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"Care Across the Miles: Catchment Area of UMCNO for Patients with Amputations"

Introduction: Limb amputations remain a pressing public health concern, with nearly 150,000 nontraumatic lower-extremity amputations occurring each year in the United States, primarily in patients with diabetes and peripheral artery disease. Although preventive care and vascular interventions can reduce amputation risk, racial, socioeconomic, and geographic disparities persist, as Black, Hispanic, Native American, and low-income populations consistently face higher rates of limb loss. Recent analyses demonstrate that within both rural and metropolitan regions, lower household income and higher proportions of Black residents are strongly associated with elevated amputation rates. However, less is known about how physical distance from tertiary referral centers affects access to pre-amputation vascular care and the likelihood of limb preservation. Understanding these associations is critical, as specialized vascular and wound care are often concentrated in urban centers, leaving distant populations at greater risk. To address this gap, we mapped patient home addresses relative to University Medical Center-New Orleans and evaluated whether distance from care was associated with differences in frequency and duration of wound care prior to limb loss.

Methods: A retrospective cohort study was conducted to collect demographic and geographic data on patients who underwent lower extremity amputation at UMCNO. Miles were calculated using publicly available distance maps from the patients' home addresses to UMCNO. Regression analysis tested for association between care frequency, care duration, and surgical indications.

Results: Mean distance from the patients' home address to UMCNO was 45.1 miles with a range of 1.4 to 250 miles. The median distance was 51.6 and mode 11.2 miles. In this preliminary analysis, distance between home and hospital was not associated with differences in the frequency or duration of wound care prior to amputation. Catchment area was not different between patients who experienced traumatic versus non-traumatic limb loss.

Conclusion: These preliminary results highlight the large catchment area serviced by UMCNO. Additional data are needed to determine if long distances to tertiary care influences attempted limb salvage, wound care, and care of associated medical comorbidities.