

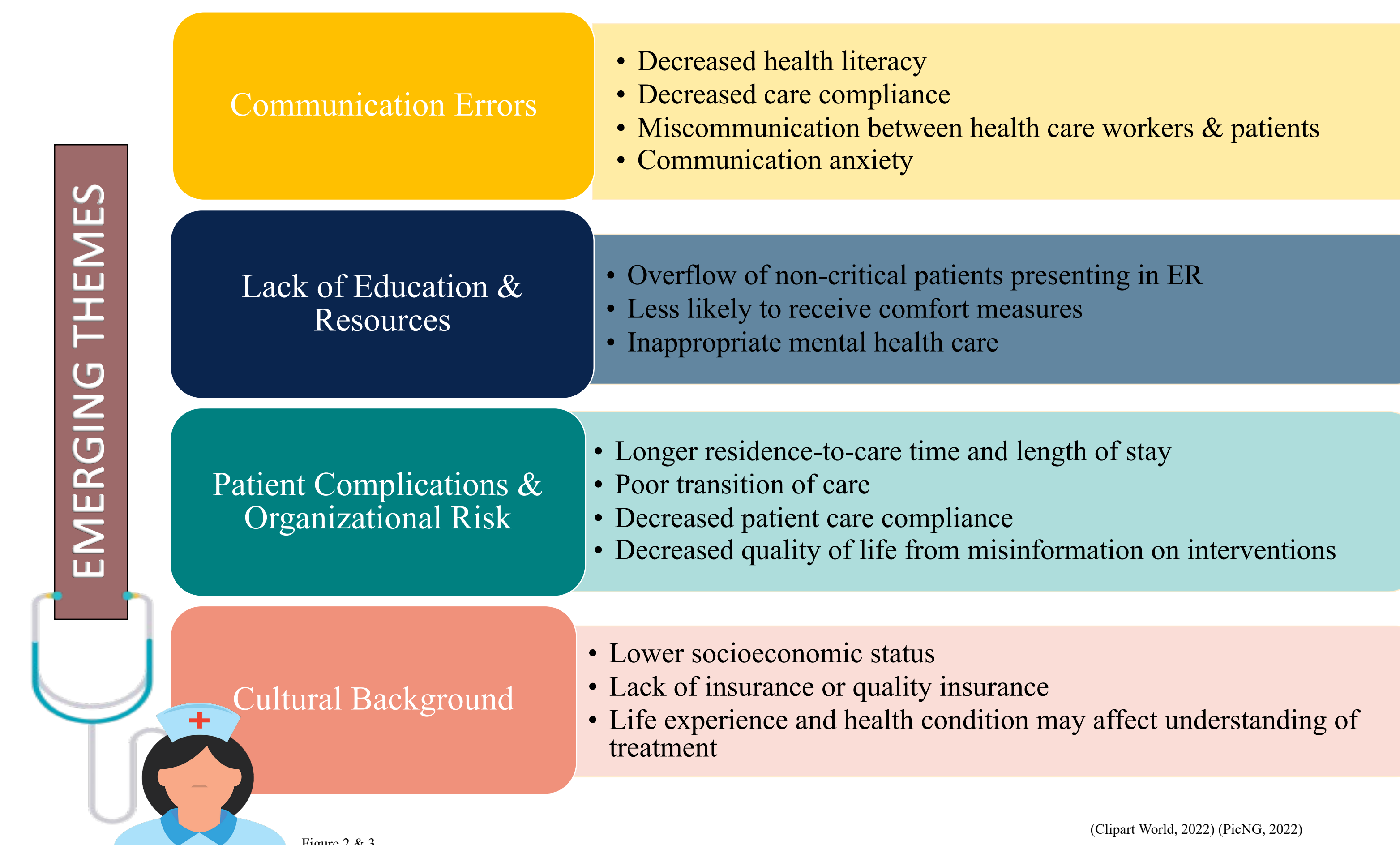
