Visualizing and Exploring Interview Transcripts
Applications for Qualitative Researchers

Problem
Our goal was to create a visualization tool that could be used for data exploration by a group of qualitative researchers. We wanted to create web applications that provide a way to visualize the entire corpus of interviews and also drill down into the existing interview codes. We worked with researchers who were studying body image and weight stigma but our framework could be used to visualize other coded interview transcripts.

Motivation
There are currently limited tools for creating and sharing interactive visualizations for results of qualitative research. Most of the existing Computer-assisted qualitative data analysis software (CAQDAS) have a high learning curve and high cost to use. Text visualizations are challenging and some visualizations, like word trees fail to keep the data in context.

Approach
We created two different ways of exploring the codes within the interview corpus.

Interview Timeline
In order to allow the researcher to get a view of the entire interview at once this application uses a bar chart to visualize the timeline of the interview. Each bar represents a response from the respondent and the height of the bar represents the word count of the response. Looking at the chart the researcher is able to see where the respondent had more to say about a given prompt. Clicking on a code highlights the sections of the interview that correspond to that code. A brush tool allows you to view the interview transcript below the chart and highlights the parts of the interview that correspond to the selected code.

Code Distribution
During data analysis, the interviewer reviews and codes the data. This application enables the interviewer to view both the codes and related quotes from all the interviews. A bar chart shows the distribution of the codes amongst the interview files. Having access to a complete picture of the coded data, the interviewer is better equipped to prepare reports via discussing similarities and differences in related codes across distinct contexts or comparing the relationship between two or more codes.

Results
We have developed two prototypes that allow the user to explore the interview corpus. The underlying interview data was provided to us in rich text format and the codes and quote data was in XML. Our applications are built using D3.js. MySQL and Python were also used for data processing.

Future Work
We would like to evaluate the effectiveness of our prototype for visualizing interviews compared to some of the industry tools which allow users to tag the text with codes. Additional work is also needed to see how researchers collaborate while exploring interview data and how this could be included in the visualizations.