

## **Guideline Specific Selection of Anti-Hypertensives to Adequately Manage Hypertension at East Orange VA**

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### **Background**

Hypertension is a common medical condition, more common in people of African heritage and is associated with increased risk of serious health problems including heart attacks, strokes, and kidney failure. Non-adherence to up-to-date guidelines may lead to poorly controlled blood pressures, which can further increase cardiovascular morbidity and mortality. Due to changing guidelines, appropriate medication regimens are not always adhered to in the outpatient setting. This is apparent in primary care clinics in the East Orange VA, as many patients are not on first-line therapy for hypertension. By understanding the proportion of patients not on indicated anti-hypertensives based on American College of Cardiology (ACC) guidelines for high blood pressure in adults (2017), providers at the VA may be able to then implement methods to increase adherence to up-to-date guidelines. Thus, ultimately this will lead to improved hypertension management and prevent complications that arise from uncontrolled hypertension in the veteran population.

### **Methods**

Retrospective chart review was conducted for 306 randomized patients with the diagnosis of hypertension in various primary clinics in the East Orange VA. Anti-hypertensive regimens were reviewed as well as relevant medical co-morbidities that factor into appropriate medication regimens based on ACC guidelines for hypertension in adults (2017). The proportion of patients who were not on guideline recommended anti-hypertensives was calculated after retrospective chart review.

### **Results**

Our results indicate that 69.6% of the study sample were on guideline directed antihypertensive regimens. 93 patients were not following guideline directed antihypertensive regimens representing 30.4% of the study sample.

### **Conclusion:**

There are a significant proportion of patients not on appropriate anti-hypertensive regimens based on ACC guidelines in primary care clinics at the East Orange VA. These findings will allow for development of methods on quality improvement to aid in adherence of providers to current guidelines on the management of hypertension.