

Update: 11/06/2022 (Masato)

Question:

How can we define the burden of disease?

- The most common measure of the burden of disease seems to be the disability-adjusted life years (DALYs), but should we use this measure? (It looks too complicated.)
- As an alternative, I simply divided the total number of deaths or hospitalization by the population, which seems to be a natural thing to do. I will call them "deaths per capita" and "hospitalizations per capita."
- See below for some scatter plots. Unfortunately, all of them seem quite useless at this point.

Chart 1:

At least deaths per capita and hospitalizations per capita are positively correlated.

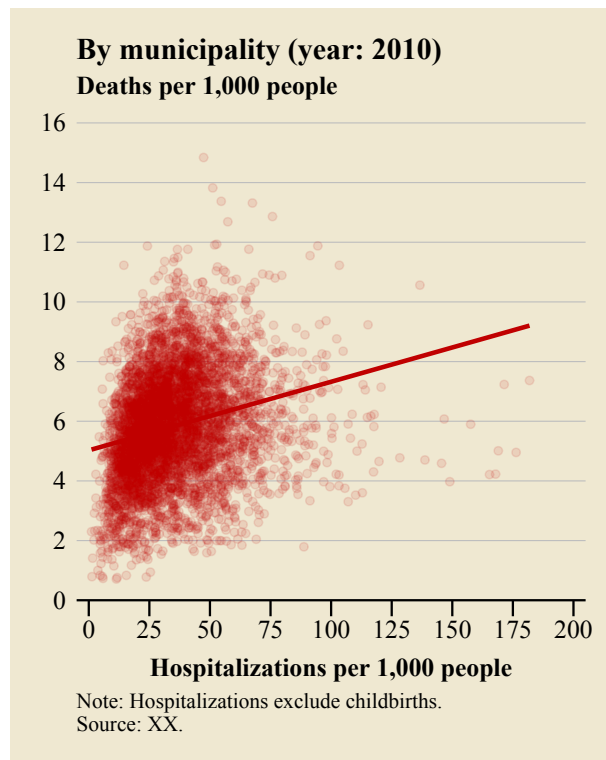


Chart 2:

Deaths or hospitalizations per capita is plotted against population (a proxy for urban and rural). A linear fitted line is shown but I can feel the R-squared is very low. The result is the same regardless of what type of regression line we use.

