icy can be implemented only if decision-makers have the access to analytical tools to address different policy scenarios. It requires initial investment, which pays off in the future decisions.

PDB3
THE EPIDEMIOLOGY AND BURDEN OF OBESITY AND DIABETES IN FRANCE: A METHODOLOGICAL COMPARISON
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OBJECTIVES: The aim of the current study is to utilize two different methodologies to estimate the prevalence and burden of type 2 diabetes (T2D) and obesity among the adult population in France. METHODS: Two separate representative data sources were used for the French adult population. Data from the French respondents of the EU National Health and Wellness Survey (NHWS) (N=15,051) and the OBEPI survey (N=6,054) was used. The NHWS is an internet-based survey and the OBEPI is a mailed survey conducted every three years, validated by the French authorities. Prevalence information for T2D, comorbid treatments, and BMI were analyzed using both data sources. The humanistic and economic burden of T2D was analyzed only from the NHWS data. RESULTS: From NHWS, 44.8% of respondents from France were male and the average age was 45.1 years (SD=11.005). From OBEPI, 47.8% were male and the average age was 48.2 years (SD=17.8). A total of 30.5% (OBEPI=31.9%) and 15.6% (OBEPI=14.5%) of the French population were estimated to be overweight and obese, respectively. A total of 4.4% (from NHWS) and 4.8% (from OBEPI) of the adult French population reported suffering from T2D. Among these patients, 15.1% and 80.5% were taking an insulin and oral treatment, respectively (12.4% by OHA + insulin and 76.0% by OHA only as estimated by OBEPI). From NHWS, a significant burden was observed among patients with T2D as they reported significantly lower levels physical quality of life (using the SF-12v2; 42.6 vs. 50.1, p<0.05) and significantly greater work impairment (26.7% vs. 18.2%, p<0.05) and physician visits (8.7 vs. 5.5, p<0.05). CONCLUSIONS: Both internet and mailed survey methodologies provided consistent prevalence estimates of diabetes and obesity among the French population. Further, despite the high prevalence of treatment, significant effects are observed on health outcomes among T2D patients, highlighting the unmet need.

Respiratory-Related Disorders – Clinical Outcomes Studies

PSR1
COST-EFFECTIVENESS OF VARENCLINE VERSUS EXISTING SMOKING CESSATION STRATEGIES IN BRAZIL FROM THE PUBLIC PERSPECTIVE, USING THE BENESCO MODEL
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OBJECTIVES: To assess the effectiveness of varenicline through evaluation of the rate of adher- ence of inhaled corticosteroids (ICS) for 360 days from their ICS index fill date. An average SABA consumption in days for each index ICS drug was calculated. RESULTS: Persistence with ICS is generally poor; about 60% to 78% of patients drop off therapy with the first 30 days of treatment. Fluconosine (dose adjusted for body mass index [BMI]) combination shows the best persistence and budesonide the worst persistence. Children were more persistent with mometasone whereas patients 19-60 and 60+ were more persistent with F/S. Budesonide and triamcinolone had the worst persistence with all age groups. The same results were seen in patients with multiple co-morbidities. Per- sistency with ICS across different co-morbid condition was consistent. On average 57% to 91% of ICS users took a concomitant budesonide. Budesonide (N=6,493) pa- tients on average used fewer days of SABA therapy (higher control), whereas budesonide/long-acting beta-agonist combination (N=7,263) patients used more days on SABA therapy (lower control). CONCLUSIONS: Rx data can be used to compare effective- ness of drugs in a class across different population segments. Our analysis showed that different ICSs have different effectiveness, as indicated by the rate of adher- ence of inhaled corticosteroids and use of rescue medication, in different individuals.

