



# Linguistic and Cultural Competence at Hospital Discharge

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## ABSTRACT

Hospital discharge is one of the most vulnerable moments in a patient's experience of care. One relatively unexplored area to improving transitions of care is how to meet the needs of diverse populations in a growing multicultural world. The intersectionality of language, race, ethnicity, and culture adds an additional layer of complexity to the hospital discharge process and raises the already high risk of communication failures. This article aims to review the role of language, race, ethnicity, and culture during the hospital discharge process; to discuss potential solutions to improve discharge outcomes amongst diverse populations; and to identify priority areas for future research.

## KEYWORDS

Cultural Competence, Cultural Humility, Hospital Discharge, Limited English Proficiency, Transitions in Care

## INTRODUCTION

Hospital discharge is one of the most vulnerable moments in a patient's experience of care. The discharge process is a complex system involving multiple stakeholders: physicians, nurses, case managers, pharmacists, patients, and their families. Coordination of care must occur across multiple institutions from the hospital to primary care clinics, home health services, and pharmacies. The inherent complexity introduces opportunities for both human and system errors and fragmentation of care (Mitchell et al., 2018). One in five hospital discharges is complicated by an adverse event within 30 days, often leading to the need to be readmitted (Forster et al., 2004; Forster et al., 2003). Early rehospitalization is associated with significant morbidity and mortality and is a marker for poor quality of care (Kansagara et al., 2015; Rohr, 2009). Unplanned readmissions cost the health care system around \$26 billion annually, making them a leading driver of preventable health care costs (Rohr, 2009). Despite the effort invested by multidisciplinary hospital teams, patients and families report feeling poorly prepared to assume care responsibilities, lacking both information and support they need (Mitchell et al., 2018).

One relatively unexplored area within the extensive body of work to improve transitions of care is how to meet the needs of diverse populations in growing multicultural world. The intersectionality

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of language, race, ethnicity, and culture adds an additional layer of complexity to the hospital discharge process and raises the already high risk of communication failures. Language barriers can hinder accurate information exchange, comprehension of discharge instructions, and thus adherence to treatment plans. Patients from different racial and ethnic backgrounds may have unique cultural perspectives on illness that influence acceptability of recommended treatments or create challenges in navigating the health care system. Providers may struggle to demonstrate empathy and respect to patients from different backgrounds and life experiences. Understanding and respecting such differences is vital to providing patient-centered care during the discharge process to ensure patient safety, reduce readmission rates, improve patient experience, and promote positive health outcomes.

This article reviews the role of language, race, ethnicity, and culture during the hospital discharge process, discusses potential solutions to improve discharge outcomes amongst diverse populations, and identifies priority areas for future research. Our discussion focuses on discharge from United States hospitals, though similar disparities are present in other countries for those from minoritized linguistic and cultural groups. Our focus does not comprehensively review all communication barriers salient at the time of hospital discharge, such as those faced by individuals who are deaf or blind, which are beyond the scope of this article. Also, this discussion focuses on diversity of language, race, and ethnicity as these are key contributors to adverse events at the time of hospital discharge, but other aspects of identity, such as gender and sexual orientation, not discussed here but are likely also relevant. Lastly, we will use the term limited English proficiency (LEP), though we acknowledge that preferences around ideal terminology may be in flux (Ortega et al., 2022).

## **RACE, ETHNICITY, AND CULTURE: AN OVERVIEW**

Recognizing the multifaceted impact of linguistic and cultural diversity in hospital discharge first requires an exploration the link between race, ethnicity, and culture (Egede, 2006; Flanagan et al., 2021). Race and ethnicity, while often used interchangeably, represent distinct but interconnected social constructs. Race is commonly understood as a categorization of individuals based on physical characteristics, such as skin color, while ethnicity refers to shared cultural heritage, ancestry, and nationality. Culture encompasses a broad range of shared values, beliefs, traditions, practices, and behaviors of a particular group, which may be reflected by language, religion, social norms, or dietary preferences. Because individual cultures are difficult to define and track on a population level, race, ethnicity, and preferred language are often used as proxies for cultural groups. These discrete labels, however, clearly oversimplify one's identity; some have advocated to instead focus on the concept of intersectionality to understand disparities in health care that arise from the combined force of inequalities (Wilson et al., 2019).

In the US the population with limited English proficiency (LEP)—defined as those with a limited ability to read, speak, write, or understand English—is on the rise (Ortega et al., 2022). Between 1980 and 2019 the number of Americans who speak a language other than English at home has tripled (U.S. Census Bureau, 2015). One in four Americans now living in a household where one of approximately 430 languages other than English is spoken. This shift is due in part to increasing global migration: the U.S. leads the world in its number of immigrants at approximately 40 million (Budiman, 2020).

Shifts in the racial and ethnic breakdown of the U.S. also demonstrate our increasing diversity. According to the 2020 U.S. Census, White non-Hispanic remains the most prevalent racial or ethnic group (Jensen et al., 2021). However, the second largest group—Hispanic or Latino—grew 23% as compared to the 2010 U.S. Census. Similarly, there is a dramatic 276% rise in those who identify as multiracial over this ten-year interval. Population diversity is shifting even faster for those under age 16 (Frey, 2020). Given both of these trends, understanding how to provide quality care at hospital discharge for a multicultural multilingual population is a pressing need.

## THE ROLE OF LANGUAGE AND CULTURE AT HOSPITAL DISCHARGE

The need to examine the dynamics at hospital discharge in diverse populations is supported by existing disparities in care. Those from minoritized racial and ethnic groups have higher readmission rates, with the greatest disparities for Black patients (Friedman & Basu, 2004; Rambachan et al., n.d.; Rodriguez-Gutierrez et al., 2019). For example, one study found that Black patients had 34% higher odds of being readmitted after acute myocardial infarction compared to White patients and that 79% of the racial difference in the risk could not be explained by other factors including age, baseline cardiac risk factors and comorbidities, or social determinants of health (Okafor et al., 2023).

Disparities also exist for patients with LEP at the time of hospital discharge. Linguistic barriers are associated with a higher likelihood of poor understanding of discharge instructions, unanswered questions at the time of discharge, experiencing new or worsening symptoms once home, and having trouble obtaining medications, all of which contribute to a higher incidence of post-discharge adverse events (Barreto et al., 2021; Malevanchik et al., 2021). While not all studies that have examined disparities in readmission for patients with LEP compared to English speakers it has been reliably demonstrated for conditions that require intensive self-management, such as heart failure, diabetes, and COPD (Chauhan et al., 2020; Rawal et al., 2019; Woods et al., 2022). It is important to note, however, that no studies to date have been able to fully control for factors that could make patients with LEP have a lower baseline risk of readmission—such as increased family support—which could mask disparities (Barreto et al., 2021; Chauhan et al., 2020; Malevanchik et al., 2021; Rawal et al., 2019; Woods et al., 2022).

While the causes of disparities originating from culture and language are likely multifactorial, understanding likely mechanism is important to craft effective solutions (Centers for Medicare and Medicaid Services, 2018). First and foremost, linguistic and cultural barriers exacerbate the already prevalent breakdown in communication that often occurs at hospital discharge. This is unsurprising: a systematic review found that interventions to improve communication at the time of hospital discharge improved patient satisfaction, increased treatment adherence, and reduced hospital readmissions (Becker et al., 2021). Lack of understanding due to language barriers may prevent patients from recognizing early warning signs, reaching out for help, and correctly assuming self-care responsibilities. Even without a language barrier, cultural discordance between patients and providers may lead to misunderstandings, make patients hesitant to ask questions or express opposition to care plans (thereby inhibiting their ability to advocate for their healthcare needs effectively), or lead provider recommendations to conflict with important cultural practices (Galanti, 2000; Kleinman, 1978; Kleinman & Benson, 2006; Schouten & Meeuwesen, 2006). The real-world impact of these barriers and how they manifest at the time of hospital discharge are highlighted in the vignettes in Box 1.

