The Effects of Interpreter Utilization on Patient Outcomes: A Systematic Review

Student Authors: Isaiah Wiles, MS, CCC-SLP; Amna Tariq, MS; Ghadah Karasneh, PhD; David Summerville; and Diony Tovar; and Faculty Mentor: Leslie Woltenberg, PhD, MS Ed

University of Kentucky College of Health Sciences

UK College of Health Sciences
Department of Physician Assistant Studies
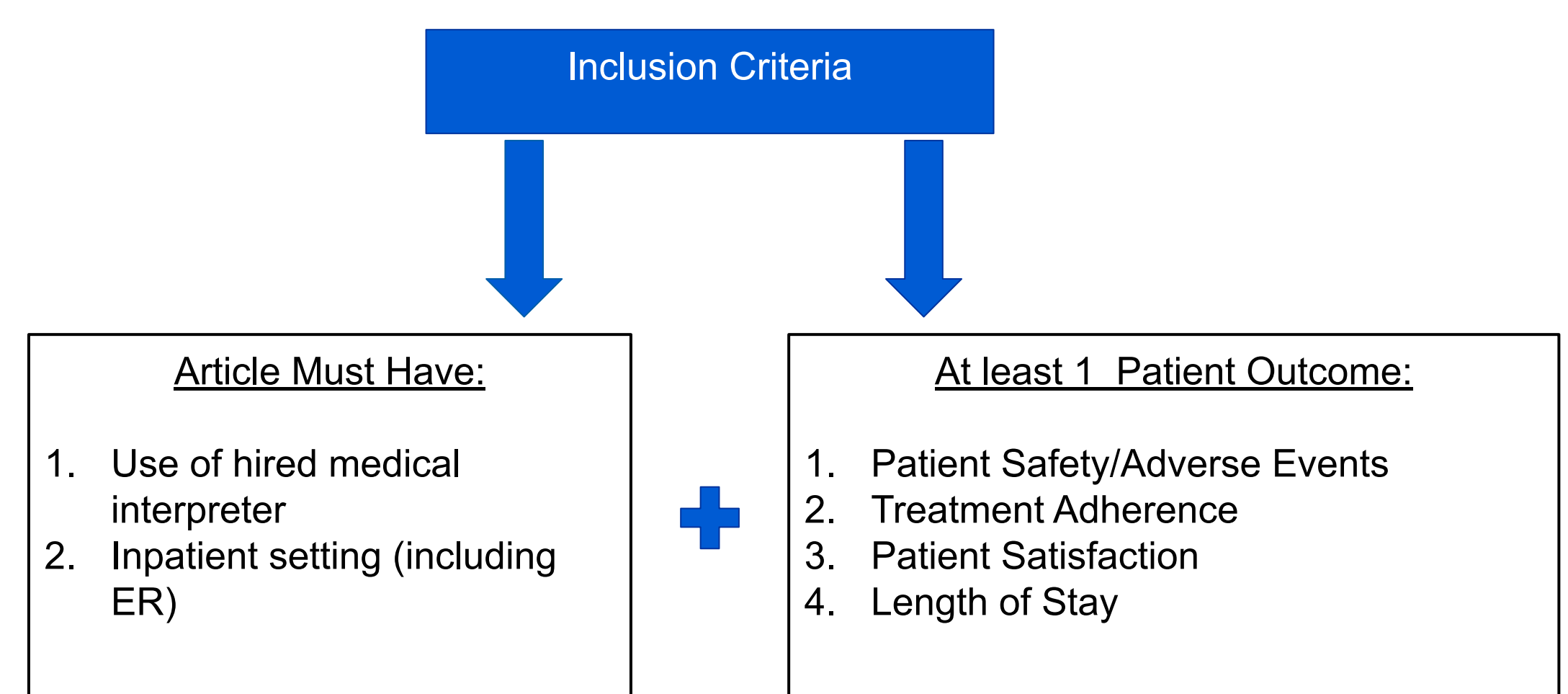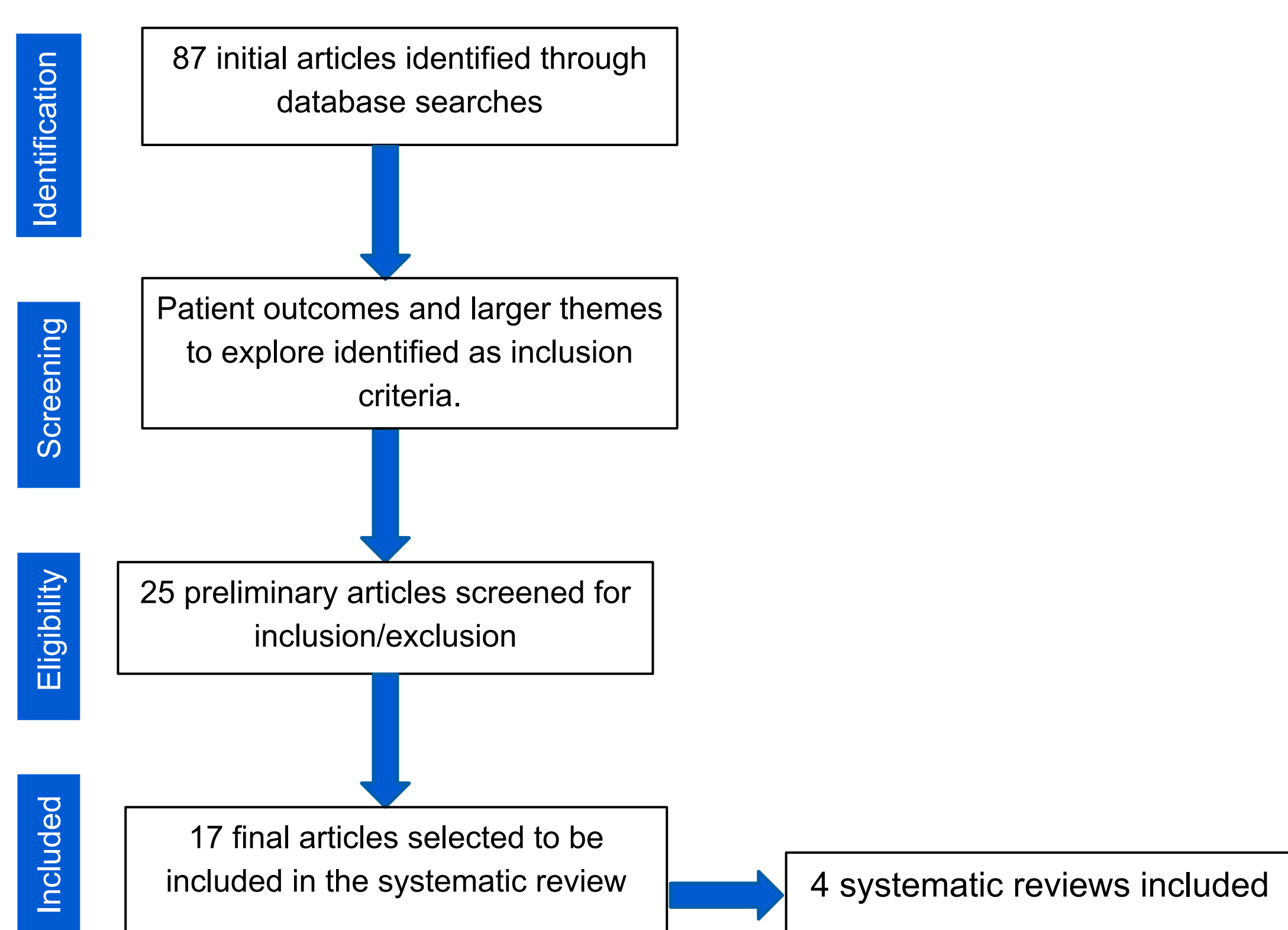
INTRODUCTION