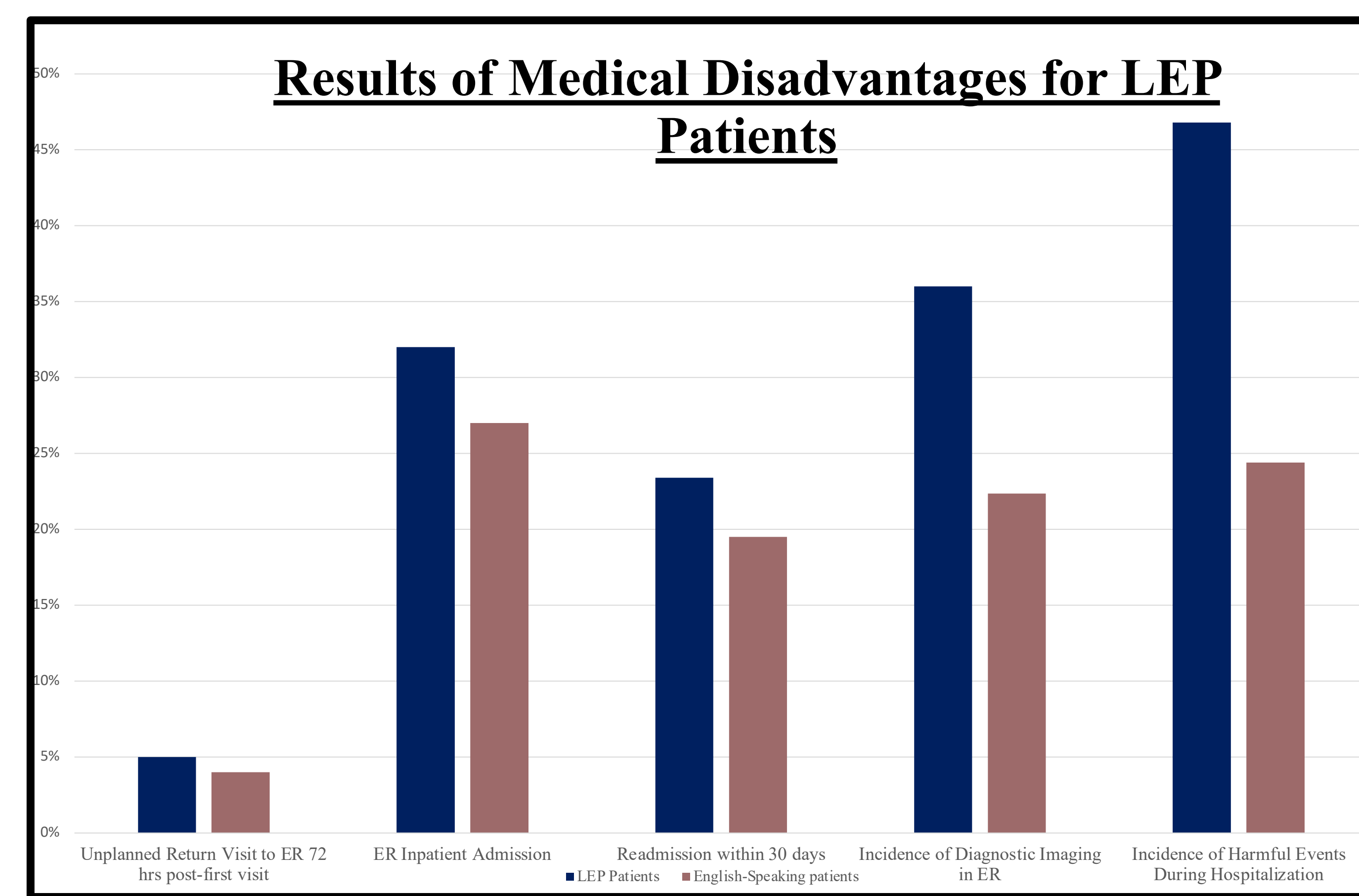
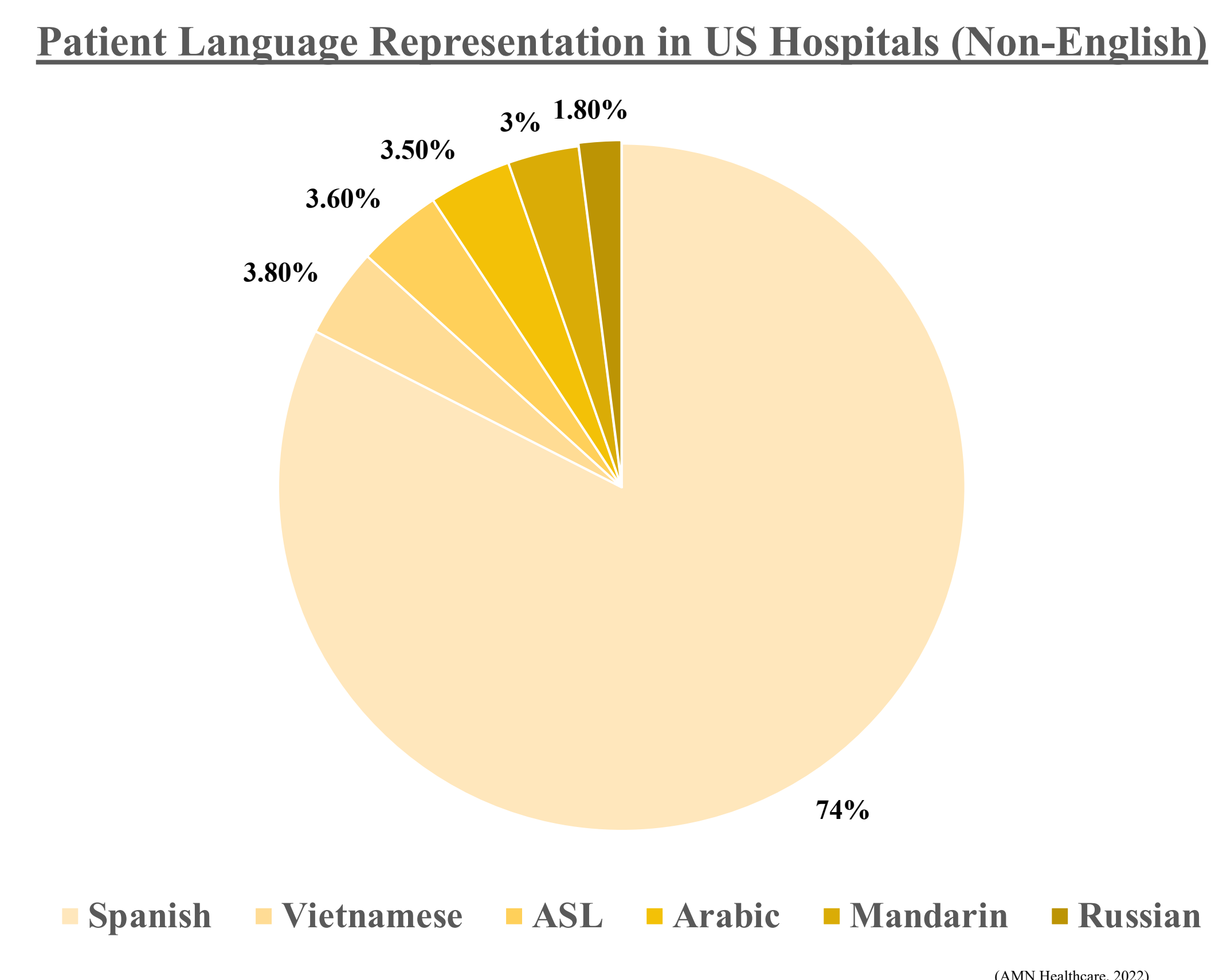
