Looking through a Health Equity Lens to Improve Stroke Care

Amy Markham, MSN, RN, SCRN, Quality Coordinator, Augusta Health
Adam Schwartz, Database Analyst, Augusta Care Partners

BACKGROUND

Augusta Health is a 255-bed non-profit community hospital located in Fishersville, Virginia that served over 63,000 Emergency visits and 10,341 admissions in 2023. Augusta Health is a DNV Primary Stroke Certified facility and serves approximately 500 stroke patients annually. Statistics show stroke is the 5th leading cause of death and the leading cause of disability in the United States. Every minute that passes by when someone is having a stroke, 1.9 million brain cells are being lost. Recognition of stroke signs and symptoms and calling 911 is the key to minimizing long-term effects of a stroke and death. To receive evidence-based care and decrease the chance of disability or death, patients need to arrive timely for treatment, within 4.5 hours.

OBJECTIVES

- To understand Health Equity variables that impact patient arrival within 4.5 hours of onset of stroke signs & symptoms.
- Apply a standardized set of Health Equity variables demonstrating support of CMS Health Equity Strategic Plan and the Virginia Statewide Stroke initiatives.
- Recommend strategies for improvement to support timely arrival for patients with stroke signs & symptoms.
- Develop a framework for other programs to understand how health equity may impact patient care outcomes.

METHODS

Data variables including age, race, mini-market, area deprivation index (ADI), last primary care provider access were applied to a Get with the Guidelines Stroke registry data set from January 2022 - November 2023. Addresses from the Stroke data set were joined with the Area Deprivation Index at the census block group within our service area.

RESULTS

Stroke population is impacted by ADI scores ranging from 6-10. The main mini market that patients are arriving in greater than 4.5 hours is Southern Augusta.

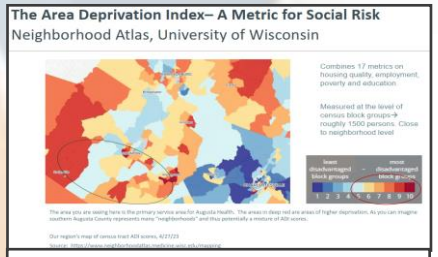

Figure 1: A rea Deprivation Index for Augusta Health's primary service area

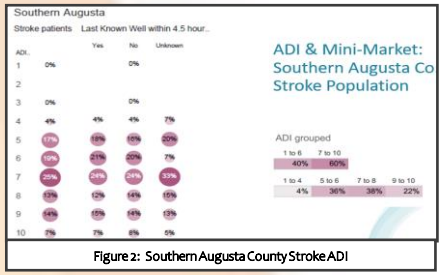

Figure 2: Southern Augusta County Stroke ADI

60% of 50–64-year-old stroke patients are not arriving within 4.5 hours to be treated. Over half of the stroke patients had not seen a primary care provider in the last 12 months.

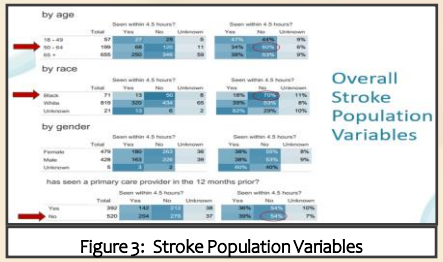

Figure 3: Stroke Population Variables

Southern Augusta is not as well covered by the mobile clinic and access primary care.

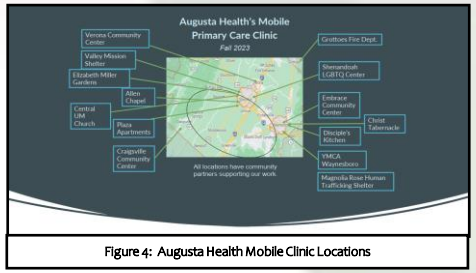

Figure 4: Augusta Health Mobile Clinic Locations

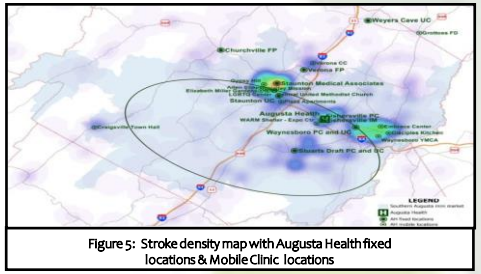

Figure 5: Stroke density map with Augusta Health fixed locations & Mobile Clinic locations

There is a large area of manufacturing & distribution centers in the Southern Augusta area & two large truck stops in Augusta County along Interstate 81.

Figure 6: Map showing the number of large corporations within Augusta Health Service Area. Top 3 Industries within Augusta County and the number employed in the 50-64 age group.

CONCLUSION

Overall, the data and analysis shed some light on potential opportunities to increase primary care access, increase marketing, and expand community and occupational outreach within our service area.

The information garnered will be shared with the Population Health, Marketing, and Senior Team for consideration of future strategic planning.

The application of standardized health equity variables are available to model across other clinical populations within the hospital to understand how health equity may impact patient care outcomes.

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- "Mini Market" and "Service Area" refer to geographies defined by Augusta Health

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