Telehealth Use in Rural North Carolina Counties: Perceptions Among Patients With Acute Myeloid Leukemia

Alexa Woodard, RN, BSN, Ijeoma Julie Eche, PhD, MPH, FNP-BC, AOCNP®, CPHON®, BMTCN®, and Ashley Leak Bryant, PhD, RN, OCN®, FAAN

Acute myeloid leukemia (AML) is the most common type of leukemia in adults, with a median age at diagnosis of 68 years (Isaac et al., 2021; Surveillance, Epidemiology, and End Results Program, n.d.). Improvements in AML treatment have led to increased overall survival (Freeman et al., 2016), but the five-year relative survival rate remains low at 29.5% (Surveillance, Epidemiology, and End Results Program, n.d.), and the rate of relapse is high (Molica et al., 2019). Because of the intensive treatment and symptom monitoring required for patients with AML, there is a need to investigate factors that may affect access to care (Albrecht, 2014; Bryant et al., 2015, 2018; Storey et al., 2017). Two such factors are geographic region and proximity to a National Cancer Institute (NCI)–designated cancer center. North Carolina is divided into nine regions by the Area Health Education Centers (AHEC) program (Freeman et al., 2016). The goal of the AHEC program is to facilitate partnerships between academic institutions like NCI-designated cancer centers and local oncology care settings to improve the resources and education at local facilities (Freeman et al., 2016). Of note, North Carolina is a largely rural state, with about 80 out of 100 counties considered rural (Freeman et al., 2016).

Freeman et al. (2016) found that a sample of patients with AML receiving inpatient chemotherapy in three of the nine AHEC regions had decreased survival outcomes after one year from completion of treatment. Density of local oncology care providers and patterns of referral to NCI-designated cancer centers could play a role in survival outcomes (Freeman et al., 2016). Although the role of NCI-designated cancer centers in improving survival outcomes for patients with hematologic versus solid tumors requires further investigation (Freeman et al., 2016; Wolfson et al., 2015), these facilities offer resources that directly benefit rural patients and improve access to specialty oncology care (Freeman et al., 2016; NCI, 2019; Wolfson et al., 2015). Therefore, one possible way to decrease geographic disparity is to increase access to NCI-designated cancer centers, particularly through partnerships with local oncology care providers.

Telehealth can provide several benefits that increase access to quality care for patients living in rural areas, such as reduced travel time and expenses (Smrke et al., 2020). A study by Isaac et al. (2021) suggested that collaboration between academic and local oncology care providers through