patients receiving coronary artery stents in a managed care population. **METHODS:** Patients were selected from the PharMetrics Integrated Outcomes Database who underwent coronary angioplasty and stent insertion between January 1 and June 30, 1999 and who had at least 6 months of continuous enrollment in their health plan following the beginning of the treatment episode. Patients were grouped according to whether they received outpatient anticoagulant/antiplatelet prescription drug therapy following their stent procedure. Patients were also stratified by history of acute myocardial infarction (AMI) and presence of comorbid conditions (diabetes and hypertension). Total charges associated with the stenting treatment episode (up to 6 months following the procedure) were assessed. **RESULTS:** 2,713 patients receiving anticoagulant/antiplatelet therapy and 438 untreated patients met all selection criteria. The two treatment groups were similar in age (58.6 vs. 58.0 years respectively, p = 0.322) and in the frequency of AMI (37.7% vs. 37.9% respectively, p = 0.939) and of one or more comorbidities (73.3% vs. 71.5% respectively, p = 0.427). Mean charges over the study period for the anticoagulant/antiplatelet cohort exceeded those in the untreated cohort by $4,748 (p = 0.014). Pharmacy charges accounted for only $297 of this excess ($660 vs. $363, respectively). Most of the difference between treatment groups was in the medical costs of interventional cardiology. **CONCLUSION:** Among coronary stent recipients, the mean charge for a 6-month period in patients who also received anticoagulant/antiplatelet prescription drug therapy was 14% higher than in the untreated cohort, due mainly to higher medical charges. It is possible that untreated patients were less severely ill or had a favorable risk profile. Further investigation of these data will examine this issue.

PCV16

COST-EFFECTIVENESS ANALYSIS OF ENOXAPARIN VERSUS UNFRACTIONATED HEPARIN IN ACUTE CORONARY SYNDROME PATIENTS IN POLAND

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OBJECTIVE: To estimate the cost-effectiveness of enoxaparin (1 mg/kg s.c. bid) vs unfractionated heparin (UFH) (i.v. bolus and constant infusion adjusted to maintain a therapeutic APTT) in acute coronary syndrome (ACS) patients from a Polish hospital perspective. The intention was to facilitate the decision-making process in selecting the most cost-effective treatment for ACS. **METHODS:** Decision model was used to quantify costs and effectiveness of alternative treatments. Published results from ESSENCE study were used to estimate the probability for clinical end-points (death, MI, recurrent angina) at 30 days. Probabilities of patients receiving revascularisation procedures were obtained from the GRACE registry (961 patients at 6 centres in Poland). The analysis assessed only direct medical costs resulting from the treatment of events comprising the composite end-point, revascularisation procedures, enoxaparin and UFH therapy, related medications. The costs were determined from actual resource consumption on a patient-specific basis (6 months observational study) and estimated using Polish data on unit costs. One- and two-way sensitivity analysis and treshold analysis were performed. **RESULTS:** At 30 days 19,8% of patients receiving enoxaparin compared with 23,3% of patients receiving UFH reached one event of the composite end-point (p = 0,02). The average costs (in PLN, 1 USD = 4 PLN) were 1085 per patient receiving enoxaparin compared with 1097 per patient receiving UFH. Therefore for every 29 patients treated, enoxaparin therapy would not only avoid one event of the composite end-point, it would also save 348 PLN. The threshold analysis revealed, that enoxaparin would lose the dominance, when cost of enoxaparin therapy would increase by 30%, cost of UFH—decrease by 47%, probability end-point in enoxaparin arm increase to 0.22 or in UFH arm decrease to 0.2. **CONCLUSION:** Since enoxaparin resulted in a better effect at a lower cost, this antithrombotic strategy was considered to be dominant for Polish patients with ACS.

PCV17

QUALITY OF LIFE AND PATIENT PREFERENCE AS PREDICTORS FOR RESOURCE UTILIZATION AMONG PATIENTS WITH HEART FAILURE; INTERIM ANALYSIS

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OBJECTIVE: The objective of this study was to examine the role of quality of life (QOL) and patient preference as predictors for resource utilization among patients with heart failure (HF). **METHODS:** QOL, patient preference, resource utilization, and survival are being assessed in 94 patients with HF managed in an urban HF specialty clinic. QOL is measured using a disease-specific questionnaire, the Kansas City Cardiomyopathy Questionnaire (KCCQ) and a generic questionnaire, the Short Form 12 (SF-12), at baseline, 3 months, and 6 months. Patient preference is measured using standard gamble technique at baseline. Resource use including hospitalization, ER visits, procedures, and outpatient visits are captured by patient interview and verified by clinic and hospital records. Health care costs are derived from clinic cost data, University Health System Consortium database, and literature. **RESULTS:** To date, 81 patients have completed 3 months follow-up (mean age 49.9 ± 14.0 years; 69% African American; 53% male; NYHA class I = 15,

