

A Retrospective Study on the Geographic Trends of Eosinophilic Esophagitis (EOE) in the United States

Fadi Totah, D.O., Scott Kubomoto M.D., Carol Monis, M.D., Mahesh Botejue, M.D., Eric Choi, M.D.

HCA Healthcare; Riverside Community Hospital in affiliation with University of California, Riverside



Results

Introduction

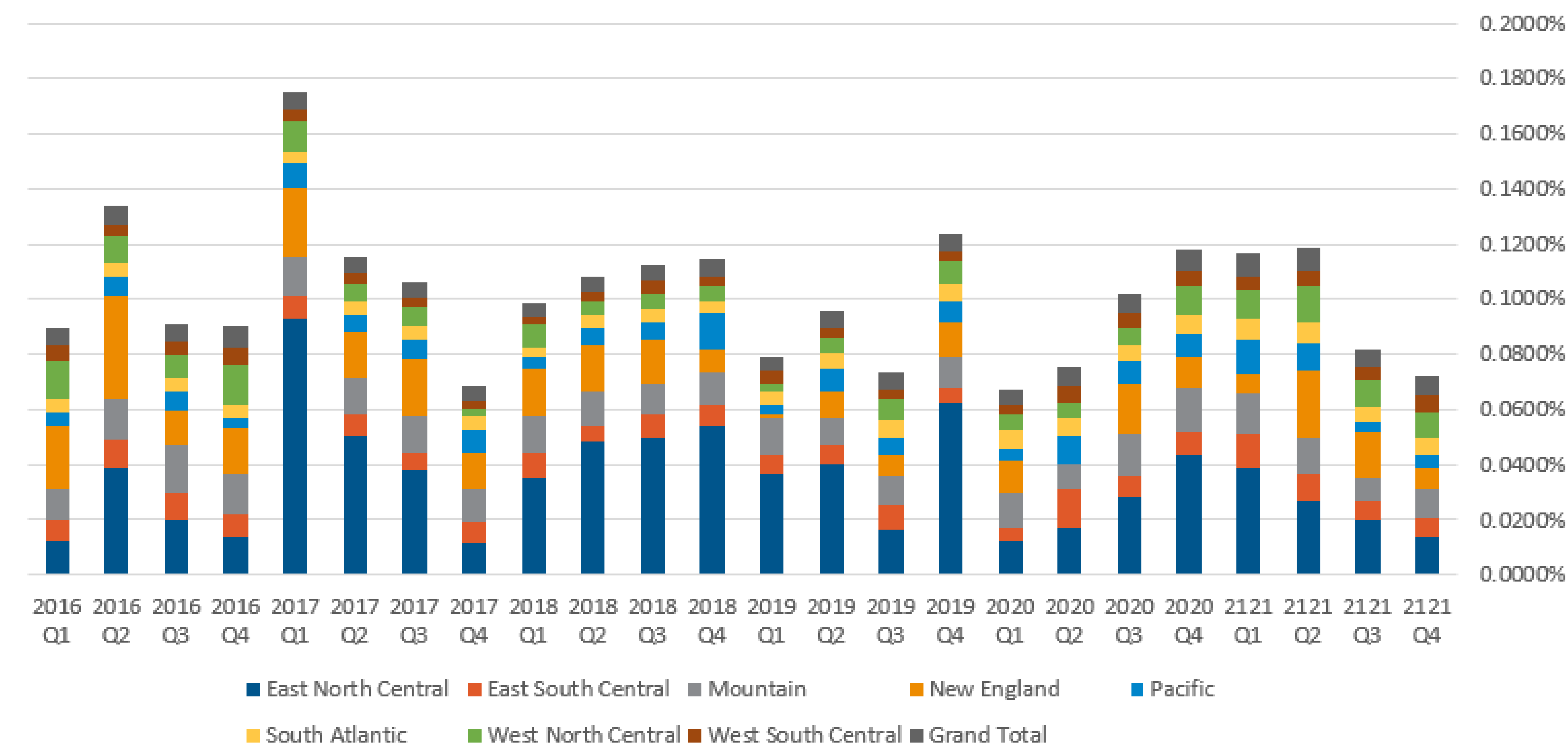
- Up until a couple of decades ago, eosinophilic esophagitis in adults (EoE) was considered uncommon, but its incidence has increased dramatically in recent decades.
- In this retrospective study, we compare the number of cases of EoE across various regions in the United States and aim to identify regional trends.

