

01. Introduction

Neurosurgical care presents unique challenges, particularly in environments with socioeconomic disparities. According to a comprehensive review done by Wellcome Open Research, neurologic cases are affected much more than other issues patients may face. This study aimed to comprehensively explore the experiences of medical professionals in a neurosurgery clinic situated in a disadvantaged neighborhood, focusing on identifying challenging neurosurgical diseases, understanding barriers to healthcare access, and evaluating clinic and hospital support for patients. A structured survey was administered to surgeons and nurse practitioners, collecting qualitative and quantitative data regarding disease challenges, healthcare barriers, and support services.

02. Objective

This study was designed with a comprehensive scope to delve into the intricate experiences of medical professionals working in a neurosurgery clinic in a disadvantaged neighborhood.

03. Methodology

The methodology in this research involved a structured survey administered to the entire neurosurgical staff of Memorial Hermann Southwest, given the unique circumstances of the clinic's location and patient population. This approach ensured a comprehensive understanding without sampling biases from other branches with different demographics. Participants included surgeons, nurse practitioners, and other healthcare providers directly involved in neurosurgical care. The survey guaranteed anonymity stated its purpose clearly, and collected both quantitative data (analyzed using descriptive statistics) and qualitative data (analyzed for common themes and patterns) regarding challenging neurosurgical diseases, healthcare barriers, and clinic support services. A "total score" was used where a graphical display was not feasible. Limitations, such as potential bias and reliance on self-reported data, were acknowledged, highlighting the specificity of the study to Memorial Hermann Southwest's circumstances.

04. Results

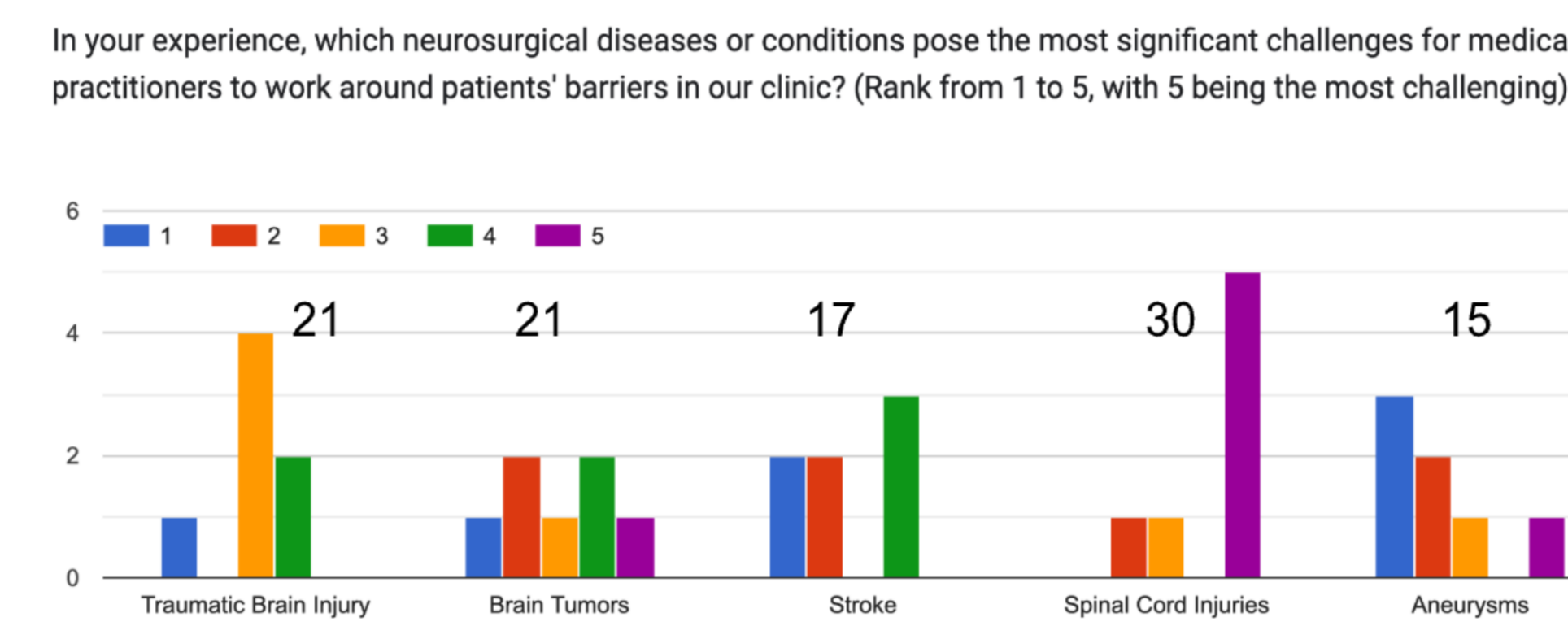


Figure 1 (Total scores calculated)