There are more than 300 languages that are spoken by patients seen in the USA in addition to a growing population with limited-English proficiency. Studies have shown language barriers contribute to an increased likelihood of physical harm, longer hospital stays, delays in treatment, and higher readmission rates.[5-7] Interpreters increase language concordance with providers. This study will assess the effects of interpreter utilization on qualitative and quantitative patient outcomes and provide insights into how interpreters should be utilized and their effects measured.

PURPOSE OF STUDY

The purpose of this study is to expand on previously published work by other authors and to create insights into new evidence that has been published following demographics and legal changes. This study evaluates both quantitative and qualitative differences in interpreter use discussed in literature published in English in the US and throughout the world. This study will contribute to the field of literature and provide recommendations regarding how interpreters may best be used and what metrics their successes can be measured. Lastly, this study will analyze how demographic variables may have confounded previous results related to interpreter use and how outcome and satisfaction measures are affected by the utilization of interpreters.
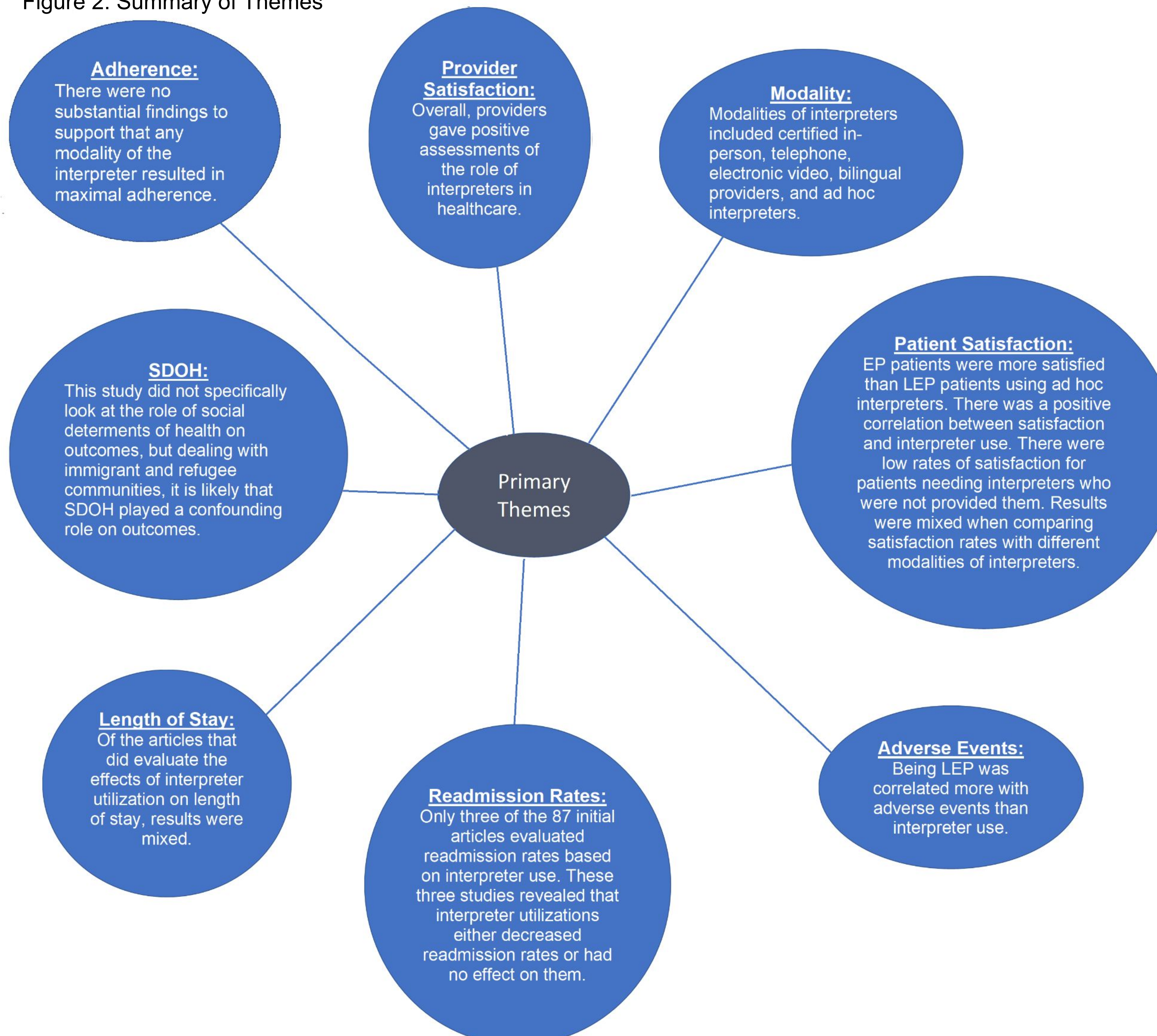
METHODS