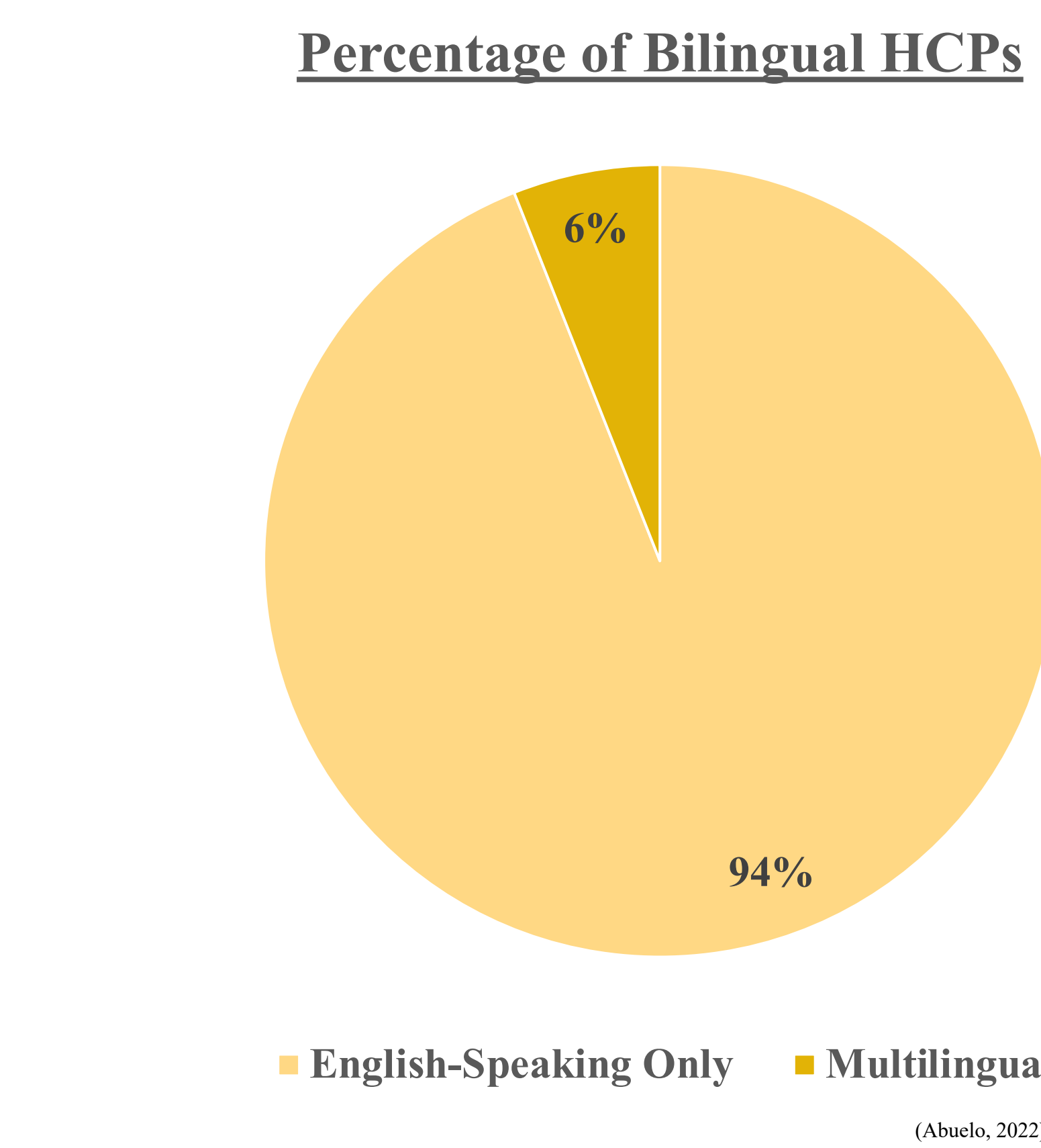
## Abstract

