questionnaires were administered pre- and post-intervention to 126 heart-failure patients within a randomized controlled trial at a university-affiliated teaching center with a referral base of HF patients.

RESULTS: The internal consistency of the EMA was 0.79 (Cronbach’s alpha). The internal consistency of the MKA was 0.61 and the responsiveness was 0.75.

CONCLUSIONS: The availability of instruments, such as those we have developed, can assist heart-failure programs to evaluate the impact of their educational interventions on knowledge gained, which will hopefully translate into better patient outcomes.

**PCV33**

**IMPACT OF INSURANCE TYPES ON PATTERNS OF ANTIHYPERTENSIVE DRUG UTILIZATION: DIURETICS OR BETA-BLOCKERS VS. ANGIOTENSIN-CONVERTING ENZYME INHIBITORS OR CALCIUM CHANNEL BLOCKERS**

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**OBJECTIVE:** Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure V (1993) and VI (1997) recommend diuretics and beta-blockers as initial antihypertensive drugs. However, a few studies have shown a trend of increasing use of angiotensin-converting enzyme inhibitors (ACEIs) and calcium channel blockers (CCBs), and decreasing use of diuretics and beta-blockers. The purpose of the study was to examine the impact of insurance types on patterns of antihypertensive drug use.

**METHODS:** A logistic regression model was employed to examine whether insurance type was associated with patterns of antihypertensive drug use by using Medical Expenditure Panel Survey (MEPS, 1996), after controlling for confounding variables. The estimated study population enrolled was 10,357,769 non-institutionalized adult US patients with essential hypertension.

**RESULTS:** Patients with HMO insurance were less likely to use diuretics or beta-blockers (OR = 0.499, 95%CI: 0.323-0.770), compared with the patients with fee-for-service (FFS) insurance. Black patients were less likely to use diuretics or beta-blockers compared with white patients (OR = 0.577, 95%CI: 0.346-0.961). Compared with non-married patients, married patients were 92 percent more likely to use diuretics or beta-blockers (OR = 1.92, 95%CI: 1.299-2.838). Finally, patients diagnosed between 1988 and 1992, and after 1993 were less likely to use diuretics or beta-blockers (OR = 0.486, 95%CI: 0.289-0.817; OR = 0.416, 95%CI: 0.251-0.691), compared with patients who were diagnosed with hypertension before 1988.

**CONCLUSION:** Insurance types are associated with the patterns of antihypertensive drug use. Patients with HMO insurance used more ACEIs or CCBs than patients with FFS insurance. Further research is required to discern the reasons for the impact of insurance types so that policy makers can propose efficient intervention.

**PCV34**

**STOP SMOKING CESSATION TARGET: OBSERVATION PROGRAM, THE FRENCH PHARMACIST’S PROGRESS**

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Pharmacists, as easily accessible health-care professionals and advisors to the general public, are distributors of information and dispensers of health-care products. The “French Consensus Conference on Smoking Cessation” – (October 1998), summed up the aims of pharmacists in helping smoking cessation as follows: lead by example; enforce smoking bans in pharmacies; underline the significant risks linked to cigarette smoking; encourage non smoking; advise, aid and monitor the smoker who has decided to stop smoking.

**OBJECTIVE:** To measure the progress of the French Pharmacist’s Smoking Cessation Program.

**METHODS:** The STOP program, through a questionnaire distributed to approximately 2500 pharmacists, aims at describing the progress pharmacists are making with regard to their own tobacco dependence as well as in the public health initiative entrusted to them.

**RESULTS:** Here we present the preliminary results of this investigation, through the analysis of the first 300 questionnaires. The average age of our sample population was 46 years, 55 % were male. 67% had attended a smoking cessation course. Ninety percent of these attended a course given by the pharmaceutical industry, and 7% attended a course given by an anti-smoking organization. Ninety eight percent of the pharmacists that attended a course given by the pharmaceutical industry, and 7% attended a course given by an anti-smoking organization. Ninety eight percent of the pharmacists that replied offered information on aiding smoking cessation, either through window displays (67%) or displays in the pharmacy (70 %). After delivering a nicotine substitute, 80% of pharmacists do not arrange a follow-up appointment. This lack of follow-up is explained on the part of the client by lack of motivation (48%) and clients not returning to the same pharmacy (34%). For the pharmacist the main reason is the absence of adequate follow-up tools (54%).

**CONCLUSION:** Since the delisting of nicotine substitutes, pharmacists have played a major role in their delivery and should therefore play a strategic role in the fight against tobacco dependence.

**PCV35**

**STOP SMOKING CESSATION TARGET: OBSERVATION PROGRAM AN EX-SMOKER IS A SMOKER IN PROGRESSION**

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Here we present the preliminary results of the “French Consensus Conference on Smoking Cessation” – (October 1998), summed up the aims of pharmacists in helping smoking cessation as follows: lead by example; enforce smoking bans in pharmacies; underline the significant risks linked to cigarette smoking; encourage non smoking; advise, aid and monitor the smoker who has decided to stop smoking.