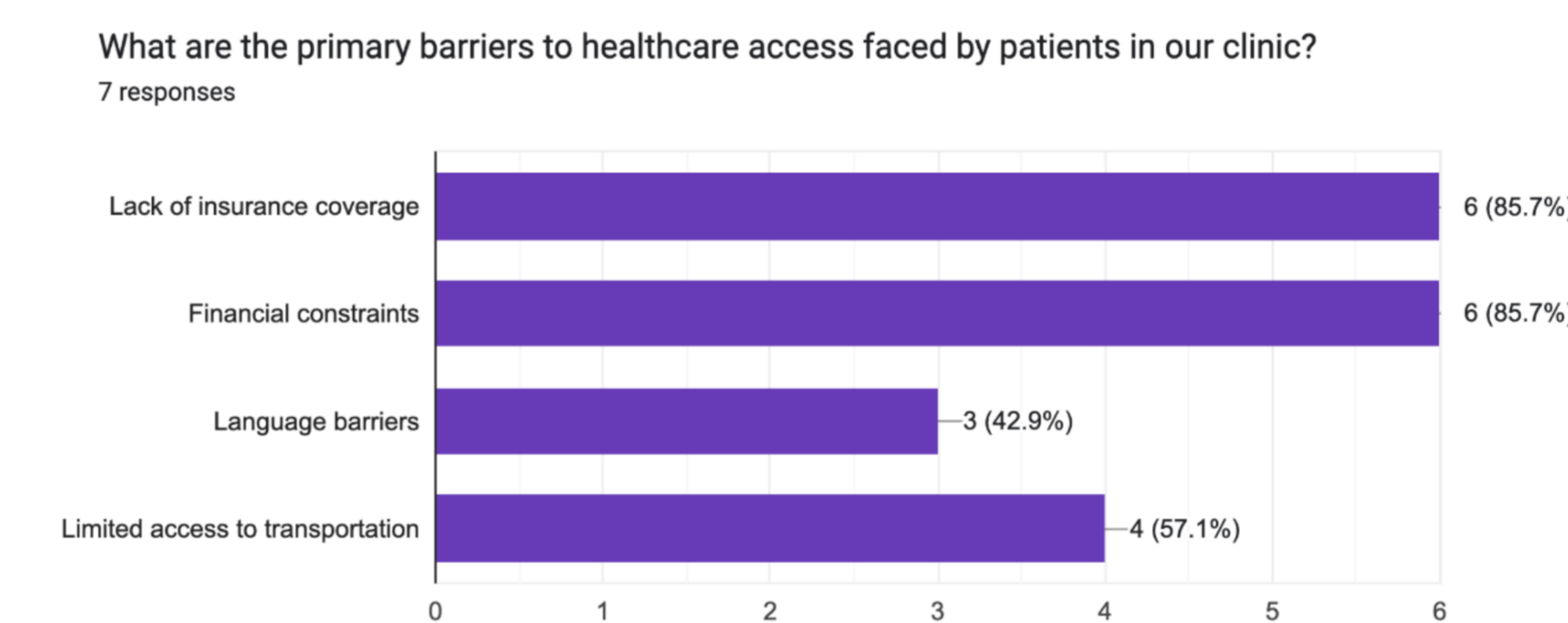