- **Purpose:** Analyze the experiences and boundaries to healthcare that LEP patients experience in US Healthcare
- **Method:** Literature review of 54 current and peer-reviewed scientific articles from reputable journals that discuss LEP and its effects on healthcare organizations and patient outcomes.
- **Results:** Patients with LEP may receive inferior quality of care, increased readmission rates, inconsistency with care outcomes, increased incidences of diagnostic tests, and experience greater levels of communication anxiety.
- **Changes to Practice:** increasing transcultural awareness among hospital staff, increased utilization of quality interpretative services, transcultural and language training (simulation, trips, etc.) for nursing students, development of a multi-vocational team that is transculturally trained and bilingual that can come to the scene of every LEP patient's medical emergency or hospital stay and care for them appropriately.

*While the LEP population may be seen as a problem in modern healthcare, we should humble ourselves and take up the challenge of education reform and organizational creativity to better cater to this disadvantaged patient population.*

## Methods

- Search Terms used: LEP, limited English proficiency, ESL, interpretation, healthcare, translation
- Databases used: Google Scholar, HRSA< and CINAHL
- Inclusion Criteria: peer-reviewed, published within 15 years, English as primary language of HCP, have a clear connection to the purpose, discussion, and conclusion of the manuscript
- Literature review of 54 current and peer-reviewed articles were reviewed
  - Data Reports/Surveys (10)
  - Cohort Studies (10)
  - Literature Reviews (5)
  - Interviews (5)
  - Other (24)



## Results & Solutions

### Results:

- 5% of patients with LEP return to ER within 72 hours of their first visit (Schulson et al., 2018)
- 32% of patients with LEP presenting to the ER get inpatient admission (Schulson et al., 2018)
- 23% of patients with LEP get readmitted within 30 days of original discharge (Rawal et al., 2019)
- Patients with LEP have a 36% higher incidence of diagnostic imaging in the ER (Schulson et al., 2018)
- Patients with LEP have a 47% higher incidence of harmful events during hospitalization (Schulson et al., 2018)

