Low Health Literacy and Transitional Care Needs: Beyond Screening

Leah Karliner, MD, MAS*

School of Medicine, University of California San Francisco, San Francisco, California.

Health literacy (HL) is the ability of individuals to obtain, process, and understand health information in a way that enables them to make health decisions.[1] Approximately one-third of adults in the United States are considered to have inadequate HL,[2] and its prevalence is even higher among hospitalized patients.[3] Low HL has been associated with higher rates of hospital readmission[4] and higher mortality.[5,6] Inadequate HL has been identified as a barrier to communication and is associated with poorer outcomes for communication-sensitive behaviors, such as adherence to medications, chronic disease self-efficacy and self-management,[7-10] and understanding hospital discharge instructions.[11,12] It has been largely understood that the association between HL and hospital outcomes has been mediated by these communication challenges.

In this issue of the journal, Boyle et al.[13] demonstrate that inadequate HL is not only a communication barrier but also an indicator of other social support needs during a transition from the hospital. In particular, the authors found that hospitalized patients with inadequate HL had needs in more social support domains than those with adequate HL. After multivariable adjustment for sociodemographic factors that likely impact social support, such as age and marital status, inadequate HL remained associated specifically with insufficient caregiver support and transportation barriers. These findings suggest that, along with the more direct comprehension barriers previously associated with inadequate HL, the identified social support needs may mediate prior established associations between inadequate HL and poor health outcomes.

The authors concluded that screening for HL along with transitional care needs will allow hospitals to ensure a quality care transition. Indeed, screening for these gaps is the first step in identifying important postdischarge social needs and will be necessary in order to track improvements for at-risk populations. However, screening alone will not likely change outcomes; for this, we will need effective interventions.

In fact, it remains an open question how best to intervene to improve care transitions for patients with social needs and low HL. The recent focus of HL interventions in the literature has been on "universal precautions," such as the teach-back technique, to ensure patient comprehension of information, and writing patient informational materials at a low literacy level.[14] This approach to make all materials and communication accessible to all patients, rather than to tailor HL interventions, has become more prevalent in efforts to address the adverse communication and resultant health impacts of inadequate HL.[15-17]

Meanwhile, the focus of care transition interventions has been on transition coaching or case management in the hospital, medication reconciliation prior to discharge, and postdischarge telephone calls from pharmacists or nurses, often utilizing the HL "universal precautions."[18-20] While these approaches have been impactful to improve discharge preparedness and decrease readmission rates,[21] they may not adequately address individual social support and social service needs when the patient leaves the hospital.

Recently, the National Academy of Medicine published the Accountable Health Community Screening Tool, designed to screen for the following 5 areas of unmet social need that are known to be impactful for health: housing stability, food insecurity, transportation needs, utility needs, and interpersonal violence.[22] This screener is being used as part of the Center for Medicare & Medicaid Services' Accountable Health Communities Model and is being tested by the Center for Medicare and Medicaid Innovation (CMMI). The goal of the CMMI evaluation is to test whether systematically identifying social service needs and closing the gap between clinical care and community services for patients with the highest levels of need will improve health outcomes.

Screening for HL and social determinants in the hospital will not, in and of itself, improve the quality of care transitions or prevent subsequent readmissions, morbidity, or mortality. However, measurement is the first step toward identifying individuals with the greatest need and can help direct hospitals' utilization of limited resources, such as transition managers. The CMMI Accountable Health Communities Model evaluation will provide hospital and healthcare systems with best practices for building clinical–social services networks and connecting at-risk patients with high levels of need to appropriate services in the community.

No longer can a patient's hospital care end with writing prescriptions and scheduling follow-up appointments. For some, using teach-back and low literacy-appropriate discharge materials will be enough; others will require a postdischarge telephone call to review medications and

***Address for correspondence and reprint requests:** Leah Karliner, MD MAS, School of Medicine, University of California San Francisco, 1545 Divisadero, San Francisco, CA 94143; Telephone: 415-353-7931; Fax: 415-514-8666; E-mail: leah.karliner@ucsf.edu

Received: June 26, 2017; **Accepted:** June 27, 2017

2017 Society of Hospital Medicine DOI 10.12788/jhm.2881

symptoms and ensure follow-up. But for those highest-risk patients, connection to a network of ongoing community social support will be necessary to guide their transition back to health in the community.

Disclosure: The author reports no conflicts of interest.

