CONCLUSION: Young people are a population whose dependency level is mainly low or moderate, a fact that enables—with appropriate but generalised mobilization (doctor, educator, pharmacist, family)—a smoking cessation attempt to succeed.

PCV55

SMOKING DEPENDENCY: AUDIT CARRIED OUT AMONG THE UNDER 25 GROUP

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OBJECTIVE: As part of an environment program (outcomes program) on smoking cessation, it seemed interesting to study young smokers under the age of 25. **METHOD:** A special questionnaire was distributed to them via the "Student" supplement of a French regional weekly newspaper (Tarn Libre), which they were asked to return by post. **RESULTS:** The first results concerned the first 50 questionnaires returned. Average age: 17.5 years; average weight: 56 kilos; average height: 1,67 m. In our sample, 92% were students, 86% declared themselves to be exposed to other people's smoke and only 37% said they took part in a sporting activity. Age at which tobacco dependency began was 13 years; 98% smoked cigarettes—versus 2% a cigar or pipe); the average daily consumption was 10 cigarettes; of these, 65% wished to stop smoking, but only 38% had already made an attempt at smoking cessation. Only 30%, however, said that they had been asked spontaneously by their doctor about their desire to stop smoking (minimum advice) In the Fagerström test, 48% had low or no dependency; 48% had moderate dependency and only 2% had heavy dependency. **CONCLUSION:** This pilot study confirmed that tobacco dependency is occurring at an increasingly early age; that tobacco dependency in young people is low or moderate, and that there is little management of tobacco dependency in young people by doctors.

PCV56

ALLOCATION OF RESOURCES BETWEEN SMOKING CESSATION METHODS AND PHARMACEUTICAL TREATMENT OF HYPERCHOLESTEROLEMIA BASED ON COST-EFFECTIVENESS AND THE SOCIAL WELFARE FUNCTION

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OBJECTIVE: The objective of the health system is to achieve an efficient and equitable allocation of scarce health resources. In this study, a particular social welfare function was used to decide the optimal allocation of resources between smoking cessation methods (medical advice, nicotine gum and nicotine patches) for smokers and 20–80 mg/day lovastatin (HMG-CoA reductase inhibitor) for individuals with hypercholesterolemia. **METHODS:** Parameter epsilon determining the exact form of the social welfare function is >0 when society has aversion to inequality in the distribution of health gains between two patient groups, while it is equal to 0 when there is no aversion. This parameter was determined using a questionnaire to assess preferences concerning the efficiency-equity trade-off in a group of health managers. Based on these preferences, a higher priority should be given to the preventive intervention associated with a value of epsilon consistent with that from the social welfare function. **RESULTS:** A value of epsilon = 1.6 was obtained for the social welfare function. Values of epsilon obtained for different preventive interventions were 2.9–1.8 for medical advice for smoking cessation and 20–80 mg/day lovastatin, 0.9–0.15 for nicotine gum and 20–80 mg/day lovastatin, and 0 for nicotine patch for smoking cessation and 20–80 mg/day lovastatin. The highest value of epsilon was obtained for the intervention using medical advice for smoking cessation and 20 mg/day lovastatin for hypercholesterolemia, with 2.9 in men and 2.4 in women. A higher priority should be given to the intervention using medical advice for smoking cessation and 20–80 mg/day lovastatin for hypercholesterolemia than to interventions using nicotine substitution therapies and 20–80 mg/day lovastatin. **CONCLUSION:** Lovastatin treatment of hypercholesterolemia should have a higher priority than nicotine substitution therapies for smoking cessation based on cost-effectiveness and the social welfare function.

PCV57

IMPLICATIONS OF TREATMENT GUIDELINES: WHAT STATINS DO WE REALLY NEED?

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OBJECTIVES: New treatment recommendations describe aggressive lipid-lowering goals to maximize cardiovascular-event risk reduction for a broad population. This analysis determined what statin doses would be required to achieve treatment goals in a Canadian population. **METHODS:** Canadian treatment guidelines were reviewed and combined with population-based data on blood lipid levels to determine the percentage reduction in LDL-C required to achieve treatment goals. Efficacy of statins was determined from the literature. The statin dose required for patients to achieve LDL-C reduction goal was reported. **RESULTS:** The Canadian 1985–1990 Heart Health Surveys reported that 18% of men and 17% of women had high blood lipid levels, with a total cholesterol ≤6.2 mmol/L (corresponding to an approximate LDL-C level ≤4.7 mmol/L). Canadian guidelines dictate that adults with very high risk of cardiovascular events (those with a history of cardio-