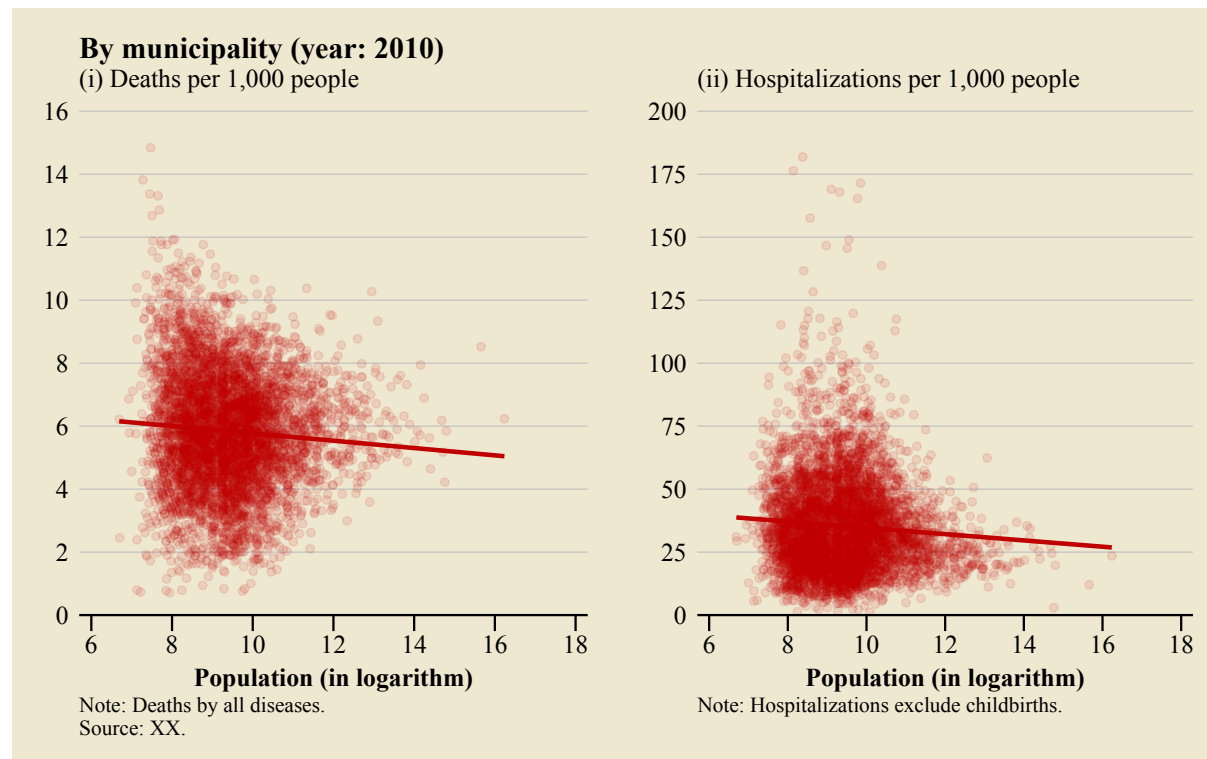


Chart 3:

I am not a fan of having too many points in a scatter plot, so I decided to aggregate it by state. The result is absolutely terrible, being almost impossible to make any sense.