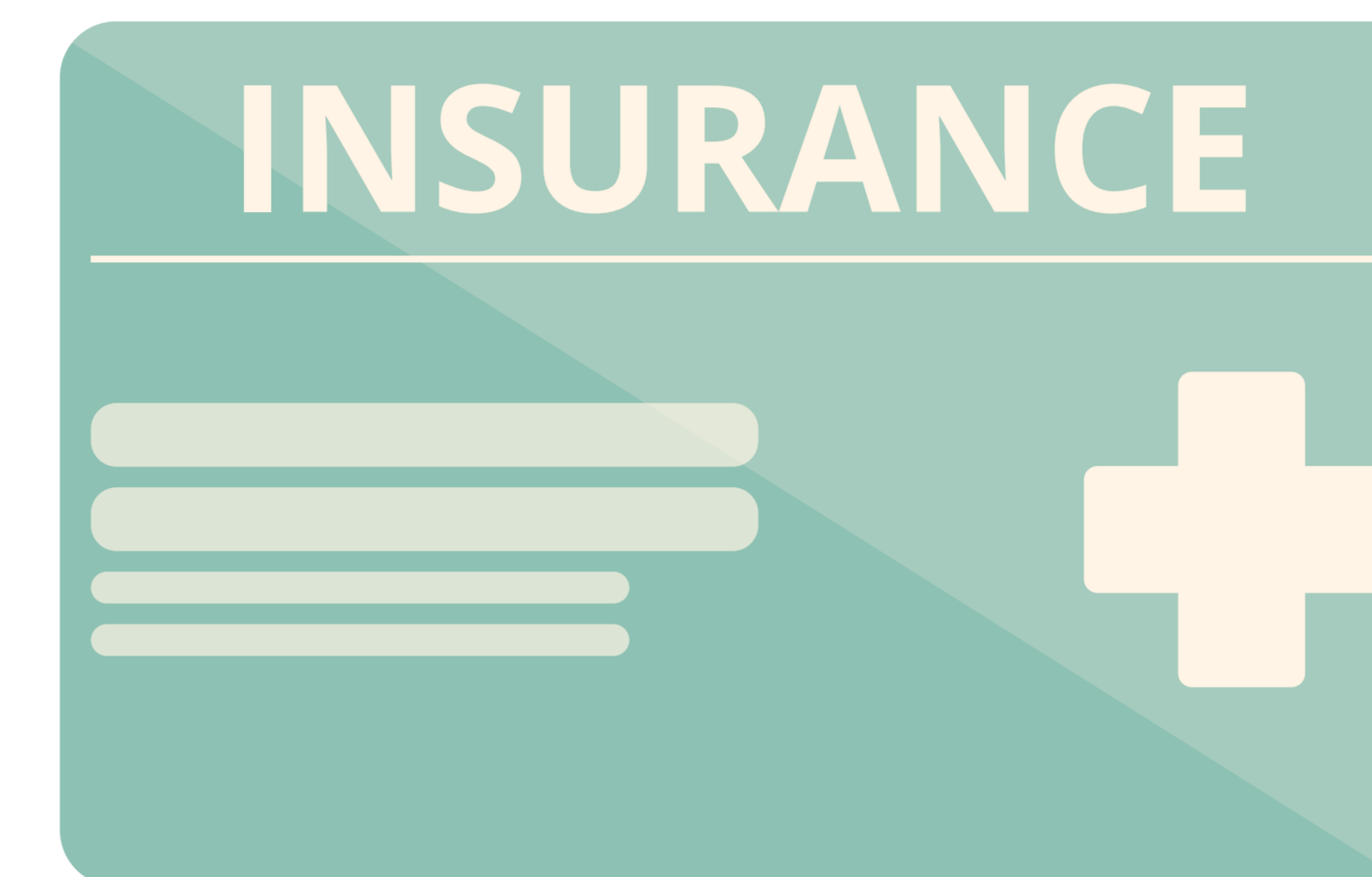