*See emerging themes table for further findings*

### Proposed Solutions:

- Implications for Practice:
  - Raising transcultural awareness for healthcare staff
    - educating staff members on resources and interpretative services for patients with LEP, organizing organization limitations.
  - Interpretative and Communicative Services
    - Using simple language and interpretative technology
- Implications for Education:
  - Teaching different languages, simulation experiences, international travel, collaborative community education and cultural education

## Gaps & Future Research

### Gaps in the Literature:

- No track of cultural awareness progression for healthcare providers
  - Standardized assessments?
- No research into the quality of life after discharge of LEP patient
- Lack of cultural identification and grouping
  - No systematic way to collect information on race, ethnicity, and language data

### Future Research:

- Explore the experiences of patients with LEP in collaboration with other language departments, such as interpretative services
- Examine the effectiveness of teach-back and return demonstration for LEP patients in high-intensity critical care situations
- Investigate cheaper more accessible interpretative services for healthcare workers

## References

*See additional page for full citation list*

- Abuelo, C. (2020, August 25). The U.S. Needs More Spanish-Speaking Doctors. U.S. News: A World Report. Retrieved September 10, 2022, from <https://www.usnews.com/news/healthiest-communities/articles/2020-08-25/why-we-need-more-spanish-speaking-doctors>. Al Shamsi, H., Almutairi, A. G., Al Mashrafi, S., & Al Kalbani, T. (2020). Implications of language barriers for Healthcare: A systematic review. *Oman Medical Journal*, 35(2). <https://doi.org/10.5001/omj.2020.40>
- AMN Healthcare. (2022). Healthcare World Language index. Healthcare World Language Index. Retrieved September 10, 2022, from <https://www.amnhealthcare.com/amn-insights/whitepapers/healthcare-world-language-index/>
- Anderson, T. S., Karliner, L. S., & Lin, G. A. (2019). Association of Primary Language and hospitalization for ambulatory care sensitive conditions. *Medical Care*, 58(1), 45–51. <https://doi.org/10.1097/mlr.0000000000001245>
- Augustine, J. (2019, February 19). Statistical trends of diagnostic testing in the emergency department. ACEP Now. Retrieved September 9, 2022, from <https://www.acepnow.com/article/statistical-trends-of-diagnostic-testing-in-the-emergency-department/>
- Barwise, A., Jaramillo, C., Novotny, P., Wieland, M. L., Thongprayoon, C., Gajic, O., & Wilson, M. E. (2018). Differences in code status and end-of-life decision making in patients with limited English proficiency in the Intensive Care Unit. *Mayo Clinic Proceedings*, 93(9), 1271–1281. <https://doi.org/10.1016/j.mayocp.2018.04.021>
- Basic, D., Shanley, C., & Gonzales, R. (2017). The impact of being a migrant from a Non-English-speaking country on healthcare outcomes in frail older inpatients: An Australian study. *Journal of Cross-Cultural Gerontology*, 32(4), 447–460. <https://doi.org/10.1007/s10823-017-9333-5>
- Bay, D. (2021) Hearing and honoring the voices of families with limited English proficiency. *Pediatric Nursing*. 47(5), 252-255, 258 <https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/hearing-honoring-voices-families-with-limited/docview/2581886600/se-2>
- Benda, N. C., Fairbanks, R. J., Higginbotham, D. J., Lin, L., & Bisantz, A. M. (2019). Observational study to understand Interpreter Service use in emergency medicine: Why the key may lie outside of the initial provider assessment. *Emergency Medicine Journal*, 36(10), 582–588. <https://doi.org/10.1136/emered-2019-208420>
- Biswas, S., Seman, M., Cox, N., Neil, C., Brennan, A., Dinh, D., Walton, A., Chan, W., Lefkovits, J., Reid, C., & Stub, D. (2018). Impact of limited English proficiency on presentation and outcomes of patients undergoing primary percutaneous coronary intervention for st-elevation myocardial infarction. *Internal Medicine Journal*, 48(4), 457–461. <https://doi.org/10.1111/imj.13751>
