGRQ. The latter indicator plus ‘improved knowledge of disease’ and ‘less impact on HRQoL (i.e. improved HRQoL in the year after the indicator was registered). The indicators related to smoking did not affect health outcomes. CONCLUSIONS: The integrated care program did improve performance indicators and some of these indicators were predictive of improved HRQoL.

**PRSS57 PREVALENCE OF SWITCHEFROM BRAND TO GENERIC ASTHMA MEDICATIONS**

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OBJECTIVES: The expiration of patents for brand asthma medications and ongoing pressure on the healthcare budget resulted in a growing market for generic medications. Switching of inhaled drugs implicates change of inhalation device. Few data is available on the prevalence of switching from brand to generic asthma drugs. The aim of this study is to estimate the use of generic asthma drugs and the prevalence of switching between brand and generic asthma drugs in patients with asthma in the Netherlands. METHODS: From the Dutch PHARMO register for Chronic Obstructive Pulmonary Disease (COPD) patients, all dispensed prescriptions of generic or brand asthma drugs 2012 of asthma patients aged >5 years were extracted. The prevalence of dispensing was calculated as percentage of users per calendar year per asthma drug and all asthma drugs combined. Switching was defined as mixed use: generic brand dispensing or vise versa. RESULTS: This study included 31,295 pediatric (<15 years) and 191,072 users with in total 380,510 dispenses over 2003-2012. All drugs combined, the proportion of children using only brand drugs decreased from 73% in 2003 to 54% in 2012, while only generics increased from 8% to 17% and mixed (both brand-generic) from 19% to 29%. Similarly, the proportion of adults with only brand dispenses decreased from

**PRSS58 CONDITIONAL AGREEMENTS FOR INNOVATIVE THERAPIES IN ITALY: THE CASE OF PIRFENIDONE**

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OBJECTIVES: To present recent experiences about the Italian model for granting initial reimbursability of innovative therapies. This model is based on a Register whose aim is to warrant appropriate prescribing, and on a conditional agreements (risk-sharing) until drug effectiveness/tolerance is confirmed in clinical practice. METHODS: As an example of implementation of the Italian model, we report the re-negotiation process of pirfenidone in the treatment of idiopathic pulmonary fibrosis. The first reimbursement authorization (2013) was granted along with a risk-sharing agreement (Success Fee) and pirfenidone inclusion in the AIFA Register. The aim of these tools was to assure from the initial access a proper cost-benefit profile also when evidence from clinical practice was limited. RESULTS: The Register warranted pirfenidone appropriate utilization according to clinical trials eligibility criteria. This made it possible to achieve adherence and persistence rates with therapy greater than EU values (80% (ITRA) vs. 72% (EUC) and 73% (ITRA) vs. 50% (EUC), respectively). When the agreement had to be renegotiated, new clinical data from Phase III randomized trials and clinical practice, supporting pirfenidone value, were submitted in order to reassess the cost-benefit profile. Due to this evidence, AIFA overcame the initial uncertainty about the benefit in clinical practice and agreed to approve the risk-sharing model, although still present in the Register in order to evaluate appropriateness of prescribing patterns. CONCLUSIONS: This approach, based on an initial risk-sharing agreement, to mitigate the effectiveness uncertainties, allows post-marketing reassessment of health technologies, consistent with current health policies. It is expected that in the future there will be an increased utilization of data collected through AIFA Registers for reevaluation of innovative therapies.

**REFERENCES**