

Introduction

This study examines hospitals' efforts in combating COVID-19 in the U.S. to determine the dominant frames used in traditional media and on Twitter. The results will help create effective health communication strategies to positively influence peoples' behaviors and mitigate the number of infections.

Theoretical Framework

- **Media framing:** Selection of certain aspects of perceived reality to make them more salient in a communicating text to promote a particular problem or interpretation.
- **Framing effects:** Mainstream news media and health organizations can emphasize certain aspects of an issue to convey messages more effectively.
- **Strategic framing:** Constructed for organizations to obtain specific goals, these frames work under the assumption that the broader goal involves creating value for stakeholders.

Frames

- **Generic Frames:** Conflict, human interest, economic consequence, morality, and attribution of responsibility.
- **Health Communication Frames:** Ethnicization, politicization, fear, hope, and call to action.

Methods

- Quantitative content analysis to analyze news and Twitter data.
- **Twitter:** BrandWatch; sample of **1664** COVID-related tweets analyzed from leading hospitals' main Twitter accounts.
- **News media:** Factiva; sample of **842** COVID-related news articles, collected from: New York Times, CNN, Washington Post, CNBC, LA Times, Chicago Tribune, WSJ, USA Today, Newsweek, NBC news, CBS News, ABC News, PBS, Boston Globe, and Boston Herald
- Codebooks were developed to examine each tweet and article's content, relevance to COVID-19, topic, tone and framing.

Top hospitals selected:

- | | |
|---|------------------------------------|
| 1. Brigham and Women's Hospital | 5. Cleveland Clinic |
| 2. Boston Medical Center | 6. Mayo Clinic |
| 3. Tufts Medical Center | 7. The Johns Hopkins Hospital |
| 4. Beth Israel Deaconess Medical Center | 8. University of Michigan Hospital |
| | 9. UCSF Health |

Key Findings

RQ1: How do **news media** frame U.S. leading hospitals' Covid-related efforts?

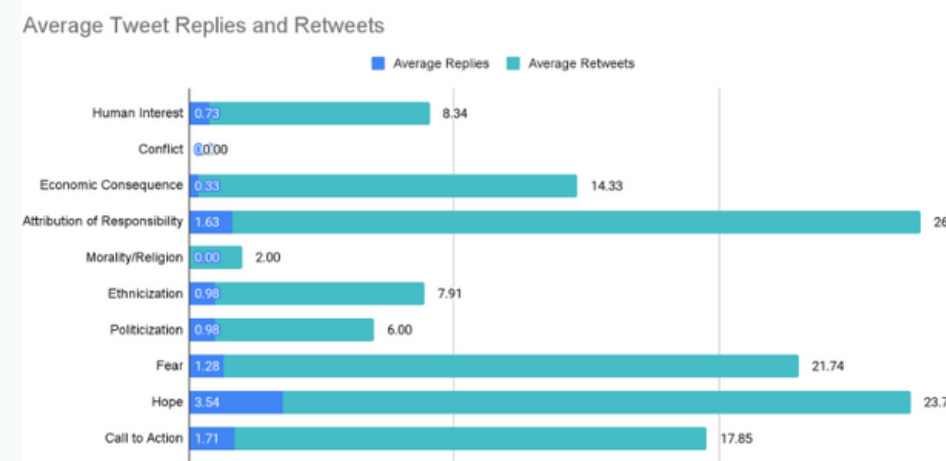
Results: Politicization **16.86%**, Human Interest **11.4%**, Attribution of responsibility **9.74%**.

RQ2: How do different leading hospitals frame their own Covid-related efforts on **Twitter**?

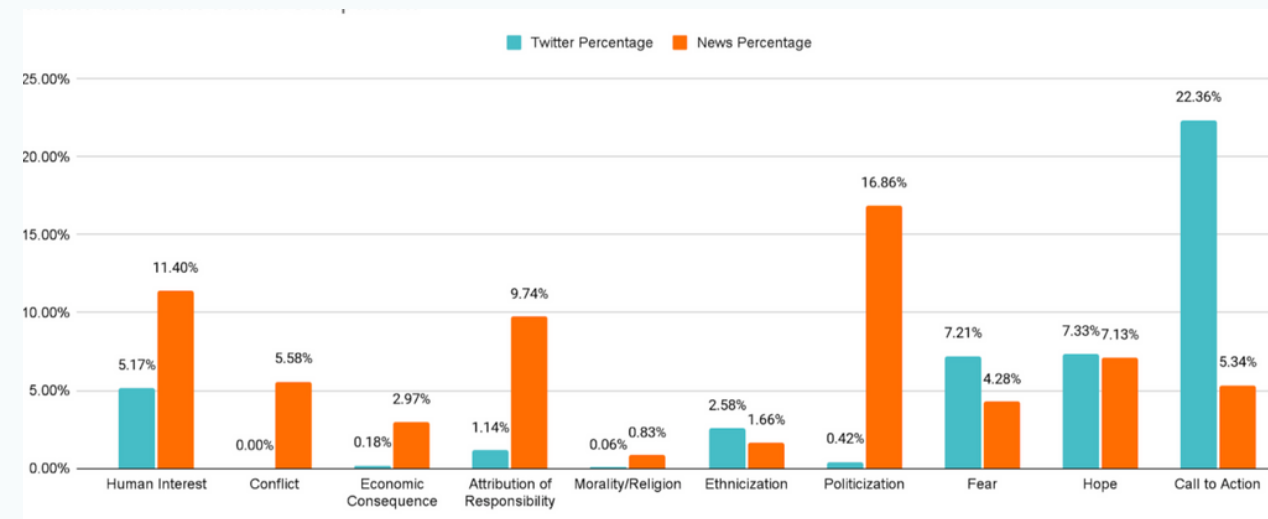
Results: Call to action **22.36%**, Hope **7.33%**, Fear **7.21%**.

