

The Ever-Evolving Nature of Health Literacy in Organizations: A Commentary on the 2021 *JPHMP* Article “Updating Health Literacy for Healthy People 2030”

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H *Healthy People* is a data-driven policy framework that public health managers and practitioners use to guide their work (eg, collaborations, logic models).¹ In 2021, *JPHMP* published the article by Santana et al, titled “Updating Health Literacy for Healthy People 2030: Defining Its Importance for a New Decade in Public Health.”² Their article informs public health managers and practitioners that, henceforth with *Healthy People 2030*, 2 definitions of health literacy—that is, individual and organizational—will be used to appraise how well health promotion efforts align with the framework’s objectives.³ Santana et al relay that organizational health literacy is defined as “the degree to which organizations equitably enable individuals to find, understand, and use information and services

to inform health-related decisions and actions for themselves and others.”²(pS259) This formal definition of organizational health literacy is new to the framework, though efforts to promote something to its effect have been around for some time (eg, training manuals and workshops teaching health care providers how to be clear and effective in their communication with patients).⁴

Each author of this commentary, for some time, has felt if organizational barriers remain unaddressed, efforts to improve community health will be severely constrained if not immobilized. We are not alone in this maxim, given the wide adoption of a social ecological perspective by many professions that contribute to health promotion.^{5,6} We wrote this commentary to the article by Santana et al to elicit further contemplation among health care managers and practitioners on the significance of the organizational health literacy definition added to the *Healthy People* framework. Two research-based perspectives on health literacy were used to develop our commentary: one focused on patient skills and behaviors, and one focused on health care administration (ie, broadly defined as organizational entities involved in health promotion).

Health literacy concerns the degree to which individuals obtain, understand, and use basic health information and services to make decisions to manage or improve their own or other’s health.^{2,7} Health literacy is a process that involves cognitive and social skills rooted in the cultural awareness of an individual’s environment.⁸ There are fundamental components to health literacy that include an individual’s ability to (1) be self-aware and possess knowledge of different aspects of health and health care systems; (2) find, understand, and use health information; and (3) confidently maintain health through self-management strategies and interactions with health care systems.⁹ The concept of health literacy continuously evolves with time, context, and various health needs.⁸ Overall,

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higher levels of health literacy are associated with lower levels of hospitalization, higher rates of health screening, and higher levels of health status and quality of life.¹⁰ In part, these associations are a result of healthful behavior changes achieved through health literacy interventions, including increased physical activity, decreased smoking, and improved diet.^{10,11} However, the predominant focus in practice settings concerning health literacy promotion has been on individual changes, rather than environments.

For some time now, calls have been made to expand health literacy scholarship and policy discussion to include environments that clients and the public navigate. A progress report for *Healthy People 2010* contained the following commentary:

Healthcare and public health delivery systems are complicated bureaucracies.... Even highly motivated and educated individuals may find the systems too complicated to understand.... Consequently, assessments of individuals' health literacy skill may actually reflect system complexity rather than individual skill level.^{2(pS259)}

Since these cautionary words, health literacy research has expanded to include appraisals of organizational capacity to deliver literacy-sensitive care, specifically by providing materials/services that individuals with low health literacy would understand, learn from, and feel empowered by.¹² Using literacy-sensitive materials and techniques to foster understanding, similar gains in health knowledge and health behavior are observed regardless of health literacy level.¹³⁻¹⁶ Yet, within practice, health materials and services remain as major barriers to quality care and the adoption of preventive health behaviors.¹⁷⁻²⁰ Persistent issues include health materials with low readability, contradictory information, and unclear visual media.²¹⁻²³

