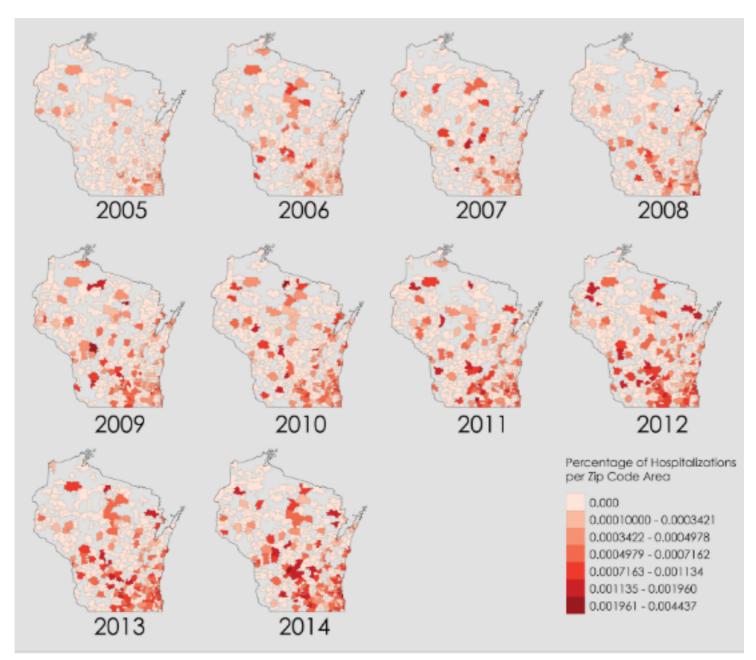
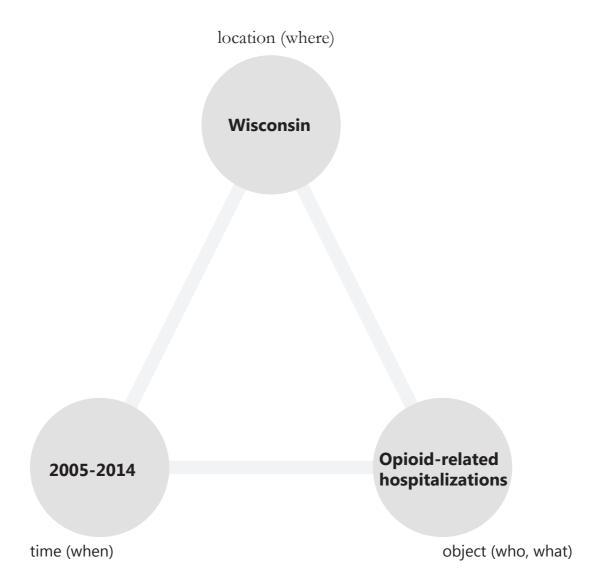
I created this map with Clare Trainor and Jon McHugh for Bill Gartner's Geography 578 class in Spring 2016. If you happen to recognize it, that's because you were at the final presentation. :) We emailed each other while in the same room. #introverts





Our conceptualization of time was **universal time** (year by year, linear). I think this was the most ideal conceptualization of time for these data because the opioid problem is something that we understand linearly. It's growing all the time (hopefully this ceases to be the truth soon!), no matter the season. It's not a cyclical thing as far as I know, and neither ordinal nor time-as-distance would make any sense for these data. Or maybe they would and I'm not thinking of a really cool/creative idea.

It's a static visualization using small multiples or **adjacent representation** as a temporal representation. We also made a GIF from these maps, which has been lost forever it seems. The GIF was a fun thing to experiment with, but it made it more difficult to glean where the hospitalization rates were growing. The static side-by-sides are better.

I like small multiples for this phenomenon because it helps draw attention to the trend over time. It shows the general trend for some elementary map-reading.

Despite the successes, there are some things we could have done better. We were mostly interested in representing the temporal change for this visualization, so it would have made sense to reduce complexity in the hospitalizations attribute by reducing the number of classes. Three or four classes would have been fine. It's hard for people to attend to all our classes and the different time points at the same time. I also think we should have chosen a different color for the background/"no data" areas because it's hard to differentiate between the light colors, which makes it more difficult to see the changes, as some did zip code areas did change from masked/no data to having a few cases. These changes are hard to make out. Lastly (and this isn't really time-based but I still need to say something), our legend is out of control. We should have reported it as X people per 100,000.

I think two of the three elements of the TRIAD are clear, assuming the map reader is familiar with Wisconsin (our audience was). The time element is also clear because each map is labeled with a year. The object (opioid-related hospitalizations) is less clear; our legend only says "percentage of hospitalizations per zip code area". This was part of a larger presentation, so it was assumed that the audience would know what the maps were showing. However, I think we should have made it more clear so this could stand on its own in another context if needed.

It would have been interesting to show this as a **difference map** to highlight the change between two different time states, probably between 2005 and 2014. We'd lose the nuance of exactly how it grew in 2006-2013, but it would show the overall change in a simpler way.