### Box 1. Vignettes to illustrate the role of barriers due to language, culture, and health literacy at the time of hospital discharge

All cases were inspired by actual patients cared for by the authors. Details have been changed to protect patient confidentiality.
<p><i>Vignette 1</i></p> <p>An 18-year-old non-verbal patient with epilepsy and developmental delay who was cared for by his Vietnamese speaking mother presented for breakthrough seizures. The doses of the patient's anti-epileptic medications were increased and his mother received excellent discharge teaching on medication dosing with an in-person interpreter. Once home, however, she became confused because the labels of the new medications were not translated into Vietnamese, resulting in her giving the patient half the dose of levetiracetam and twice the dose of phenytoin intended. The patient was readmitted one week later for altered mental status due to supratherapeutic phenytoin levels.</p>
<p><i>Vignette 2</i></p> <p>A 58-year-old Spanish speaking male from Guatemala was admitted for epigastric pain. He was cared for by a hospitalist fluent in Spanish who diagnosed him with H pylori gastritis. The hospitalist started him on quadruple therapy; while he was concerned that the quantity of pills could be harmful, he did not want to disagree with the physician and accepted this plan on discharge. At home, his family also expressed concern about the quantity of pills he was taking and suggested he stop them, and instead take a tea sent from Guatemala that had cured a relative's abdominal pain. Due to his inadequately treated H pylori gastritis, his pain worsened, but due to lack of insurance he did not seek care until it became severe. Months later he presented to the emergency room and was found to have a perforated gastric ulcer requiring urgent surgical intervention.</p>

Lack of trust in cross-cultural discharge encounters may also play a role. Patients from minoritized groups have higher levels of warranted mistrust given the legacy of racism in medicine and ongoing evidence of implicit bias which impacts clinical interactions and provider decision-making (Chapman et al., 2013; Daugherty et al., 2017; Dehon et al., 2017; Fitzgerald & Hurst, 2017; Hall et al., 2015; Kleinman, 1978; Zestcott et al., 2016). As an example, multiple studies have found that Black patients experience inferior quality of communication with their medical providers (Shen et al., 2018). Challenges in developing rapport and expressing empathy may discourage patients from following recommendations from the care team after discharge (Galanti, 2000).

Unique considerations also arise around the role of family. While American culture prioritizes autonomy, family and community support are important in many cultural groups and can be a powerful positive force in ensuring a safe transition of care (Alden et al., 2018). Failure to engage key players and understand their perspective may lead to opposition to the discharge plan or dissatisfaction with care, ultimately leading to a readmission. Family may recommend complementary and alternative treatments, or medications that are under prescription control in the U.S. but available over the counter in many other countries (such as antibiotics) (Lescure et al., 2021).

Health literacy—defined as the ability to find, understand, and use information and services to inform health-related decisions and actions—likely also plays a role in disparities at discharge (Mantwill et al., 2015). While low health literacy (LHL) is widely prevalent in the overall American population (about 40% of the population), it is even more common in minoritized racial and ethnic groups (Eneanya et al., 2016; Mantwill et al., 2015; Muvuka et al., 2020). LHL may also compound language barriers (Andrulis & Brach, 2007; Sentell & Braun, 2012). However, even native speakers of English and highly educated patients may have LHL at the time of hospital discharge, at least in part due to impaired sleep that limits information processing and attention (Kripalani et al., 2010). Data has shown that less than half of patients understand and recall key domains shared during discharge teaching—such as their primary diagnosis and medication changes—but are largely unaware of these gaps in understanding and retention (Townshend et al., 2023). LHL is an independent risk factor for hospital readmission and remains a promising target for intervention to ameliorate health disparities at discharge (Mitchell et al., 2012).

Systems navigation is an important component of health literacy (Andrulis & Brach, 2007). Transitions of care create discontinuity that often require significant patient effort to overcome. However, navigating the complex U.S. healthcare system requires a comprehensive understanding of how it works, language skills, and comfort with self-advocacy. All of these are more challenging for patients and families who face linguistic and cultural barriers. As electronic solutions evolve to help in care coordination—such as online patient portals, which are often available only in English, to create access to test results, medication lists, and provider communication—patients from disadvantaged and minority backgrounds with inferior access to technology will be left even further behind (Chang et al., 2018).

Lastly, race, ethnicity, and language also track with social determinants of health that place individuals at higher risk for readmission (Fischer et al., 2021). Challenges include poor access to primary care, disparities in insurance coverage impacting eligibility for home services, affordability of out-of-pocket medication costs, homelessness, schedule inflexibility due to employment type, and lack of reliable transportation.

## **CULTURALLY AND LINGUISTICALLY APPROPRIATE SERVICES AT HOSPITAL DISCHARGE**

The US Department of Health and Human Services defines culturally and linguistically appropriate services (CLAS) as those that “are respectful of and responsive to the health beliefs, practices, and needs of diverse patients” (2023). We will turn to exploring solutions at the patient, provider,

organization, and systems level to promote linguistic and cultural competency at the time of hospital discharge. Unfortunately, few evidence-based interventions exist to improve cultural competence: a systematic review of strategies found that none of the studies included had shown a decrease in disparities (Butler et al., 2016). This may be due in part to the focus on individual level interventions while ignoring the strength of influence of organization culture and an enabling environment, or an unproven belief that changing provider attitudes will translate into improved patient outcomes. As such, much of what is reviewed below constitutes “best practices” that require further studies to determine their true impact on patient-centered outcomes and health disparities (Agency for Healthcare Research and Quality, 2020a; Centers for Medicare and Medicaid Services, 2018).

## Professional Interpreters

One clear evidence-based solution to overcome linguistic barriers at the time of hospital discharge is the use of professional interpreters. There is robust evidence that use of professional interpreters improves the quality and safety of care while also reducing hospital length of stay and readmission rates (Bauer & Alegría, 2010; Diamond et al., 2019; Heath et al., 2023; Joseph et al., 2017; Karliner et al., 2007; Karliner et al., 2017). The form of interpreter appears to be less important, with equal patient satisfaction rating of in-person, video, or phone interpretation (Joseph et al., 2017; Pathak et al., 2021).

Despite national laws mandating universal access to interpreters, widespread underuse in the hospital setting remains (Diamond et al., 2009; Diamond et al., 2010; Hartford et al., 2019; Schenker et al., 2011). A study from 2010 found that only 14% of hospitals surveys met all CLAS standards relating to language services (Diamond et al., 2010). Providers often opt for more convenient ad hoc interpreters—such as bilingual hospital staff who are not trained as interpreters and family members—or try to “get by” without one, possibly due to overestimation of their own language skills in institutions that do not test bilingual providers (Lion et al., 2012; Schenker et al., 2011). Other factors such as lack of identification of language barriers or variable quality of interpreters have also been identified as drivers of non-use (Lion et al., n.d.). One study found that placing dual handset telephones beside all hospital beds drastically increase compliance with interpreter use, suggesting inconvenience plays a major role in underuse (Lee et al., 2018). When providers fail to use professional interpreters, patients may not feel comfortable requesting one. On the flipside, patients themselves may decline professional interpreters, possibly due to a lack of understanding about their benefit or concerns about confidentiality, which is especially salient in small cultural communities where patients may encounter interpreters outside of the hospital. Training providers in the proper use of interpreters, and national certification for professional interpreters could target these issues (Jones et al., 2020).