Although physicians may have their own method in how they counsel patients, there are many actors involved in health communication (eg, the design of signage, forms, Web sites).²⁴ Numerous tools have been developed to aid the many actors involved in delivering health care so that the information they produce would support health literacy among patients and the public.⁴ However, these tools seem seldom used. While part of it may be due to their complexity,²⁵ another driver may be low awareness among providers on what factors affect health literacy.²⁶ Several reports have shown providers overestimate their ability to convey information clearly, contributing to patient confusion and decreased confidence to manage their health or make informed decisions.^{21,26-28} Others have shown teams are not on the same page in designing patient education material

or other services, such as adding contradictory information or details that increase reading difficulty.^{29,30} Thus, the organizational health literacy definition added to the *Healthy People* framework is promising to see.²

Santana et al² report that adding an organizational definition for health literacy had a plurality of public and expert support. This should not be surprising. Since at least 1989, when the US National Cancer Institute published its landmark resource guide, *Making Health Communication Programs Work: A Planner's Guide*, the onus of health literacy promotion has been with organizations.⁴ Numerous state and federal laws exist mandating health care sites to use plain language communication and language services.³¹ In 2006, Paasche-Orlow et al³² summarized action steps that may be taken to become a health literate organization. Others have followed suit, including testing and studying the adoption of the Universal Precaution approach.³³ Preliminary work has extended this line of research into the study of patient portal systems.²⁸

While organizations may seek to empower clients to meet personal health needs and aid them in doing so, their policies or norms often undermine their efforts.^{16,34} As Neuhauser et al³⁵ stated, more than 800 research studies had found health material by medical and public health groups were too hard to be easily read by lay adults. In their own study, they found emergency preparedness materials disseminated by public health departments and others exceeded the suggested sixth-grade reading level. Schur et al³⁶ found that while many local public health departments had in place strategies to meet the needs of culturally and linguistically diverse populations, only one-third had tested the readability of their materials. Wide adoption of the definition for organizational health literacy could encourage public health professionals to examine not only their own organization's policies³⁷ but also their approach to community-engaged partnerships.²⁶

Concluding Thoughts

Santana et al concluded their article with a list of action steps. Among them was to “[engage] public and private partners in the work of increasing both personal and organizational health literacy.”^{2(pS262)} The expanded view of health literacy promotion to include organizations gives incentive to measure progress at 2 levels: individual and organizational.² Santana et al, in their article, encouraged action-based research be used, whereby public health professionals engage in partnerships that promote organizational health literacy and track how it develops.³⁸ Work in this area has

already begun.³⁹ Clearly, this action-based research should extend beyond health care organizations.^{4,40,41} Toward that end, and in the form of a *JPHMP Direct post*, we offer a policy template for promoting organizational health literacy that was developed using the Health in All Policies framework.^{42,43}