- Boggs, B. (2019). How Are Immigrants Changing The Way Health Care Is Practiced? Zocalo. Zocalo Public Square. Retrieved September 12, 2022, from <https://www.zocalopublicsquare.org/event/how-are-immigrants-changing-the-way-health-care-is-practiced/>. **FIGURE 1**
- Brophy Williams, S., Boylen, S., Gill, F. J., Wilson, S., & Cherian, S. (2020). Use of professional interpreters for children and families with limited English proficiency: The intersection with quality and safety. *Journal of Paediatrics and Child Health*, 56(8), 1201–1209. <https://doi.org/10.1111/jpc.14880>
- CHRISTIANA CARE EXTERNAL AFFAIRS. (2015). Video remote interpretation assists patient care. Christiana Care Health System. Retrieved September 12, 2022, from <https://3f97c21cm2if3lrayt2ivf2v-wpengine.netdna-ssl.com/wp-content/uploads/2015/08/2015-JUL-Focus.pdf>.
- Clipart World. (2022). Nurse Clipart Transparent Background. Clipart World. Retrieved September 12, 2022, from <https://clipart.world/nurse-clipart/nurse-clipart-transparent-background/>. **FIGURE 2**
- Divi, C., Koss, R., Schmaltz, S., & Loeb, J. (2007). Language proficiency and adverse events in US hospitals: A pilot study. *International Journal for Quality in Health Care*, 19(2), 60–67. <https://doi.org/10.1093/intqhc/mzl069>
- Diamond, L., Izquierdo, K., Canfield, D. et al. A Systematic Review of the Impact of Patient–Physician Non-English Language Concordance on Quality of Care and Outcomes. *J GEN INTERN MED* 34, 1591–1606 (2019). <https://doi.org/10.1007/s11606-019-04847-5>
- Divi, C., Koss, R. G., Schmaltz, S. P., & Loeb, J. M. (2007). Language proficiency and adverse events in US hospitals: A pilot study. *International Journal for Quality in Health Care*, 19(2), 60–67. <https://doi.org/10.1093/intqhc/mzl069>
- Douglas, J., Delpachitra, P., Paul, E., McGain, F., & Pilcher, D. (2014). Non-english speaking is a predictor of survival after admission to Intensive Care. *Journal of Critical Care*, 29(5), 769–774. <https://doi.org/10.1016/j.jcrc.2014.03.037>
- Eneriz-Wiemer, M., Sanders, L. M., Barr, D. A., & Mendoza, F. S. (2014). Parental limited English proficiency and health outcomes for children with special health care needs: a systematic review. *Academic pediatrics*, 14(2), 128–136. <https://doi.org/10.1016/j.acap.2013.10.003>
- Espinoza Suarez, N.,R., Urtecho, M., Nyquist, C. A., Jaramillo, C., Mei-Ean Yeow, Thorsteinsdottir, B., Wilson, M. E., & Barwise, A. K. (2021). Consequences of suboptimal communication for patients with limited English proficiency in the intensive care unit and suggestions for a way forward: A qualitative study of healthcare team perceptions. *Journal of Critical Care*, 61, 247-251. <https://doi.org/10.1016/j.jcrc.2020.10.012>
- Feeney, T., Sanchez, S. E., Tripodis, Y., Brahmhatt, T. S., Schulze, R., Burke, P., Dechert, T., & Drake, F. T. (2019). The Association of Primary language with emergency general surgery outcomes using a statewide database. *Journal of Surgical Research*, 244, 484–491. <https://doi.org/10.1016/j.jss.2019.06.082>
- Gerchow, L., Burka, L. R., Miner, S., & Squires, A. (2021). Language barriers between nurses and patients: A scoping review. *Patient Education and Counseling*, 104(3), 534–553. <https://doi.org/10.1016/j.pec.2020.09.017>
- Gulati, R.K., Hur, K. Association Between Limited English Proficiency and Healthcare Access and Utilization in California. *J Immigrant Minority Health* 24, 95–101 (2022). <https://doi-org.ezproxy.liberty.edu/10.1007/s10903-021-01224-5>
- Hasnain-Wynia, R., & Baker, D. W. (2006). Obtaining data on patient race, ethnicity, and primary language in health care organizations: Current challenges and proposed solutions. *Health Services Research*. <https://doi.org/10.1111/j.1475-6773.2006.00552.x>
