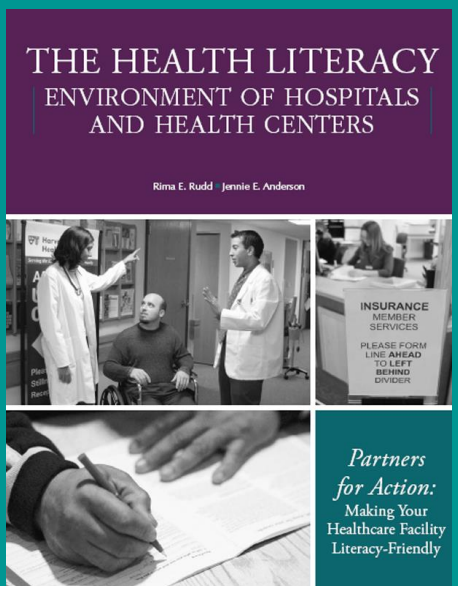
HLE2
The Health Literacy Environment of Hospitals and Health Centers



Access to Information, Care and Services Through the Lens of Health Literacy

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An Updated Assessment Tool for Identifying Facilitating Factors and Barriers to Information, Care, and Services

HLE2

The Health Literacy Environment of Hospitals and Health Centers

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Introduction

Environmental characteristics of our hospitals, health centers, and health services can shape the experiences and actions of clients, patients, visitors, and everyone who calls the health organization their workplace. Using a 'health literacy lens' we offer a focus on a number of key factors that can affect people's access to information, care, and services. Health literacy factors can support or inhibit navigation, dialogue, safety, decision making, and health outcomes. These factors include institutional resources, policies, practices, and norms. They also include vocabulary used in discussions, in print, or on signs; expectations we have for patients and professionals; as well as navigation guideposts and instructions for action.

In support of a growing interest in the health literacy environment of our organizations, we have undertaken an update of the Rudd and Anderson 2007 *The Health Literacy Environment of Hospitals and Health Centers [**HLE**]*. This revised tool [**HLE2**] enables you to identify and rate literacy related factors within your organization. Findings will support efforts to improve health literacy by initiating action, identifying and acting on priority areas, and measuring change over time.

Background

Attention to the *health literacy environment* began as health researchers and literacy experts expanded the concept of *health literacy.* As originally conceptualized by some health researchers, the term *health literacy* focused on the skills and abilities of individuals. However, once the link between literacy and health outcomes was established, this concept ultimately stymied health researchers and practitioners seeking to enact efficacious change. Health professionals could not, of course, take responsibility for improving the literacy and math skills of the public or of their patients nor could they simply wait for improvements in skills to accumulate through the education sector. However, partnerships among health and literacy experts have expanded our understanding of literacy and health literacy and has opened a door to action.

We have long known that measures of literacy skills will show variations based on texts and contexts. As the 2004 Institute of Medicine report, *Health Literacy: A Prescription to End Confusion,* noted, literacy is not a trait or characteristic of an individual but is instead an interaction – such as that between a reader and a text or between a speaker and a listener. Furthermore, it is an interaction that takes place, not within a vacuum, but within a specific context that may ease or constrain the interaction. Thus, the skills of the reader and the writer, of the listener and of the speaker, as well as the characteristics of the social and physical environment within which these activities take place -- must all be considered.

This broader understanding of health literacy supports action on multiple levels. For example, we can make information more accessible by improving health related print and web materials. We can enhance the communication skills of those of us interacting with the public whether in clinical encounters, in the community, or over the air waves. We can lessen the burden on health providers through added resources and by modifying institutional policies. In

sum, we can facilitate healthful action for the public and ease the journey for patients and their families by removing unnecessary literacy and math related barriers within the health system.

Health literacy can emerge when the mismatch between the documented skills of the public and the demands and expectations of the health sector is corrected. In support of this growing awareness, the Institute of Medicine (now the National Academy of Medicine) introduced the idea of a *health literate organization* in 2012. This concept is based on the principle that all healthcare organizations have a responsibility to develop a structure that reduces barriers, improves communication, and facilitates the use of healthcare service for all patients.

