

# Regional Differences in Bacterial Pneumonia Hospitalizations Caused by Methicillin Resistant Staphylococcus Aureus in 2016 and 2017

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### INTRODUCTION

 MRSA pneumonia infections were previously associated with hospital or ventilator acquired pneumonia, but have increased in prevalence of community acquired pneumonia. MRSA causes severe symptoms with increased rates of mortality and morbidity.

**OBJECTIVES** 

differences of hospitalizations of

Methicillin Resistant Staphylococcus

Aureus (MRSA) between 2016 and

bacterial pneumonia caused by

To examine the regional

Figure 1: Percent of Hospital Discharges by Region in 2016

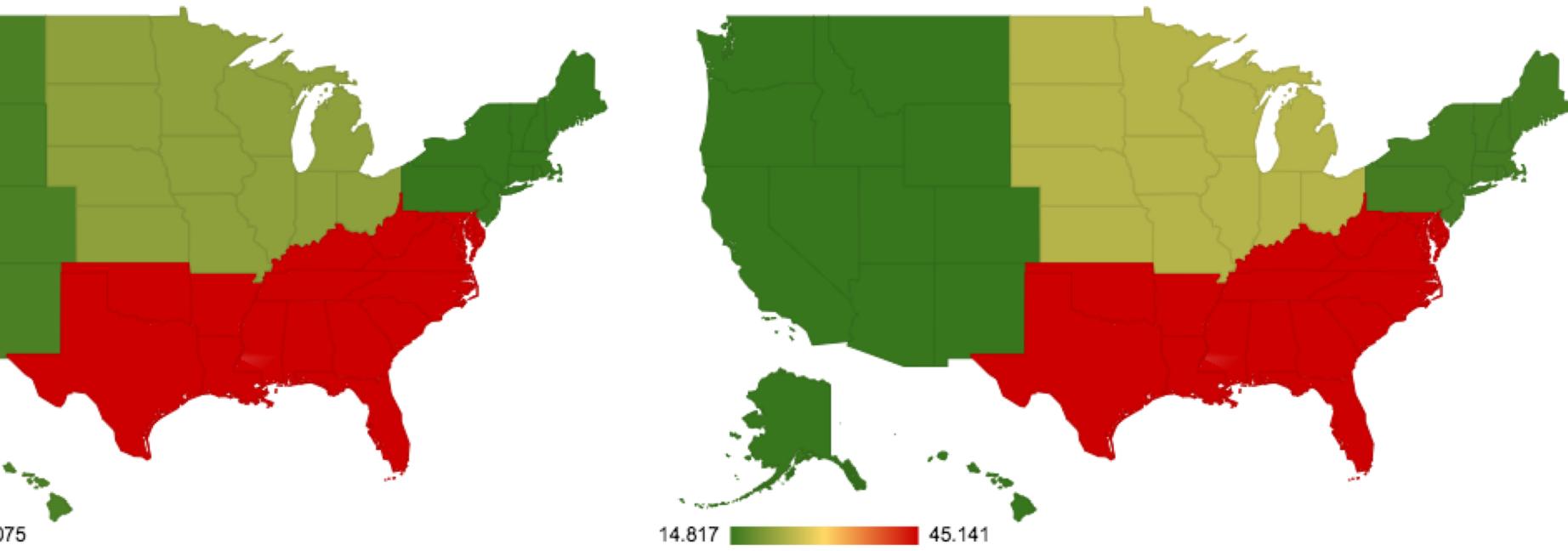


Figure 2: Percent of Hospital Discharges by Region in 2017

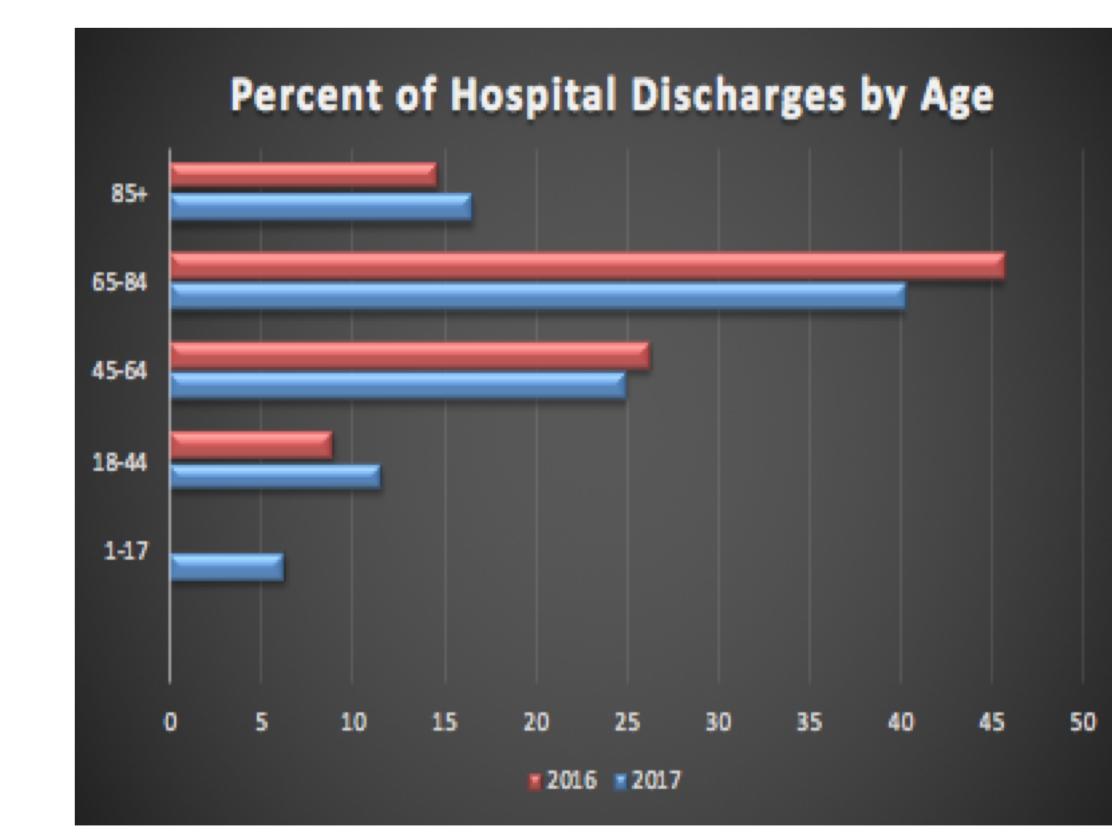


Figure 4: Percent of Hospital Discharges by Age in 2016 &



- Data from the Healthcare Cost and Utilization Project (HCUP) State Inpatient Database from 2016 and 2017
- ICD-10 code J15.212, was used to identify patients with Pneumonia due to MRSA.
- Rates of hospitalizations were examined in relation to patient characteristics and region.