Provider education on the benefits of professional interpreter use alone is likely to be an effective strategy to fix this implementation gap. Interventions that target the multilevel determinants of interpreter use are needed for sustainable change to occur (Khoong & Fernandez, 2021). Technology must be harnessed to help providers easily identify patients with language barriers (i.e., verbal and written language preference in the electronic medical record), to reduce the inconvenience of accessing interpreters (i.e., quick and easy to use phone and video interpreter capacity in each patient room), and to improve the quality of interpretation (i.e., tablet-based video interpreters).

Institutional policies around use of professional interpreters are key to improving their real-world use (Lion et al., 2023). Hospitals should clearly communicate expectations and build capacity to audit interpreter use at the provider level. For example, hospitals could build a “hard stop” for all documentation in the electronic medical record that requires providers to document if an interpreter was used and which form for all patients registered as LEP. This could link with requests for phone or in-person interpreters that day to ensure accuracy in documentation. Regulatory agencies and payors could require this documentation and provide financial incentives to facilities that meet benchmarks.

## Workforce Diversity

A second clearly evidence-based approach to improving CLAS is to increase the diversity of health care providers to match that of the population served (Handtke et al., 2019; U.S. Department of Health and Human Services O of MH, n.d.). A diverse healthcare workforce brings a broader range of perspectives, experiences, and cultural competencies to the table, enabling better understanding and responsiveness to the needs of diverse patient populations. Incorporating individuals from different racial, ethnic, and cultural backgrounds into the workforce may be an effective strategy to mitigate biases and stereotypes, promoting fair and unbiased treatment. Moreover, a diverse workforce can inspire trust and confidence among patients, particularly among marginalized communities who have historically faced discrimination and disparities in health care. While such efforts are worthwhile, the payout is not immediate. Success will require significant investment from hospitals, universities and medical schools, and the government to invest in pipeline programs and ongoing support to ensure adequate health care worker support to prevent burnout (Lawrence et al., n.d.).

A more diverse workforce will create more opportunities to match patients and provider demographics to remove the linguistic and cultural barriers that strain communication and trust. Studies have shown that patient-provider concordance according to language, race, ethnicity, and gender improve patient satisfaction, though the impact of clinical outcomes remains unclear (Ngo-Metzger et al., 2007; Takeshita et al., 2020). In addition, supporting more providers in acquiring language skills can increase the pool of language concordant providers. However, it is vital to formal test provider fluency before allowing providers to directly communicate with patients with a non-English preference and to have a clear policy that these providers cannot serve as interpreters for others (Lion et al., 2012).

## Universal Precautions for Low Health Literacy

Given the high prevalence of LHL in the U.S., especially among racial and ethnic minorities, we encourage hospitals take a “universal precautions” approach at the time of hospital discharge (Agency for Healthcare Research and Quality, 2020b). This approach of assuming all patients have LHL prevents the need for staff conducting discharge teaching to screen for health literacy and may increase routine use of evidence-based communication techniques. Best practices for LHL include using simplified language at no higher than a fifth grade reading level. Teach-back, a method to confirm patient/family understanding of what a provider wants to communicate, has been proven to improve patient comprehension and clinical outcomes, including lower rates of hospital readmission (Griffey et al., 2015; Ha Dinh et al., 2016; Lindblom et al., 2023; Mahajan et al., 2020; Yen et al., n.d.). Training staff in the use of teach-back via a professional interpreter is key given the additional complexity involved (Centre for Culture E&H, 2017).

Hospitals can also develop enhanced discharge teaching materials that have been shown to improve comprehension in populations with LHL. These include visual aids, such as pictographics, or short informational videos (Hill et al., 2016; Houts et al., 2006; Kountz, 2009; Lion & DeCamp, 2019; Lion et al., 2019; Zeng-Treitler et al., n.d.). Novel IT solutions that can provide in-depth patient teaching—such as embodied conversational agents, computer-generated characters that facilitate interactive communication with patients that simulate human face-to-face conversation—are promising solutions as they reduce burden on hospital staff. Furthermore, these solutions can easily be scaled to serve patients with LEP.

## Translation

While access to interpreters, professional who translates spoken words, is common in hospitals, few have developed capacity for translation, which refers to converting written words in another language (Choe et al., 2021; Davis et al., 2019). The ability to reference key information after hospital discharge is vital given the low retention of information at the time of discharge (Townshend et al., 2023).

AHRQ recommends providing all patients on discharge with written instructions that summarize their hospital course, self-care instructions, medication changes and potential side effects, follow-up appointments, and issues to discuss with primary care after discharge. This patient-facing discharge summary is typically not prepared until the day of discharge and translation services typically cannot provide this quick of turnaround, meaning most patients with LEP are given these instructions only in English. As such, there is a systemic inequity as patients with LEP are not provided personalized discharge instructions in their preferred language. While stock handouts may be available in multiple languages, these provide only generic recommendations that fail to address all categories of information recommended for discharge communication with patients. Some providers use Google translate or other publicly available language translation services. However, studies have shown that the quality of translation is error prone and pose a patient safety risk (Lee et al., 2023; Taira et al., 2021). New technology for high fidelity on-demand translation for hospital discharge and other novel solutions that can overcome this barrier should be a priority for researchers.

### **Systems Navigation**

Primary care follow up within seven days of discharge has been shown to reduce readmissions (Anderson et al., 2018). Obtaining appointments may be challenging for patients who face linguistic barriers—as front desk staff may not speak their language—or lack an existing connection to primary care—which is more common for minoritized groups. As such, policies that ensure universal primary care follow-up prior to discharge could help diverse populations avoid this barrier that likely contributes to disparities.

As questions or concerns often arise after hospital discharge all patients need clear instructions on who to call when questions arise post-discharge. A standardized post-discharge telephone call may reduce readmission (Vernon et al., 2019). Similarly, access to online patient portals can provide a much needed means of accessing information and guidance without returning to the emergency room (Chang et al., 2018). There is little data currently about how equitable the reach of these programs is, given the language barriers for patients with LEP face and possible disparities in smart phone ownership by race and ethnicity. Potential avenues for future research include provision of low-cost cellphones at the time of discharge and technology-enabled solutions to improve communication with diverse patient populations during this important transition of care.

Patient navigation is another promising strategy to better support patients from diverse backgrounds during the transition from hospital to home. Community health workers that provide post-discharge support can help patients who face barriers to care navigate health systems more effectively. One program delivered to primarily Black patient population that focused on both systems navigation and social support found a reduction in recurrent hospital admissions (Kangovi et al., 2014). However, another program which utilized bilingual community health workers found an increase in readmissions in younger patients, possibly due to increased detection of important health needs (Balaban et al., 2015). Further data is needed to clarify which programmatic components result in positive impacts for both patients and health systems.

### **Cultural Competency/Humility Training**

Cultural competence is at its core the ability to understand, respect, and effectively interact with people from cultures other than one's own (Butler et al., 2016). Slowly replacing this concept is cultural humility, which emphasizes critical self-reflexivity and awareness of personal biases, ultimately seeking to reduce power imbalances between patients and providers (Kibakaya & Oyeku, 2022). For healthcare providers, cultural humility is crucial to delivering high-quality patient-centered care that includes developing the skills to fostering trust and rapport across cultural divides. Many organizations have produced curricula for training hospital staff in cultural competence, including an entire library from AHRQ that is publicly available (Agency for Healthcare Research and Quality, 2023). These materials include recommendations on delivering the transitional care intervention ReEngineered

Discharge (Project RED) to diverse populations, including assessing health beliefs related to medications, awareness of non-verbal communication that may differ by culture, considerations regarding the role of family and traditional healers, and tips for effective use of interpreters (Agency for Healthcare Research and Quality, 2020a; Jack et al., 2009).

