

## **Building Sustainable Rural Healthcare Services**

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The rural-urban disparities in US mortality have grown substantially over time. The COVID-19 pandemic and rural hospitals closure has further exacerbated health disparities in rural communities. In Oklahoma, mobile wellness units (MWUs) have recently been deployed to improve rural community's access to basic medical needs, reduce health disparities, and improve healthcare delivery while decreasing costs. However, due to limited resources, health departments face great challenges in conducting periodical evaluations on the local health needs and gathering sufficient information to make wise decisions on allocating MWU services, which hinders its capability of providing equitable healthcare services to the underserved populations. To address these challenges, this project will partner with existing community resources providers (i.e., Harmon and Tillman Counties Health Departments, OSU extension offices, and Shortgrass Community Health Center in Harmon County) to (1) assess the healthcare needs of local communities and their barriers to the use of MWUs (i.e., lack of trust) so that effective solutions can be developed, (2) identify fine-scale healthcare professional shortage areas to assist the assessment of MWUs locations, (3) allocate and optimize MWUs locations to maximize service coverage and improve health equity, and (4) build an online interactive dashboard to assist healthcare seeking and decision making. Upon the successful implementation, the project is expected to assist health departments in providing sustainable rural healthcare services, reducing health disparities, and strengthening public health emergency preparedness and responses for underserved populations in rural Oklahoma.