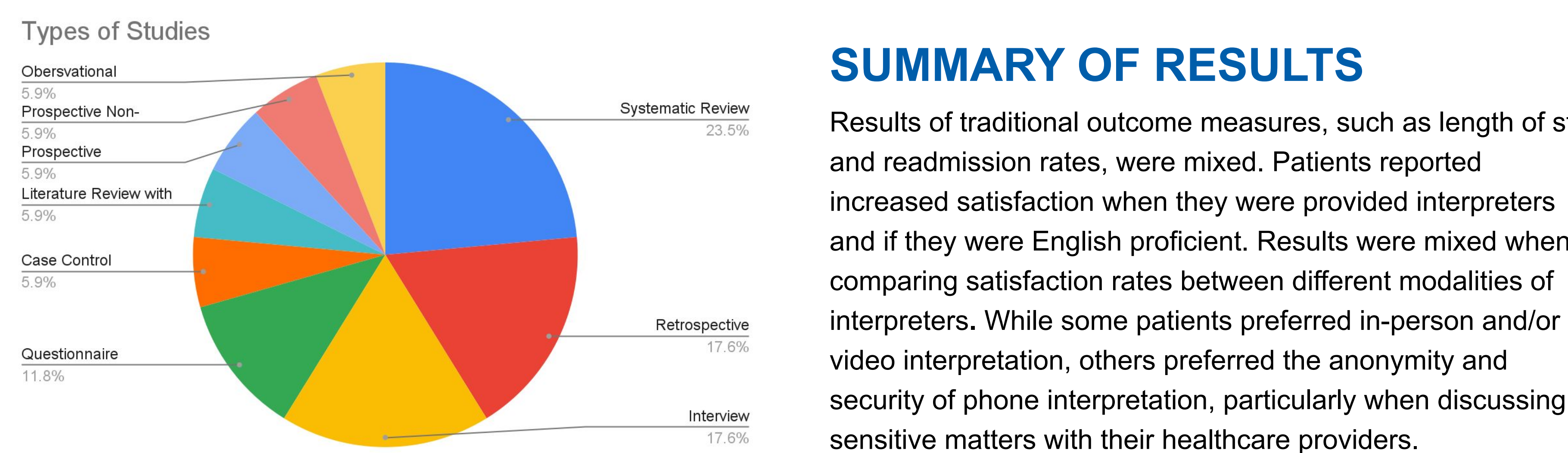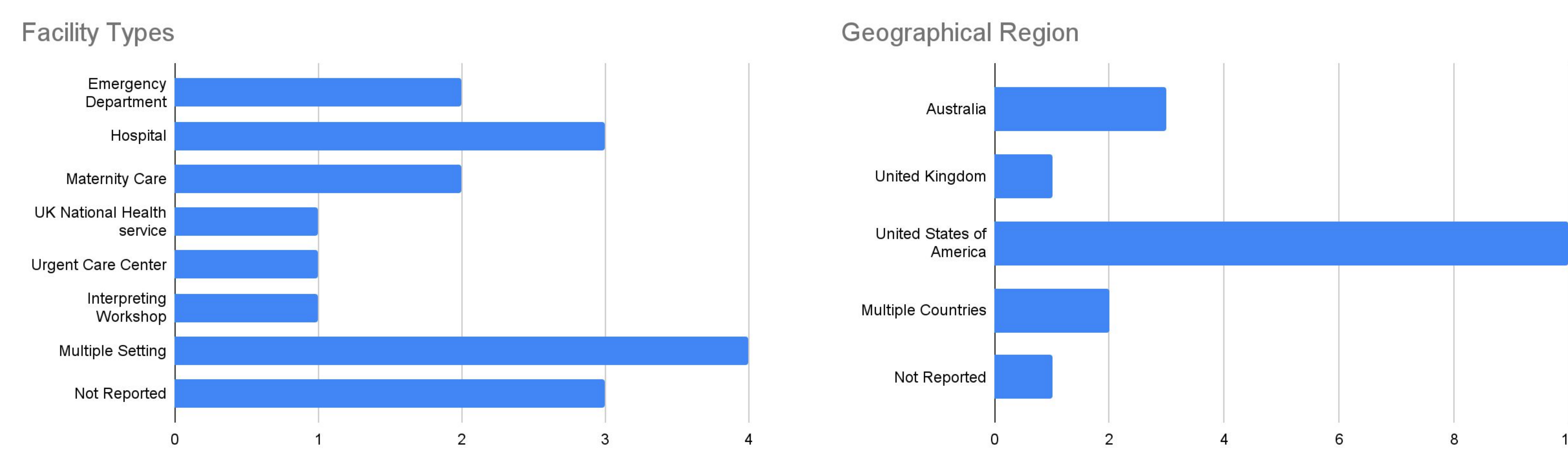Figure 1: Article Retrieval Process and Inclusion Criteria

Identification
87 initial articles identified through database searches

Screening
Patient outcomes and larger themes to explore identified as inclusion criteria.

