Mapping healthcare accessibility across communities in Central Appalachia, including Virginia’s New River Valley, throughout the Covid 19 pandemic.

**Introduction:**

Healthcare accessibility is a critical determinant of overall well-being which influences not only individual health outcomes but also the broader public health landscape. According to the Appalachian Regional Commission it was found that Appalachia performed worse than the national average in 33 out of 41 health indicators **(1).** The Central Appalachia, encompassing parts of West Virginia, Eastern Kentucky, Southwest Virginia, East Tennessee, and Western North Carolina, covers 29,773 square miles and has about 2 million residents **(2).** In regions like Central Appalachia, where economic challenges and geographic barriers are prevalent, ensuring equitable access to healthcare is particularly vital. This area, characterized by its rural terrain and dispersed population, faces unique challenges in providing timely and adequate healthcare services to all residents. Multiple studies have compared health status within the 420 Appalachian counties to areas outside its federally defined boundaries, by examining indicators like depressive disorders and physical conditions such as diabetes **(3).** These challenges make the study of healthcare accessibility in such regions not only significant but also urgent, as disparities can have far-reaching consequences for population health

Healthcare access is a complex term, involving the health system, population characteristics, and service use and satisfaction, and is influenced by individual and community factors **(4).** In rural areas like Central Appalachia, where healthcare facilities are often scarce, even slight changes in accessibility can significantly impact healthcare-seeking behaviors. According to Andersen et al., healthcare access is shaped by predisposing factors (e.g., age, race, disability) and enabling factors (e.g., income, insurance, employment, education), with the latter being more modifiable **(4).** Populations in these areas are particularly vulnerable to disruptions in healthcare access, which leads to delays in seeking care and, consequently, worse health outcomes.

**References:**

1. Marshall JF, Thomas L, Lane NM, et al. Health Disparities in Appalachia [Internet]. Appalachian Regional Commission; 2017. [cited 2021 July 7]. Available from: <https://www.arc.gov/report/health-disparities-inappalachia/>
2. <https://www.thestayproject.net/about-central-appalachia>
3. Morrone, M., Cronin, C. E., Schuller, K., & Nicks, S. E. (2021). Access to health care in Appalachia: perception and reality. *Journal of Appalachian health*, *3*(4), 123.
4. Andersen, R. M., Yu, H., Wyn, R., Davidson, P. L., Brown, E. R., & Teleki, S. (2002). Access to medical care for low-income persons: how do communities make a difference? *Medical care research and review*, *59*(4), 384-411.