Million Hearts®: Preventing Heart Attacks and Strokes in Primary Care

Improving Blood Pressure Control in African Americans (BPAA)

Case for Change

Clinical Rationale

High blood pressure contributes to nearly 1,300 deaths per day.[1] According to the most recent NHANES data (2013-2016), 54% of African Americans have hypertension, and of those, 79% do not have their blood pressure controlled.[2] Often, African Americans diagnosed with hypertension have an increased awareness of their condition and are likely to be under medical treatment; however, their blood pressure is less likely to be under control when compared to non-Hispanic whites.[1] Appropriate prescribing practices is a critical factor in controlling hypertension in African Americans, who are less responsive to monotherapy with ACE inhibitors, angiotensin receptor blockers, and β blockers compared to diuretics and calcium channel blockers.[3] Further, it has been shown that social and environmental factors help explain the race difference in hypertension diagnosis,[4] and addressing issues, such as poverty, racism, and other social determinants, can play a pivotal role in combatting overall morbidity and mortality in African Americans. Efforts to ensure the most effective antihypertensive agents are prescribed for specific patient populations should be combined with strategies to mitigate inequities that may exacerbate disparities in hypertension outcomes.

Business Rationale (Potential ROI)

Together, heart disease and stroke are among the most widespread and costly health problems facing the nation, accounting for over $316.6 billion in health care expenditures and lost productivity annually (CDC, 2019). Cardiovascular disease (CVD) accounts for 1-in-6 US health care dollars spent – almost $1 billion per day[5]—and for 800,000 deaths every year, almost a third of US deaths.[6] By 2030, direct medical costs linked to CVD are projected to exceed $818 billion annually.[5] With the transition to value-based care, efforts focused on the preventing cardiovascular events are a business imperative.

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[1] CDC, Underlying Causes of Death, 2019

[2] National Center for Health Statistics, Centers for Disease Control and Prevention. National Health and Nutrition Examination Survey (NHANES), 2013–2016.

[3] Ferdinand KC, Armani, AM. The management of hypertension in African Americans. Critical Pathways in Cardiology: A Journal of Evidence-Based Medicine. 2007;6(2):67-71.

[4] Thorpe Jr, R. J., Brandon, D. T., & LaVeist, T. A. (2008). Social context as an explanation for race disparities in hypertension: findings from the Exploring Health Disparities in Integrated Communities (EHDIC) Study. *Social science & medicine*, *67*(10), 1604-1611.

[5] Benjamin EJ, Virani SS, Callaway CW, et al.; American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2018 update: a report from the American Heart Association. Circulation. 2018;137:e67–492.

[6] Yoon PW, Gillespie CD, George MG, Wall HK. Control of hypertension among adults--National Health and Nutrition Examination Survey, United States, 2005-2008. *MMWR Suppl.* 2012 Jun 15;61(2):19-25.