vascular disease or diabetes) should have LDL-C levels <2.5 mmol/L. Canadians at very high risk and with high blood lipid levels would require an LDL-C reduction of at least 47% to achieve treatment goal. Of marketed statins, only moderate to high doses of atorvastatin (20, 40 and 80 mg), simvastatin (80 mg) or lovastatin (80 mg) could achieve the LDL-C reduction required by Canadian guidelines. In contrast, a new lipid-lowering agent (rosuvastatin) could achieve a 47% LDL-C reduction at the 10 mg dose. **CONCLUSIONS:** A significant proportion of Canadians should receive aggressive lipid-lowering therapy, which can only be achieved with higher doses of currently marketed statins to achieve Canadian treatment goals. Newer statins such as rosuvastatin would assist in achieving the updated treatment goals. By achieving these targets at lower doses, rosuvastatin can improve ease and success of management of hyperlipidemia.

PCV58

RANDOMIZED CONTROLLED INTERVENTION IN CARDIOVASCULAR DRUG TREATMENT IN NURSING HOMES

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OBJECTIVE: The aim of this study was to evaluate intervention of drug treatment to elderly patients with cardiovascular diseases living in nursing homes and assess the effect of this intervention. **METHOD:** Eighty patients living in nursing homes in the County of Stockholm were randomized into 2 groups, 43 to the intervention group (average age 87 years) and 37 to the control group (average age 85 years). Patients included had diagnoses of heart failure, post myocardial infarction or cardiac valvular disease. Patients with drug treatment related to these diagnoses were also included. At a first visit a research nurse interviewed each patient to collect data of symptoms and health-related quality of life. The drug therapy was recorded. After reviewing medication, specialists in clinical pharmacology and cardiology suggested changes in the cardiovascular drug therapy to the responsible physician. At each following visit the current drug therapies as well as data of symptoms and health-related quality of life were recorded. **RESULTS:** The outcome was measured as scores of symptoms. Changes of total Health Index, ADL scores and deaths were recorded as well. The patients in the intervention group initially consumed 9.8 drugs on the average. For the control group this figure was 9.2 drugs. A change of cardiovascular drug therapy was suggested for 40 patients. Thirty-two changes in 19 patients were carried out, mainly regarding furosemide and potassium. Suggestions to initiate treatment with ACE-inhibitors were never followed. There were no significant changes in the scores of symptoms, total Health Index or ADL scores. **CONCLUSIONS:** The self-reported symptoms for each patient were helpful as a guide for the specialists to evaluate the drug therapy. The intervention resulted in reduction of drug use in half of the patients in the intervention group without any negative effects on health of symptoms.

GASTROINTESTINAL DISEASES/DISORDERS—Economic Outcomes

PGS1

EMPLOYMENT LOSSES RELATED TO INFLAMMATORY BOWEL DISEASE IN THE UNITED STATES: RESULTS FROM THE NATIONAL INTERVIEW SURVEY

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OBJECTIVES: U.S. studies using varying methodologies have reported different estimates for the indirect cost per person with IBD. Our analysis contributes to this literature, by using the 1999 sample of the National Health Interview Survey (NHIS) to estimate the employment effect of Inflammatory Bowel Disease (IBD) in the United States. **METHODS:** Our predictive analysis adapts the theory of labor supply to a health context. A weighted logistic regression model was used to estimate the odds ratio (OR) of being out of the labor force as determined by predictive variables including having been diagnosed with IBD, with or without symptoms. Controls included demographic variables and health status indicators. For those people in the labor force, a second analysis was performed to determine whether an individual worked throughout the entire duration of the past 12 months or less than 12 months. SUDAAN 8.0 was used to generate population estimates, systematically correcting for survey design. **RESULTS:** Thirty-one and one-half percent of IBD patients who had experienced symptoms in the past 12 months reported being out of the labor force with OR = 2.07. We estimated the excess in the non-participation rate attributable to IBD with symptoms in the past 12 months in the United States to be 11.7%. Based on this, the indirect cost of non-participation attributable to IBD in 1998 was $3.5 billion US dollars or $4973 per person with IBD and symptoms. According to the second weighted logistic regression, having IBD had no association with the duration of work, for those who are in the labor force. Consequently, the indirect cost of IBD reported can be interpreted as the indirect cost of IBD associated with employment losses. **CONCLUSIONS:** By using directly observed data in our analysis, this method of estimation can be used to predict the overall paid-employment burden of IBD.