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**RESULTS:** Here we present the preliminary results of this investigation, through the analysis of the first 300 questionnaires. The average age of our sample population was 46 years, 55 % were male. 67% had attended a smoking cessation course. Ninety percent of these attended a course given by the pharmaceutical industry, and 7% attended a course given by an anti-smoking organization. Ninety eight percent of the pharmacists that replied offered information on aiding smoking cessation, either through window displays (67%) or displays in the pharmacy (70 %). After delivering a nicotine substitute, 80% of pharmacists do not arrange a follow-up appointment. This lack of follow-up is explained on the part of the client by lack of motivation (48%) and clients not returning to the same pharmacy (34%). For the pharmacist the main reason is the absence of adequate follow-up tools (54%).

**CONCLUSION:** Since the delisting of nicotine substitutes, pharmacists have played a major role in their delivery and should therefore play a strategic role in the fight against tobacco dependence.
Over half of regular consumers of tobacco, including many young people state a desire to break from tobacco dependence, but very few succeed in the long term.

**OBJECTIVES:** The objectives of the program can be summed up as follows: to contribute to improving public health knowledge; to understand the process made by smokers and ex-smokers; to anticipate success factors in smoking cessation.

**METHODS:** In May 2001, 5000 user questionnaires were distributed by GPs and pharmacists to smokers (S) or ex-smokers (ES). The questionnaire included the most frequently used tests, a socio-demographic profile, the individual’s smoking experience and a questionnaire of knowledge of the smoking environment.

**RESULTS:** Presented here is the outcome of the analysis of the first 700 responses, permitting a better understanding of how smokers progress when they break from tobacco dependence. The male/female ratio between smokers (42%/58%) and ex-smokers (57%/43%) is statistically significant (p = 0.01), both for age (S/ES = 39/46yrs) and weight (S/ES = 66/71kg). Forty three percent of ES said they had a regular sporting activity as opposed to 26% of S (p = 0.001). The daily consumption of a cup of coffee was different (S/ES = 4.1/2.7) (p=0.0001). There was no difference with respect to alcohol consumption. Both groups complained of being exposed to passive smoke: S/ES = 44%/41%. Forty-seven percent of the smokers said they had a history of depressive problems, as opposed to 36% of the former smokers p = 0.02.

**CONCLUSION:** These first results confirm the growing proportion of women who are tobacco dependent, the influence of passive smoking and the progress of the smoker when he or she becomes an ex-smoker.

**DIABETES & GASTROINTESTINAL DISORDERS**

**PDG1**

**THE OUTCOMES OF LONG-TERM TREATMENT OF A NEW ORAL DIABETES DRUG PIOGLITAZONE (ACTOS **) IN THE MANAGEMENT OF TYPE 2 DIABETES IN FINLAND**

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**OBJECTIVE:** To assess the cost-effectiveness of pioglitazone (Actos *NF) in combination therapy for patients with type 2 diabetes in Finland.

**METHODS:** A published, validated model for type1 diabetes mellitus developed by the Institute of Medical Informatics and Biostatistics (Palmer et al., 2000) was adapted to simulate long-term (80 years or until death) management, health outcomes, resource utilisation and treatment costs of patients with type2 diabetes. The model accounts for most complications occurring in diabetes patients: nephropathy; retinopathy; acute myocardial infarction; angina pectoris; stroke, and amputation. The analysis was done from third-party-payer perspective and costs figured relative to the year 2000. A 5% discount rate was applied to costs and outcomes and sensitivity analysis was performed to test the results.

**RESULTS:** Pioglitazone (PIO) 30 mg and metformin (MF) were associated with longer life expectancy (15.16 years) than sulphonylureas (SU)/MF (14.47) or rosiglitazone (RSG) 8 mg/MF (15.06). PIO 30 mg/SU and PIO15 mg/SU were associated with the lowest number of serious complications per 100 patients treated. For every 21 patients treated with PIO 30 mg/MF rather than SU/MF or every 41 patients, respectively, for PIO15 mg/SU rather MF/SU one complication is avoided. Combinations of PIO 30 mg/SU, PIO 30 mg/MF and PIO 15 mg/SU are associated with lower mortality than the other treatment combinations available. Thus, for every 35 patients treated with PIO 30 mg/MF rather than SU/MF one death will be avoided after 15 years of treatment.

**CONCLUSION:** This model suggests that combined treatments with pioglitazone improve survival and reduce complications in patients with type 2 diabetes and may represent a cost-effective use of scarce resources. It is necessary to confirm the results of this theoretical model on long-term effectiveness data with the compared alternatives are available.

**PDG2**

**RISK OF DIABETES AMONG RISPERIDONE AND OLanzAPINE USERS**

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**OBJECTIVE:** We assessed the incidence of diabetes in an ambulatory population treated for the first time with either olanzapine or risperidone.

**METHODS:** We conducted a population-based cohort study using data from the Quebec drug benefit plan. Included in the cohort, all people who received a first prescription of olanzapine or risperidone between 1/1/1997 and 8/31/1999, who were eligible for the drug plan, had not been prescribed an antidiabetic drug or any atypical antipsychotic for the six-month period preceding the first olanzapine or risperidone prescription. Person-months of follow-up were calculated as the amount of time from the date of the first olanzapine or risperidone prescription to the date of the first antidiabetic drug prescription. Those who had a prescription for an antidiabetic drug were considered as having diabetes. Subjects who discontinued olanzapine or risperidone, who became non-eligible for the drug plan and those who reached the end of the follow-up period (8/31/2000) were censored at the event date. We used a proportional hazard model to compute the age- and sex-adjusted incidence-rate ratio (IRR) of having diabetes among olanzapine users compared to risperidone users.