Despite the significant resources that have been invested in cultural competency training, to date it has not been shown to reduce health disparities (Butler et al., 2016). Some studies have found improvement in patient satisfaction after provider training, but the quality of evidence is low and effect size small. There remains a need for effective models to prepare clinicians to care for diverse populations. Training that focuses on specific communication skills—for example, overcoming patient deference to authority or promoting patient and family engagement in care—or evidence-based strategies to combat implicit bias are areas for further inquiry.

### **Health Related Social Needs Screening**

While screening for health-related social needs (HRSN) screening has become quite commonplace in the outpatient setting, its use during a hospitalization remains less common (Drake et al., 2021; Escobar et al., 2021). However, data suggests that investment in HRSN in the inpatient setting is on the rise (Horwitz et al., 2020; Patel et al., 2022). Studies that robustly evaluate the impact of HRSN screening on readmission and other patient-centered outcomes at the time of hospital discharge should be a priority.

### **Meaningful Involvement of Patients and Their Families in the Discharge Process**

While understanding the vulnerabilities of diverse populations is important to targeting areas for intervention, so is recognizing strengths of these communities. Given the prominent role of family in many other cultures compared to the U.S. Qualitative evidence has shown that minoritized patients are more likely to feel that their needs and preferences were not considered in discharge planning (Jones et al., 2023). As such, best practices to understand patients' and families' preferences and values should be pursued as a strategy to promote engagement. If successful, such efforts are likely to reduce readmissions: a study conducted in older adults found that when family was involved in discharge planning the risk of readmission was reduced by 25%. However, given the importance of family in many cultures it is an evidence-informed recommendation.

## **PUTTING IT INTO PRACTICE**

To date many interventions have been developed to improve the transition from hospital to home (Fønss Rasmussen et al., 2021; Leppin et al., 2014; Naylor et al., 2017; Transitional Care Interventions to Prevent Readmissions for People With Heart Failure, n.d.; Wray & Jones, 2023). While each vary, they share many common features, or transitional care components, which are listed in Table 1 (Li et al., 2021). As hospitals and health systems consider how to implement changes to improve linguistic and cultural competency at the time of hospital discharge discussed above, knowing how to put them into action at the patient level can present a challenge. As such, we have summarized the key considerations for delivering a discharge intervention to culturally and linguistically diverse populations and matched them to each transitional care component (Table 1).

## **CONCLUSION**

National CLAS principal standard is to “provide effective, equitable, understandable, and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred language, health literacy, and other communication needs” (U.S. Department of Health and Human



Table 1. Suggestions

Transitional Care Component	Considerations for Diverse Populations
Conduct an initial patient needs assessment	<ul style="list-style-type: none"> <li>- Identify language needs and preferences (spoken, written)</li> <li>- Explore patient’s cultural identity</li> <li>- Explore family involvement and community supports</li> <li>- Review insurance status, connect with resource to apply if uninsured or underinsured</li> <li>- Screen for need for support around social determinants of health (i.e. food insecurity, housing)</li> <li>- Assess connection to primary care</li> </ul>
Medication reconciliation	<ul style="list-style-type: none"> <li>- Ask about complementary and alternative medications</li> <li>- Ask about medications brought from out of country</li> </ul>
Create patient-facing discharge summary (After Visit Summary or After Hospital Care Plan)	<ul style="list-style-type: none"> <li>- Employ universal precautions for health literacy</li> <li>- Develop capacity for on-demand translation or workarounds (i.e. audio recording discharge teaching with interpreter)</li> <li>- Cultural adaptation of any stock handouts used</li> </ul>
Patient education: review summary with patient (and family)	<ul style="list-style-type: none"> <li>- Consider influence of cultural on dietary and lifestyle recommendations</li> <li>- Provider training in effective use of interpreters</li> <li>- Assess understanding using teach back</li> </ul>
Discharge medications and DME	<ul style="list-style-type: none"> <li>- Confirm typical mealtimes for any taken with food</li> <li>- Translate medication labels</li> <li>- Check cost of new medications and connect with resources for discounts</li> <li>- Consider bedside medication delivery</li> </ul>
Plan for pending tests/studies	<ul style="list-style-type: none"> <li>- Ensure communication with post-discharge providers</li> <li>- Enroll in patient portal (if language concordant)</li> </ul>
Follow-up appointments	<ul style="list-style-type: none"> <li>- Schedule prior to discharge</li> <li>- Arrange interpreter if needed</li> <li>- Consider transportation (voucher)</li> </ul>
Post-discharge phone call	<ul style="list-style-type: none"> <li>- Arrange interpreter if needed</li> <li>- Stock of cell phones to send with patients</li> </ul>
Post-discharge home visit	<ul style="list-style-type: none"> <li>- Explore cultural appropriateness of in-home care</li> <li>- Arrange interpreter if needed</li> </ul>

Note: Table adapted from Re-Engineered Discharge to Diverse Populations (Hall et al., 2015) tool contained in the RED Toolkit on the AHRQ website

Services O of MH, n.d.). In this article we have explored the complex interconnection between language, race, ethnicity, and culture and the hospital discharge process with the aim of contributing to the growing body of knowledge and advance the development of culturally competent practices at this critical transition in care. Adapting care to needs of minorized groups is increasingly being recognized as a pillar of quality in health care and a key strategy for addressing pervasive health inequities (Alvidrez, Nápoles, Bernal, Lloyd, Cargill, Godette, Cooper, Horse Brave Heart, Das, & Farhat, 2019). Despite the multitude of transitional care interventions developed and tested to date, the vast majority have excluded participants with LEP. Simply extrapolating these interventions to diverse populations means they are unlikely to meet the needs of diverse populations and fail to achieve the desired impact of reducing readmissions. There is an urgent need for transitional care interventions that are designed or adapted to meet the unique needs of patients with LEP and from other minoritized communities. Understanding how to best support diverse populations at the time of hospital discharge is critical step towards achieving equitable, patient-centered care.

