Using GIS, we mapped areas of hospital closures and at risk classified hospitals with 20% losses as potentially at risk. For each county, we obtained mortality rates by county and year. We also obtained in 2009 and 2020. Next, we obtained data from the ADPH on Department of Public Health (ADPH). We searched for news understand gaps geographically in healthcare. We obtained the locations of hospital closures since 2009 in Alabama to understand the context into which the intervention is being implemented, experiences of Veterans and clinicians with the intervention, and barriers and facilitators to implementa.

**CONSIDERING HOSPITAL CLOSURES IN ALABAMA:**

**NURSING HOMES’ FIVE-STAR QUALITY RATING SYSTEM: FORECASTING THE FUTURE STABILITY AND VOLATILITY**

Shivani Gupta, Ashay Kadam, and Neeraj Bhandari


The utilization of publicly reported quality measures such as nursing homes’ five-star quality rating system to hold providers accountable for their quality of care has increased over
the years. Therefore, nursing homes have invested significant resources into maintaining or improving the ratings awarded to them by CMS. This study utilizes statistical models to analyze the past rating histories to predict future evolution of ratings of nursing homes. Data on all U.S. nursing homes for the years 2017 - 2021 was derived from CMS Nursing Home Compare. Primary variable represents the overall five-star quality rating of nursing homes. A Markov chain model and a Mover Stayer model are used to predict changes in ratings of nursing homes. The one-year rating transition probabilities are estimated using maximum likelihood estimation. The key findings indicate the likelihoods of future upgrades and downgrades in nursing homes’ ratings. Nursing home administrators are under constant pressure to strategically allocate resources for maintaining or improving the five-star ratings awarded to them by CMS. The findings of this study could help nursing home administrators in forecasting future change in their rating and making better resource allocation decisions such as those related to preventing a rating downgrade. The study findings could also be used by policymakers to focus on nursing homes facing downgrades and assisting them in improving their quality of service based on the potential change in their rating. The same results could also be utilized to assess the stability of ratings given to nursing homes.