Eligibility
25 preliminary articles screened for inclusion/exclusion

Included
17 final articles selected to be included in the systematic review → 4 systematic reviews included

Inclusion Criteria

Article Must Have:
1. Use of hired medical interpreter
2. Inpatient setting (including ER)

+

At least 1 Patient Outcome:
1. Patient Safety/Adverse Events
2. Treatment Adherence
3. Patient Satisfaction
4. Length of Stay

RESULTS

Figure 2: Summary of Themes

Primary Themes

Adherence: There were no substantial findings to support that any modality of the interpreter resulted in maximal adherence.

Provider Satisfaction: Overall, providers gave positive assessments of the role of interpreters in healthcare.

Modality: Modalities of interpreters included certified in-person, telephone, electronic video, bilingual providers, and ad hoc interpreters.

SDOH: This study did not specifically look at the role of social determents of health on outcomes, but dealing with immigrant and refugee communities, it is likely that SDOH played a confounding role on outcomes.

Patient Satisfaction: EP patients were more satisfied than LEP patients using ad hoc interpreters. There was a positive correlation between satisfaction and interpreter use. There were low rates of satisfaction for patients needing interpreters who were not provided them. Results were mixed when comparing satisfaction rates with different modalities of interpreters.

Length of Stay: Of the articles that did evaluate the effects of interpreter utilization on length of stay, results were mixed.

Readmission Rates: Only three of the 87 initial articles evaluated readmission rates based on interpreter use. These three studies revealed that interpreter utilizations either decreased readmission rates or had no effect on them.

Adverse Events: Being LEP was correlated more with adverse events than interpreter use.

Figures 3-5: Synopsis of Settings and Study Types

Facility Types

Geographical Region

Types of Studies

SUMMARY OF RESULTS

Results of traditional outcome measures, such as length of stay and readmission rates, were mixed. Patients reported increased satisfaction when they were provided interpreters and if they were English proficient. Results were mixed when comparing satisfaction rates between different modalities of interpreters. While some patients preferred in-person and/or video interpretation, others preferred the anonymity and security of phone interpretation, particularly when discussing sensitive matters with their healthcare providers.

DISCUSSION

Interpreters may not affect traditional outcome measures like length of stay and readmission rate.

Similar to a 2005 systematic review, findings support improved satisfaction is correlated with being provided an interpreter.

Being LEP, especially Spanish-speaking, be more correlated with adverse events than interpreter utilization is. However, many studies did not adjust for covariates and confounding variables. Selection bias resulted in decreased external validity.

Modality has become an increasing area of focus, especially in regards to patient satisfaction.

Patients should be educated on modalities of interpreters and be allowed to decide. Providers and interpreter staff should customize each patient's interpreter experience to meet unique needs.

The role of the interpreter in the healthcare setting is evolving. Interpreters may act as "language conduit, flow manager, relationship builder, and cultural inside."[27]

Interpreter preference is dependent on many factors and may vary even within a single patient.

CONCLUSION

Findings from this systematic review support the notion that interpreters do positively affect outcomes in hospitalized LEP patients in most outcome measures. The outcome measure that is most substantially affected is patient satisfaction, but this outcome is highly variable and depends on the modality of interpreter utilized.

FUTURE DIRECTIONS

Demographic changes and evidence from this systematic review demonstrate the importance of continued provider training in the utilization of interpreters with LEP patients. Further studies are needed to investigate patient education regarding interpreter modality options, the qualitative experiences of interpreter modality selection by patients, and how these choices affect patient satisfaction. Studies are also needed to assess multimodality interpretation and its effects on patient satisfaction and other outcomes. Lastly, research is needed to compare patient outcomes using automated interpretation software to human interpreters.

REFERENCES

Scan QR code for access to an extensive list of references, tables, and charts.

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