

Evaluating Medical and Basic Spanish Knowledge of EMS providers in Brown County

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INTRODUCTION

- The Brown County community has a significant proportion of Hispanic/Latino residents, constituting around 8% of the population.
- Almost 2% of Brown County is Spanish-speaking with “Low English Proficiency” (LEP).
- This population may be experiencing significant linguistic barriers to healthcare in addition to numerous cultural and socioeconomic barriers.
- To decrease language barriers, improve quality of care, and decrease adverse outcomes for this group of patients, healthcare systems in Brown County need to respond by increasing the number of healthcare providers who are competent in fundamental and medical Spanish language skills. This is especially important among Emergency Medical Service (EMS) providers where time is of the essence and communication is critical between the patient and provider.

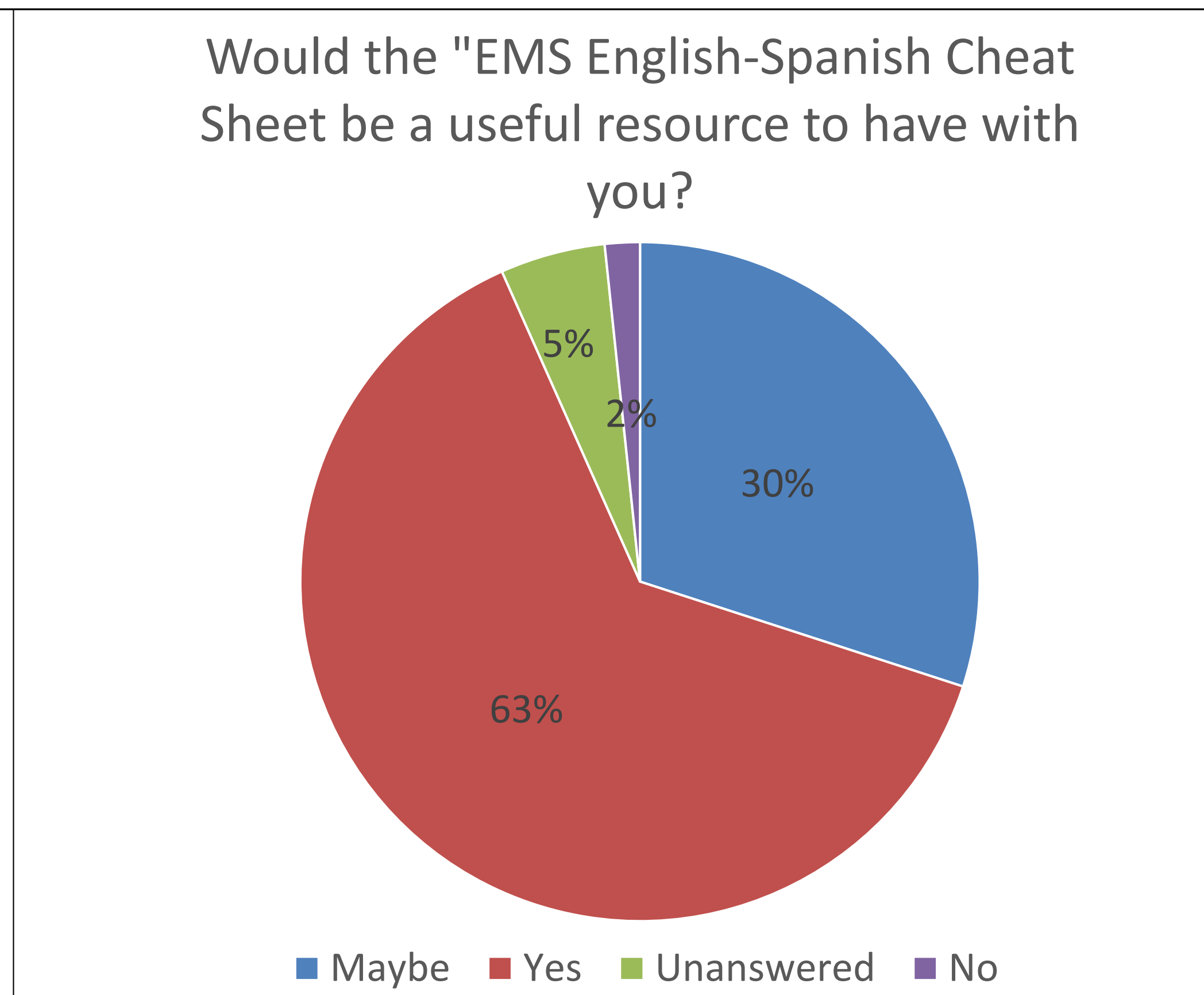
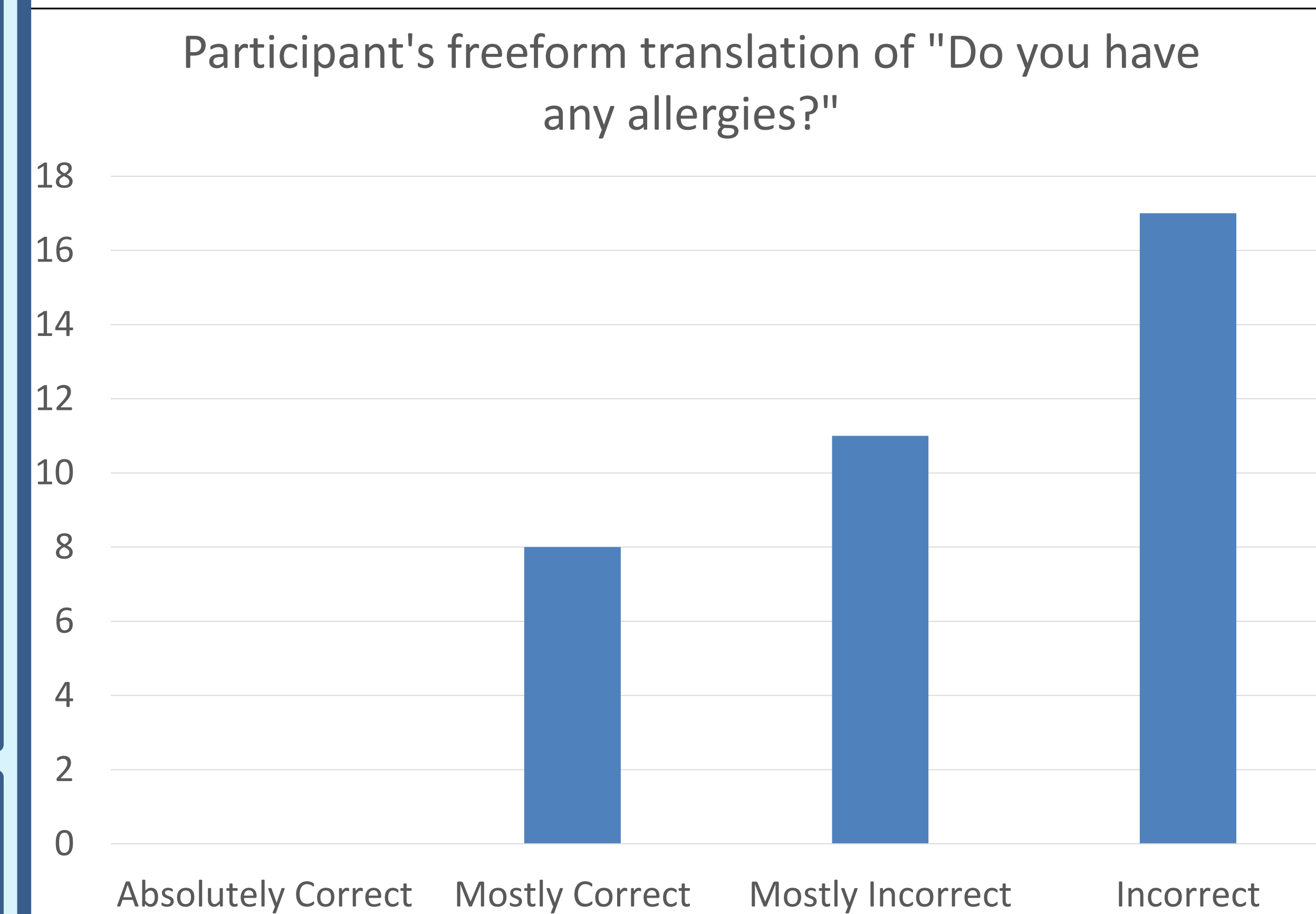
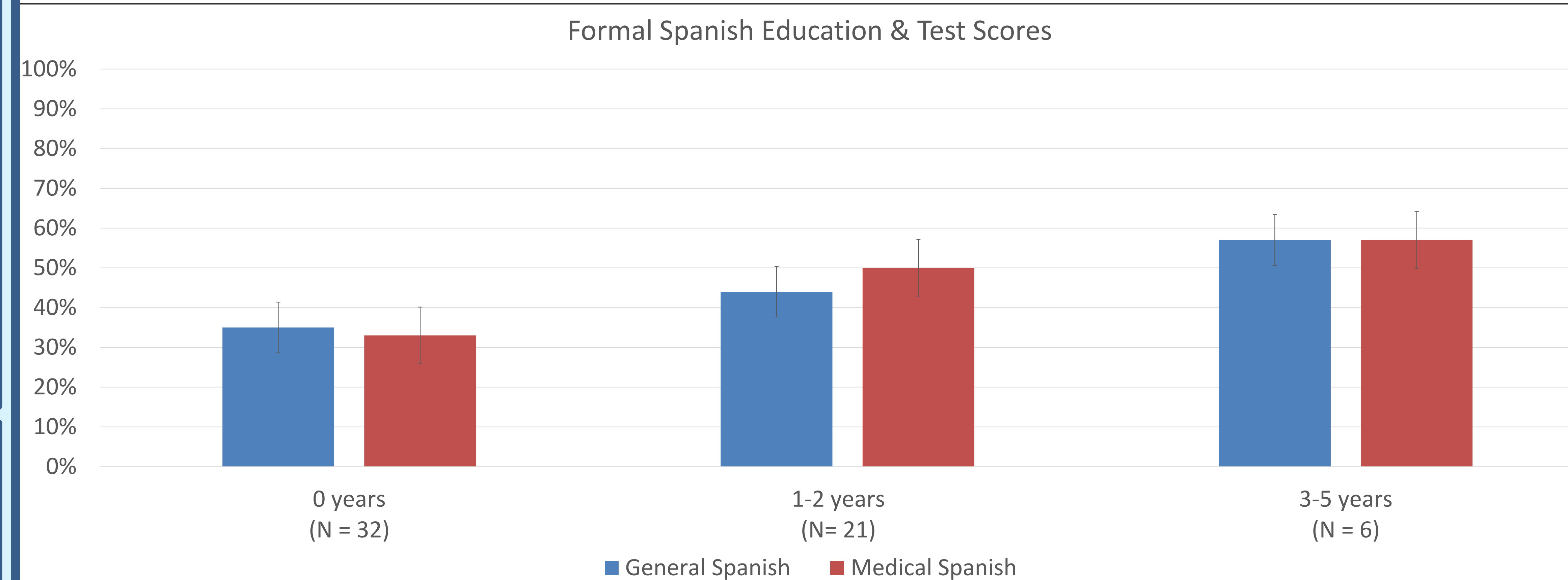
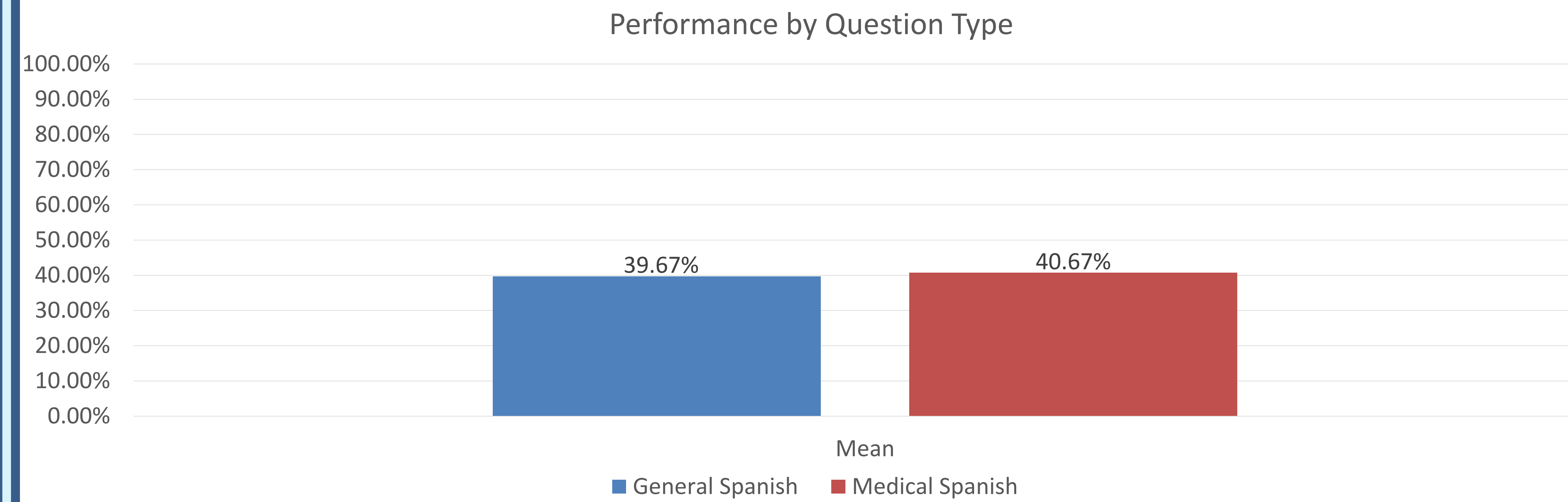
PURPOSE

