Introduction:
Low socioeconomic status is associated with worse outcome after cardiac arrest. This study aims to investigate if patients’ socioeconomic status impacts the chance to receive early coronary angiography after cardiac arrest.

Methods:
In this nationwide retrospective cohort study, 4011 patients admitted alive after out-of-hospital cardiac arrest (OHCA) and registered in the Swedish Registry for Cardiopulmonary Resuscitation were included. Individual data on income and educational level, prehospital parameters, coronary angiography results and comorbidity were linked from other national registers.

Results:
In the unadjusted model there was a strong correlation between income level and rate of early coronary angiography where 35% of patients in the highest income quartile received early angiography compared to 15% in the lowest income quartile. When adjusting for confounders (educational level, sex, age, comorbidity and hospital type) there were still higher chance of receiving early coronary angiography with increasing income, OR 1.31 (CI 1.01-1.68) and 1.67 (CI 1.29-2.16) for the two highest income quartiles respectively compared to the lowest income quartile. When adding potential mediators to the model (initial rhythm, location, response time, bystander cardiopulmonary resuscitation and if the arrest was witnessed) no difference in early angiography related to income level where found. The main mediator was initial rhythm.

Conclusion:
Higher income is strongly related to the rate of early coronary angiography after OHCA. This finding is consistent when adjusting for known confounders. However, the association between income and early angiography seems to be mediated by initial rhythm. Patients with low income more often presents with non-shockable rhythms which lowers the likelihood to undergo early coronary angiography.
Correlation between disposable income and rate of early coronary angiography. Confidence interval in grey. Values above 0 on y-axis indicates increased rate of early coronary angiography. Second figure adjusted for confounders. Third and fourth figure adjusted for increasing numbers of potential mediators as stated in figure.