II = 24, III = 38; mean left ventricular ejection fraction = 34.3% ± 15.5). Mean disease-specific QOL (KCCQ Overall Summary Score = 66.9) and generic QOL (Physical Component Summary = 38.7; Mental Component Summary = 48.2) were similar to literature values for HF patients. Mean utility was 0.832. Using linear regression, lower KCCQ scores, SF-12 scores, and utility at baseline were all significantly associated with higher resource utilization at 3 months. When patients were grouped into three categories based on their baseline KCCQ Overall Summary Score (I = 0–50, II = >50 to £75, III = >75), resource utilization over 3 months was significantly different across the groups (I = $4033; II = $2500; III = $2010; p = 0.0003). **CONCLUSION:** Among patients with HF, QOL and patient preference appear to predict future resource utilization.

PCV18

FRAMINGHAM RISK EQUATIONS PREDICT HOSPITAL USAGE AND MORTALITY

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Risk equations based on the Framingham Heart Study (FHS) are used in NZ to predict the 5y risk of incident cardiovascular (CV) events. **OBJECTIVE:** To establish how well the FHS equations predict first hospitalisation or mortality from CV events in a New Zealand (NZ) population without overt CV disease. **METHODS:** Observations were taken from a cohort study with 6354 (4638 M +1716 F) participants age 32–74 without known CV disease, taken from the workforce of a nation-wide multi-industry corporation plus a random sample of the Auckland electoral rolls. Prognostic factors were assessed in 1992/93 by a questionnaire plus physiological measurements (BP, cholesterol etc.). Age-specific risk predictions from the FHS were compared with age-specific mortality plus relevant hospital discharges from January 1988 to December 1998 (NZ Health Information Service). **RESULTS:** The 5y incidence of first hospitalisation for any CV event was 6.4% (male) and 4.4% (female). Table 1 compares observed hospitalised events or mortality with predicted incident events, averaged across 5y age bands.

Ratio of observed to predicted events, averaged across 8 × 5y age bands

Mean ratio (±SD)	Male	Female	Both
CHD	1.03 ± 0.15	0.92 ± 0.35	1.03 ± 0.06
MI	1.24 ± 0.19	1.49 ± 1.19	1.26 ± 0.15
STROKE	0.98 ± 0.40	0.74 ± 0.57	0.94 ± 0.42

CONCLUSIONS: FHS risk equations accurately predict age-specific incident hospitalized CHD or stroke events or mortality for NZ males age 30–74 but under-estimate MI events. Prediction is less accurate and precise for females.

PCV19

DISCRIMINABILITY FOR RISK OF CARDIOVASCULAR EVENTS

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Risk equations based on the Framingham Heart Study (FHS) are used in NZ to predict the 5y risk of an incident CV event for individuals without cardiovascular (CV) disease. **OBJECTIVES:** To establish in a NZ population without overt CV disease: (i) the discriminability of the relevant FHS risk equation for prediction of first hospitalisation or mortality for any cardiovascular event; (ii) whether FHS risk equations have better discriminability than single risk factors. **METHODS:** Observations were taken from a cohort study with 6354 (4638 M + 1716 F) participants age 32–74 without known CV disease, taken from the workforce of a nation-wide multi-industry corporation plus a random sample of the Auckland electoral rolls. Prognostic factors were assessed in 1992–93 by a questionnaire plus physiological measurements (BP, cholesterol etc.). Outcomes data were CV mortality and hospital discharges from Jan. 1988 to Dec. 1998 (NZ Health Information Service). Risk predictions were compared with outcomes, and receiver-operator characteristics (ROC) curves were constructed. The area under the ROC curve was obtained by fitting a dual-Gaussian unequal variance model. **RESULTS:** Table 1 shows the area under the ROC curves.

Area under ROC curves (±95% CI).

	Male	Female	Total
FHS	.72 ± .030	.78 ± .055	.74 ± .025
Age	.70 ± .029	.77 ± .058	.71 ± .026
SBP	.62 ± .034	.69 ± .062	.64 ± .030
Chol/HDLc	.61 ± .034	.64 ± .066	.63 ± .030
BMI	.56 ± .034	.61 ± .063	.58 ± .029

CONCLUSIONS: FHS risk equations or age alone provide moderate discriminability for individuals with 5y risk of a CV event that requires hospitalisation. SBP and serum lipids have weaker discriminability.

PCV20

ASSESSING THE TOTAL COST OF MANAGEMENT OF A PATIENT WITH DEEP VEIN THROMBOSIS (DVT) IN FRANCE AND IN ITALY

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OBJECTIVES: Economic studies on the cost of DVT usually take into account the acute care costs only although the patients are treated and followed-up after hospital discharge for at least six months. We calculated the true economic burden of the disease. **METHODS:** We assessed from the Health Care System perspective the total cost of managing a patient with DVT over a one-year