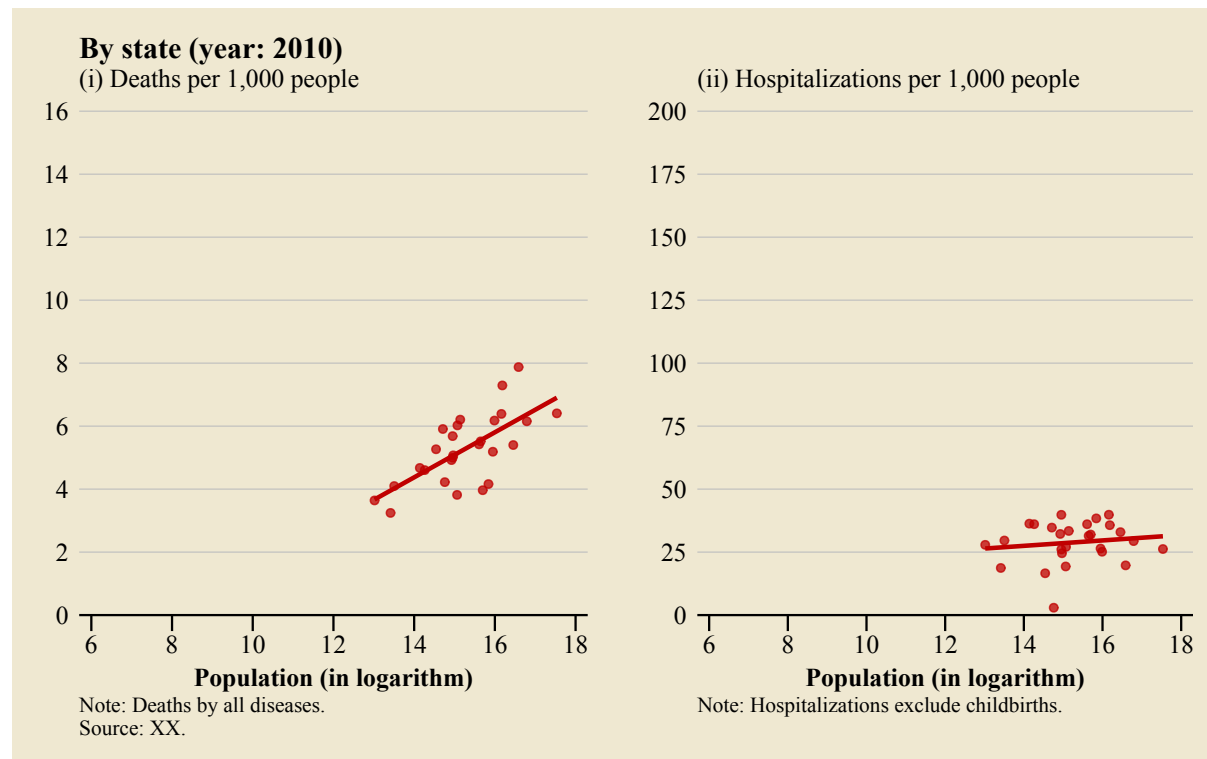
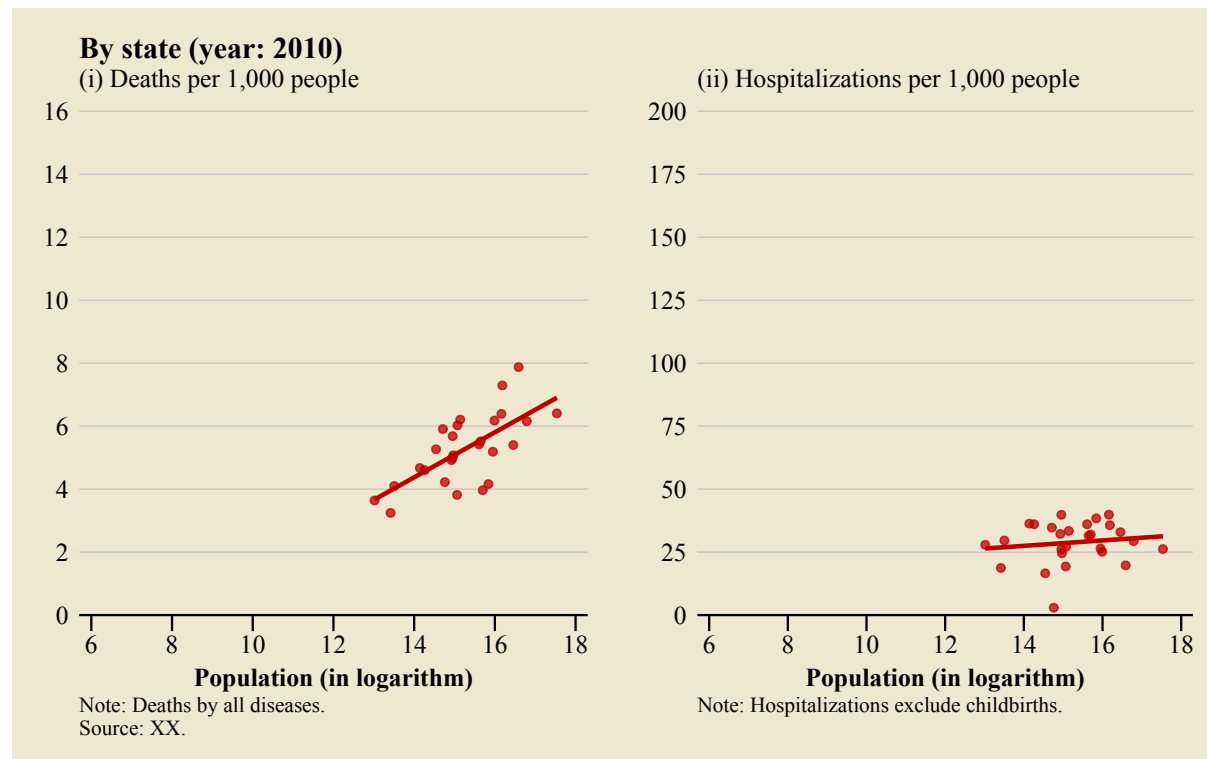


Chart 4:

Next, let us plot deaths and hospitalizations per capita against income by state. Again, the result is absolutely terrible, being almost impossible to make any sense. Removing the outlier does not make a difference.



Comments and suggestions welcome!