The original workbook and assessment tool, *The Health Literacy Environment of Hospitals and Health Centers,* has been widely used in the U.S. and has been translated and adapted for different health systems in Europe, Australia, and New Zealand. Several published studies are based on its use and we provide a few of the citation along with additional resources at the end of this packet. This revision, ***HLE2*** (*The Health Literacy Environment of Hospitals and Health Centers, version 2)* is the product of a partnership between Rima Rudd, Sandy Oelschlegel and members of the Health Literacy Task Force at the University of Tennessee Medical Center: Kelsey Leonard Grabeel, Emily Tester, and Eric Heidel.

Structure

The ***HLE2*** tool is organized into 5 sections, each of which provides a rating scale and a metric to indicate both a total score and a percentage score. The sections are:

- Organizational Policies
- Organizational Practices
- Navigation
- Culture and Language
- Communication: Print Materials, Forms, Websites, and Patient Portals

Suggested Processes

The value of an assessment is enhanced by active administrative support and well planned mechanisms for dissemination, reflection, and action. First, we suggest that you obtain support from key administrators. Next, we suggest that you identify a standing committee to whom you may report findings and with whom you can generate ideas for follow-up action steps.

For the assessment, we suggest working with a small team – ideally from different parts of the organization and/or with different areas of expertise. We encourage the team to take the time to review each section together, independently try out various items within a section, and build consensus for the ratings. Doing so will reduce subjectivity and increase reliability.

Finally, we note that organizations vary in size and complexity. You must determine how your assessment process will best fit the type and size of your organization. If, for example, your organization is large, you may want to first assess overall organizational policy and then

undertake independent assessments of practice, navigation, culture and language, and/or materials for different sites or units as you deem appropriate.

Next Steps

Once you generate findings, you will be well poised to work with administration and organizational committees to determine priority areas and action steps.

The original ***HLE*** provided suggestions for action, examples from the field, as well as additional instruments for materials review. The additional instruments for materials included the *SMOG*, *PMOSE/IKIRSCH*, and the *SAM*. If, for example, some materials emerge as problematic, we suggest undertaking a second level of assessment for the problematic texts. You may choose to turn to these noted instruments and/or to more recently developed ones such as the *CDC Health Literacy Index* or the *AHRQ PEMAT* as well as to existing guides for examining and structuring forms, websites, and numeric displays (most of which are freely available on line). Specific materials assessment tools and guidelines offer insight for analyses as well as for revision. We provide citations for these as well as additional resources and references at the end of this packet. In addition, we refer you to the original ***HLE***. We will add new resources to ***HLE2*** over time as we gather new tools, reports, and action steps from the field.

Citations and Use

This work was originally supported by a grant from the U.S. Department of Education to Health Literacy Studies at the Harvard School of Public Health, as part of the National Center for the Study of Adult Literacy and Learning at Harvard University Graduate School of Education. The ***HLE*** was distributed in hard copy (at no cost) and later posted on line at: https://www.hsph.harvard.edu/healthliteracy as well as on: www.ncsall.net

By posting this revised ***HLE2*** instrument, we grant permission for its use. We request that you report back on use and findings. Please be sure to always offer a full citation to give credit. We are listing this tool on several websites and so ask that you insert the url location from which you accessed the document.

Rudd RE, Oelschlegel S, Grabeel KL, Tester E, & Heidel E. The HLE2 Assessment tool, Boston: Harvard T.H. Chan School of Public Health. 2019. Online at: (insert the appropriate on-line source and date accessed).

When you use this tool, we would appreciate hearing about your experience. Please obtain written permission if you are considering a translation or modification. You may write to any of the co-authors:

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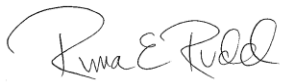
- Lane Stiles, Director of Patient Education, Vanderbilt University Medical Center, Nashville, TN
- University of Virginia Health System, Charlottesville, VA
- Brandi Weaver, Marketing Specialist, Oregon Health & Science University, Portland, OR

Sincerely,



And the Health Literacy Task Force of the University of Tennessee Medical Center

Note
A variety of resources helpful for follow up discussions and actions are appended at the end.

