

Language, culture and preventable readmissions: pragmatic, intervention studies needed

Elaine C Khoong,¹ Alicia Fernandez ^{1,2}

¹Division of General Internal Medicine at Zuckerberg San Francisco General Hospital, University of California San Francisco, San Francisco, California, USA

²Center for Vulnerable Populations at Zuckerberg San Francisco General Hospital, San Francisco, CA, United States

Correspondence to

Dr Alicia Fernandez, Division of General Internal Medicine at Zuckerberg San Francisco General Hospital, University of California San Francisco, San Francisco, CA 94143, USA; alicia.fernandez@ucsf.edu

Accepted 5 July 2019
Published Online First
10 August 2019



► <http://dx.doi.org/10.1136/bmjqs-2019-009317>



© Author(s) (or their employer(s)) 2019. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Khoong EC, Fernandez A. *BMJ Qual Saf* 2019;**28**:859–861.

Preventable hospital readmissions are considered a marker of care quality. Readmissions burden patients and their families and are a significant driver of healthcare costs.^{1,2} In the USA (where we are based), readmission penalties have resulted in an array of interventions, ranging from the relatively simple (eg, ensuring a timely follow-up appointment) to bundled interventions with multiple components (eg, medication reconciliation plus phone follow-up plus structured handoff to outpatient clinicians).³ Evaluation results, however, have been mixed and progress in reducing readmissions difficult. Studies generally have provided limited details about interventions and the patient groups involved, making it impossible to know what worked for whom.^{3,4} Complicating the practical implications of this research is that bundled interventions, which tend to be more successful, require greater investment of clinical and financial resources and at times result in net financial loss, significantly dampening health system enthusiasm for implementation of programmes to reduce admissions.⁵ Importantly, despite well-documented racial/ethnic disparities in readmission rates,⁶ many studies in the USA have taken a ‘one-size-fits-all’ approach by designing interventions that do not attempt to address the specific needs or circumstances of diverse populations.

The study by lead author and colleagues in this issue of *BMJ Quality & Safety*⁷ differs from much of the readmission literature in two important ways. First, the study focused on discharge practices and activities adapted for diverse populations. Working with a patient population in Israel that included a diverse groups of patients—Russian-speaking immigrants from the former Soviet

Union, Arabic-speakers from several ethnic groups and Hebrew-speakers—the authors examined the association of what they termed cultural factors (eg, health literacy, minority status, etc), specific discharge practices and patient perception of discharge preparedness with hospital readmission rate. The second important contribution of this study lies in its attempt to untangle the complex, proxy marker that is race/ethnicity/minority status and sort out how specific discharge practices can address multiple cultural factors. Minority status is inclusive of a breadth of cultural, societal and biological factors and concepts that may contribute to differences in healthcare outcomes.^{8,9} Yet the drivers of these differences are poorly understood and often not explored. By examining the role of cultural factors, the investigators allow for a more nuanced understanding of patient differences.

This study found that factors suggestive of increased cultural tailoring during the discharge process were associated with patients reporting higher preparedness for discharge, and in turn fewer readmissions. Put another way, the study observed a reduction in readmission rates based on low-cost practices—teach back, clinician cultural competence, caregiver presence and language concordance at discharge—that are relatively easy to implement and often within a clinician’s control, yet not systematically accomplished at most institutions. The authors also found that the relationship between minority status and readmissions was significantly mediated by the studied discharge practices.

Like much within health services research, this study’s conclusions, particularly on the importance of language concordant care, may seem self-evident. Language concordant care results in

better patient comprehension than professional interpreter use¹⁰ and is associated with improvement in many outcomes.¹¹ For fairly simple instructions, such as using statins for lipid control, use of professional interpreters appears equivalent to language concordant clinicians.¹² But for complex interactions, such as improving glycaemic control among Spanish-speaking patients with diabetes, language concordance with the primary care physician has been associated with better outcomes.^{13 14} The complexity of the discharge process cries out for the easier give and take of a language concordant interaction, and this study's finding is both self-evident and yet important because health systems by and large do not prioritise language concordance for complex interactions and, specifically, do not ensure that language and culturally concordant nurses deliver discharge instructions.

The finding that a family caregiver present at discharge was associated with reduced admissions is similarly unsurprising. As adult physician children have discovered and studies show, caregiver integration into the discharge process can aid understanding, prevent medication mishaps, increase adherence and ultimately reduce readmissions.^{15 16} The 'family collectivism' orientation of immigrant communities in the USA and around the world is a source of strength which health systems can choose to harness. From personal experience (AF), intensive care 'family rounds' in major teaching hospitals in Buenos Aires are held twice daily at prescheduled times, once in the morning and once in the evening to accommodate working family members, thereby providing an easy way for families to stay updated. This is in marked contrast to a US clinician's laborious task of scheduling ad hoc meetings. Health systems can do much more to facilitate family engagement and understanding.

What are the implication of this work for clinicians and researchers? Individual clinicians and patients are variable in their beliefs and behaviours. The details of these variations are key to determining what actions or factors impact outcomes. The US healthcare system has recently redoubled its effort to collect race and ethnicity data and started more systematically collecting data on language preference, sexual orientation and gender identity. This study underscores the need to explore in greater detail cultural and other differences that may drive disparities in health outcomes. Similarly, this study reinforces the need to investigate clinician behaviour to delineate what clinician actions most impact patient outcomes. As an example, studies have shown that physician gender differences impact patient outcomes,¹⁷ but gender is not a modifiable factor. By identifying behaviours more frequently employed by women physicians that improve outcomes,¹⁸ we can advise all clinicians, regardless of gender, to adopt those behaviours.