## ABBREVIATIONS

**AHRQ:** Agency for Healthcare Research and Quality

**HRSN:** Health Related Social Needs

**LEP:** Limited English Proficiency

**LHL:** Low Health Literacy

**U.S.:** United States

## REFERENCES

- Agency for Healthcare Research and Quality. (2020a). *Re-Engineered Discharge (RED)*. Toolkit.
- Agency for Healthcare Research and Quality. (2020b). *AHRQ Health Literacy Universal Precautions Toolkit*. Available from: <https://www.ahrq.gov/health-literacy/improve/precautions/index.html>
- Agency for Healthcare Research and Quality. (2023). *Culturally and Linguistically Appropriate Services*. Available from: <https://www.ahrq.gov/sdoh/clas/index.html>
- Alden, D. L., Friend, J., Lee, P. Y., Lee, Y. K., Trevena, L., Ng, C. J., Kiatpongsan, S., Lim Abdullah, K., Tanaka, M., & Limpongsanurak, S. (2018, January 8). Who Decides: Me or We? Family Involvement in Medical Decision Making in Eastern and Western Countries. *Medical Decision Making*, 38(1), 14–25. doi:10.1177/0272989X17715628 PMID:28691551
- Alvidrez, J., Nápoles, A. M., Bernal, G., Lloyd, J., Cargill, V., Godette, D., Cooper, L., Horse Brave Heart, M. Y., Das, R., & Farhat, T. (2019, January 1). Building the Evidence Base to Inform Planned Intervention Adaptations by Practitioners Serving Health Disparity Populations. *Am J Public Health. NLM (Medline)*, 109(S1), S94–S101. PMID:30699023
- Anderson, A., Mills, C.W., Willits, J., Lisk, C., Maksut, J.L., Khau, M.T., & Scholle, S.H. (2018). Follow-up Post-discharge and Readmission Disparities Among Medicare Fee-for-Service Beneficiaries. *J Gen Intern Med.*, 37(12), 3020–3028.
- Andrulis, D. P., & Brach, C. (2007). Integrating Literacy, Culture, and Language to Improve Health Care Quality for Diverse Populations. *American Journal of Health Behavior*, 31(1), 122–133. doi:10.5993/AJHB.31.s1.16 PMID:17931131
- Balaban, R. B., Galbraith, A. A., Burns, M. E., Vialle-Valentin, C. E., Laroche, M. R., & Ross-Degnan, D. (2015). A Patient Navigator Intervention to Reduce Hospital Readmissions among High-Risk Safety-Net Patients: A Randomized Controlled Trial. *Journal of General Internal Medicine*, 30(7), 907–915. doi:10.1007/s11606-015-3185-x PMID:25617166
- Barreto, E. A., Guzikowski, S., Michael, C., Carter, J., Betancourt, J. R., Tull, A., Tan-McGrory, A., & Donelan, K. (2021). The role of race, ethnicity, and language in care transitions. *The American Journal of Managed Care*, 27(7), E221–E225. doi:10.37765/ajmc.2021.88705 PMID:34314122
- Bauer, A., & Alegría, M. (2010). Impact of Patient Language Proficiency and Interpreter Service Use on the Quality of Psychiatric Care: A Systematic Review. *Psychiatric Services*, 61(8).
- Becker, C., Zumbunn, S., Beck, K., Vincent, A., Loretz, N., Müller, J., Amacher, S. A., Schaefer, R., & Hunziker, S. (2021). Interventions to Improve Communication at Hospital Discharge and Rates of Readmission. *JAMA Network Open*, 4(8), e2119346. doi:10.1001/jamanetworkopen.2021.19346 PMID:34448868
- Budiman, A. (2020). *Key findings about U.S. immigrants*. The Pew Research Center.
- Butler, M., Ellen McCreedy, M., & Natalie Schwer, M. (2016). *Improving Cultural Competence To Reduce Health Disparities*. Available from: [www.ahrq.gov](http://www.ahrq.gov)
- Centers for Medicare and Medicaid Services. (2018). *Guide to Reducing Disparities in Readmissions. Centers for Medicare and Medicaid Services*. Available from: [https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH\\_Readmissions\\_Guide.pdf](https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH_Readmissions_Guide.pdf)
- Centre for Culture E&H. (2017). *Using teach-back via an interpreter*. Available from: [www.ceh.org.au](http://www.ceh.org.au)
- Chang, E., Blondon, K., Lyles, C. R., Jordan, L., & Ralston, J. D. (2018, January 1). Racial/ethnic variation in devices used to access patient portals. *The American Journal of Managed Care*, 24(1), e1–e8. PMID:29350513
- Chapman, E. N., Kaatz, A., & Carnes, M. (2013). Physicians and implicit bias: How doctors may unwittingly perpetuate health care disparities. *Journal of General Internal Medicine*, 28(11), 1504–1510. doi:10.1007/s11606-013-2441-1 PMID:23576243
- Chauhan, A., Walton, M., Manias, E., Walpole, R. L., Seale, H., Latanik, M., Leone, D., Mears, S., & Harrison, R. (2020). The safety of health care for ethnic minority patients: A systematic review. *Int J Equity Health. International Journal for Equity in Health*, 19(1), 1–25. doi:10.1186/s12939-020-01223-2 PMID:32641040

- Choe, A. Y., Schondelmeyer, A. C., Thomson, J., Schwieter, A., McCann, E., Kelley, J., Demeritt, B., & Unaka, N. I. (2021, November 1). Improving Discharge Instructions for Hospitalized Children With Limited English Proficiency. *Hosp Pediatr. American Academy of Pediatrics*, 11(11), 1213–1222. PMID:34654727
- Daugherty, S. L., Blair, I. V., Havranek, E. P., Furniss, A., Dickinson, L. M., Karimkhani, E., Main, D. S., & Masoudi, F. A. (2017). Implicit gender bias and the use of cardiovascular tests among cardiologists. *Journal of the American Heart Association*, 6(12), e006872. doi:10.1161/JAHA.117.006872 PMID:29187391
- Davis, S. H., Rosenberg, J., Nguyen, J., Jimenez, M., Lion, K. C., Jenicek, G., Dallmann, H., & Yun, K. (2019, October 1). Translating Discharge Instructions for Limited English–Proficient Families: Strategies and Barriers. *Hosp Pediatr. Hospital Pediatrics*, 9(10), 779–787. doi:10.1542/hpeds.2019-0055 PMID:31562199
- Dehon, E., Weiss, N., Jones, J., Faulconer, W., Hinton, E., & Sterling, S. (2017). A Systematic Review of the Impact of Physician Implicit Racial Bias on Clinical Decision Making. *Academic Emergency Medicine*, 24(8), 895–904. Available from: <http://doi.wiley.com/10.1111/acem.13214>
- Diamond, L., Izquierdo, K., Canfield, D., Matsoukas, K., & Gany, F. (2019). A Systematic Review of the Impact of Patient–Physician Non-English Language Concordance on Quality of Care and Outcomes. *Journal of General Internal Medicine*, 1591–1606.
- Diamond, L. C., Schenker, Y., Curry, L., Bradley, E. H., & Fernandez, A. (2009, February). Getting By: Underuse of interpreters by resident physicians. *Journal of General Internal Medicine*, 24(2), 256–262. doi:10.1007/s11606-008-0875-7 PMID:19089503
- Diamond, L. C., Wilson-Stronks, A., & Jacobs, E. A. (2010). *Do Hospitals Measure up to the National Culturally and Linguistically Appropriate Services Standards?* Available from: [www.lww-medicalcare.com](http://www.lww-medicalcare.com)
- Drake, C., Batchelder, H., Lian, T., Cannady, M., Weinberger, M., Eisenson, H., Esmaili, E., Lewinski, A., Zullig, L.L., Haley, A., Edelman, D., & Shea, C.M. (2021). Implementation of social needs screening in primary care: a qualitative study using the health equity implementation framework. *BMC Health Serv Res.*, 21(1).
- Egede, L. E. (2006, June). Race, ethnicity, culture, and disparities in health care. *Journal of General Internal Medicine*, 21(6), 667–669. doi:10.1111/j.1525-1497.2006.0512.x PMID:16808759
- Eneanya, N.D., Winter, M., Cabral, H., Waite, K., Henault, L., Bickmore, T., Hanchate, A., Wolf, M., & Paasche-Orlow, M.K. (2016). Health literacy and education as mediators of racial disparities in patient activation within an elderly patient cohort. *J Health Care Poor Underserved*, 27(3), 1427–1440.
- Escobar, E. R., Pathak, S., & Blanchard, C. M. (2021). Screening and Referral Care Delivery Services and Unmet Health-Related Social Needs: A Systematic Review. *Preventing Chronic Disease*, 18, 1–22. doi:10.5888/pcd18.200569
- Fischer, A., Conigliaro, J., Allicock, S., & Kim, E.J. (2021). Examination of social determinants of health among patients with limited English proficiency. *BMC Res Notes*, 14(1).
- Fitzgerald, C., & Hurst, S. (2017). Implicit bias in healthcare professionals: A systematic review. *BMC Med Ethics*. *BMC Medical Ethics*, 18(1), 19. doi:10.1186/s12910-017-0179-8 PMID:28249596
- Flanagin, A., Frey, T., Christiansen, S. L., & Bauchner, H. (2021). *The Reporting of Race and Ethnicity in Medical and Science Journals Comments Invited*. Available from: <https://jamanetwork.com/>
- Fønss Rasmussen, L., Grode, L.B., Lange, J., Barat, I., & Gregersen, M. (2021). Impact of transitional care interventions on hospital readmissions in older medical patients: A systematic review. *BMJ Open*.
- Forster, A. J., Clark, H. D., Menard, A., Dupuis, N., Chernish, R., Chandok, N., Khan, A., & van Walraven, C. (2004, February 3). Adverse events among medical patients after discharge from hospital. *Canadian Medical Association Journal*, 170(3), 345–349. <https://www.ncbi.nlm.nih.gov/pubmed/14757670> PMID:14757670
- Forster, A. J., Murff, H. J., Peterson, J. F., Gandhi, T. K., & Bates, D. W. (2003). *The Incidence and Severity of Adverse Events Affecting Patients after Discharge from the Hospital Background*. Available from: <https://annals.org>
- Frey, W. (2020). The nation is diversifying even faster than predicted, according to new census data. Academic Press.