The HLE2 Assessment Tool

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Organizational Policies

This section addresses organizational policies through the lens of health literacy. This section requires a review of existing written documents as well as a rating of policy in practice.

- Part 1 focuses on policies and whether or not they are in written format.
    - Items 1-4 require a no/yes response only.

- Part 2: focuses on policies as well as on practice.
    - Items 5-10 require both a no/yes response (to indicate a written policy) as well as a frequency rating scale to indicate the extent to which each item is in practice.

Part 1: Policy

Items 1 through 6 require only a no or yes response to confirm whether or not the policy is in written format. This may require some document searches and reviews.

To score, please enter 4 points for each Yes response.

Scoring Guidance for No/Yes Rating

No: no written document could be found that establishes this practice as a policy.
Yes: a written document is available to indicate that this practice is an established policy.

Part 1: Policy		
Directions: Indicate whether or not each of the following is documented in written format. Enter the number of points earned in the appropriate box.		
Criteria	**Written No 0**	**Written Yes 4**
1. The strategic plan reviewed by the board of directors includes a reference to becoming a more health literate organization.		
2. The strategic plan reviewed by the board of directors includes a reference to improving health literacy by reducing literacy related barriers.		
3. The organization includes improved health literacy as part of quality improvements and patient safety goals.		
4. The organization has a committee that includes increasing health literacy by removing literacy related barriers to information and care.		
5. A policy requires that patient satisfaction surveys include at least one question about the quality and availability of health information.		
6. A policy requires that patient satisfaction surveys include at least one question about the communication skills of professional staff.		
Part 1 Policy: Add the yes points for questions 1-6 total = _____		

Part 2: Policy and Practice

These questions focus on policy and practice in the institution. Note that a satellite clinic may not provide the same resources, such as a library, as the main facility. Do credit the organization as a whole if the feature is in the main site. If you do a full independent assessment at each site, then consider what is present at the satellite clinic only.

Items 7 through 12 ask about written policy. You may need to undertake some document searches and reviews. First, indicate whether or not each policy is documented in written format (no/yes). Then indicate the extent to which this policy is practiced for each item – whether or not it is documented in written form. As a result, two scores should be entered for each of the items 7-12: a 0 or 4 related to written format and then a number of points for frequency of practice. Please enter the points in the appropriate boxes to be tallied at the end.

Scoring Guidance for No/Yes Rating

No: no written document could be found that establishes this practice as a policy.
Yes: a written document is available to indicate that this practice is an established policy.

Scoring Guidance for Frequency Rating and Score

Rating	Score	Example
Never	0	This is not practiced as yet.
Rarely	1	This has been practiced only once or twice OR in one or two units. Less than 25% of the time.
Occasionally	2	This is practiced from time to time but not on a regular basis. Less than 50% of the time OR in fewer than half of the units.
Frequently	3	This is practiced on a regular basis. More than half the time [about 75% of the time] OR in most units.
Always	4	This is an institutional expectation. Practiced with a goal of 100%.

Part 2: Policy and Practice							
Directions: First, indicate whether or not each of the following is documented in written format (No/Yes). Next, indicate the extent to which this policy is practiced- whether or not it is in written format. Enter the number of points earned in the appropriate box.							
	Written		**Extent to Which this Policy is Practiced**				
Criteria	**No 0**	**Yes 4**	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
7. A policy requires that all print materials for patients and families are reviewed for plain language principles.							
8. A policy requires that staff responsible for developing print materials for patients and families undergo training in the use of assessment tools (e.g., readability tools, the CDC Index, the AHRQ PEMAT, etc.).							
9. A policy requires that all new print materials are piloted with members of the intended audience.							
10. Contracts with outside vendors providing print materials for patients include requirements for reporting on literacy assessments and for conducting/reporting on pilot tests of materials with members of the intended audience.							
11. Contracts with web designers include requirements for analyzing and reporting on findings of usability and literacy assessments.							
12. Contracts with portal designers include requirements for analyzing and reporting on findings of usability and literacy assessments.							
Sum the points in each of the columns.							
Part 2 Policy and Practice: Add the points for items 7-12 total = _____							

