

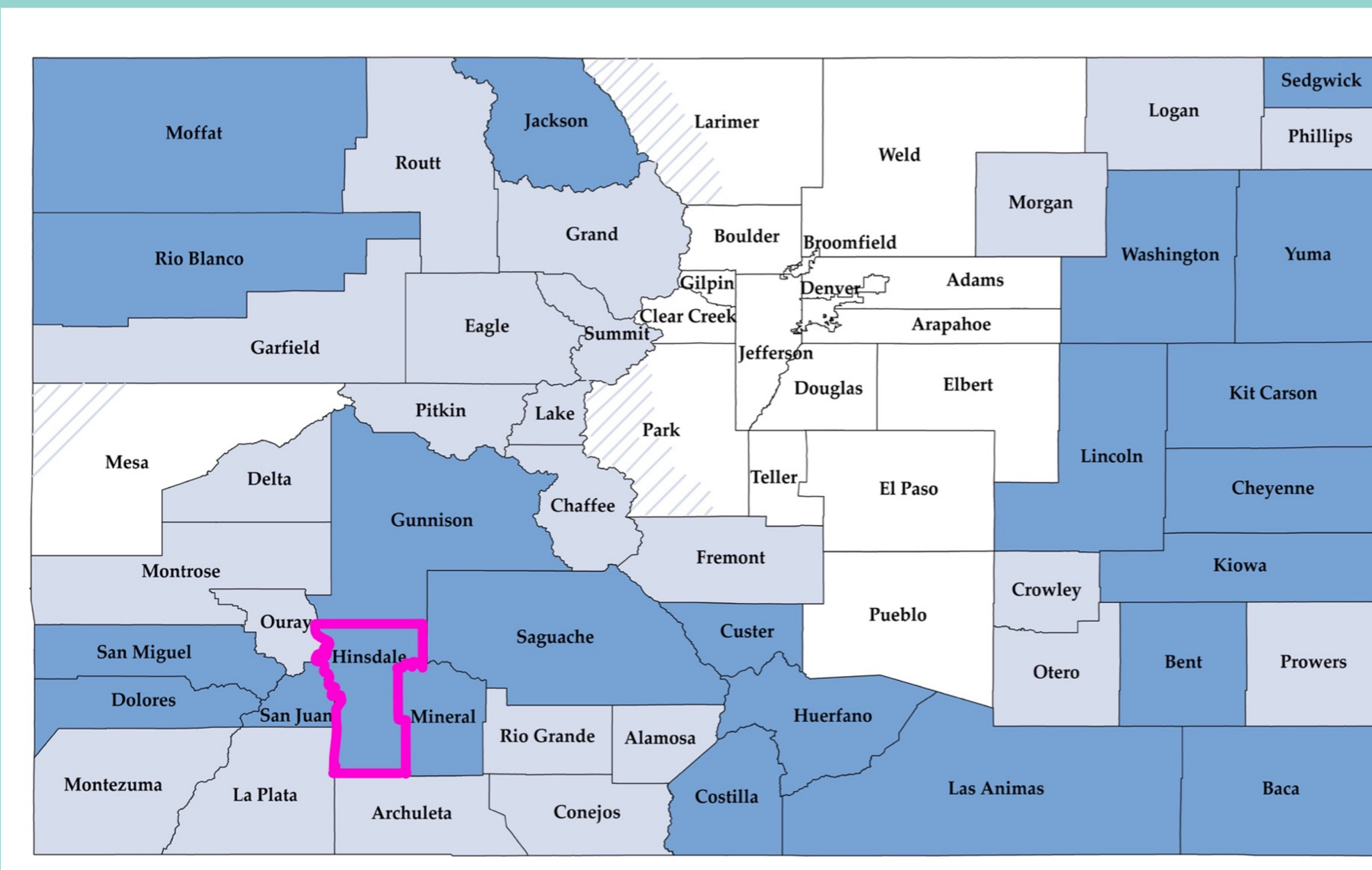
The Response of Hinsdale County, Colorado to the COVID-19 Pandemic: A Qualitative Case Study

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Introduction

- It has been well documented that urban solutions to public health issues have not been easily translated to rural areas, and thus often lose their effectiveness in such settings¹
- With the progression of the COVID-19 pandemic, there is an increased need to understand how rural areas combatted the pandemic.**
- The purpose of this study was to examine rural areas directly, and to highlight strategies and challenges that came about in response to the pandemic.