Only **11% of tweets** from hospital accounts contain a **dominant generic frame**.

RQ3: How does the use of frames on Twitter correlate with engagement on **Twitter**?



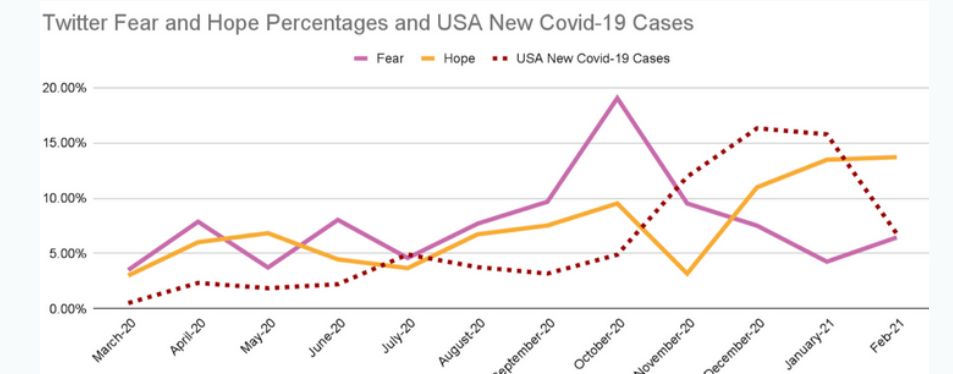
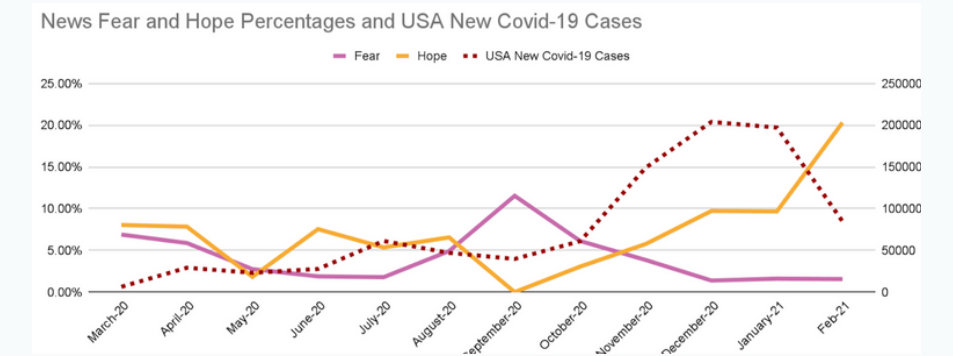
RQ4: How do the frames emphasized on **news media** and **Twitter** differ?



The relationship between content type and use of human interest frame was significant $\chi^2(1, N=2506)=32.25, p<0.05$. News articles (11.4%) were more likely to use human interest frames than Tweets (5.2%). *The Chi-Square test was only run for valid samples.

Key Findings

H1: There will be more news articles and tweets that use **fear** framing at the beginning of the pandemic, and a shift to the use of **hope** frames near the end of the pandemic.



H1 is partially supported by the data. As seen in the chart for Twitter and News articles' use of hope and fear frames from March 2020 to February 2021, there is not a significant difference in the frequency of hope and fear frame at the beginning of the pandemic. However, there is an increase in the use of fear frames during September-October 2020 in both News and Tweets. There is also a simultaneous increase in hope frames and a decrease in Fear frames nearing the end of the pandemic from January to February 2021.

Discussion

- To increase **news media** attention, hospitals should use more **human interest** and **attribution of responsibility** frame and include **government**, **vaccines**, and **virus information** as topics. Hospitals should follow **current events** to determine the appropriate frame to use. **Politicization** may not be appropriate.
- Hospitals should use the **hope** frame on **Twitter** to receive more audience engagement.