Organizational Policies Points

Part 1 Policy =	
Part 2 Policy and Practice =	
Sum points for total in Organizational Policy Section =	

Scoring Instructions

Number of items =	**12**
Highest possible points =	**80**
Organizational Policies Score Expressed as a Percentage	
Total number of points earned =	
Divide the number of your total points by **80** (the highest possible number of points) =	
Multiply by 100 =	
% Score of Organizational Policies Section =	

Institutional Practices

This section addresses institutional practices through the lens of health literacy.

- Part 1 focuses on institutional resources.
  - Items 1-5 require a no/yes response only.

- Part 2 focuses on orientation, development, and expectations.
  - Items 6-20 offer a frequency rating scale to indicate the extent to which each item is practiced.

Part 1: Resources

Please respond with a no or yes answer. These initial 5 questions focus on features that do or do not exist within the institution as a whole. Note that a satellite clinic may not provide the same resources, such as a library, as the main facility. Do credit the organization as a whole if the feature is in the main site. If you do a full independent assessment at each site, then consider what is present at the satellite clinic only.

Scoring Guidance for No/Yes Rating

No: this resource does not exist at the institution.
Yes: this resource exists at the institution.

Part 1: Resources		
Directions: Indicate whether or not the following resources are available. Enter the number of points earned in the appropriate box.		
Available Institutional Resources	**No 0**	**Yes 4**
1. The organization has a staffed library/resource room available to staff and volunteers.		
2. The organization has a staffed library/resource room available to patients and family members [could be the same as room/library as above].		
3. Easy to read heath information is available for patients and family members.		
4. The organization provides training for patients on how to use electronic health applications (patient portal, electronic health records, mobile applications).		
5. Cards/paper are available for patients/family members to write down their questions for the clinicians.		
Part 1 Resources: Add the yes points for questions 1-5 total = _____		

Part 2: Orientation, Development, and Expectations

Items 6 through 20 require a rating of the frequency with which this item is practiced.
Enter the number of points in the appropriate box.

Scoring Guidance for Frequency Rating and Score

Rating	Score	Example
Never	0	This is not practiced as yet.
Rarely	1	This has been practiced only once or twice OR in one or two units. Less than 25% of the time.
Occasionally	2	This is practiced from time to time but not on a regular basis. Less than 50% of the time OR in fewer than half of the units.
Frequently	3	This is practiced on a regular basis. More than half the time [about 75% of the time] OR in most units.
Always	4	This is an institutional expectation. Practiced with a goal of 100%.

Part 2: Orientation, Development, and Expectations					
Directions: Indicate the extent to which each item is practiced. Enter the number of points earned in the appropriate box.					
Staff Orientation	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
6. New staff are offered orientation programs.					
7. New staff receive information about health literacy and plain language best practices through orientation presentations and/or written materials.					
8. New staff receive information describing the physical layout and design of the facility through orientation presentations and/or written materials.					
9. New staff receive information about available resources (such as resource room, library, learning opportunities, on-line programs, language services) through orientation presentations and/or written materials.					
Sum the points in each of the columns.					
Staff Orientation: Add the points for items 6-9 total = _____					

Staff Development	Never 0	Rarely 1	Occasionally 2	Frequently 3	Always 4
10. The organization provides training for staff about health literacy issues & practices for the design of **print materials** – as is relevant to their work.					
11. The organization provides training about health literacy issues and practices for clear **verbal** communication (such as "teach-back" method) for staff and volunteers.					
12. The organization provides training on how to use **technologies** (e.g., exam room computers, electronic medical records) as appropriate for staff and volunteers.					
13. The organization offers **educational opportunities** (such as Grand Rounds or Continuing Education credit) about health literacy and best practices for professional staff.					
14. The organization offers opportunities for **staff engagement** in health literacy initiatives.					
Sum the points in each of the columns.					
Staff Development: Add the points for items 10-14 total = _____					
Expectations	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
15. Staff offer everyone help regardless of appearance (e.g., help for filling out forms, completing questionnaires, getting directions).					
16. Staff use plain language or everyday words as well as sentences that are short and direct.					
17. Staff members use visuals, audio and/or DVDs to support talk when such materials are available.					
18. Staff use a reasonably slow pace when speaking with patients.					
19. Staff take responsibility for communication. For example, ask "Am I being clear?" rather than "Do you understand?"					
20. Scripted answers to commonly asked questions are available to reception and phone staff (e.g., directions to the facility or to a location within the facility).					
Sum the points in each of the columns.					
Expectations: Add the points for items 15-20 total = _____					

