INTRODUCTION
The media has a great influence on shaping public opinion. While it is important to be informed on major issues such as COVID-19, there are cases where dissemination of misinformation can lead to potential harm to the general public. Differences in perception of the virus and the vaccine has vastly affected adherence to healthy safety protocols and vaccination efforts. Public opinion of the pandemic has many ethical issues involving ethics of media coverage, data transparency, and the effects on vaccine perception. The exploration answers the question of “how can we be transparent and compelling with health data?”

Because it is a global pandemic, the stakes are high, and although it is essential to share accurate information, the data is often private and unable to be verified. How can we attempt to fix this issue and combine it with media strategy to best combat the virus and provide people with correct, rather than biased, information.

MOTIVATION & OBJECTIVE
We hope to achieve a better understanding of the dissemination of information about COVID-19, which includes the societal challenge of how people perceive the vaccination. Analyzing related data will help illuminate the effects of the media in general and, more specifically, the healthcare field. This will not only help us understand how COVID-19 was handled, but also help us prepare and adapt media strategies for the future.

MATERIALS & METHODS
To best leverage the data we have, we will first perform a text analysis on the Twitter data to determine the sentiments of the Tweets, specifically pro-vax or anti-vax. We can then correlate this data with information on political parties and geographic affiliation because some Tweets include their location data. Then, we will use historical data to see which media outlets different demographics are more inclined to, and then use that to assess vaccination rate. A predictive model may be developed in order to leverage different types of data collected that reflect the local trajectory of COVID-19. For example, the model might represent case rates, virus rate predictions, and vaccination rates or disparities in different local areas. We would also like to examine how people’s ideas were framed by media discourse, and how such has correlated with spread of virus and vaccination success.

DATA SOURCES
COVID Data of St. Joseph County & Tweets Associated with COVID-19

PREDICTIVE RESULTS
The final deliverable will be an assessment of how the media has portrayed the virus and how this portrayal has affected public opinion. It will hopefully include recommendations, if necessary, for how the media could be better and more conscientious of how it shapes general understanding of health crises.