Read the following article (either use the link or the file in the discussion thread):

https://www.nytimes.com/2014/03/16/business/income-gap-meet-the-longevity-gap.html

The article describes health disparities across two counties, and different reasons for them. Using quotes or examples out of the article together with information from the book or elsewhere, please discuss:

• The possible reasons that might explain the relationship between income and health.

• What reasons can explain why the life expectancy of people in the poorer county is worsening over time.

• How you would test what was a cause of the differences in health across these two counties. What data would you need? How can you separate correlation from causation?

• Potential policies to address the growing differences in life expectancies across richer and poorer individuals.

After reading this article, it appears to me that income and health gets caught up in a vicious cycle but like a death spiral. Once the county becomes poorer and the resources dried up, the socio-economic stress forces selective portion of its population to stay back. Meaning, the ones that are capable leave the place in search of better fortunes while the incapable ones get left behind. This increases the concentration of less employable people and therefore the economic activity and the economy itself starts to shrink even further. In contrast, I believe the Fairfax county must have retained a good portion of its ‘able’ or ‘employable’ population, and in addition, must have attracted more ‘able’ and ‘employable’ population. When we investigate the metrics like ‘life expectancy’ we usually look at it from a per capita perspective. This is in a way skewed because it is not a metric for people that are just ‘from there’ and should have direct consequence to the public health.

I believe this selective filtering or selective selection is the reason for the life expectancy metric to be worsening over time in poorer counties. One of the hypotheses that I would be interested in is finding and comparing the life expectancy of the people that left to the people that stayed in both the poorer county and Fairfax. In addition to this, having other demographics information like education will also be helpful. A correlation between education and the movement of people out of the poorer county might also add value to this investigation. I think most of the details that may be needed for the analysis might be available through NHANES. **Separating correlation and causation might be easier if we analyse the data as a time series. Time series data has an inherent time stamp to each of the observation and therefore it is relatively easier to identify which came first, ‘chicken or the egg?’.**

From a policy perspective, the poorer county should be made a richer county to even talk about making marginal gain in life expectancy. Any policy that would offer incentives for an elevated economic activity could be a starting point. I believe it is impractical to hope for having good health with poor socioeconomic status.