

**Faculty Mentor:** Dr. Jay Dow, Political Science; Dr. William Horner, Political Science

## **Appalachian Health Disparities Ignored : Understanding State Variations in Health Outcomes within Appalachia**

Rebecca Wells and Jay Dow

Health inequality in Appalachia is well documented, but prior research has done little to evaluate variations between states. Appalachia is failing in health, technological and water infrastructure. Despite two federally created institutions for providing relief in Appalachia, the Tennessee Valley Authority and the Appalachian Regional Commission (ARC), Appalachia remains one of the poorest and sickest areas in the United States. Prior research has established that there are qualities of Appalachian health disparity that go further than the rural penalty, meaning Appalachian inequalities in many senses are unique to the region. However, little energy has been devoted to understanding variation between Appalachian counties and states. This paper answers the question, “What social and political factors can explain differences in health quality between Appalachian states?” Appalachian counties in Kentucky, West Virginia, and Tennessee were compared using regression modeling. State and regional approaches to healthcare were examined to understand the different approaches and political influences in achieving positive health outcomes. This research indicates that variations between states are significant, meaning that healthcare outcomes do vary between Appalachian areas. The scope of this research is limited due to time constraints and the age of the data. As such, future research could expand on this by reviewing counties from all Appalachian states and replicating the regressions included in this report with newer data sets. Further, due to COVID-19, physically observing the community health programs discussed in this report was not feasible. However, this research is still impactful in that it provides a framework for achieving reduced health disparities in a high risk region. Full conclusions will be presented at the Undergraduate Research Forum.