Abstracts

ple (n = 20,088) of adult residents from the Baltimore, MD and Chicago, IL areas was contacted by phone, of whom 7,691 met occupation eligibility criteria. Respondents were randomized to one of the six interviews at the time of contact. Interviews were compared on the basis of estimates of work loss and variation in estimates of work loss associated with recall period and version.

RESULTS: Interviews varied in average length from 9.2 minutes (V3) to 15.1 minutes (V1). The participation rate (66%) did not vary with the version. Estimates of work loss varied with recall period and version. The mean total hours/week of lost productive work time was lower for interviews using a four-week compared to a one-week recall period. V3 of the interviews was the most discriminating for illness-related work-loss estimates. For example, individuals with allergic rhinitis (AR) reported significantly more lost productive time at work due to not feeling well compared to controls and a stronger relation between severity of AR and work loss.

CONCLUSION: Variation in relatively short recall periods influences estimates of work loss. Interview version 3 required the least time to administer and was the most discriminating in terms of work-loss estimates by illness status and illness severity.

PRP2

ASTHMA MANAGEMENT AND OUTCOMES IN ITALY

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OBJECTIVE: To collect information on knowledge of asthma by patients (pts), on its management and outcomes.

METHODS: multi-center, cross-sectional survey. Patients (pts) were administered a questionnaire derived from the one used in the survey “Asthma Insights & Reality in Europe” (A.I.R.E.). The questionnaire was adapted for administration during a visit, instead of by phone as done during A.I.R.E.

RESULTS: During the second half of 2000, 105 pneumologists administered the questionnaire to 1017 asthmatic pts (972 fully evaluable). Urban population represented 53% of the sample, males were 44%, mean age was 44 years, and 35% suffered from seasonal asthma. Relatives suffering from asthma were reported by 39% of pts. Most pts (80%) believed that the number of Italian asthmatics had increased during the last decade. Those who rated their health status as at least good were 60%. Fifty three percent thought that their asthma was better today than 10 years ago. During the last 12 months, severe symptoms were reported by 44% of pts, 11% of pts spent at least one night in hospital, 16% reported accessing an emergency department, and 34% had an unscheduled visit. During the last four weeks, asthma was reported as very good/good by 53%. In the same time, 72% of pts reported symptoms of various severity, and 40% of pts had night awakening. The peak flow meter was known by 54% of pts. Thirty two percent of pts owned one, but more than 50% of pts did not use it or used it only when symptoms appeared. Half of pts underwent lung functionality tests during the last 12 months.

CONCLUSION: Our data suggest that asthma management does not usually fit the GINA guidelines. Health status reported by pts does not always correspond with symptom severity assessed by doctors. The hospitalization rate and unscheduled visits due to asthma seem to be higher than expected.

PRP3

SPECIFIC IMMUNOTROPIC THERAPY — ASPECTS OF COST-EFFECTIVENESS

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OBJECTIVES: To determine the cost-effectiveness of basic monotherapy for bronchial asthma in children with nedocromil sodium with or without specific immunotropic therapy (SIT).

METHODS: Criteria for effectiveness were the number of asymptomatic days per year and a complex estimation by A. Zemskov (1997) which includes dynamics, clinical and immunochemical markers of allergic inflammation. Direct and indirect costs were calculated using data from patient diaries with daily recording of medication and medical care. We observed 100 children with moderately severe asthma. The first group received monotherapy with nedocromil sodium. The second group received nedocromil sodium with SIT domestic allergens.

RESULTS: The study revealed that use of nedocromil sodium in 84.0 ± 4.23% of the children provided 327.24 ± 1.04 asymptomatic days per year. The cost of one asymptomatic day was 15.44 ± 0.26 rubles. The use of SIT in the first year of treatment improved the control of asthma, and the number of asymptomatic days per year was 333.8 ± 1.01. The cost of one asymptomatic day in this group is 12.04 ± 0.28 rubles. Incremental cost-effectiveness ratio in group with SIT was −171,71. This complex analysis of the index with determination of clinico-immunological effectiveness was −944,41.

CONCLUSIONS: Our investigation showed that SIT in children with moderately severe asthma improved the effectiveness of basic therapy and reduced expenditures.

PRP4

COST-CONSEQUENCE ANALYSIS OF TIOTROPIUM VERSUS IPRATROPIUM FOR THE TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

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Ipratropium, a short-acting anticholinergic bronchodilator, is frequently prescribed for the maintenance treatment of COPD. Tiotropium is a new, once-daily bronchodilator.