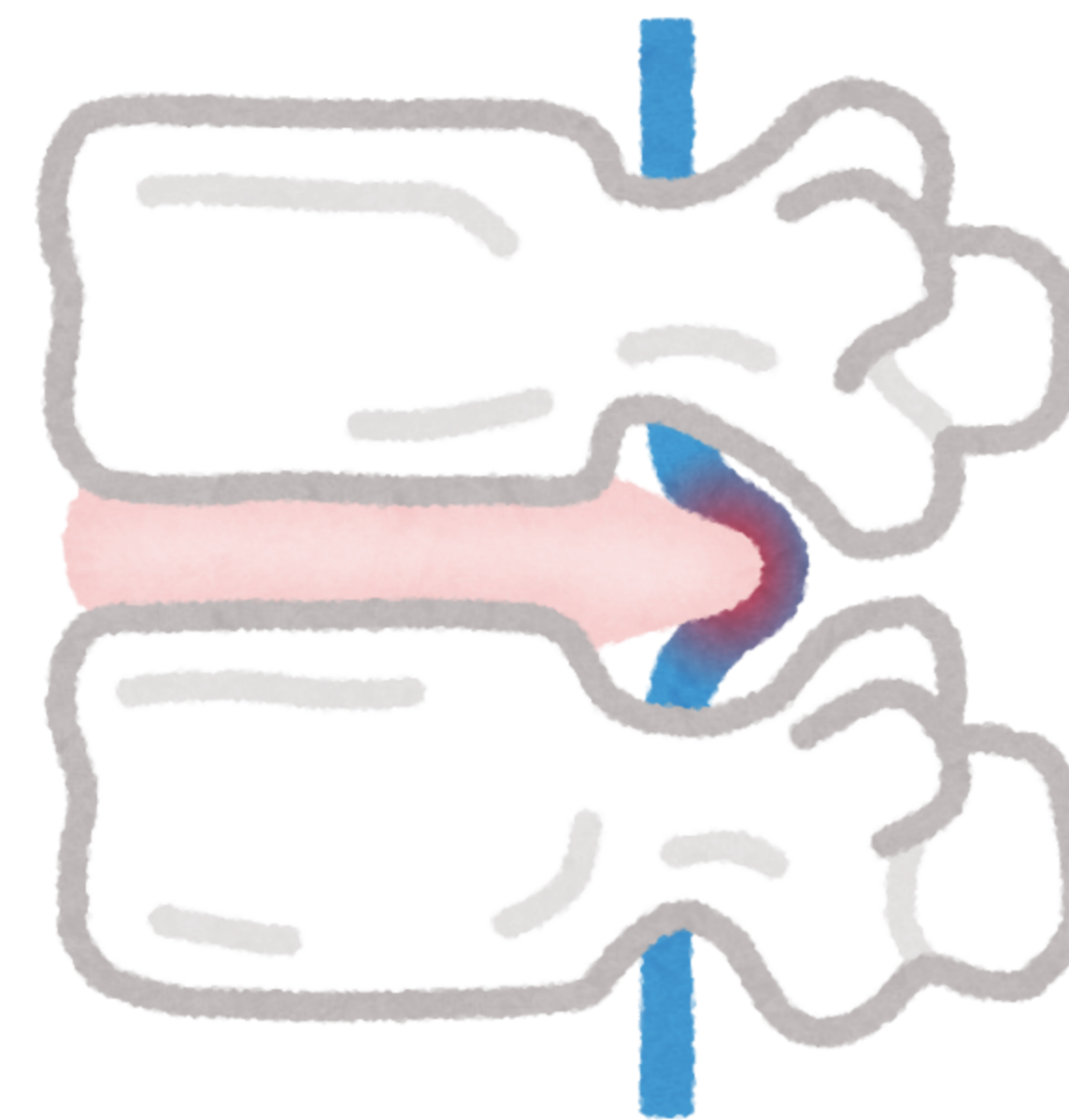