- Hartford, E. A., Anderson, A. P., Klein, E. J., Caglar, D., Carlin, K., & Lion, K. C. (2019). The use and impact of professional interpretation in a pediatric emergency department. *Academic Pediatrics*, 19(8), 956–962. <https://doi.org/10.1016/j.acap.2019.07.006>
- Hines, A., Andrews, R., Moy, E., Barrett, M., & Coffey, R. (2014). Disparities in rates of inpatient mortality and adverse events: Race/ethnicity and language as independent contributors. *International Journal of Environmental Research and Public Health*, 11(12), 13017–13034. <https://doi.org/10.3390/ijerph111213017>
- HRSA. (2019, August 13). Health literacy. Official web site of the U.S. Health Resources & Services Administration. Retrieved August 14, 2022, from <https://www.hrsa.gov/about/organization/bureaus/ohe/health-literacy/index.html>
- Hsueh, L., Hirsh, A. T., Maupomé, G., & Stewart, J. C. (2019). Patient–provider language concordance and health outcomes: A systematic review, evidence map, and Research Agenda. *Medical Care Research and Review*, 78(1), 3–23. <https://doi.org/10.1177/1077558719860708>
- Jackson, Kylie H. BSN, RN; Mixer, Sandra J. PhD, RN, CTN-A Using an iPad for Basic Communication Between Spanish-Speaking Families and Nurses in Pediatric Acute Care, CIN: Computers, Informatics, Nursing: August 2017 - Volume 35 - Issue 8 - p 401-407 doi: 10.1097/CIN.0000000000000354
- John-Baptiste, A., Naglie, G., Tomlinson, G., Alibhai, S. M., Etchells, E., Cheung, A., Kapral, M., Gold, W. L., Abrams, H., Bacchus, M., & Krahn, M. (2004). The effect of English language proficiency on length of stay and in-hospital mortality. *Journal of General Internal Medicine*, 19(3), 221–228. <https://doi.org/10.1111/j.1525-1497.2004.21205.x>
- Levas, M. N., Cowden, J. D., & Dowd, M. D. (2011). Effects of the limited English proficiency of parents on hospital length of stay and home health care referral for their home health care-eligible children with infections. *Archives of pediatrics & adolescent medicine*, 165(9), 831–836. <https://doi.org/10.1001/archpediatrics.2011.61>
- Lundin, C., Hadziabdic, E., & Hjelm, K. (2018). Language interpretation conditions and boundaries in multilingual and Multicultural Emergency Healthcare. *BMC International Health and Human Rights*, 18(1). <https://doi.org/10.1186/s12914-018-0157-3>
- Ngai, K. M., Grudzen, C. R., Lee, R., Tong, V. Y., Richardson, L. D., & Fernandez, A. (2016). The association between limited English proficiency and unplanned emergency department revisit within 72 Hours. *Annals of Emergency Medicine*, 68(2), 213–221. <https://doi.org/10.1016/j.annemergmed.2016.02.042>
- Pannu, N. S., Hill-Mann, A., & Gill, G. (2017). The effect of language on hospital inpatient length of stay. *Healthcare Quarterly*, 20(1), 73–78. <https://doi.org/10.12927/hcq.2017.25140>
- PicNG.com. (2022). Stethoscope png. PicNG.com. Retrieved September 12, 2022, from <https://www.picng.com/png/objects/stethoscope/page/8>. **FIGURE 3**
- Rawal, S., Srighanthan, J., Vasantharopan, A., Hu, H., Tomlinson, G., & Cheung, A. M. (2019). Association between limited English proficiency and revisits and readmissions after hospitalization for patients with acute and chronic conditions in Toronto, Ontario, Canada. *JAMA*, 322(16), 1605. <https://doi.org/10.1001/jama.2019.13066>
- Reaume, M., Batista, R., Talarico, R., Rhodes, E., Guerin, E., Carson, S., Prud'homme, D., & Tanuseputro, P. (2020). The impact of hospital language on the rate of in-hospital harm. A retrospective cohort study of Home Care Recipients in Ontario, Canada. *BMC Health Services Research*, 20(1). <https://doi.org/10.1186/s12913-020-05213-6>
- Regalbuto, R., Maurer, M. S., Chapel, D., Mendez, J., & Shaffer, J. A. (2014). Joint Commission requirements for discharge instructions in patients with heart failure: Is understanding important for preventing readmissions? *Journal of Cardiac Failure*, 20(9), 641–649. <https://doi.org/10.1016/j.cardfail.2014.06.358>