Background

Hinsdale County, CO

- Location: SW Colorado
- Population: 781 residents^{2,3}
- Town seat: Lake City
- Considered to be one of the most remote locations in the contiguous lower 48 states³**
 - Remote in both location & population density
 - Closest hospital is over 1 hour away in nearby city of Gunnison, CO
 - Access is via CO-149, a winding one lane highway
- Unique aspects:**
 - Lake City has 400 year-round residents, but the population increases to more than 2,500 with summer tourism⁴
 - Wanted to know how they contended with the expanding population in the summer months, especially in the context of a global pandemic

Methods

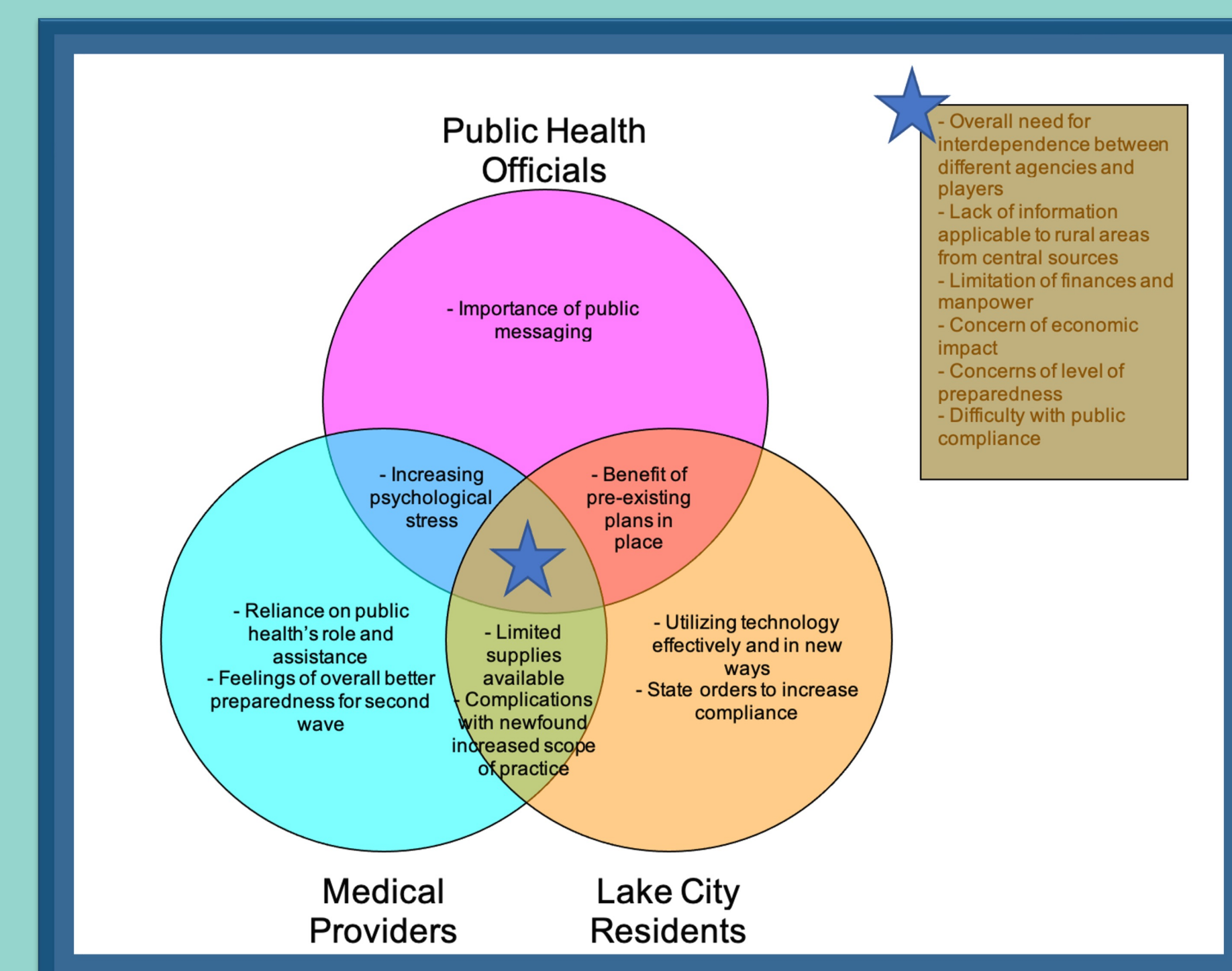
Single qualitative case study

- Various community members were interviewed, and their responses were then examined in a qualitative manner using Framework Analysis**

- Study timeframe - January 1, 2020 to July 31, 2020
- Data collection - Interviews were conducted with a standardized list of questions & participant comments were simultaneously transcribed
- Participants - Individuals seen as the major stakeholders in the community who were directly involved in the COVID-19 response & planning

7 total interviewees

- Director of Lake City Area Medical Center
- Director of Hinsdale County Emergency Medical Services
- Director of Silver Thread Public Health District
- Hinsdale County Public Information Officer/County Administrator
- Hinsdale County School District Superintendent/Principal
- Hinsdale County Emergency Manager
- Chair of the Lake City Board of Health
- Data analysis - framework analysis
 - Thematic based approach that is comprised of 5 steps, with the goal of creating a cohesive picture of the data^{5,6}**
 - Identified a thematic framework for the interviews and compiled a table to highlight common underlying themes between the interviews



Results

4 key themes:

Theme	Summary	Frequency*
Importance of Partnerships	In nearly every interview, each participant brought up the importance of having partnerships between different agencies. Specifically, the biggest highlights were the connections between the medical center with EMS, the medical center with STPHD, and participation in weekly collaborative phone calls with various agencies within and outside of the county.	6/7
Limited Resources	Numerous participants discussed the dire need for resources in rural areas. Similarly to urban areas, there was a significant concern for PPE, however the geographic isolation of the county led to increased strain and stress with acquiring PPE. A specific challenge for the county EMS was the lack of qualified providers. The EMS crew had enough to staff their vehicles, but if one or two members were exposed to or positive for COVID-19 there would not be anyone available to replace them.	6/7