References

1. Fromknecht CQ, Hallman VA, Heffernan M. Developing state health improvement plans: exploring states' use of healthy people. *J Public Health Manag Pract.* 2021;27(suppl 6):S274-S279.
2. Santana S, Brach C, Harris L, et al. Updating health literacy for Healthy People 2030: defining its importance for a new decade in public health. *J Public Health Manag Pract.* 2021;27(suppl 6):S258-S264.
3. US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Browse objectives. Health.gov/HealthyPeople. <https://health.gov/healthypeople/objectives-and-data/browse-objectives>. Accessed April 29, 2022.
4. Thomas JD, Flay BR, Cardinal BJ. Are physical activity resources understandable as disseminated? A meta-analysis of readability studies. *Quest.* 2018;70(4):492-518.
5. Kennedy W, Fruin R, Lue A, Logan SW. Using ecological models of health behavior to promote health care access and physical activity engagement for persons with disabilities. *J Patient Exp.* 2021;8:23743735211034031.
6. 2U, Inc. What is social ecology? Social work. <https://www.onlinemswprograms.com/social-work/what-is-social-ecology>. Published February 2022. Accessed May 3, 2022.
7. Nutbeam D. Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health Promot Int.* 2000;15(3):259-267.
8. Berkman ND, Davis TC, McCormack L. Health literacy: what is it? *J Health Commun.* 2010;15(suppl 2):9-19.
9. Liu C, Wang D, Liu C, et al. What is the meaning of health literacy? A systematic review and qualitative synthesis. *Fam Med Community Health.* 2020;8(2):e000351.
10. Berkman ND, Sheridan SL, Donahue KE, et al. Health literacy interventions and outcomes: an updated systematic review. *Evid Rep Technol Assess (Full Rep).* 2011;(199):1-941.
11. Walters R, Leslie SJ, Polson R, Cusack T, Gorely T. Establishing the efficacy of interventions to improve health literacy and health behaviours: a systematic review. *BMC Public Health.* 2020;20(1):1040.
12. Kiser K, Jonas D, Warner Z, Scanlon K, Shilliday BB, DeWalt DA. A randomized controlled trial of a literacy-sensitive self-management intervention for chronic obstructive pulmonary disease patients. *J Gen Intern Med.* 2012;27(2):190-195.
13. Clement S, Ibrahim S, Crichton N, Wolf M, Rowlands G. Complex interventions to improve the health of people with limited literacy: a systematic review. *Patient Educ Couns.* 2009;75(3):340-351.
14. Sheridan SL, Halpern DJ, Viera AJ, Berkman ND, Donahue KE, Crotty K. Interventions for individuals with low health literacy: a systematic review. *J Health Commun.* 2011;16(suppl 3):30-54.
15. Kim SH, Lee A. Health-literacy-sensitive diabetes self-management interventions: a systematic review and meta-analysis. *Worldviews Evid Based Nurs.* 2016;13(4):324-333.
16. Watson JC. Talking the talk: enhancing clinical ethics with health literacy best practices. *HEC Forum.* 2019;31:177-199.
17. Clarke MA, Moore JL, Steege LM, et al. Health information needs, sources, and barriers of primary care patients to achieve patient-centered care: a literature review. *Health Informatics J.* 2016;22(4):992-1016.
18. Harrison AL, Taylor NF, Frawley HC, Shields N. Women with gestational diabetes mellitus want clear and practical messages from credible sources about physical activity during pregnancy: a qualitative study. *J Physiother.* 2019;65(1):37-42.
19. Thomas JD, Cardinal BJ. Health science knowledge translation: critical appraisal of online physical activity promotion material. *Nurs Health Sci.* 2021;23(3):742-753.
20. Thomas J, Love B, Smith C. Understanding and communicating physical activity guidelines: creating a training video for health care providers. *Int J Exerc Sci Conf Proc.* 2021;14(1). Article 106. <https://digitalcommons.wku.edu/ijesab/vol14/iss1/106>. Accessed April 29, 2022.
21. Maneze D, Weaver R, Kovai V, et al. "Some say no, some say yes": receiving inconsistent or insufficient information from healthcare professionals and consequences for diabetes self-management: a qualitative study in patients with type 2 diabetes. *Diabetes Res Clin Pract.* 2019;156:107830.
22. Thomas JD, Uwadiae AY, Watson NM. Towards equitable communication of kinesiology: a critical interpretive synthesis of readability research: 2021 National Association for Kinesiology in Higher Education Hally Beth Poindexter Young Scholar Address. *Quest.* 2021;73(2):151-169.
23. May P, Yeowell G, Connell L, Littlewood C. An analysis of publicly available National Health Service information leaflets for patients following an upper arm break. *Musculoskelet Sci Pract.* 2022;59:102531.
24. Thomas JD, Kennedy W, Cardinal BJ. Do written resources help or hinder equitable and inclusive physical activity promotion? *Int J Kinesiol High Educ.* 2022;6(1):39-55.
25. Zhang Y, Sun Y, Xie B. Quality of health information for consumers on the Web: a systematic review of indicators, criteria, tools, and evaluation results: quality of health information for consumers on the web. *J Assoc Inf Sci Technol.* 2015;66(10):2071-2084.
26. Thomas JD, Cardinal BJ. Gibberish in communicating written physical activity information: making strides at derailing a perpetual problem. *Sociol Sport J.* 2018;35(2):108-118.
27. Imoisili OE, Levinsohn E, Pan C, Howell BA, Streiter S, Rosenbaum JR. Discrepancy between patient health literacy levels and readability of patient education materials from an electronic health record. *HLRP Health Lit Res Pract.* 2017;1(4):e203-e207.
28. Alpert JM, Desens L, Krist AH, Aycock RA, Kreps GL. Measuring health literacy levels of a patient portal using the CDC's clear communication index. *Health Promot Pract.* 2017;18(1):140-149.
29. Gal I, Prigat A. Why organizations continue to create patient information leaflets with readability and usability problems: an exploratory study. *Health Educ Res.* 2005;20(4):485-493.
30. Mehlis A, Locher V, Hornberg C. Barriers to organizational health literacy at public health departments in Germany. *HLRP Health Lit Res Pract.* 2021;5(3):e264-e271.
31. US Institute of Medicine. Defining language need and categories for collection. In: Ulmer C, McFadden B, Nerenz DR, eds. *Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement*. Washington, DC: Institute of Medicine; National Academies of Science; 2012:chap 4. <https://www.ahrq.gov/research/findings/final-reports/iomracereport/reldata4a.html>. Accessed September 9, 2021.
32. Paasche-Orlow MK, Schillinger D, Greene SM, Wagner EH. How health care systems can begin to address the challenge of limited literacy. *J Gen Intern Med.* 2006;21(8):884-887.
33. Hirsh J, Wood P, Keniston A, et al. Universal health literacy precautions are associated with a significant increase in medication adherence in vulnerable rheumatology patients. *ACR Open Rheumatol.* 2020;2(2):110-118.
34. Watson NM, Thomas JD, Phelan S. Reading grade levels of physical activity promotion material: preliminary findings of a meta-synthesis study on material suitability. In: *Western Society for Kinesiology & Wellness 66th Annual Conference Program*. Western Society for Kinesiology & Wellness; 2021:27-28. <https://www.wskw.org/past-conferences>. Accessed May 19, 2022.
35. Neuhauser L, Ivey SL, Huang D, et al. Availability and readability of emergency preparedness materials for deaf and hard-of-hearing and older adult populations: issues and assessments. *PLoS One.* 2013;8(2):e55614.
36. Schur CL, Lucado JL, Feldman J. Local public health capacities to address the needs of culturally and linguistically diverse populations. *J Public Health Manag Pract.* 2011;17(2):177-186.
37. Williams AM, Muir KW, Rosdahl JA. Readability of patient education materials in ophthalmology: a single-institution study and systematic review. *BMC Ophthalmol.* 2016;16:133.