Part 2 Orientation, Development, Expectations: Add the total points for items 6-20
Orientation total: _____
Staff Development total: _____
Expectations total: _____
Section 2 Total = _____

Institutional Practices Points

Part 1 Resources =	
Part 2 Orientation, Development, Expectations =	
Sum points for total Institutional Practices Section =	

Scoring Instructions

Number of items =	**20**
Highest possible points =	**80**
Institutional Practices Score Expressed as a Percentage	
Total number of points earned =	
Divide the number of your total points by **80** (the highest possible number of points) =	
Multiply by 100 =	
% Score of Institutional Practices Section =	

Navigation

This section addresses navigation through the lens of health literacy.

- Part 1 focuses on arrival.
  - Items 1-10 require a no/yes response only.

- Part 2 focuses on wayfinding.
  - Items 11-29 offer a frequency rating scale to indicate the extent to which each item is practiced.

Part 1: Arrival

Please respond with a no or yes answer. These initial 10 questions focus on features related to navigation that are either present or not present.
To score, please enter 4 points for each Yes response.

Scoring Guidance for No/Yes Rating

No: this feature is not present within the organization.
Yes: this feature is present within the organization.

Part 1: Arrival		
Directions: Indicate whether or not each feature is present. Enter the number of points earned in the appropriate box.		
Arrival and Departure	**No 0**	**Yes 4**
1. Directions to the organization are posted at nearby public transportation locations.		
2. Directions for parking are clearly indicated.		
3. Directions from parking area to the main entry are clearly indicated.		
4. Directions to the Emergency Department are clearly indicated.		
5. Directions back to the parking area or public transportation location from the organization are posted near exits.		
Sum the points in each of the columns.		
Entry and Lobby Access	**No 0**	**Yes 4**
6. The healthcare organization's name is clearly displayed on the outside of the building.		
7. The main entrance is clearly posted.		
8. Handheld maps are available for people to take with them.		
9. Signs show location and names of elevators.		
10. Posted maps and/or wayfinding kiosks are located in the lobby.		
Sum the points in each of the columns.		
Part 1 Arrival: Add the yes points for items 1-10 total = _____		

Part 2: Wayfinding

Items 11 through 29 require a rating of the frequency with which an item is practiced.
Enter the number of points in the appropriate boxes.

Scoring Guidance for Frequency Rating and Score

Rating	Score	Example
Never	0	This is not practiced as yet.
Rarely	1	This has been practiced only once or twice OR in one or two units. Less than 25% of the time.
Occasionally	2	This is practiced from time to time but not on a regular basis. Less than 50% of the time OR in fewer than half of the units.
Frequently	3	This is practiced on a regular basis. More than half the time [about 75% of the time] OR in most units.
Always	4	This is an institutional expectation. Practiced with a goal of 100%.

Part 2: Wayfinding Directions: Indicate the extent to which each item is practiced. Enter the number of points earned in the appropriate box.					
Staff Assistance	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
11. Staff or volunteers wear identification such as a button, uniform, or nametag.					
12. Staff or volunteers are available at or near the main entrance to help visitors.					
13. Staff or volunteers are present at the welcome or information desk.					
14. Staff or volunteers are approachable (e.g., smiling, welcoming).					
15. Staff or volunteers help people navigate the facility (e.g., highlight paths on maps, offer written instructions, or provide escort).					
16. Information offered either by person or phone is with plain, everyday words.					
17. The pace of talk in person is relatively slow.					
18. The pace of talk via phone (person or automated) is relatively slow.					
Sum the points in each of the columns.					
Staff Assistance: Add the points for items 11-18 total = _____					