Researchers should pursue (and funders need to fund) interventional studies that test the most effective

behaviours of individual clinicians. Some may argue that data from observational studies such as these are sufficient, particularly when the behaviours noted—teach back, ensuring language concordant care or encouraging caregiver presence—are relatively easy and low risk. Devoting resources to a clinical trial of these actions would appear unnecessary. Although we understand this perspective, we believe that at least in the USA, pragmatic intervention studies (eg, cluster randomised trials, stepped wedge design) that incorporate these practices and use theory-based implementation science approaches are necessary to quantify the benefit of providing this bundle (teach back, language concordance, caregiver presence when possible). This information would enable health systems and health plans to promote widespread system change in discharge practices. From this observational study, for example, it is difficult to isolate a particular patient phenotype that most benefits from language concordant discharge, or the number needed to treat to avoid a costly readmission, both important policy considerations. Additionally, clinician time is limited, with many clinicians experiencing burnout which itself is associated with costs to the healthcare system.¹⁹ Additional demands on the time or energy of clinicians will be more easily accepted when accompanied by solid evidence. Medical interventions should be assessed with rigour before being widely implemented; patient-directed or clinician-directed behavioural interventions should be subject to the same standards.

With the current unprecedented global migration of populations, the need for culturally tailored healthcare is greater than ever before. The United Nations estimates that in 2017 the number of migrants reached 258 million.²⁰ As these immigrants and other diverse populations enter hospitals, healthcare systems must provide culturally adapted care to prevent the development or exacerbation of disparities in health outcomes. Rigorous, pragmatic trials of discharge practices that allow health systems and clinicians to sort out which readmissions interventions work for whom are needed. While these studies alone will not drive health system change, they can provide guidance on the path forward to health equity in an increasingly large immigrant population.

Contributors ECK conceived of the work, drafted the article, critically revised the article, and had final approval of the version to be published. AF conceived of the work, critically revised the article, and had final approval of the version to be published.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Commissioned; internally peer reviewed.

ORCID iD

Alicia Fernandez <http://orcid.org/0000-0002-7975-6614>

REFERENCES

- 1 Joynt KE, Jha AK. Thirty-Day readmissions — truth and consequences. *N Engl J Med Overseas Ed* 2012;366:1366–9.
- 2 Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. *N Engl J Med* 2009;360:1418–28.
- 3 Kripalani S, Theobald CN, Anctil B, *et al.* Reducing Hospital readmission rates: current strategies and future directions. *Annu Rev Med* 2014;65:471–85.
- 4 Hansen LO, Young RS, Hinami K, *et al.* Interventions to reduce 30-day rehospitalization: a systematic review. *Ann Intern Med* 2011;155:520.
- 5 Nuckols TK, Keeler E, Morton S, *et al.* Economic evaluation of quality improvement interventions designed to prevent Hospital readmission: a systematic review and meta-analysis. *JAMA Intern Med* 2017;177:975.
- 6 Joynt KE, Orav EJ, Jha AK. Thirty-day readmission rates for Medicare beneficiaries by race and site of care. *JAMA* 2011;305.
- 7 Rayan-Gharra N, Balicer RD, Tadmor B, *et al.* Association between cultural factors and readmissions: the mediating effect of hospital discharge practices and care-transition preparedness. *BMJ Qual Saf* 2019;28:866–74.
- 8 Williams DR, Lavizzo-Mourey R, Warren RC. The concept of race and health status in America. *Public Health Rep* 1994;109:26–41.
- 9 Calvillo-King L, Arnold D, Eubank KJ, *et al.* Impact of social factors on risk of readmission or mortality in pneumonia and heart failure: systematic review. *J Gen Intern Med* 2013;28:269–82.
- 10 Gany F, Leng J, Shapiro E, *et al.* Patient satisfaction with different interpreting methods: a randomized controlled trial. *J Gen Intern Med* 2007;22 Suppl 2:312–8.
- 11 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*;26.
- 12 Fernandez A, Warton EM, Schillinger D, *et al.* Language barriers and LDL-C/SBP control among Latinos with diabetes. *Am J Manag Care* 2018;24:405–10.
- 13 Fernandez A, Schillinger D, Warton EM, *et al.* Language barriers, physician-patient language concordance, and glycemic control among insured Latinos with diabetes: the diabetes study of northern California (distance). *J Gen Intern Med* 2011;26:170–6.
- 14 Parker MM, Fernández A, Moffet HH, *et al.* Association of patient-physician language concordance and glycemic control for Limited-English proficiency Latinos with type 2 diabetes. *JAMA Intern Med* 2017;177:380.
- 15 Rodakowski J, Rocco PB, Ortiz M, *et al.* Caregiver integration during discharge planning for older adults to reduce resource use: a Metaanalysis. *J Am Geriatr Soc* 2017;65:1748–55.
- 16 Hahn-Goldberg S, Jeffs L, Troup A, *et al.* "We are doing it together"; The integral role of caregivers in a patients' transition home from the medicine unit. *PLoS One* 2018;13:e0197831.
- 17 Tsugawa Y, Jena AB, Figueroa JF, *et al.* Comparison of hospital mortality and readmission rates for Medicare patients treated by male vs female physicians. *JAMA Intern Med* 2017;177:206.
- 18 Roter DL, Hall JA, Aoki Y. Physician gender effects in medical communication. *JAMA* 2002;288.
- 19 Han S, Shanafelt TD, Sinsky CA, *et al.* Estimating the attributable cost of physician burnout in the United States. *Ann Intern Med* 2019;170:784.
- 20 United nations. migration, 2018. Available: <https://www.un.org/en/sections/issues-depth/migration/index.html> [Accessed 17 Jun 2019].