38. Tse EN, Longoria SA, Christopher CN, Thomas JD. Training novices to evaluate physical activity promotion material quality: results of a pilot study. *Med Sci Sports Exerc.* 2021;53(8)(suppl):249.
39. Laing R, Thompson SC, Elmer S, Rasiah RL. Fostering health literacy responsiveness in a remote primary health care setting: a pilot study. *Int J Environ Res Public Health.* 2020;17(8):2730.
40. Kamp SJ, Thomas JD. *The Importance of Health Literacy: A Student-Led Workshop on Lay Communication.* San Luis Obispo, CA: California Polytechnic State University, San Luis Obispo; 2022. <https://digitalcommons.calpoly.edu/kinesp/19>. Accessed April 9, 2022.
41. Gorczynski P, Patel H. Quality of online physical activity information for long-haul truck drivers. *Int J Workplace Health Manag.* 2014;7(1):40-53.
42. Public Health Institute, California Department of Public Health, and American Public Health Association. An introduction to Health in All Policies: a guide for state and local governments. https://www.apha.org/-/media/Files/PDF/factsheets/HiAPGuide_4pager_FINAL.ashx. Accessed September 9, 2021.
43. Smith CN, Gorczynski P, Thomas JD. Equity in communication: a policy template for promoting organizational health literacy. *JPHMP Direct.* <https://jphmpdirect.com/2022/05/30/equity-in-communication-a-policy-template-for-promoting-organizational-health-literacy/>. Published May 30, 2022. Accessed August 6, 2022.