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## Considerations for UK Women's Cancer Rates 2007

The initial idea for visualizing the cancer rates data came from the clear trend in the distribution of cancer types among each age category. The core of the visualization stayed the same, I wished to show the movement of the cancers from leukemias and brain cancer to breast, lung, and colorectal cancer. Initially, I started with a draft consisting of figures with heatmaps of cancers plotted on organs with bar charts showing cancer distributions. Although the main ideas stayed the same, feedback became instrumental in shaping now the graphic looks currently. Performing narration testing provided many insights on clarifying the graphic.

Originally, the first draft was a quick mock-up using simple D3.js utilities on a webpage. The first thing noticed was the odd medium to display the visualization. Most people noticed that the size of type, while okay on a webpage, would be too small for actual print. This encouraged me to think about how the visualization would look on paper and influence the font sizing while developing the webpage in future iterations. I have encouraged the use of a consistent type weightings and sizes for readability.



The issue of color was also brought up. The first draft used many bright vibrant hues to color each discrete cancer type in the three bar charts which did not correlate to the color of the organs. This added too much confusion and an extra dimension of freedom that was unnecessary. This caused me to rethink how to use colors effectively. In the end, no color was actually used for the distributions, and only a single hue of red was used to color the organs.

Lines were also an important consideration in both the figures and charts. The figure originally had a one pixel stroke width, causing upset in reader's eyes when compared with the heavy weights of the bar graph and other type on the page. Grid lines were also added to the bar charts to ease comparisons; but in this case the lines were unnecessarily bold and interfered with the audience from quickly interpreting the chart. This caused me to reconsider all weights of non-text elements and adjust them according to their surroundings.