References

1. Quick Guide to Health Literacy. Office of Disease Prevention and Health Promotion: Health Communication Activities. US Department of Health & Human Services. https://health.gov/communication/literacy/quickguide/default.htm. Accessed June 24, 2017.
2. Kutner M, Greenberg E, Jin Y, Paulsen C. *The Health Literacy of America's Adults: Results from the 2003 National Assessment of Adult Literacy*. Washington, DC: National Center for Education Statistics, 2006. Contract No.: Report No.: NCES 2006.483.
3. Baker DW, Gazmararian JA, Williams MV, et al. Functional health literacy and the risk of hospital admission among Medicare managed care enrollees. *Am J Public Health*. 2002;92(8):1278-1283.
4. Mitchell SE, Sadikova E, Jack BW, Paasche-Orlow MK. Health literacy and 30-day postdischarge hospital utilization. *J Health Commun*. 2012;17 Suppl 3: 325-338.
5. Peterson PN, Shetterly SM, Clarke CL, et al. Health literacy and outcomes among patients with heart failure. *JAMA*. 2011;305(16):1695-1701.
6. Sudore RL, Yaffe K, Satterfield S, et al. Limited literacy and mortality in the elderly: the health, aging, and body composition study. *J Gen Intern Med*. 2006;21(8):806-812..
7. Fransen MP, von Wagner C, Essink-Bot ML. Diabetes self-management in patients with low health literacy: ordering findings from literature in a health literacy framework. *Patient Educ Couns*. 2012;88(1):44-53
8. Hahn EA, Burns JL, Jacobs EA, et al. Health Literacy and Patient-Reported Outcomes: A Cross-Sectional Study of Underserved English- and Spanish-Speaking Patients With Type 2 Diabetes. *J Health Commun*. 2015;20(Suppl)2:4-15
9. Lindquist LA, Go L, Fleisher J, Jain N, Friesema E, Baker DW. Relationship of health literacy to intentional and unintentional non-adherence of hospital discharge medications. *J Gen Intern Med*. 2012;27(2):173-178.
10. McCarthy DM, Waite KR, Curtis LM, Engel KG, Baker DW, Wolf MS. What did the doctor say? Health literacy and recall of medical instructions. *Med Care*. 2012;50(4):277-282.
11. Choudhry AJ, Baghdadi YM, Wagie AE, et al. Readability of discharge summaries: with what level of information are we dismissing our patients? *Am J Surg*. 2016;211(3):631-636.
12. Kripalani S, Jacobson TA, Mugalla IC, Cawthon CR, Niesner KJ, Vaccarino V. Health literacy and the quality of physician-patient communication during hospitalization. *J Hosp Med*. 2010;5(5):269-275.
13. Boyle J, Speroff T, Workey K, et al. Low health literacy is associated with increased transitional care needs in hospitalized patients. *J Hosp Med*. 2017;12(11):918-927. Published online first September 20, 2017.
14. Brega AG, Barnard J, Weiss BD, et al. *AHRQ Health Literacy Universal Precautions Tooklit, Second Edition*. Rockville, MD: Agency for Healthcare Research and Quality, 2015. Report No.: Contract No.: AHRQ Publication No.: 15-0023.
15. Griffey RT, Shin N, Jones S, et al. The impact of teach-back on comprehension of discharge instructions and satisfaction among emergency patients with limited health literacy: A randomized, controlled study. *J Commun Healthc*. 2015;8(1):10-21.
16. Marcantoni JR, Finney K, Lane MA. Using health literacy guidelines to improve discharge education and the post-hospital transition: a quality improvement project. *Am J Med Qual*. 2014;29(1):86.
17. Samuels-Kalow M, Hardy E, Rhodes K, Mollen C. "Like a dialogue": Teach-back in the emergency department. *Patient Educ Couns*. 2016;99(4):549-554.
18. Coleman EA, Parry C, Chalmers S, Min SJ. The care transitions intervention: results of a randomized controlled trial. *Arch Intern Med*. 2006;166(17):1822-1828.
19. Jack BW, Chetty VK, Anthony D, et al. A reengineered hospital discharge program to decrease rehospitalization: a randomized trial. *Ann Intern Med*. 2009;150(3):178-187.
20. Tang N, Fujimoto J, Karliner L. Evaluation of a primary care-based post-discharge phone call program: keeping the primary care practice at the center of post-hospitalization care transition. *J Gen Intern Med*. 2014;29(11):1513-1518.
21. Gonçalves-Bradley DC, Lannin NA, Clemson LM, Cameron ID, Shepperd S. Discharge planning from hospital. *Cochrane Database Syst Rev*. 2016(1):CD000313.
22. Billioux A, Verlander K, Anthony S, Alley D. Standardized screening for health-related social needs in clinical settings: The accountable health communities screening tool. National Academy of Medicine. Discsussion Paper, 2017.