PSR2
THE EFFECT OF AAT REPLACEMENT THERAPY ON PATIENT LENGTH AND QUALITY OF LIFE - A MARKOV MODEL
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OBJECTIVES: To model the outcomes associated with alpha-1-antitrypsin defi- ciency (AATD) related emphysema, an orphan disease, through the use of a Markov cohort model. METHODS: A simulated cohort of 773 patients (the number pre- dicted patients in the UK) were transitioned between seven health states: mild, moderate, severe, very severe, lung transplantation, post-lung transplantation and death. The transition probabilities were calculated from randomised controlled trials. Computed tomography (CT) is accepted to be a more sensitive and correct measure of progression of disease in AATD-related emphysema, whereas FEV1 is a more recognised measure of lung function for clinical management of pulmonary disorders. Thus to model disease progression and outcomes, probabilities of death, lung transplantations are required, increasing the number of donor organs available for transplantation. A predesigned limitation on the number of organs available reflected the competition for lung transplantation in the healthcare system. The model outputs include Life Years, QALYs, Lung transplantations, and death per year were discussed. RESULTS: The AAT re- placement therapy resulted in an increase of 0.32 life years (6.93 vs. 6.61), with an estimated gain of 0.28 QALYs per patient (4.64 vs. 4.27) over best supportive care. For a cohort of 773 patients over a lifetime horizon, 19 AAT deficiency deaths and 6 lung transplantations were avoided when patients were treated with AAT compa- red to usual standard care. CONCLUSIONS: Treatment with AAT slows decline in lung function and delays death associated with AATD. By slowing lung function decline, patients experience improved health related quality of life, while fewer lung transplantations are required, increasing the number of donor organs available for use in other diseases.

PSR4
EFFECTIVENESS OF A MULTIFACTORIAL INTERVENTION TO IMPROVE ADHERENCE IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) ICEPOC STUDY
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OBJECTIVES: To assess the effectiveness on treatment adherence of a multifac- torial intervention in patients with COPD. METHODS: Design: Randomized Control Trial (ISRCTN 15106246) Patients: 146 subjects randomly allocated (random blocks of 4 patients) in two groups (intervention group: IG, control group: CG). Intervention components: 1) Motivational aspects related with adherence: beliefs-behaviour about COPD (group and individual interviews); 2) Cognitive aspects: information about COPD; 3) Educational aspects: information about COPD (group and individual interviews); 4) Educational aspects: information about COPD; 5) Motivational aspects related with adherence: beliefs-behaviour about COPD (group and individual interviews); 6) Cognitive aspects: information about Illness; 7) Skills: inhalation techniques training. Follow-up: 1 year, 5 visits/ group: 1) V0 random allocation, all variables were measured; 2) V0C adherence was measured; 3) V4 (after intervention) and variable variables were measured; 4) V3 (one year after start/ intervention) all variables were measured. Primary Outcome: Adherence (doses/ cigarette); Secondary Outcomes: functional status (spirometry), quality of life (Saint George Respiratory Questionnaire (SGRQ)). Independent variables: age, sex, education level, smoking sever- ity, COPD severity stage (SEPAR guidelines), prescribed medication. RESULTS: Predominance of males (91.8%), mean age 69.01 years (C95%, 67.58-70.44); low cultural level (78.1%), 32.2% current smokers (29.36 cigarettes/day [95CI, 26.03-32.7]) ever smoker, body Mass Index 30.78 kg/m2 [95CI, 25.98-32.87]. 81.2% mild-moderate severity stage, predominance of obstructive respiratory pattern; FEV1 (mean) = 0.67% (CI 95%, 65.23-72.29), 0.87 exacerbations/year (95CI, 0.68-1.06). Pharmacological treatment: inhaled-anticholinergic (77%); inhaled-beta2-ad- renergic (48%); inhaled-steroids (70.5%); xantin (8.2%); oxygen therapy (4.8%); oral-corticosteroids (0.7%); mucolitics (11.6%). All these measures were similar in both groups. Adherence was 41% (41.2G/40.8G), 93 patients (63.7%) completed follow-up. Adherence in follow-up V1-61.8% (58.9G/65.21C), V2-66.3% (63.5G/71.1G), V3-56.8% (43.1G/72.7G). Significative differences between study groups (p=0.004): NNT for intervention,6.8 Multivariate analysis (Ad- herence: specificity = 87.5%, sensitivity = 60.4%): intervention OR=6.6 (95CI%, 2003, A239-A250)