Methods

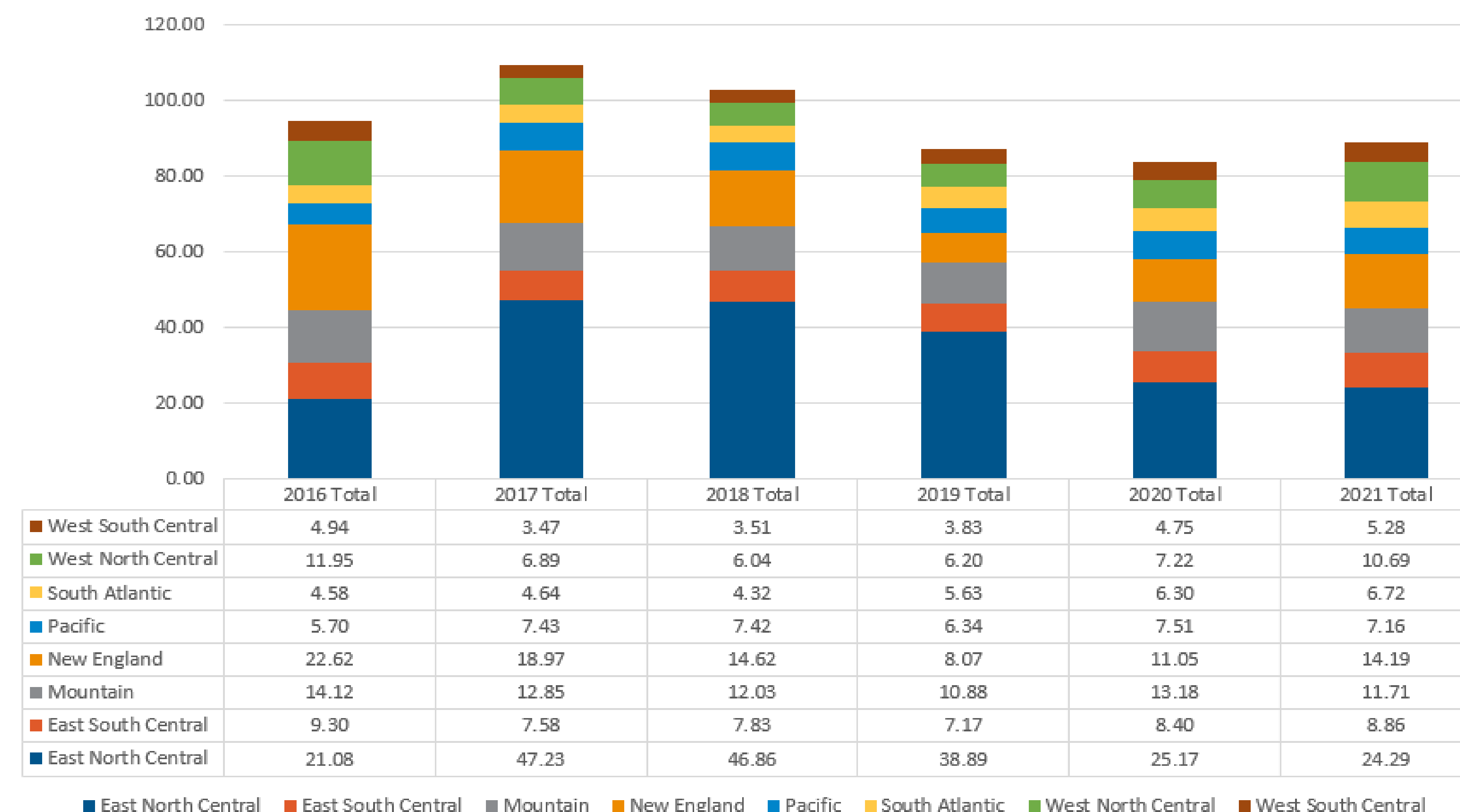
- We performed a retrospective cross-sectional study of adults presenting to the ED and/or admitted to the hospital with eosinophilic esophagitis from 2016 through 2021 at 185 HCA hospitals across the United States.
- A total of 5,283 unique patients were included in the study. The inclusion criteria were all patients ages 18 years and older with a diagnosis of eosinophilic esophagitis.
- Patients with visit problems suggestive of other known cause of dysphagia such esophageal cancer, candida esophagitis, immunocompromised, were excluded.

This research was supported (in whole or in part) by HCA Healthcare and/or an HCA Healthcare affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA Healthcare or any of its affiliated entities.

Prevalance of EOE Admissions by Quarter & Region



EOE Encounters per 100,000 Patients by Year & Region



- The mean age of patients was 46 years. 17.8% of EOE encounters involved food impaction, and 14.9% of patients had a diagnosis of asthma.
- Our data revealed a statistically significant difference in EoE encounters based on year. There was an increase in the percent of patients seen for EOE each year from 2016-2021 (p=0.025).
- East North Central (ENC) region had the greatest number of EoE cases per 100,000 patients for each given year. ENC, had a dramatic increase in encounters from 2016 (21.08/100,000 patients) to reaching its peak in 2017 (47.23/100,000 patients).
- The West South-Central region had the least amount of EoE encounters for each given year.
- There was no statistically significant seasonal difference in encounter frequency.

Conclusion

- The geographical data of EoE cases, reveal an overwhelming rate of EoE cases in the East North Central region of the United States.
- Our study demonstrated significant regional variations within the United States for hospitalizations and ED visits for EoE patients.
- Given the association of EoE and allergic diseases, further investigation could include comparing our findings with regional rates of encounters for asthma and allergies.