Impact on the Town	Each participant brought up this topic as Lake City is a tourist destination. As explained in the background, Lake City is home to 400 year-round residents, but that number can increase to the thousands in the summer. As such, there was significant concern about how tourism, or rather the lack thereof, would impact the town's finances. Additional concerns stemmed from the possibility of visitors bringing the virus with them and exacerbating the spread of illness within the community.	7/7
Lack of Information Applicable to Rural Areas	Participants from nearly all disciplines made note of the difficulty with getting applicable and accurate information. While this is likely a difficulty encountered across the nation, there was a lack of information specifically tailored to rural areas. In turn, this put the onus of adapting and adjusting the information on the local public health department. Additionally, the time spent sifting through the mountains of data coming from different sources became extremely time consuming. A common theme, especially among those in public health disciplines, was the need for better direct communication from public health offices at the state level to local public health offices.	6/7

*Frequency = the number of participants (out of 7 total participants) that mentioned the theme

Additional common themes identified:

- Learning from nearby counties
- Benefits of pre-existing plans
- Impact on tourism & impact on the economy
- Innovations
- Increased scope of practice
- Political undertones
- Concerns about psychological stress
- Utilization of technology
- Difficulty with public adherence

Discussion & Conclusions

The motivation behind this study was to better understand how rural communities, and Hinsdale County, Colorado in specific, responded to the COVID-19 pandemic.

- Various community stakeholders identified unique strategies, solutions, and interventions that were utilized, in addition to barriers faced.
- Our multiple interviewees also demonstrated the resilience and ingenuity of rural communities

Overall, this study demonstrated the importance of rural communities creating an interlinked network between their public health, medical, and civilian agencies in preparation for public health emergencies.

While this case study was completed in the context of a rural county, many of the lessons learned can be applied to urban counties as well.

Acknowledgements

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