Hallways: Navigation Ease	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
19. Maps are posted at various locations around the facility.					
20. Words used for locations on signs in the facility remain consistent (e.g., the *Cafeteria* is not changed to *café* or *restaurant*).					
21. Symbols/graphics/icons used on signs in the facility remain consistent.					
22. Signs use plain language as well as symbols, graphics, or icons.					
23. Overhead signs use large, clearly visible lettering.					
24. Wall (eye level) signs use large, clearly visible lettering.					
25. Posted directions and instructions use plain, every day words.					
26. Signs are posted to help patients/visitors return to the lobby/main entrance.					
27. Elevators and/or staircases indicate current floor location/name.					
Sum the points in each of the columns.					
Hallways: Add the points for items 19-27 total = _____					
Service and Specialty Areas (medical records, pharmacy, MRI, etc.)	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
28. The name of clinic/service areas is clearly posted.					
29. Sign-in procedures are clearly indicated.					
Sum the points in each of the columns.					
Service and Specialty Areas: Add the points for items 28-29 total = _____					
Part 2 Wayfinding: Add the points for items 11-29 total = _____					

Navigation Points

Part 1 Arrival Points =	
Part 2 Wayfinding Points =	
Sum points for total Navigation points =	

Scoring Instructions

Number of items =	**29**
Highest possible points =	**116**
Navigation Score Expressed as a Percentage	
Total number of points earned =	
Divide the number of your total points by **116** (the highest possible number of points) =	
Multiply by 100 =	
% Score of Navigation Section =	

Culture and Language Assessment

This section addresses culture and language through the lens of health literacy.

Please note, this is not an exhaustive list of important culture and language items. We've chosen several items specifically related to health literacy.

Consider the following items to rate the frequency with which each item is practiced. The number of points is indicated for each response.

Culture and Language

Items 1 through 9 require a rating of the frequency with which an item is practiced.
Enter the number of points in the appropriate boxes.

Scoring Guidance for Frequency Rating and Score

Rating	Score	Example
Never	0	This is not practiced as yet.
Rarely	1	This has been practiced only once or twice OR in one or two units. Less than 25% of the time.
Occasionally	2	This is practiced from time to time but not on a regular basis. Less than 50% of the time OR in fewer than half of the units.
Frequently	3	This is practiced on a regular basis. More than half the time [about 75% of the time] OR in most units.
Always	4	This is an institutional expectation. Practiced with a goal of 100%.

Culture and Language					
Directions: Please rate the frequency with which each of the following is practiced. Enter the number of points in the appropriate box.					
Culture and Language Items	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
1. Communication provided by the organization shows awareness of and respect for diversity (avoiding stereotyping, using culturally appropriate pictures, words, and examples).					
2. Language services are available or can be called upon with short notice.					
3. Children or untrained people are prohibited from serving as medical interpreters.					
4. Forms are offered in languages other than English.					
5. Webpages can direct users to pages written in their primary language.					
6. Orientation/training sessions for staff include information about the patient population (cultures, languages, and other demographics).					
7. Orientation and/or training sessions for interpreter staff includes information about literacy and health literacy skills of the populations they work with.					
8. Orientation and/or training sessions for interpreter staff includes information about health literacy insights for best practices.					
9. Training sessions for staff include information on how to access, use, and document interpretation services.					
10. The organization offers staff opportunities for Adult Basic Education classes (ABE) or English for Speakers of Other Languages (ESOL) courses to build literacy skills.					
Sum the points in each of the columns.					
Culture and Language: Add the points for items 1-10 total = _____					

Scoring Instructions

Number of items =	**10**
Highest possible points =	**40**
Culture and Language Score Expressed as a Percentage	
Total number of points earned =	
Divide the number of your total points by **40** (the highest possible number of points) =	
Multiply by 100 =	
% Score of Culture and Language Section =	

Communication: Print Materials, Forms, Websites, and Patient Portals

This section focuses on communication in four different media/formats: Print Materials, Forms, