

The above graphic intended audience is people completely unfamiliar with the medical field- I intend it to be used to convey how effective different antibiotics across a variety of ailments. Microsoft Excel was used to create the above graphic.

The dataset contained information on the minimum inhibitory concentration. As it measures how much of an antibiotic is required to prevent bacteria growth- that, and supporting evidence from scientific journals suggested the smaller the value- the more effective the antibiotic is. Given we perceive bigger is better, I inversed the numbers for the purposes of my visualization.

I chose a stacked percent bar graph because of scaling- I don't want people to focus on how much of an antibiotic is needed- rather- how does it compare against other antibiotics for treating the same ailment. Having different sized bar graphs with varying lengths would add more detail- but given a stacked bar graph would be hard to read (going back and forth between the axis label and color start/end), a percentage graph would convey the same effectiveness information without the tedious conversion. If needed, I would add the total mg at the end so people can still convert the percent to numbers if needed.

For color- I simply chose colors with a great deal of contrast from one to the next- to make identifying and keeping track of a given antibiotic easier. I sorted by decreasing MIC for Penicillin, followed by Neomycin, but given they're ratios on the graph and numbers in the data- the visualization doesn't "scale" the way I intended it to.

Data on the amount required to treat an ailment is obscured, my transformation may be misleading or confusing to people in the medical field who know less is better, and interpreting what "inverse MIC" means is hard to impossible without supporting text explaining what it is around it. It also loses information on gram straining- and whether its positive or negative.