OBJECTIVE: To compare the costs and consequences of tiotropium versus ipratropium in COPD patients with a FEV1 65% of predicted normal.

METHODS: The cost-consequence analysis was part of a one-year, randomized, controlled, double-blind clinical trial in the Netherlands and Belgium. Consequences were expressed as the number of COPD exacerbations, the number of patients with a minimal clinically relevant improvement in the St. George’s Respiratory Questionnaire (SGRQ), and the number of effectively treated patients. A societal perspective was adopted when calculating COPD-related direct health-care costs. Multiple imputation (SOLAS) was used to impute all missing data.

RESULTS: Tiotropium was associated with a 27% reduction in exacerbations (p = 0.03). The number of patients with a clinically relevant improvement in SGRQ after one year of treatment was 16% higher in tiotropium (p < 0.001). The proportion of effectively treated patients was 21% higher (p < 0.001). Across all categories, health-care resource use was consistently lower for tiotropium than for ipratropium. There was a 47% reduction (p = 0.07) in the number of hospital admissions and a 36% reduction (p = 0.03) in the number of unscheduled visits to physicians and other caregivers. The use of concomitant medication was comparable in both groups. COPD-related health-care costs were estimated to be Euro 1310 in ipratropium and Euro 1065 in tiotropium. Hence, annual savings were estimated to be Euro 245 with a 95% CI ranging from –656 to +167. This estimate excludes the costs of the study medications, since the price of tiotropium still has to be set.

CONCLUSION: This cost-consequence analysis favors the new once daily bronchodilator tiotropium over ipratropium on all relevant outcome measures.

PRP5

ESTIMATES OF LOST PRODUCTIVE WORK TIME ASSOCIATED WITH ALLERGIC RHINITIS (AR)
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OBJECTIVE: To determine if lost productive work time differed between individuals with and without AR symptoms and by severity of AR symptoms. Work loss was evaluated as: a) missed workdays; b) missed hours, and c) reduced productivity on days at work while not feeling well.

METHODS: Three different phone interviews were developed to quantify illness-related work loss. Version 1 (V1) included a lengthy direct assessment of work loss. Version 2 (V2) was an abridged version of V1. Version 3 (V3) included a brief indirect assessment of work loss. Two different recall periods, at one week and at four weeks, were used for each version of the interview. A convenience sample (n = 20,088) of adult residents from the Baltimore, MD and Chicago, IL areas was contacted by phone, of whom 7,691 met occupation eligibility criteria. The interview included health questions to screen for AR symptoms and to determine AR severity.

RESULTS: The dominant source of health-related work loss among all respondents was in total hours of reduced productive work time on days at work when not feeling well, rather than missed full days of work. We compared individuals with AR symptoms (n = 1,596) to controls without AR symptoms on the basis of estimates of total hours of lost productive work time per week by interview version. AR cases reported significantly more lost productive work hours per week than controls. The observed differences between cases and controls per week were 1.8 hours (V1), 2.1 hours (V2), and 3.1 hours (V3) (p < .05). Among moderate-to-severe AR cases, the observed differences per week increased to 4.4 hours (V1), 5.7 hours (V2), and 6.5 hours (V3).

CONCLUSION: Individuals with AR symptoms reported significantly more lost productive time at work on days at work when not feeling well than controls. Hours of lost productive work time per week increased with increased severity of AR symptoms.

PRP6

ASMACARE STUDY: ASSESSMENT OF THE IMPACT OF AN INTERVENTION DESIGNED TO IMPROVE THE MANAGEMENT OF ASTHMA PATIENTS
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OBJECTIVES: To assess the impact of an intervention helping physicians in the management of asthma patients (APs).

METHODS: A program was designed to help physicians in the management of APs that includes an education program (EP) and a computer application (CA) advising on therapeutic decisions. The EP was devoted to teach patients to distinguish worsening symptoms requiring a hospital emergency visit from those that could be self-managed, and to ensure correct self-administration/self-control of therapy. The CA implements the Spanish recommendations for the management of APs that physicians may follow at their discretion. A naturalistic, controlled, cluster-randomized study was designed to assess the long-term (one-year) impact of the intervention on health-related quality of life as measured by the St. George’s Respiratory Questionnaire (SGRQ), on direct and indirect costs, and on satisfaction and clinical outcomes. We also assessed physicians’ adherence to the recommendations. Twenty-two physicians (11 GPs, 11 pne-