

Abstract

It has been widely known that disparities in incidence and mortality exist for lung cancer patients. Socioeconomic factors including insurance status and zip code have been shown to correlate with important delays in lung cancer testing and treatment. This “time to molecular testing” is a crucial step in the pathway toward treatment choice, which may ultimately affect survival. It is therefore important to understand where disparities impact patients as they access testing and treatment for lung cancer so that all patients may access the benefits of recent advancements in targeted therapy. The current study seeks to understand how the socioeconomic status of patients in the state of Colorado, as measured by a County Disparity Index and Rural-Urban Continuum Code, impacts their time to molecular testing. We hypothesize that counties with an increased Disparity Index will demonstrate a longer time from diagnosis to molecular testing when compared to patients from counties with a lower Disparity Index. Preliminary results suggest that a disparity in timely molecular testing exists in the state of Colorado, and that many patients in Colorado experience a delay in timely molecular testing. Almost all patients receive testing within 1 year of diagnosis, though only 66.50% receive timely testing within 6 weeks. A large proportion of patients represent low disparity counties, providing a mixed picture for the disparity landscape in Colorado. Future analysis needs to be performed to investigate the correlation between the Disparity Index, Rural-Urban Continuum Code, and time to molecular testing. Future analysis will involve time to event studies to answer these questions.