Objectives: The purpose of this study is to determine the percentage of patients admitted for acute myocardial infarction currently prescribed a statin, with low-density lipoprotein (LDL) <100 mg/dL, and high-density lipoprotein (HDL) <50 mg/dL for men and <55 mg/dL for women and evaluate their medication management with a focus on niacin initiation.

Methods: This was a retrospective study from 12/07 to 12/09, conducted at a private, community hospital. Inclusion criteria required patients to have an acute myocardial infarction (AMI) ICD-9 code, troponin 0.2 ng/dL and lipid panel performed within 96 hours of troponin. Patients with a triglyceride level > 400 mg/dL were excluded. The residual risk population consisted of patients currently taking a statin with LDL <100 mg/dL and HDL <50/55 mg/dL. Patients were excluded from the residual risk population if they were on niacin, had an allergy to or previously failed niacin therapy, or expired within 72 hours.

Results: A total of 553 patients experiencing an AMI had lipid panels available for evaluation. The mean LDL was 97.3 ± 36.0 mg/dL, mean HDL was 33.5 ± 11.1 mg/dL, and mean triglycerides were 133.1 ± 71.3 mg/dL. The majority of patients (n=521, 94.2%) had an HDL < 50 or 55 mg/dL respective of gender. Ninety-two (80.0%) residual risk patients had no change in their home lipid medications post AMI. Fifteen (13.0%) residual risk patients had their dose of statin medication increased. Seven (6.1%) residual risk patients were initiated on niacin.

Conclusions: The study results confirm an existence of a residual risk population with nearly 25% of AMI patients meeting the criteria. The results also confirm a low incidence of medication intervention in the residual risk population post AMI (20.0%) regarding lipid therapy, including the initiation of niacin in only 6.1% of patients.

Keywords
Myocardial Infarction, Niacin, Cholesterol, HDL, United States.