

## **Statin Utilization in Cardiac Rehabilitation Patients with ASCVD**

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**Introduction:** Cholesterol treatment guidelines, updated in 2013, re-affirmed the importance of statin therapy for secondary prevention in patients with atherosclerotic cardiovascular disease (ASCVD). In addition, the guidelines recommended that high risk patients receive high intensity statin therapy (HIST), if tolerated, for secondary prevention of cardiovascular events.

**Purpose:** Determine statin treatment patterns in a large, multi-state sample of patients with ASCVD attending outpatient cardiac rehabilitation (CR).

**Design:** A cross-sectional study design was used for CR facilities participating in the Montana Outcomes Project (MOP).

**Methods:** Over a one-year time-period (October 2014 through September 2015), data were collected from 121 programs representing 18 states participating in the MOP. Beginning in October 2014, the MOP began collecting data on three yes/no variables related to statin therapy: 1) on statin therapy, 2) statin contraindication and 3) on HIST or HIST not tolerated. HIST was defined as atorvastatin 40-80 mg or rosuvastatin 20-40 mg. The inclusion criteria consisted of patients 18-75 years with an ASCVD diagnosis. Patients with heart failure, valve repair/replacement only or patients with other non-ASCVD diagnoses were excluded from the analysis. A total of 6,063 CR patients met the inclusion criteria and were included in the sample. Statistical analysis included Chi-square and ANOVA tests with p-value of <0.05 indicating statistical significance.

**Results:** Overall, 73% of the patients were male, predominately white (93%), non-Hispanic (97%), and had a mean age of 62.5 years. After excluding patients with a statin contraindication, 97% were on statin therapy. Men were slightly more likely to be receiving a statin compared to women (97.2% vs. 95.7%). Overall, almost 40% of CR patients were not treated to the 2013 guidelines (this includes: 36.7% who were treated on low intensity statin without HIST intolerance documented and 3% who were not on statin therapy). Men and non-whites were significantly more likely to be treated to guidelines compared to women (62.0% vs. 54.9%) and whites (65.9% vs. 59.7%), respectively. Among the three age categories, the youngest age group had the highest percentage treated to guideline recommendations and decreased steadily for the other two age categories: 18-45 years 67.4%, 46-65 years 63.6%, and 66-75 years 55.1%.

**Conclusion:** Statin therapy was widely used in this sample of CR patients with ASCVD. However, after excluding those with statin contraindications and HIST intolerance, almost 40%

of the patients were not being treated to evidence-based cholesterol treatment recommendations.