**ABSTRACT**

**Background:** Coronary artery disease (CAD) is the most common type of heart disease and the leading cause of cardiovascular disease (CVD) death in the United States. Statins have demonstrated efficacy to prevent and treat CAD but are not utilized as frequently as indicated for high-risk patients. There may be challenges to achieving an LDL-C goal of <70 mg/dL due to intolerance to statins, medication non-adherence, or outdated lipid panels. Ambulatory care pharmacists can play a role in ensuring patients have updated lipid panels and are on indicated statin therapy to improve CAD outcomes.

**Objective:** To examine the impact of pharmacist interventions on lipid screening and lipid-lowering treatment outcomes in patients with hyperlipidemia and coronary artery disease in an internal medicine clinic.

**Methods:** This was a single-center, IRB-approved, prospective cohort, pre-post analysis in an internal medicine clinic. The pharmacist intervention included recommending a direct LDL or lipid panel if last results were not obtained in the last 12 months and optimizing lipid-lowering therapy by following a treatment algorithm using the most recent lipid panels. Patient-specific recommendations were communicated to the patient’s PCP via message in the electronic medical record. The primary outcome was the pre-post comparison of percentage of patients achieving an LDL-C goal of <70 mg/dL. Secondary outcomes included pre-post comparison of percentage of patients with lipid panels in the last 12 months, physician acceptance rate of pharmacist recommendations, number of lipid panels/direct LDL ordered, and number of ICD-10 codes added for myalgias.

**Results:** For the primary outcome, there was a trended increase in the percentage of patients with LDL-C goal <70 mg/dL after the interim intervention period (19.5% vs 23.3%). For secondary outcomes, there was a trended increase in the percentage of patients with lipid panels in the last 12 months after the interim intervention period (50.9% vs 56.3%). Physician acceptance rate was 30.6%, 31 lipid panels or direct LDL labs were ordered based on pharmacist recommendation, and no ICD-10 codes were added for myalgias.

**Conclusion:** Ambulatory care pharmacists may help improve lipid management in primary care settings by ensuring patients have updated lipid panels and are on indicated statin therapy to improve CAD outcomes.