- Friedman, B., & Basu, J. (2004, June). The rate and cost of hospital readmissions for preventable conditions. *Medical Care Research and Review*, *61*(2), 225–240. doi:10.1177/1077558704263799 PMID:15155053
- Galanti, G. A. (2000, May 1). An introduction to cultural differences. *The Western Journal of Medicine*, *172*(5), 335–336. doi:10.1136/ewjm.172.5.335 PMID:10832428
- Griffey, R. T., Shin, N., Jones, S., Aginam, N., Gross, M., Kinsella, Y., Williams, J. A., Carpenter, C. R., Goodman, M., & Kaphingst, K. A. (2015). The impact of teach-back on comprehension of discharge instructions and satisfaction among emergency patients with limited health literacy: A randomized, controlled study. *Journal of Communication in Healthcare*, *8*(1), 10–21. doi:10.1179/1753807615Y.0000000001 PMID:26617669
- Ha Dinh, T. T., Bonner, A., Clark, R., Ramsbotham, J., & Hines, S. (2016, January). The effectiveness of the teach-back method on adherence and self-management in health education for people with chronic disease: A systematic review. *JBIS Database of Systematic Reviews and Implementation Reports*, *14*(1), 210–247. doi:10.11124/jbisrir-2016-2296 PMID:26878928
- Hall, W. J., Chapman, M. V., Lee, K. M., Merino, Y. M., Thomas, T. W., Payne, B. K., Eng, E., Day, S. H., & Coyne-Beasley, T. (2015). Implicit racial/ethnic bias among health care professionals and its influence on health care outcomes: A systematic review. *American Journal of Public Health*.
- Handtke, O., Schilgen, B., & Mösko, M. (2019). Culturally competent healthcare – A scoping review of strategies implemented in healthcare organizations and a model of culturally competent healthcare provision. *PLoS One*, *14*(7).
- Hartford, E. A., Anderson, A. P., Klein, E. J., Caglar, D., Carlin, K., & Lion, K. C. (2019, November 1). The Use and Impact of Professional Interpretation in a Pediatric Emergency Department. *Academic Pediatrics*, *19*(8), 956–962. doi:10.1016/j.acap.2019.07.006 PMID:31394260
- Heath, M., Hvass, A. M. F., & Wejse, C. M. (2023). *Interpreter services and effect on healthcare - a systematic review of the impact of different types of interpreters on patient outcome. Journal of Migration and Health* .
- Hill, B., Perri-Moore, S., Kuang, J., Bray, B.E., Ngo, L., Doig, A., & Zeng-Treitler, Q. (2016). Automated pictographic illustration of discharge instructions with Glyph: Impact on patient recall and satisfaction. *Journal of the American Medical Informatics Association*, *23*(6), 1136–1142.
- Horwitz, L. I., Chang, C., Arcilla, H. N., & Knickman, J. R. (2020, February 1). Quantifying health systems' investment in social determinants of health, by sector, 2017–19. *Health Affairs (Project Hope)*, *39*(2), 192–198. doi:10.1377/hlthaff.2019.01246 PMID:32011928
- Houts, P.S., Doak, C.C., Doak, L.G., & Loscalzo, M.J. (2006). The role of pictures in improving health communication: A review of research on attention, comprehension, recall, and adherence. In *Patient Education and Counseling*. Elsevier Ireland Ltd.
- Jack, B. W., Chetty, V. K., Anthony, D., Greenwald, J. L., Sanchez, G. M., Johnson, A. E., & Forsythe, S. R. (2009). *A Reengineered Hospital Discharge Program to Decrease Rehospitalization: A Randomized Trial*. Available from: <https://annals.org>
- Jensen, E., Jones, N., Rabe, M., Pratt, B., Medina, L., Orozco, K., & Spell, L. (2021). *2020 U.S. Population More Racially and Ethnically Diverse Than Measured in 2020*. US Census Bureau.
- Jones, J., Rice, K., Cueto, V., Mojica, C. D. V., Stawitcke, M., Salem, S., Talley, E., & Blankenburg, R. (2020). Increasing Health Care Workers' Proficiency With Using Professional Medical Interpretation: A Workshop. *MedEdPORTAL*.
- Jones, K. C., Austad, K., Silver, S., Cordova-Ramos, E. G., Fantasia, K. L., Perez, D. C., Kremer, K., Wilson, S., Walkley, A., & Drainoni, M. L. (2023, January 2). Patient Perspectives of the Hospital Discharge Process: A Qualitative Study. *Journal of Patient Experience*, *10*. doi:10.1177/23743735231171564 PMID:37151607
- Joseph, C., Garruba, M., & Melder, A. (2017). Patient satisfaction of telephone or video interpreter services compared with in-person services: A systematic review. *Australian Health Review*, *42*(2), 168–177. doi:10.1071/AH16195 PMID:30021688

