counted for 1.5 percent of the average cost of admission ($125 of $7974 total cost, 90% CI: $96–$224). Relative to no prophylaxis, the incremental cost per VTE avoided using enoxaparin was $1330 ± 468.

CONCLUSIONS: Acutely ill medical patients are at high risk of VTE with treatment costs ranging from approximately $2500 (outpatient) to $25,000 (inpatient). Chronic care for post-thrombotic syndrome, experienced in 20%-56% of deep vein thrombosis patients further increases the cost burden. This analysis demonstrates that VTE prophylaxis with enoxaparin, in acutely ill medical patients has both economic and clinical benefits.

MODELLING THE COSTS OF ILLNESS IN THE MANAGEMENT OF CEREBROVASCULAR ACCIDENTS IN FRANCE
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OBJECTIVES: Cerebrovascular accidents (CVA) affect 120,000 French people each year. The aim of the study was to calculate the cost of managing these patients.

METHODS: A Markov model was used in which four clinical conditions were distinguished: first ischaemic event; first cerebral haemorrhage; recurrent ischaemic event; recurrent haemorrhagic event. Three lines of management were identified after hospitalisation: rehabilitation, home, and geriatric institutions. Three levels of incapacity were identified using the Barthel index. Patients’ pathways in the health-care system were identified from the only French register (Dijon) related to this disease. The specific death rates were calculated at 3, 6, 9 and 12 months. The severity of sequelae was assessed using the Barthel index at 3 and 12 months. The clinical benefit was measured as survival without loss of independence (Barthel 95-100). All of the cost calculations were made from the perspective of the community. Expenditures were discounted at a rate of 5%

RESULTS: The time horizon used for the model was five years. 54.7% of the patients died during this time. The average incapacity times after hospitalization over the five years were: 70% slight incapacity (Barthel 95-100); 15% moderate incapacity (Barthel 60-90), and 15% severe incapacity (Barthel 0-55). The total cost of managing the 120,000 cases of cerebrovascular accidents was approximately 17 billion francs over the five years following the event. Twenty four percent (4.1 billion FF) of this cost was related to short-term hospitalizations, 16.5% (2.8 billion FF) to admissions to re-education or rehabilitation institutions, 33% (5.6 billion FF) to institutional management, and 26.5% (4.5 billion FF) to looking after patients at home. A sensitivity analysis was conducted specially frequency with which health-care professionals visited the patients at home.

CONCLUSION: This method allows for the calculation of long-term costs of new cases of cerebrovascular accident.

COSTS OF HYPERTENSION IN POLAND
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OBJECTIVE: The aim of the study was to assess the costs and cost distribution of hypertension in Poland and to compare the societal burden of hypertension on an international basis.

METHODS: The time horizon of the analysis was 12 months and a retrospective approach was applied. The direct medical costs of pharmacological treatment, doctor consultations, laboratory and diagnostic tests and hospitalizations were identified and calculated. Indirect costs due to lost productivity were also included in the analysis. All of the cost components were collected with the aid of a cost assessment formula, which was included in the epidemiological protocol.

RESULTS: Based on data collected from 9286 patients, the average cost per hypertensive patient per year was calculated at 1570 PLN. The total burden of hypertension in Poland may reach as much as 14 billion PLN per year. The distribution of total costs is as follows: pharmacological treatment, 10.2%; doctor consultations, 30.8%; laboratory and diagnostic tests, 11.4%; hospitalizations, 21.0%, and productivity loss, 26.6%. An international comparison demonstrated that expenditures incurred as a result of the pharmacological treatment of hypertension in Poland were much lower than in other countries (i.e. Sweden: 53.3%, USA: 20.7%). Theoretically the total burden of hypertension on society per year amounts to 31 USD in Sweden, 82 USD in the United States and 88 USD in Poland using exchange rates available on January 21, 2000.

CONCLUSION: The results of the analysis demonstrate that hypertension constitutes an important economic burden for the Polish population. The cost of pharmacological treatment represents the lowest percentage of the total cost of hypertension and the smallest portion of direct medical costs. The conclusion is that an optimal allocation of expenditure for pharmacological treatment may contribute to a significant reduction of the total cost of hypertension following the example of other European countries such as Sweden as well as the United States.

A COST STUDY OF COMMON PRACTICE TREATMENT FOR CRITICAL LIMB ISCHEMIA IN MOSCOW, RUSSIA
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OBJECTIVE: To study costs and effectiveness of common practice treatment for critical limb ischemia at Moscow hospitals.

