Abstract: After the acute hospital stay, most cardiac patients in Germany are transferred for a 3-4-week period of inpatient cardiac rehabilitation. We aim to describe patient characteristics and risk factor management of cardiac rehabilitation patients with a focus on drug treatment and control status, differentiated by education level (low level, elementary school; intermediate level, secondary modern school; high level, grammar school/university). Data covering a time period between 2003 and 2008 from 68,191 hospitalized patients in cardiac rehabilitation from a large-scale registry (Transparency Registry to Objectify Guideline-Oriented Risk Factor Management) were analyzed descriptively. Further, a multivariate model was applied to assess factors associated with good control of risk factors. In the total cohort, patients with a manifestation of coronary artery disease (mean age 63.7 years, males 71.7%) were referred to cardiac rehabilitation after having received percutaneous coronary intervention (51.6%) or coronary bypass surgery (39.5%). Statin therapy increased from 76.3% at entry to 88.9% at discharge, and low density lipoprotein cholesterol<100 mg/dL rates increased from 31.1% to 69.6%. Mean fasting blood glucose decreased from 108 mg/dL to 104 mg/dL, and mean exercise capacity increased from 78 W to 95 W. Age and gender did not differ by education. In contrast with patients having high education, those with low
education had more diabetes, hypertension, and peripheral arterial disease, had lower exercise capacity, and received less treatment with statins and guideline-orientated therapy in general. In the multivariate model, good control was significantly more likely in men (odds ratio 1.38; 95% confidence interval 1.30-1.46), less likely in patients of higher age (0.99; 0.99-0.99), with diabetes (0.90; 0.85-0.95), or peripheral arterial disease (0.88; 0.82-0.95). Compared with a low level education, a mid level education was associated with poor control (0.94; 0.89-0.99), while high education did not have a significant effect (1.08; 0.99-1.17). Patients with different levels of education treated in cardiac rehabilitation did not differ relevantly in terms of demographics, but did differ in some clinical aspects. With respect to the ultimate goal of cardiac rehabilitation, ie, optimal control of risk factors, education level does not play an important role.