

# The Impact of a Pharmacist Driven Intervention on Appropriate Statin Prescribing in Patients Living with HIV: A Population Health Perspective

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## BACKGROUND

- ❖ Within the AIDS Resource Center of Wisconsin (ARCW), a patient-centered medical home, the clinical pharmacy team manages several medical conditions for patients living with HIV via collaborative practice agreements including hypertension, diabetes, anticoagulation, and smoking cessation.
- ❖ Due to the development of effective antiretroviral treatment regimens (ART), HIV is an aging patient population that requires management of chronic conditions.
- ❖ Patients living with HIV are at twice as likely to develop cardiovascular disease compared to their HIV negative counterparts, underscoring the importance of cardiovascular prevention strategies.

## OBJECTIVES

- ❖ The aim of this study is to evaluate the impact of a pharmacist-driven statin management protocol in patients living with HIV.
- ❖ It is hypothesized that a higher proportion of patients will be prescribed appropriate statin therapy after pharmacist intervention.

## METHODS

- ❖ This study occurred over 4 months across ARCW's four Wisconsin based medical clinics.
- ❖ Eligible patients were those > 21 years old, living with HIV, and eligible for statin therapy based on 2013 ACC/AHA guidelines:
  - History of clinical ASCVD
  - Diagnosis of diabetes mellitus type 2
  - LDL > 190
  - 10 year ASCVD risk > 5%
- ❖ Patients with a contraindication to statin therapy were excluded.

## Phase 1

Researchers utilized a data collection tool, constructed to identify eligible patients and format pertinent data, in conjunction with the electronic medical record (EPIC) to perform a chart review and determine appropriateness of baseline statin prescribing across the population.

2 months

## Phase 2

A pharmacist-driven intervention targeted gaps in statin prescribing including appropriate dose/intensity following approval from the primary care provider.

1 month

## Phase 3

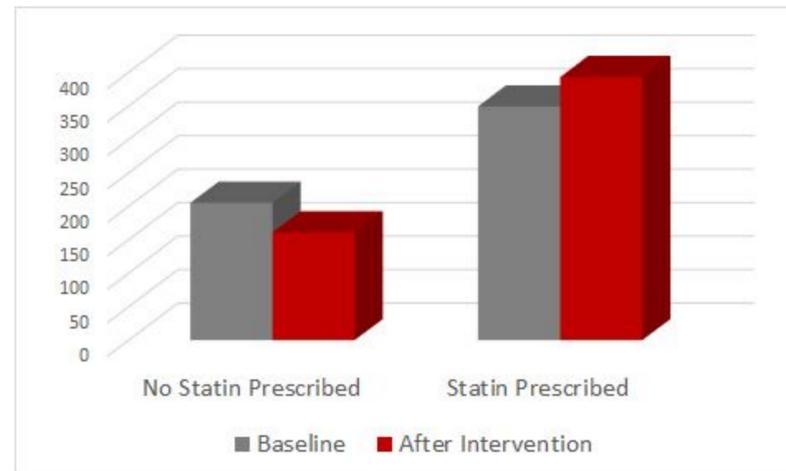
Chart review was performed, utilizing the data collection tool, to assess the impact of a pharmacist-driven intervention on appropriate statin prescribing after pharmacist intervention.

1 month

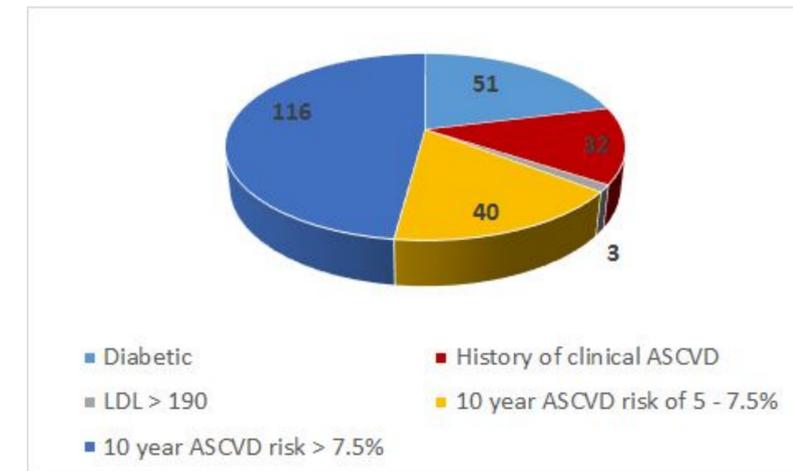
## RESULTS

- ❖ Phase 1: Of the 1600 patients considered, 554 individuals met inclusion criteria for this study.
  - 63% of patients eligible for statin therapy were prescribed a statin at baseline (349/554).
  - Twenty seven (7.7%) patients receiving statin therapy were flagged for recommendation of a dose adjustment.
- ❖ Phase 2: Providers were agreeable to initiate or adjust statin therapy with pharmacist intervention in 52% of patients identified (111/214).
- ❖ Phase 3: 71% (393/554) of patients eligible for statin therapy are currently prescribed a statin following pharmacist intervention ( $p < 0.05$ ).

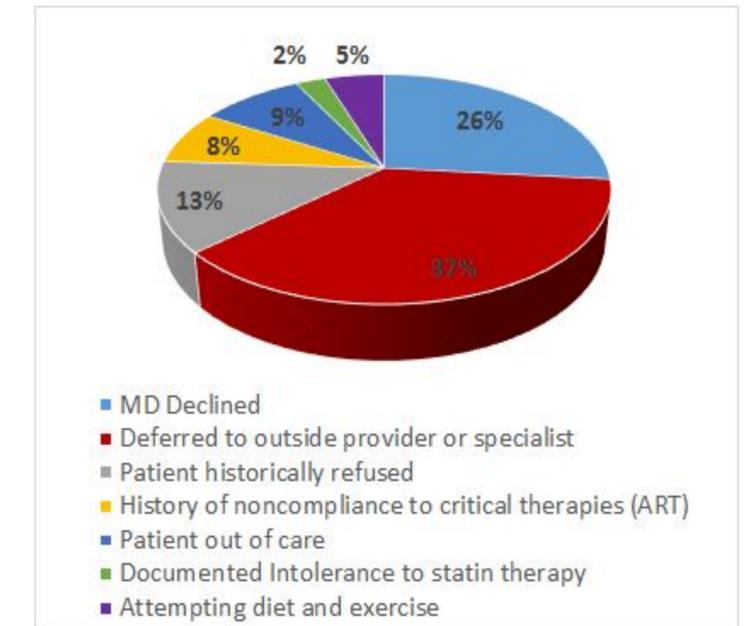
**Figure 1: The proportion of eligible patients prescribed statin therapy at baseline and after pharmacist-driven intervention.**



**Figure 2: Indication for initiation of statin therapy for eligible patients not prescribed a statin at baseline.**



**Figure 3: Documented reason for refusal of statin therapy initiation in eligible patients provided by primary care providers.**



## CONCLUSION

- ❖ Improvement in rates of appropriate statin prescribing in patients living with HIV is possible via a pharmacist-driven statin management protocol.
- ❖ Patients receiving medical management from an outside provider or specialist was the largest barrier to statin initiation at ARCW.
- ❖ The results of this study could be utilized to support pharmacists in other ambulatory and population health settings in increasing their utility and promoting collaborative care at their practice by demonstrating improvement in outcomes with pharmacist intervention.