- Kangovi, S., Mitra, N., Grande, D., White, M. L., McCollum, S., Sellman, J., Shannon, R. P., & Long, J. A. (2014). Patient-centered community healthworker intervention to improve posthospital outcomes: A randomized clinical trial. *JAMA Internal Medicine*, *174*(4), 535–543. doi:10.1001/jamainternmed.2013.14327 PMID:24515422
- Kansagara, D., Chiovaro, J. C., Kagen, D., Jencks, S., Rhyne, K., O'Neil, M., Kondo, K., Relevo, R., Motu'apuaka, M., Freeman, M., & Englander, H. (2015). Transitions of care from hospital to home: An overview of systematic reviews and recommendations for improving transitional care in the Veteran Health Administration. *Transitions of Care from Hospital to Home: An Overview of Systematic Reviews and Recommendations for Improving Transitional Care in the Veterans Health Administration*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/26312362>
- Karliner, L. S., Jacobs, E. A., Chen, A. H., & Mutha, S. (2007, April). Do professional interpreters improve clinical care for patients with limited English proficiency? A systematic review of the literature. *Health Services Research*, *42*(2), 727–754. doi:10.1111/j.1475-6773.2006.00629.x PMID:17362215
- Karliner, L.S., Pérez-Stable, E.J., & Gregorich, S.E. (2017). Convenient Access to Professional Interpreters in the Hospital Decreases Readmission Rates and Estimated Hospital Expenditures for Patients with Limited English Proficiency. *Med Care.*, *55*(3), 199–206.
- Khoong, E.C., & Fernandez, A. (2021). Addressing Gaps in Interpreter Use: Time for Implementation Science Informed Multi-Level Interventions. *Journal of General Internal Medicine*, 3532–3536.
- Kibakaya, E.C., & Oyeku, S.O. (2022). Cultural Humility: A Critical Step in Achieving Health Equity. *Pediatrics*.
- Kleinman, A. (1978). Clinical Relevance of Anthropological and Cross-Cultural Research: Concepts and Strategies. *The American Journal of Psychiatry*. PMID:637136
- Kleinman, A., & Benson, P. (2006). Anthropology in the Clinic: The Problem of Cultural Competency and How to Fix It. *PLoS Medicine*, *3*(10), 1673–1676. doi:10.1371/journal.pmed.0030294 PMID:17076546
- Kountz, D. S. (2009, September 13). Strategies for Improving Low Health Literacy. *Postgraduate Medicine*, *121*(5), 171–177. doi:10.3810/pgm.2009.09.2065 PMID:19820287
- Kripalani, S., Jacobson, T. A., Mugalla, I. C., Cawthon, C. R., Niesner, K. J., & Vaccarino, V. (2010, May). Health literacy and the quality of physician-patient communication during hospitalization. *Journal of Hospital Medicine*, *5*(5), 269–275. doi:10.1002/jhm.667 PMID:20533572
- Lawrence, J.A., Davis, B.A., Corbette, T., Hill, E. V., Williams, D.R., & Reede, J.Y. (n.d.). *Racial/Ethnic Differences in Burnout: a Systematic Review*. 10.1007/s40615-020-00950-0
- Lee, J. S., Nápoles, A., Mutha, S., Pérez-Stable, E. J., Gregorich, S. E., Livaudais-Toman, J., & Karliner, L. S. (2018, January 1). Hospital discharge preparedness for patients with limited English proficiency: A mixed methods study of bedside interpreter-phones. *Patient Education and Counseling*, *101*(1), 25–32. doi:10.1016/j.pec.2017.07.026 PMID:28774652
- Lee, W., Khoong, E.C., Zeng, B., Rios-Fetchko, F., Ma, Y.Y., Liu, K., Fernandez, A. (2023). Evaluation of Commercially Available Machine Interpretation Applications for Simple Clinical Communication. *J Gen Intern Med*.
- Leppin, A. L., Gionfriddo, M. R., Kessler, M., Brito, J. P., Mair, F. S., Gallacher, K., Wang, Z., Erwin, P. J., Sylvester, T., Boehmer, K., Ting, H. H., Murad, M. H., Shippee, N. D., & Montori, V. M. (2014). Preventing 30-Day Hospital Readmissions: A systematic review and meta-analysis of randomized trials. *JAMA Internal Medicine*, *174*(7), 1095. doi:10.1001/jamainternmed.2014.1608 PMID:24820131
- Lescure, D., Van Der Velden, J., Nieboer, D., Van Oorschot, W., Brouwer, R., Huijser Van Reenen, N., Tjon-A-Tsien, A., Erdem, Ö., Vos, M., Van Der Velden, A., Richardus, J.H., & Voeten, H. (2021). Reducing antibiotic prescribing by enhancing communication of general practitioners with their immigrant patients: Protocol for a randomised controlled trial (PARCA study). *BMJ Open*, *11*(10).
- Li, J., Du, G., Clouser, J. M., Stromberg, A., Mays, G., Sorra, J., Brock, J., Davis, T., Mitchell, S., Nguyen, H. Q., & Williams, M. V. (2021). Improving evidence-based grouping of transitional care strategies in hospital implementation using statistical tools and expert review. *BMC Health Serv Res*. *BMC Health Services Research*, *21*(1), 1–20. doi:10.1186/s12913-020-06020-9 PMID:33388053

- Lindblom, S., Ytterberg, C., Flink, M., Carlsson, A.C., Stenberg, U., Tistad, M., von Koch, L., & Laska, A.C. (2023). The Use of Teach Back at Hospital Discharge to Support Self-Management of Prescribed Medication for Secondary Prevention after Stroke—Findings from A Feasibility Study. *Healthcare (Switzerland)*, *11*(3).
- Lion, K.C., & DeCamp, L.R. (2019). Inpatient language barriers: An old problem in need of novel solutions. *Journal of Hospital Medicine*, 640–641.
- Lion, K.C., Gritton, J., Scannell, J., Brown, J.C., Ebel, B.E., Klein, E.J., & Mangione-Smith, R. (n.d.). *Patterns and Predictors of Professional Interpreter Use in the Pediatric Emergency Department*. Academic Press.
- Lion, K. C., Kieran, K., Desai, A., Hencz, P., Ebel, B. E., Adem, A., Forbes, S., Kraus, J., Gutman, C., & Horn, I. (2019, February 1). Audio-Recorded Discharge Instructions for Limited English Proficient Parents: A Pilot Study. *Jt Comm J Qual Patient Saf. Joint Commission Resources. Inc.*, *45*(2), 98–107.
- Lion, K. C., Thompson, D. A., Cowden, J. D., Michel, E., Rafton, S. A., Hamdy, R. F., Killough, E. F., Fernandez, J., & Ebel, B. E. (2012, July 1). Impact of Language Proficiency Testing on Provider Use of Spanish for Clinical Care. *Pediatrics*, *130*(1), e80–e87. doi:10.1542/peds.2011-2794 PMID:22689864
- Lion, K. C., Zhou, C., Fishman, P., Senturia, K., Cole, A., Sherr, K., Opel, D. J., Stout, J., Hazim, C. E., Warren, L., Rains, B. H., & Lewis, C. C. (2023, March 13). A sequential, multiple assignment randomized trial comparing web-based education to mobile video interpreter access for improving provider interpreter use in primary care clinics: The mVOCAL hybrid type 3 study protocol. *Implementation Science : IS*, *18*(1), 8. doi:10.1186/s13012-023-01263-6 PMID:36915138
- Mahajan, M., Hogewoning, J.A., Zewald, J.J.A., Kerkmeer, M., Feitsma, M., & van Rijssel, D.A. (2020). The impact of teach-back on patient recall and understanding of discharge information in the emergency department: the Emergency Teach-Back (EM-TeBa) study. *Int J Emerg Med.*, *13*(1).
- Malevanchik, L., Wheeler, M., Gagliardi, K., Karliner, L., & Shah, S.J. (2021). *Disparities After Discharge: The Association of Limited English Proficiency and Post-Discharge Patient Reported Issues*. Available from: 10.1101/2021.02.05.21251236
- Mantwill, S., Monestel-Umaña, S., & Schulz, P.J. (2015). The relationship between health literacy and health disparities: A systematic review. *PLoS One*, *10*(12).
- Mitchell, S. E., Laurens, V., Weigel, G. M., Hirschman, K. B., Scott, A. M., Nguyen, H. Q., Howard, J. M., Laird, L., Levine, C., Davis, T. C., Gass, B., Shaid, E., Li, J., Williams, M. V., & Jack, B. W. (2018, May 1). Care transitions from patient and caregiver perspectives. *Ann Fam Med. Annals of Family Medicine. Inc*, *16*(3), 225–231.
- Mitchell, S. E., Sadikova, E., Jack, B. W., & Paasche-Orlow, M. K. (2012). Health literacy and 30-day postdischarge hospital utilization. *Journal of Health Communication*, *17*(sup3), 325–338. doi:10.1080/10810730.2012.715233 PMID:23030580
- Muvuka, B., Combs, R. M., Ayangeakaa, S. D., Ali, N. M., Wendel, M. L., & Jackson, T. (2020, July 16). Health Literacy in African-American Communities: Barriers and Strategies. *Health Lit Res Pract. NLM (Medline)*, *4*(3), e138–e143. PMID:32674161
- Naylor, M. D., Shaid, E. C., Carpenter, D., Gass, B., Levine, C., Li, J., Malley, A., McCauley, K., Nguyen, H. Q., Watson, H., Brock, J., Mittman, B., Jack, B., Mitchell, S., Callicoatte, B., Schall, J., & Williams, M. V. (2017, June 1). Components of Comprehensive and Effective Transitional Care. *J Am Geriatr Soc. Blackwell Publishing Inc.*, *65*(6), 1119–1125. PMID:28369722
- Ngo-Metzger, Q., Sorkin, D. H., Phillips, R. S., Greenfield, S., Massagli, M. P., Clarridge, B., & Kaplan, S. H. (2007, November). Providing high-quality care for limited english proficient patients: The importance of language concordance and interpreter use. *Journal of General Internal Medicine*, *22*(S2), 324–330. doi:10.1007/s11606-007-0340-z PMID:17957419
- Okafor, C. M., Zhu, C., Raparelli, V., Murphy, T. E., Arakaki, A., D’Onofrio, G., Tsang, S. W., Smith, M. N., Lichtman, J. H., Spertus, J. A., Pilote, L., & Dreyer, R. P. (2023, February 1). Association of Sociodemographic Characteristics With 1-Year Hospital Readmission Among Adults Aged 18 to 55 Years With Acute Myocardial Infarction. *JAMA Network Open*, *6*(2), e2255843. doi:10.1001/jamanetworkopen.2022.55843 PMID:36787140
- Ortega, P., Shin, T.M., & Martínez, G.A. (2022). Rethinking the Term “Limited English Proficiency” to Improve Language-Appropriate Healthcare for All. *J Immigr Minor Health.*, *24*(3), 799–805.