- Rought, A. (2022). *Mask Word Collage*. Word Cloud Creator. Word Art. Retrieved September 12, 2022, from <https://wordart.com/>.
- Rotoli, Jason; Li, Timmy; Kim, Suejong; Wu, Tina; Hu, Jennifer; Endrizzi, Julie; Garton, Nathan; and Jones, Courtney (2020) "Emergency Department Testing and Disposition of Deaf American Sign Language Users and Spanish-Speaking Patients," *Journal of Health Disparities Research and Practice*: Vol. 13: Iss. 1, Article 8. Available at: <https://digitalscholarship.unlv.edu/jhdrp/vol13/iss1/8>
- Schulson, L., Novack, V., Smulowitz, P. B., Dechen, T., & Landon, B. E. (2018). Emergency department care for patients with limited English proficiency: A retrospective cohort study. *Journal of General Internal Medicine*, 33(12), 2113–2119. <https://doi.org/10.1007/s11606-018-4493-8>
- Seman, M., Karanatsios, B., Simons, K., Falls, R., Tan, N., Wong, C., Barrington-Brown, C., Cox, N., & Neil, C. J. (2019). The impact of cultural and Linguistic Diversity on hospital readmission in patients hospitalized with acute heart failure. *European Heart Journal - Quality of Care and Clinical Outcomes*, 6(2), 121–129. <https://doi.org/10.1093/ehjqcco/qcz034>
- Squires, A., Ma, C., Miner, S., Feldman, P., Jacobs, E. A., & Jones, S. A. (2022). Assessing the influence of patient language preference on 30 Day hospital readmission risk from home health care: A retrospective analysis. *International Journal of Nursing Studies*, 125, 104093. <https://doi.org/10.1016/j.ijnurstu.2021.104093>
- State of the Union. (2022, February 23). *US immigration: Visas, Green Cards & More: 2022 state of the union*. USAFacts. Retrieved May 24, 2022, from [https://usafacts.org/state-of-the-union/immigration/?utm\\_source=google&utm\\_medium=cpc&utm\\_campaign=ND-Immigration&gclid=Cj0KCQjwhLKUBhDiARIsAMaTLnHBY3Wdc2jzHgHTI\\_GxyTlJXM9iL4\\_PnapR9dWE6ohCGd27r4cBSekaArtmEALw\\_wcB](https://usafacts.org/state-of-the-union/immigration/?utm_source=google&utm_medium=cpc&utm_campaign=ND-Immigration&gclid=Cj0KCQjwhLKUBhDiARIsAMaTLnHBY3Wdc2jzHgHTI_GxyTlJXM9iL4_PnapR9dWE6ohCGd27r4cBSekaArtmEALw_wcB)
- Stephen, J. M., & Zoucha, R. (2020). Spanish speaking, limited English proficient parents whose children are hospitalized: An integrative review. *Journal of Pediatric Nursing*, 52, 30–40. <https://doi.org/10.1016/j.pedn.2020.02.033>
- “Transcultural Nursing.” RNPedia, RNPedia, 2022, <https://www.rnpedia.com/nursing-notes/fundamentals-in-nursing-notes/transcultural-nursing/>. Accessed 12 Sept. 2022.
- Tang, E. W., Go, J., Kwok, A., Leung, B., Lauck, S., Wong, S. T., Taipale, P. G., & Ratner, P. A. (2016). The relationship between language proficiency and surgical length of stay following cardiac bypass surgery. *European Journal of Cardiovascular Nursing*, 15(6), 438–446. <https://doi.org/10.1177/1474515115596645>
- Tuot, D. S., Lopez, M., Miller, C., & Karliner, L. S. (2012). Impact of an easy-access telephonic interpreter program in the Acute Care Setting: An Evaluation of a Quality Improvement Intervention. *The Joint Commission Journal on Quality and Patient Safety*, 38(2). [https://doi.org/10.1016/s1553-7250\(12\)38011-2](https://doi.org/10.1016/s1553-7250(12)38011-2)
- Wallbrecht, J.L., Hodes-Villamar, L., Weiss, S.J., & Ernst, A.A. (2014). No Difference in Emergency Department Length of Stay for Patients with Limited Proficiency in English. *Southern Medical Journal*, 107, 1–5.
- Waxman, M.A., & Levitt, M. (2000). Are diagnostic testing and admission rates higher in non-English-speaking versus English-speaking patients in the emergency department? *Annals of emergency medicine*, 36 5, 456-61 .
- Zhao, Y., Segalowitz, N., Voloshyn,A., Chamoux , E., & Ryder, A. G. (2021) Language Barriers to Healthcare for Linguistic Minorities: The Case of Second Language-specific Health Communication Anxiety, *Health Communication*, 36:3, 334-346, DOI: 10.1080/10410236.2019.1692488