

**Title:** Diabetes Management in People Living with HIV in Care at University Hospital, Newark NJ

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### Background

The American Diabetes Association (ADA) *Standards of Medical Care in Diabetes-2020* outlines best practices for diagnosing and treating all forms of diabetes. This includes recommendations on glycemic targets, as measured by HbA1c, annual screening foot and eye exams, and optimizing blood pressure control with ACE inhibitor or ARB therapy. This quality assessment project examines diabetes management in people living with HIV (PLWH), as assessed by rates of guideline adherence to the above four metrics.

### Methods

This project was reviewed and approved by the Rutgers IRB. Patients from an HIV registry of University Hospital Infectious Disease Outpatient clinic in Newark, NJ were reviewed for a diagnosis of diabetes and an A1c score recorded between 2/1/2019 and 1/31/2020. Achieving glycemic target was defined as HbA1c  $\leq 7.5$  for patients under age 65 and HbA1c  $\leq 8$  for patients  $\geq 65$ . Foot and eye exam adherence were defined as documentation of a conducted or referred exam in the last 12 months. Blood pressure adherence was defined as patients with a documented history of hypertension currently being managed on an ACE inhibitor or ARB.

### Results

A total of 212 patient charts fit criteria for review. Adherence rate for achieving goal HbA1c was 64.6% (95% CI 58.0-70.7%, n=212). Foot exam and eye exam adherence rates were 60.8% (95% CI 54.1-67.2%, n=212) and 60.4% (95% CI 53.7-66.7%, n=212), respectively. Adherence to guideline management of hypertension with an ACE inhibitor or ARB was 82.1% (95% CI 75.6-87.0%, n=179).

### Conclusion

When diabetes management in this population of PLWH is compared to national averages, the rate of achieving target HbA1c was similar to national rates, foot and eye exam adherence were below national rates, and ACEi/ARB management of hypertension was greater than national rates. Increased implementation of provider educational tools and utilization of existing EMR-based smart phrases and alerts may help further improve adherence rates.