

# Evaluating Emergency Department and Urgent Care Utilization Trends of Patients with Health-Related Social Needs

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## Abstract

It is well known that health related social needs (HRSN) impact long-term health outcomes including quality and length of life.

Our study sought to examine the relationship between HRSN burden and emergency department (ED) and urgent care utilization at an urban tertiary care center.

Using an abridged PRAPARE survey tool, we observed a positive relationship between increasing HRSN and ED utilization.

When looking at the ED census during this time, we noticed an overrepresentation of Black female patients in our study cohort.

We conclude that addressing HRSN in the ED setting may serve as an ideal target to reduce ED use and overall healthcare costs.

In addition, we identified a high-risk minority patient population that may benefit from future targeted interventions.

## Background

Recently there has been increased exploration into the connection between health-related social needs (HRSN) and healthcare utilization.<sup>1</sup>

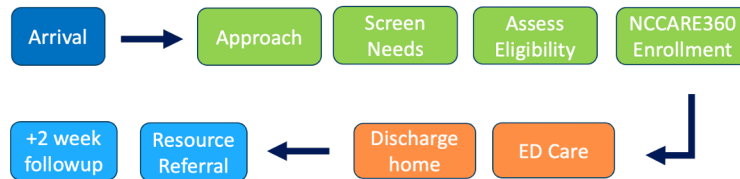
It has been well-established that these HRSN, including food insecurity, housing instability, and lack of access to transportation play a significant role in premature death and other adverse health outcomes.<sup>2</sup>

There is currently little agreement on best practices for screening of HRSN in the emergency department (ED) and urgent care settings due to lack of time, staff, and resources.<sup>1,3</sup>

The relationship between the burden of HRSN and ED and urgent care utilization is not well-established.

By evaluating the HRSN in ED patients and reviewing trends in healthcare utilization at varying levels of social burden, a better understanding of opportunities for intervention can be obtained.

## Methods



Patients presenting to the ED were approached for HRSN using abridged PRAPARE survey tool. Patients screening positive for HRSN were provided with referrals for local support and resources.

Patient information on ED and urgent care visits 12 months prior to the intervention was extracted from electronic medical records and used for analysis. Patients were sorted into four different groups based on the number of HRSN (G1 = 0 needs, G2 = 1-2 needs, G3 = 3-4 needs, G4 = 5+ needs).

Primary outcome measured was mean monthly ED and urgent care visits by HRSN group.

## Results

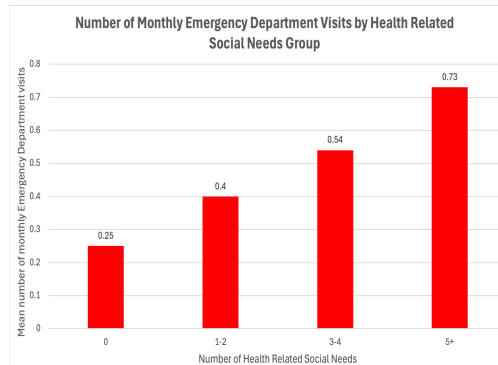


Figure 1. Comparison of monthly emergency department visits for each HRSN group.

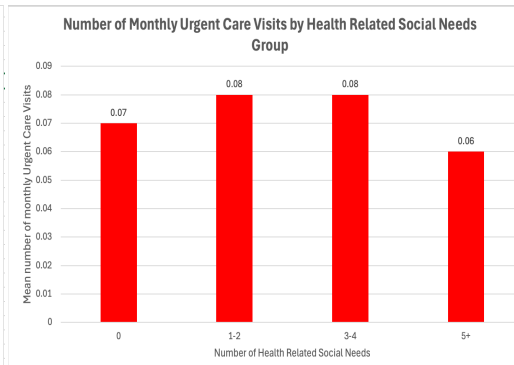


Figure 2. Comparison of monthly urgent care visits for each HRSN group.

## Results (contd.)

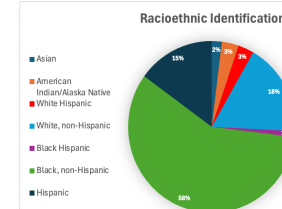


Figure 3. Race/ethnicity identification breakdown for study population.

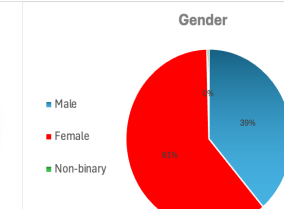


Figure 4. Gender identification breakdown for study population.

## Conclusions

We observed a positive linear increase in ED utilization as HRSN burden increased (Figure 1). This suggests that as patients experience more HRSN burden, they are more likely to visit the ED. No trend was observed for urgent care visits (Figure 2).

Our results show significant disparities in our study population compared to the ED population census (Figure 3). Black patients were significantly overrepresented in our population, which is consistent with current literature indicating that Black patients have greater burden of HRSN.<sup>4</sup> White patients are significantly underrepresented, which also aligns with current literature.

Overall, our results demonstrate a linear relationship between increasing social burden and ED utilization. Future studies should be conducted to further examine the relationship between provision of social resources and ED utilization pre- and post-intervention.

## References

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