What is the EMS Treatment Penalty for Not Speaking English?

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Intro
- Patients with Limited English Proficiency (LEP) represent one of the most vulnerable patient communities. [1]
- Communication challenges result in substantial health and healthcare disadvantages. [2, 3]
- The LEP population has increased 80% since 1980 it is unknown if patients with LEP receive a substandard of care in EMS. [1]
- The effectiveness and utilization rate of pre-hospital language interpreters is currently unknown.

Methods
- Cross-sectional, retrospective study with all transported pre-hospital adult trauma patients from 2015 to 2021 in Portland, Oregon.
- LEP status was identified by narrative key word searches and manual review.
- Two outcome measures: pain screening and pain medication administration.

Results
- A population of 57,693 English speaking patients and 1,155 LEP patients were examined by EMS.
- 48% of patients with LEP received a language interpreter (of any form), however a qualified medical interpreter was used in only 3% of interactions despite field availability.
- In models adjusted for demographic and clinical confounders, LEP patients were 63% less likely to receive a pain assessment and 23% less likely to receive pain medications of any kind for their traumatic injury when compared to English speaking patients.
- The use of a language interpreter only marginally improved the likelihood of receiving a pain assessment but may have eliminated pain medication treatment disparities for patients with LEP, however these advantages did not equally benefit all race/ethnicity categories.

Conclusion
- This study helps to quantify the substandard medical treatment patients with LEP receive in EMS.
- Interpreter use, albeit concerningly low, when used, may mitigate some of the treatment disparities for patients with LEP.
- Research is needed to understand barriers to interpreter use and its varied efficacy for different racial and ethnic minority patients.

:30 second read

2% of trauma patients did not speak English

**Less than half** of them received any form of **language interpreter**

Only 3% received a qualified medical interpreter despite field availability

Non-English trauma patients were **63% less likely to receive a pain screening**

Non-English trauma patients were **23% less likely to receive any pain medications**

Using **a language interpreter only partially helped,** but not for all racial and minority groups

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non-English speaking patients

48.4% with interpreter

51.6% without interpreter
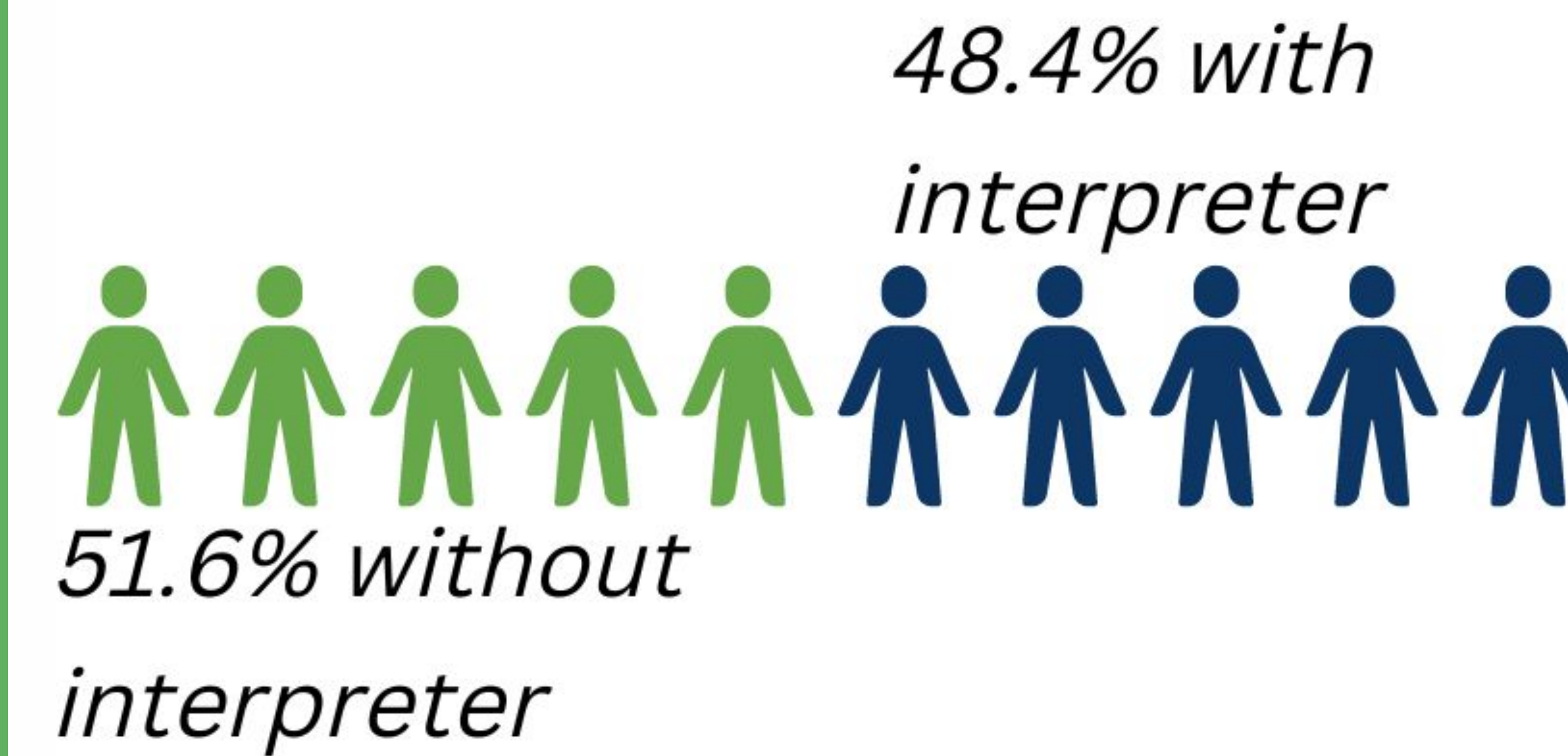
Type of interpreter used	
Family or Friends	60.3%
Bystander	20.2%
Interpreter Used from Unknown Source	9.1%
Official Interpreter Resource (Language Line or Fire Depart.)	5.5%
EMS Crew Member Informal Interpreter	3.9%
Informal Tech Tools (Google translate, etc.)	1.3%

Pain Screen and Pain Medication in Three Patient Groups

■ Patients with pain screening ■ Pain Medication Admin Rate

English speaking: 62% / 9%
non-English speaking with interpreter: 38% / 8%
non-English speaking without interpreter: 32% / 6%

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