The association between the nature and timing of dental visits and C-reactive protein levels

Candrilli SD, Blackwood J

EHealth Solutions, Research Triangle Park, NC, USA; 2Dundrum Hospital, Dundrum, CT, USA

OBJECTIVES: Preventive visits are an association with cardiovascular diseases (CVD). C-reactive protein (CRP), an inflammatory marker, has been implicated as a risk factor for CVD, and dental visits can affect CRP levels. Our study examined the relationship between the timing and nature of dental visits and CRP.

METHODS: Using data from the US-based 1999-2001, 2001-2002, and 2003-2004 National Health and Nutrition Examination Surveys, we examined the relationship between time since last dental visit and risk of most recent dental visit and CRP for adults 20 years old. Participants were enrolled if they were pregnant at the time of the survey, did not take part in the examination component of the survey, or were missing covariates for a logistic regression model: age, sex, race, BMI, WHR, CRP measure, time since last dental visit, smoking status, cholesterol-lowering medication use, and history of asthma, cancer, rheumatoid arthritis, chronic bronchitis, or recent illness. A dichotomous elevated CRP measure was used, defined as CRP >0.30 mg/dL. Time since last dental visit was categorized into <6 months, 6 months to <1 year, 1 year to <2 years, and ≥2 years ago. Respondents who reported never visiting a dentist were placed in the <2 years category. RESULTS: A greater proportion of the normal (≤0.30 mg/dL) CRP group last visited a dentist <6 months ago (P=0.046), and last visited the dentist for a “symptom-driven” visit (P=0.0001). Time since last dental visit was categorized as: 1 year, 2 years, and ≥2 years ago; respondents who reported never visiting a dentist were placed in the ≥2 years category. RESULTS: A greater proportion of the normal (≤0.30 mg/dL) CRP group last visited a dentist <6 months ago (P=0.046), and last visited the dentist for a “symptom-driven” visit (P=0.0001). Time since last dental visit was categorized as: 1 year, 2 years, and ≥2 years ago; respondents who reported never visiting a dentist were placed in the ≥2 years category.

CONCLUSIONS: Given the apparent association between time since last dental visit and CRP, it is necessary to involve patients who have not visited a dentist for at least 2 years. Further research is needed to determine the exact mechanism by which dental visits can affect CRP levels.

PCV20

Traditional and non-traditional risk factors for cardiovascular disease in type 2 diabetes: Systematic review of longitudinal studies


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quitting smoking. Cost of 5-year reimbursement varenicline was estimated to be €8,328,480, while smoking cessation avoided costs reached €99.9 million, which compared with €21.1 millions savings in the not-reimbursed scenario: a net incremental cost-saving of €15.9 millions. Savings were observed from 3rd year of modelling. CONCLUSIONS: The Bi of the reimbursement of varenicline in smoking cessation was a cost-effective health policy, improving the health status of NIS, and could produce cost-savings since the 3rd year of implementation.

PCV37 BUDGET IMPACT ANALYSIS OF HYPERTENSIVE TREATMENT WITH INDAPAMIDE AND AMLODIPINE SINGLE-PILL COMBINATION IN THE POLISH SETTING
Kwiatkowicz P1, Stawowczyk P1, Holko P1, Borowicz L1, Filipiak K1
1Jagiellonian University Medical College, Krakow, Poland, *Centrum HTA Sp z o o: Sp. komandytowe, Krakow, Poland, 41st Chair and Department of Cardiology, Medical University of Warsaw, Warsaw, Poland

OBJECTIVES: The aim of our analysis was to compare public payer and patients’ costs of hypertensive treatment with indapamide 1.5 mg and amlopidine 5 mg or 10 mg single-pill combination (SPC) and free combination (FC), in the Polish setting. METHODS: The analysis compared two scenarios: existing and new. The existing scenario compared treatment with FC of indapamide 1.5 mg and amlopidine 5 mg or 10 mg single-pill combination (SFC) and free combination (FC), in the Polish setting. RESULTS: The analysis compared two scenarios: existing and new. The existing scenario compared treatment with FC of indapamide 1.5 mg and amlopidine 5 mg or 10 mg single-pill combination (SFC) and free combination (FC), in the Polish setting. The budget impact analysis evaluated the financial impact of axipaban introduction by comparing expected 1,2, and 3 years in an estimated patient population of 360,000 Italian patients, allowing for savings of over 5 million € by the third year. Results of the simulation run on an alternative scenario with in-hospital and outpatient population of NVAF patients yields comparable estimates. Exclusive use of axibanap for three years in the identified population would allow for savings of € 8,832,500, ±14,446,551 and ±27,289,298 when compared with dabigatran (110 mg), dabigatran (150 mg) and rivaroxaban, respectively.