Figure 2

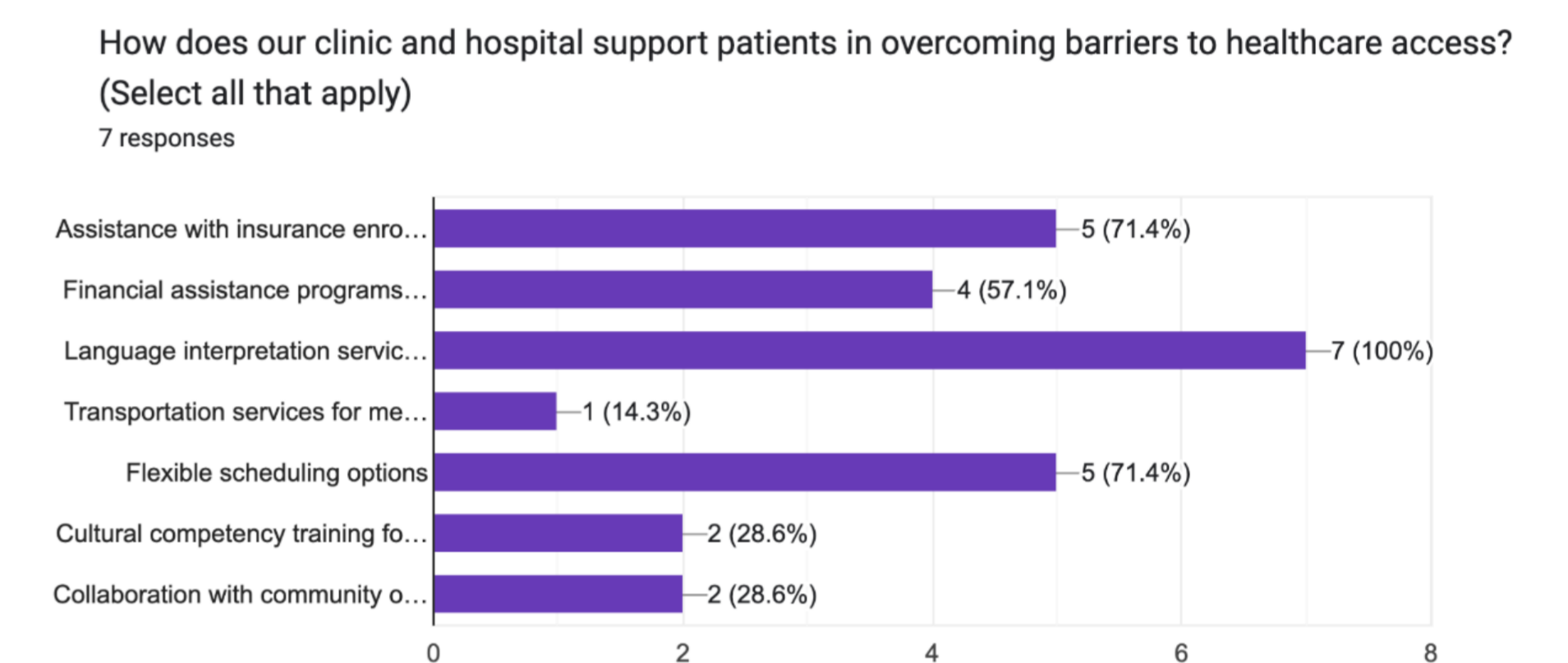


Figure 3



05. Findings

Figure 1 in this study provides a nuanced analysis of the primary challenges faced by medical professionals specializing in neurosurgery. It underscores spinal cord injuries as a significant concern due to the intense pain experienced by patients and the limited availability of detailed patient information. Despite these challenges, the manageable variability observed in spinal cord injuries allows for the development of more effective treatment strategies, contributing to better patient outcomes.

Conversely, aneurysms, while generally less painful and requiring less complex surgical procedures, present their own set of challenges. The diverse forms in which aneurysms can manifest and the need for continuous monitoring pose ongoing challenges for medical professionals. Additionally, nurse practitioners highlighted coordination challenges, particularly in cases involving brain tumors, further highlighting the complexities of neurosurgical care management.

Figures 2 and 3 delve into the healthcare access barriers prevalent in the Southwest Houston area, which notably include lack of insurance coverage, financial constraints, and language barriers. These barriers disproportionately affect the uninsured and linguistically diverse population, posing significant challenges to equitable healthcare access. However, initiatives implemented by Memorial Hermann, such as interpreter services and flexible scheduling, have played a crucial role in mitigating these barriers and improving patient access to quality neurosurgical care.

While these initiatives have been effective, suggestions for improvements have been noted, emphasizing the continuous need to enhance equitable access and patient experience within neurosurgical healthcare settings.

06. Conclusion

Overall, this research highlights the intricate dynamics of neurosurgical care delivery in underserved communities and underscores the importance of targeted interventions, policy reforms, and continued collaboration between healthcare providers and community stakeholders. By addressing the identified challenges and building upon existing strengths, healthcare institutions can contribute significantly to promoting equitable access to quality neurosurgical care and improving patient outcomes across diverse socioeconomic backgrounds.

