

## COVID-19 Death Rate Comparison within Hospitals in the Tri-State Area

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### Published In/Presented At

Vaughan, E., Weaver, D., & Miller, K. (2023, July 28). *COVID-19 Death Rate Comparison within Hospitals in the Tri-State Area*. Poster presented at Research Scholars, Lehigh Valley Health Network, Center Valley, PA.

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# COVID-19 Death Rate Comparison within Hospitals in the Tri-State Area

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## Introduction

- Vizient is a **clinical database** used amongst the nations hospitals in order to perform benchmarking to improve patient outcomes
- The **report builder** within the clinical database allows us to generate graphs that shows how Lehigh Valley Health Network's (LVHN) outcomes compare to other hospitals across the nation
- Vizient stratifies hospitals based off size and creates certain cohorts to accurately compare hospitals
- The **objective** of this data review is to determine how LVHN compares to other hospitals in COVID-19 ventilator outcomes

## Methods

### Report Builder

- Stratified hospitals into cohorts provided by Vizient
- Cedar Crest – comprehensive academic medical center
- Muhlenberg and Pocono – Complex Care Medical Center
- Hazelton – Community Hospitals

### Visualizing Data

- The information from report builder was put into excel datasheets
- Ramp graphs were created to visualize the data collected

### Data Analysis

- Hospital death rates in the tri-state area were compared

## Results

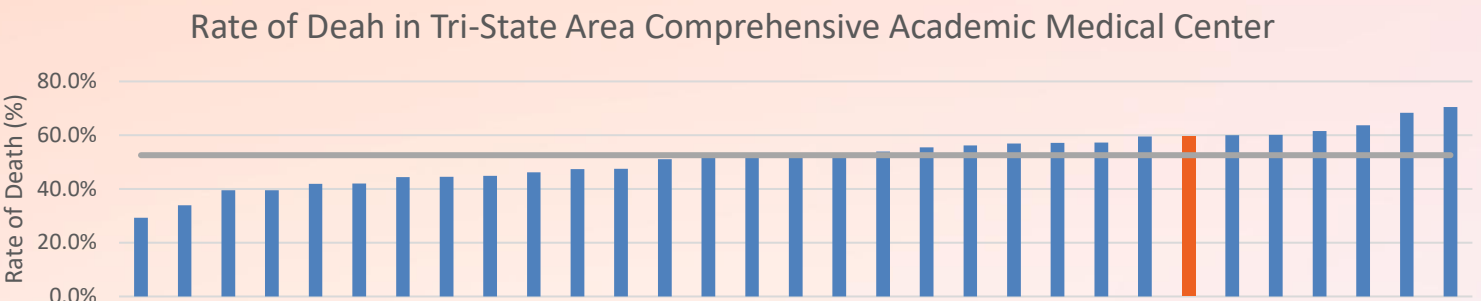


Figure 1. Ramp Graph of LVHN Cedar Crest Campus

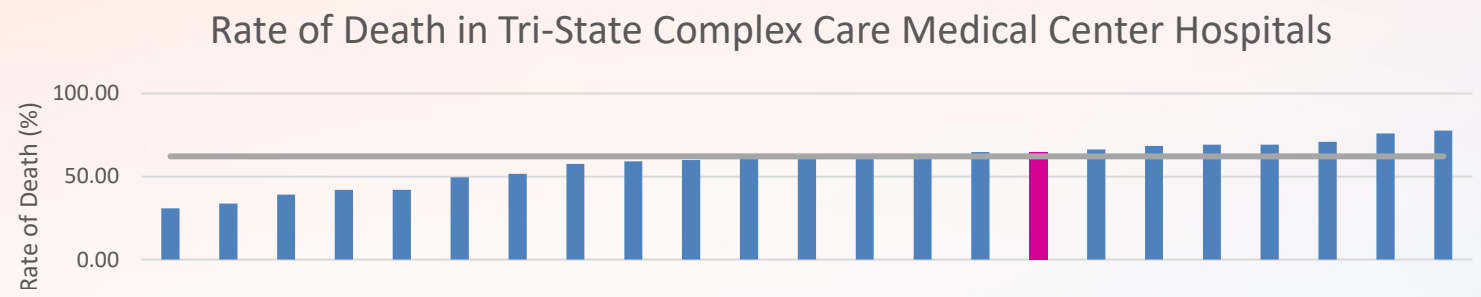


Figure 2. Ramp Graph of LVHN Pocono Campus

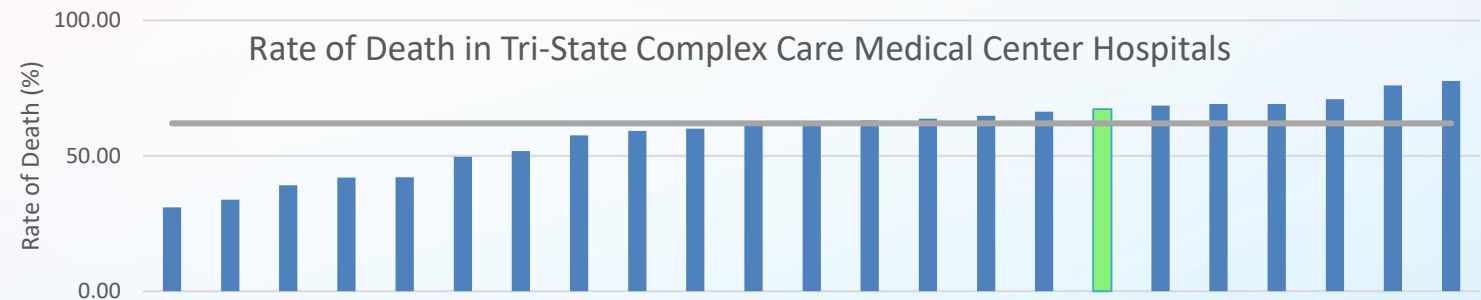


Figure 3. Ramp Graph of LVHN Muhlenberg Campus

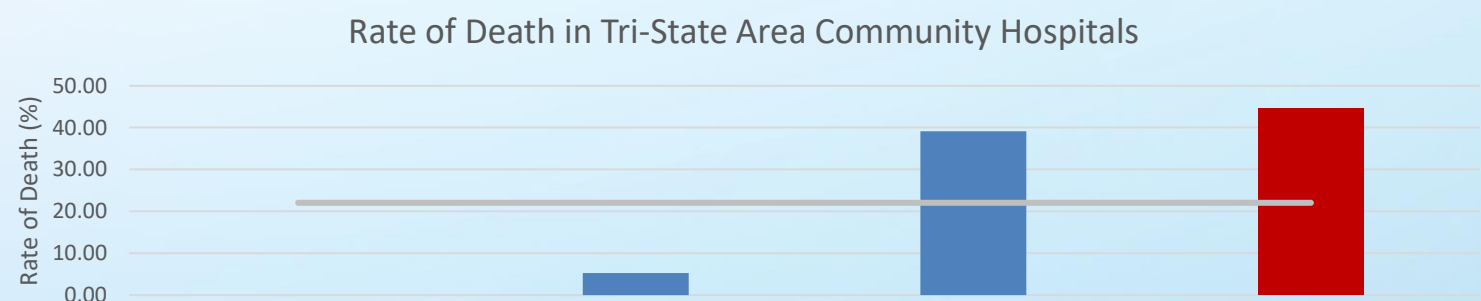


Figure 4. Ramp Graph of LVHN Hazelton Campus

## Conclusions

- Death Rate of Mechanically Ventilated Patients
  - LVHN hospitals consistently have death rates higher than the median death rate
- Comprehensive Academic Medical Centers
  - LVHN Cedar Crest Campus has higher death rate than hospitals such as: University of Pennsylvania, Johns Hopkins, and New York University
- Complex Care Medical Center
  - LVHN Pocono (65.0%) has a lower death rate than LVHN Muhlenberg (67.2%)
- Community Hospitals
  - LVHN Hazelton has the highest death right out of the four community hospitals

## Future Direction

- Collaborate with other hospitals of similar size to improve patient care at LVHN

## Acknowledgements

- Dr. Matthew McCambridge and Michele Hartzel for the help and knowledge they provided through the Vizient data collection process