

**Detection And Elimination of Lower Extremity Amputation Racial Disparities at SUNY Downstate Health Sciences University Hospital of Brooklyn: A QI project**

**Purpose:** To investigate whether Black patients had higher primary amputation rates than White or non-Black patients at SUNY Downstate Health Sciences University Hospital of Brooklyn (UHB).

**Methods:** Retrospective data was collected from 2015-2019 on patients who either had lower extremity primary amputation or received revascularization at UHB. Demographic information as collected. Individual surgical decision making was reviewed by a vascular surgeon to determine opportunities for revascularization for patients receiving primary amputation. Primary amputation was defined as one amputation with additional procedures related to that amputation if required, but with no revascularization procedure. Secondary amputation was defined as amputations that later became more extensive or included the contralateral extremity. Revascularization was defined as attempts to deliver blood flow to the lower extremities through either bypass, graft placement or stent.

**Results:** A total of 190 adult patients were included in the study, and 178 identified as African American/Black (93.6%), 10 identified as White Non-Hispanic (5.2%), and 2 did not disclose their racial identity. 87 (45.8%) identified as female, and 103 (54.2%) identified as male. Amongst the Black patients, mean age was 65.8 years. Mean BMI was 26.9 kg/m<sup>2</sup>. Hypertension and Diabetes Type II were the most common medical conditions, 93% and 72%, respectively. 72% required ambulatory assistance. 42% of patients had a primary amputation; 19% had a secondary amputation; 29% had only revascularization; and 10% had revascularization with subsequent amputation. The most common mode of presentation was gangrene (42%), followed by ischemia and rest pain (19%) and gangrene with infection (14%).

**Conclusion:** There is a high chronic disease burden and concurrent high rate of primary amputation amongst the UHB patient population. Action is called to effectively mitigate and eliminate race-based disparities affecting our patient population.