METHODS: Data was obtained from 105 medical charts from six Moscow hospitals. Inclusion criteria were: criti
cal limb ischemia (Fountain stage III-IV) at admission; length of stay no less than 2 weeks; conservative management before surgery for one week at least. Patient characteristics, length of stay (LOS) and discharge status were assessed. Amputation was considered as treatment failure. Direct medical costs for pharmacotherapy, diagnostic and treatment services were calculated.

RESULTS: Mean age of patients was 63.8 ± 11.46 years; 84.8% were men. Duration of critical limb ischemia before admission varied from two weeks to 14 months. Mean LOS was 31 ± 14 days. From 1 to 41 drugs (12.9 ± 8.6) were prescribed to patients during hospitalization. Most frequently used drugs were pentoxifyllin and rheopolysaccharide (77.1% and 58% of patients). Amputation was performed on 41.9% patients, and angioplasty on 32.4%. Median cost of treatment in the study group was 35 462,70 rub (1 222.9$). The median cost for treating patients with amputation was 41 698,41 rub (1437.9$), and the median cost for patients with angioplasty was 43 802,3 rub (1510.4$). Median cost for patients without surgical intervention was significantly lower - 14 423,4 rub (497.4$).

CONCLUSION: Common practice treatment for critical limb ischemia in Moscow hospitals requires amputation in 41.9% of cases. Costs for management patients with amputation do not differ from costs for management of patients requiring angioplasty when all direct costs are taken into account.

**PEV26**

**HOW MUCH DOES ONE GRAM OF HUMAN HEART MUSCLE COST?**

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During the development of hypertension, a progressive increase in left ventricular mass (LVM) occurs. This hypertrophy is a predictor of the incidence of cardiovascular disease and mortality. The great majority of anti-hypertensive drugs lead to a reduction of LVM, thus improving the prognosis. It is not known, however, which of these drugs is the most cost-effective in terms of reduction of LVM.

OBJECTIVE: To investigate the cost of reducing LVM by 1 gram with various agents during the treatment of hypertension.

METHODS: Out of 28 trials published between 1984 and 1995, only 17 were included (528 patients, 21 drugs from main anti-hypertensive classes including ACE inhibitors, or drug combinations) because they were of 12 months duration. The cost of drugs used (at Polish prices) for the treatment period was divided by the change in LVM in grams during that period.

RESULTS: The most cost-effective drugs in terms of LVM reduction (USD/g of muscle) were: atenolol 0.11; prazosin 0.34; hydralazine 0.44. Combinations of anti-hypertensives were highly cost-effective: rezerpine + hydrochlorothiazide 0.11; atenolol + indapamide 0.92.

CONCLUSION: These results may serve as a guide in decision-making for the choice of treatment and reimbursement.

**PEV27**

**COST-EFFECTIVENESS ANALYSIS OF A CHEST PAIN UNIT—A RE-STRUCTURED APPROACH IN RISK STRATIFICATION OF CHEST PAIN**

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OBJECTIVES: A Chest Pain Unit (CPU) with a diagnostic algorithm employing troponin T (TnT) assay was implemented in a public hospital in Hong Kong in February 2000. The aim of this study was to compare the cost-effectiveness in risk stratification of chest pain (CP) patients before and after the implementation of a CPU from the perspective of a public-health organization.

METHODS: Medical records of patients with CP presented to the Accident & Emergency (A&E) department in November 1999 (pre-CPU) and November 2000 (post-CPU) were reviewed. Patients with non-diagnostic CP were recruited. Resource utilization for CP diagnosis was retrieved from medical records. The clinical outcome (30-day post-discharge re-admission or death secondary to cardiac causes) was obtained from follow-up phone interview and hospital records for patients discharged home from A&E or CPU. Cost-effectiveness ratios (CERs) for the two study periods and incremental CER were calculated.

RESULTS: There were 689 and 836 patients presented to A&E with CP in November 1999 and November 2000, respectively. The percentage of patients discharged from A&E was higher in the pre-CPU group (64.7% vs. 50.5%, p < .001). A total of 529 patients in the pre-CPU group and 581 patients in the pre-CPU group with non-diagnostic CP were recruited. The cost of differential diagnosis for CP per patient was HK$2,934 (1USD = 7.8 HKD) in the pre-CPU group and HK$3,641 in the post-CPU group. The 30-day, post-discharge, cardiac-event rate was 8.4% in pre-CPU group vs. 5.6% in post-CPU group (p = .172). The CERs were HK$3,203 (pre-CPU) and HK$3,857 (post-CPU) per patient per 30-day, cardiac-event-free period. The incremental CER for the post-CPU group was HK$25,245 per additional patient per 30-day, cardiac-event-free period.

CONCLUSION: Based on the data obtained, the implementation of a CPU appears to be able to reduce the 30-day cardiac event rate with an incremental CER of HK$25,245.