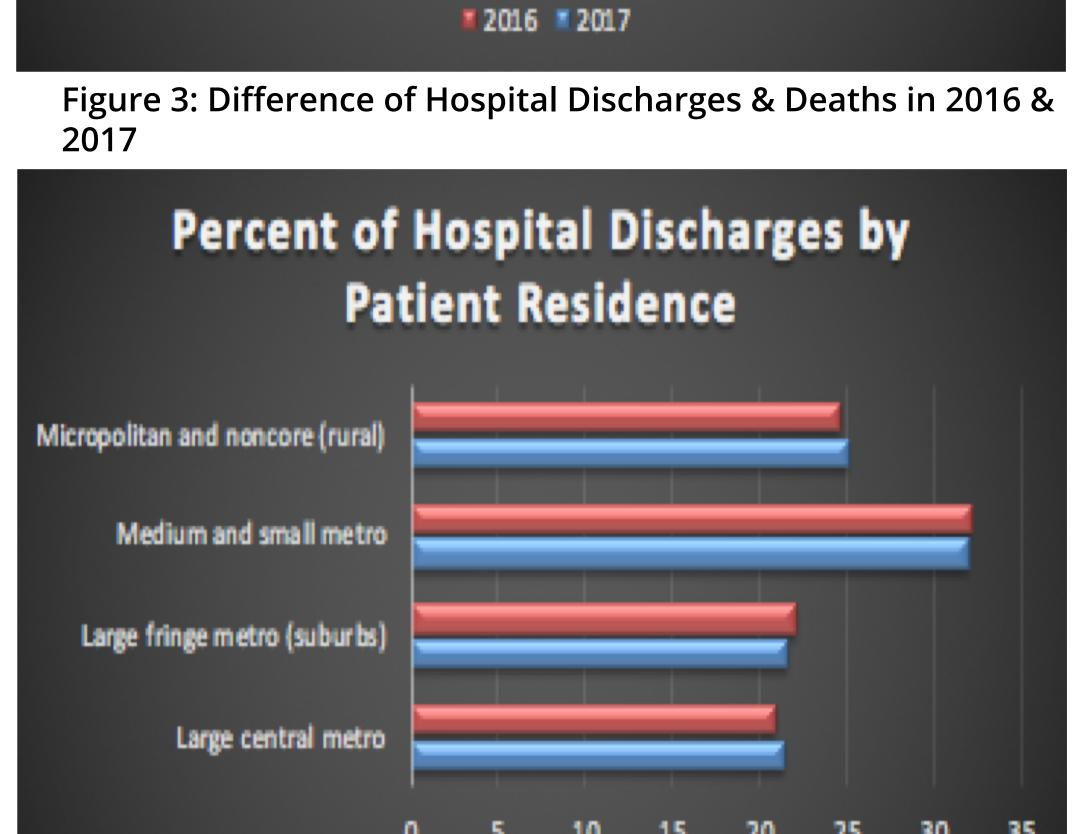


Figure 5: Percent of Hospital Discharges by Patient Residence in 2016 &

**2016** 2017

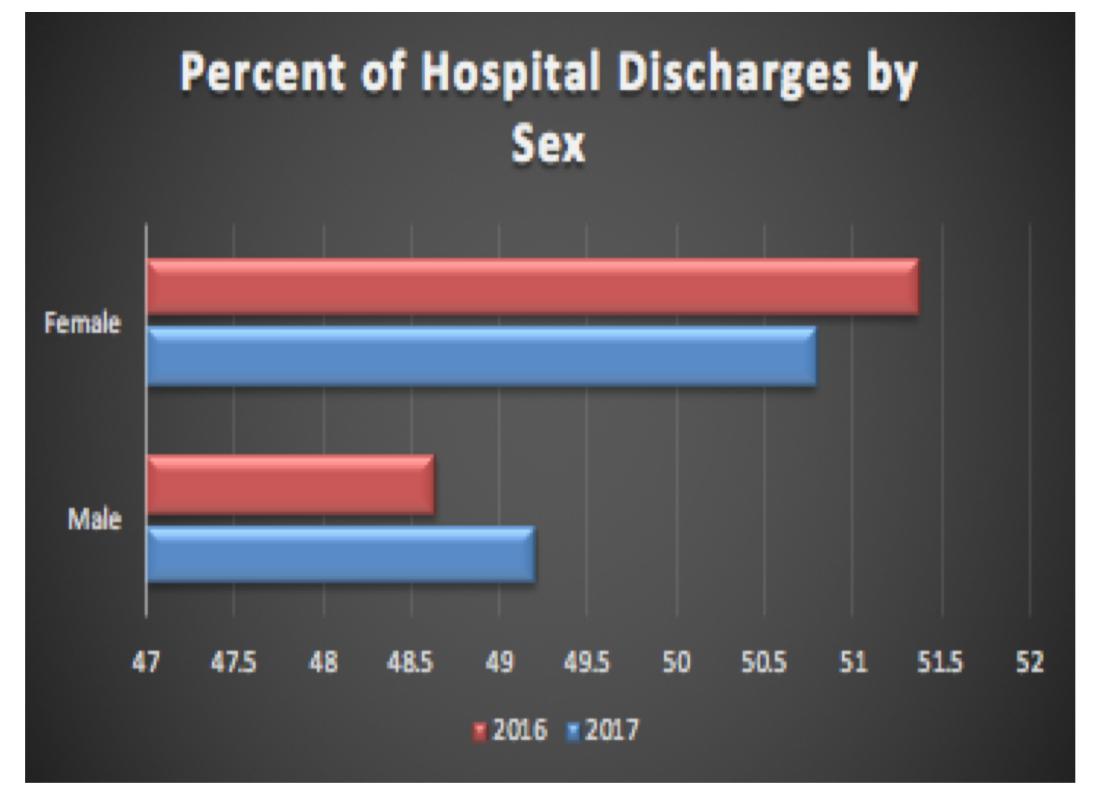


Figure 5: Percent of Hospital Discharges by Sex in 2016 & 2017

## **RESULTS**

- The number of hospitalizations of bacterial pneumonia caused by MRSA in 2016:
- o 10,855
- 5.1% death rate
- The number of hospitalizations of bacterial pneumonia caused by MRSA in 2017:
- o **7,255**
- 5.7% death rate
- The South had the highest rates of MRSA bacterial pneumonia with 47.1% in 2016 and 45.1% in 2017.
- The West had the highest inhospital death rate from MRSA bacterial pneumonia with 7.4% in 2017 and the Northeast in 2016 with 7.1%.

### CONCLUSIONS

- The number of hospitalizations of bacterial pneumonia caused by MRSA decreased between 2016 and 2017
- Death rates have increased between 2016 and 2017
- Further evaluation with recent years is needed to determine this trend