- To discover the general knowledge of basic and medical Spanish in EMS providers in Brown County
- Assess the potential utility of an “EMS English-Spanish Cheat Sheet” among EMS personnel as well as obtain suggestions for improving the cheat sheet.
- Advocate for a sustainable form of Spanish language education in healthcare systems in Brown County to improve linguistic understanding and cultural competence among providers and thus improve provider/patient interactions and health outcomes.

METHODS

- EMS providers from all four departments across Brown County were asked to take a Qualtrics survey assessing their knowledge in both basic and medical Spanish.
- They were also asked to provide feedback on an “EMS English-Spanish Cheat Sheet” in terms of how it could be improved and whether it would be useful to them in their role as an EMS provider.

RESULTS



Feedback on “EMS English-Spanish Cheat Sheet”:

- Add more phrases for alcohol/drug abuse, demographics, medical history and history of present illness
- Phonetically spell out the words
- Color code by medical condition
- Format the cheat sheet in “flashcard” style
- Add pictures of body parts alongside the words
- Hold a training class for medical Spanish

Demographic Data:

- **Average age** = 35-44 years old
- **Gender** = 88% Male, 12% Female
- **Education Level** = 65% Associate’s degree, 17% Bachelor’s degree, 12% Some college
- **Years of Spanish Education** = 54% with 0 years, 36% with 1-2 years, 10% with 3-5 years
- **Race** = 100% Caucasian

CONCLUSIONS

- Overall, general and medical Spanish knowledge was lacking in EMS providers with a mean score of around 40% in both categories. This was also reflected in the freeform question, with 78% of participants having a response that was “Incorrect” or “Mostly Incorrect”
- EMS providers appeared to be receptive to the “EMS English-Spanish Cheat Sheet” with 63% of respondents indicating that it would be a useful resource and an additional 30% answering “maybe.”
- There was a statistically significant difference between the average overall score of those with 0 years of formal Spanish education and those with 1-2 years ($p = 0.0214$) and 3-5 years ($p = 0.0093$). However, there was not a statistically significant difference between those with 1-2 years and 3-5 years of formal Spanish education ($p = 0.3297$).
- According to the demographic data, the EMS field is dominated by Caucasian Male adults in their 30s and 40s who have little to no Spanish education.
- LEP patients have been shown to receive poorer quality of care, experience higher rates of medical error, and have worse clinical outcomes than their English-speaking counterparts.
- I believe that by implementing Spanish language educational programs throughout Brown County healthcare systems, not only will cultural competency be enhanced, but LEP patient’s clinical outcomes and experiences will be greatly improved.

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