CONCLUSIONS: The difference in effectiveness and effectiveness profiles of the available NOACs emerging from the adjusted indirect comparison indicate that the introduction of axipaban could improve health care expenditure control while maintaining or increasing therapeutic appropriateness in the Italian NVAF population.

PCV40 THE BUDGET IMPACT OF NEW GENERATION CT SCANNERS FOR DIFFICULT-TO-IMAGE, LOW-RISK PATIENTS WITH SUSPECTED CAD
Shields CT, Chapman AM
Breast, Shefford, UK

OBJECTIVES: The National Institute of Health and Care Excellence (NICE), issued diagnostic guidance on new generation computed tomography (CT) scanners recommending them as an option for the first-line imaging of coronary arteries in patients with suspected low-risk coronary artery disease (CAD) in whom imaging with a second-generation CT scanner is not possible. A decision analytic model was developed to estimate the impact of replacing traditional CT with a new generation scanner. A model was developed to estimate the impact of replacing traditional CT with a new generation scanner. A model was developed to estimate the impact of replacing traditional CT with a new generation scanner.

PCV28 MODELING THE IMPACT OF A DIGITAL HEALTH FEEDBACK SYSTEM IN UNCONTROLLED HYPERTENSION PATIENTS
Kim YA, Virdi N, Raja P, DiCarlo S
Procting and Health, Redwood City, CA, USA

OBJECTIVES: Despite the availability of numerous therapeutic agents and management tools, half of all hypertensive patients do not have their blood pressure (BP) controlled. A digital health feedback system was proposed to improve the current care delivery. It was estimated that a digital health feedback system would be able to reduce the number of uncontrolled hypertension patients receiving care who were eligible for treatment.

PCV29 BUDGET IMPACT ANALYSIS OF AXIPABAN VERSUS OTHER NOACS FOR THE PREVENTION OF STROKE IN ITALIAN NON-VALVULAR ATRIAL FIBRILLATION PATIENTS
Prada M1, Candaloriero M1, Di Vincenzo M1, Bellone M1, Tabarro M1
1Adres HEXOIR, Turin, Italy, 2HE OR Unit - Bristol Myers Squibb S r. l, Rome, Italy, 3Ipsen Pharmace, Rome, Italy, 4San Filippo Neri Hospital, Rome, Italy

OBJECTIVES: To perform a budget impact analysis of the use of three available novel oral anticoagulant agents (NOACs) for preventing thromboembolic events in Italian patients with non-valvular atrial fibrillation (NVAF). METHODS: Estimated Italian population of patients is run through a decision tree/Markov model built around the current best estimate of NOACs introduction, in Italy at two dose levels (110 mg/bid for the over 80 years old, 150 mg/bid for younger NVAF patients), rivaroxaban, and axipaban. Effectiveness estimates derive from an adjusted indirect comparison between warfarin as link. Epidemiological data and unit costs are collected from Italian published sources. The budget impact analysis evaluated the financial impact of axipaban introduction by comparing expected 1,2, and 3 years in an estimated patient population of 360,000 Italian patients, allowing for savings of over 5 million € by the third year. Results of the simulation run on an alternative scenario with in-hospital and outpatient population of NVAF patients yields comparable estimates. Exclusive use of axipaban for three years in the identified population would allow for savings of € 8,832,500, ±14,446,551 and ±27,289,298 when compared with dabigatran (110 mg), dabigatran (150 mg) and rivaroxaban, respectively.

CONCLUSIONS: The difference in effectiveness and effectiveness profiles of the available NOACs emerging from the adjusted indirect comparison indicate that the introduction of axipaban could improve health care expenditure control while maintaining or increasing therapeutic appropriateness in the Italian NVAF population.