- Patel, S., Moriates, C., Valencia, V., de la Garza, K., Sanchez, R., Leykum, L.K., & Pignone, M. (2022). A Hospital-Based Program to Screen for and Address Health-Related Social Needs for Patients Admitted with COVID-19. *J Gen Intern Med.*, 37(8), 2077–2081.
- Pathak, S., Gregorich, S.E., Diamond, L.C., Mutha, S., Seto, E., Livaudais-Toman, J., & Karliner, L. (2021). Patient Perspectives on the Quality of Professional Interpretation: Results from LASI Study. *J Gen Intern Med.*, 36(8), 2386–2391.
- Rambachan, A., Abe-Jones, Y., Fernandez, A., & Shahram, Y. (n.d.). *Racial Disparities in 7-Day Readmissions from an Adult Hospital Medicine Service*. 10.1007/s40615-021-01088-3
- Rawal, S., Srighanthan, J., Vasantharopan, A., Hu, H., Tomlinson, G., & Cheung, A. M. (2019, October 22). Association Between Limited English Proficiency and Revisits and Readmissions After Hospitalization for Patients With Acute and Chronic Conditions in Toronto, Ontario, Canada. *Journal of the American Medical Association*, 322(16), 1605. doi:10.1001/jama.2019.13066 PMID:31638666
- Rodriguez-Gutierrez, R., Herrin, J., Lipska, K.J., Montori, V.M., Shah, N.D., & McCoy, R.G. (2019). Racial and Ethnic Differences in 30-Day Hospital Readmissions among US Adults with Diabetes. *JAMA Netw Open.*, 2(10).
- Rohr, R. (2009, July 16). Rehospitalizations among patients in the Medicare fee-for-service program. *The New England Journal of Medicine*, 361(3), 311–312. doi:10.1056/NEJMc090911 PMID:19610166
- Schenker, Y., Pérez-Stable, E. J., Nickleach, D., & Karliner, L. S. (2011, July). Patterns of interpreter use for hospitalized patients with limited english proficiency. *Journal of General Internal Medicine*, 26(7), 712–717. doi:10.1007/s11606-010-1619-z PMID:21336672
- Schouten, B. C., & Meeuwesen, L. (2006). Cultural differences in medical communication: A review of the literature. *Patient Education and Counseling*, 64(1-3), 21–34. doi:10.1016/j.pec.2005.11.014 PMID:16427760
- Sentell, T., & Braun, K. L. (2012). Low health literacy, limited English proficiency, and health status in Asians, Latinos, and other racial/ethnic groups in California. *Journal of Health Communication*, 17(sup3), 82–99. doi:10.1080/10810730.2012.712621 PMID:23030563
- Shen, M. J., Peterson, E. B., Costas-Muñiz, R., Hernandez, M. H., Jewell, S. T., Matsoukas, K., & Bylund, C. L. (2018, February 1). The Effects of Race and Racial Concordance on Patient-Physician Communication: A Systematic Review of the Literature. *J Racial Ethn Health Disparities*, 5(1), 117–140. PMID:28275996
- Taira, B.R., Kreger, V., Orue, A., & Diamond, L.C. (2021). A Pragmatic Assessment of Google Translate for Emergency Department Instructions. *J Gen Intern Med.*, 36(11), 3361–3365.
- Takeshita, J., Wang, S., Loren, A. W., Mitra, N., Shults, J., Shin, D. B., & Sawinski, D. L. (2020, November 2). Association of Racial/Ethnic and Gender Concordance Between Patients and Physicians With Patient Experience Ratings. *JAMA Network Open*, 3(11), e2024583. doi:10.1001/jamanetworkopen.2020.24583 PMID:33165609
- Townshend, R., Grondin, C., Gupta, A., & Al-Khafaji, J. (2023, February 1). Assessment of Patient Retention of Inpatient Care Information Post-Hospitalization. *Jt Comm J Qual Patient Saf. Joint Commission Resources. Inc.*, 49(2), 70–78.
- Transitional Care Interventions to Prevent Readmissions for People With Heart Failure. (n.d.). Available from: [www.effectivehealthcare.ahrq.gov/heart-failure](http://www.effectivehealthcare.ahrq.gov/heart-failure)
- U.S. Census Bureau. (2015). *Detailed Languages Spoken at Home and Ability to Speak English*. <https://www.census.gov/data/tables/2013/demo/2009-2013-lang-tables.html>
- U.S. Department of Health and Human Services O of MH. (n.d.). *National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health and Health Care*. Available from: <https://www.ahrq.gov/downloads/pub/evidence/pdf/minqual/minqual.pdf>
- U.S. Department of Health and Human Services Office of Minority Health. (2023). *Culturally and Linguistically Appropriate Services (CLAS)*. <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=1&lvlid=6>
- Vernon, D., Brown, J. E., Griffi, E., Nevill, A. M., & Pinkney, M. (2019). Reducing readmission rates through a discharge follow-up service. *Future Healthcare Journal*. Available from: <https://hra-decisiontools.org.uk/ethics/>

Wilson, Y., White, A., Jefferson, A., & Danis, M. (2019, February 20). Intersectionality in Clinical Medicine: The Need for a Conceptual Framework. *The American Journal of Bioethics*, 19(2), 8–19. doi:10.1080/15265161.2018.1557275 PMID:30784384

Woods, A.P., Alonso, A., Duraiswamy, S., Ceraolo, C., Feeney, T., Gunn, C.M., Burns, W.R., Segev, D.L., & Drake, F.T. (2022). Limited English Proficiency and Clinical Outcomes After Hospital-Based Care in English-Speaking Countries: a Systematic Review. *Journal of General Internal Medicine*, 2050–2061.

Wray, C. M., & Jones, C. D. (2023). Bridging the Know-Do Gap in Hospital Care Transitions. *JAMA Intern Med*. Available from: <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2802544>

Yen, P.H., Fnp-Bc, D., Leasure, A.R., & Yen, P. (n.d.). *Use and Effectiveness of the Teach-Back Method in Patient Education and Health Outcomes*. Academic Press.

Zeng-Treitler, Q., Kim, H., Hunter, M., & Mba, R.N. (n.d.). *Improving Patient Comprehension and Recall of Discharge Instructions by Supplementing Free Texts with Pictographs*. Academic Press.

Zestcott, C. A., Blair, I. V., & Stone, J. (2016, July 8). Examining the presence, consequences, and reduction of implicit bias in health care: A narrative review. *Group Processes & Intergroup Relations*, 19(4), 528–542. doi:10.1177/1368430216642029 PMID:27547105

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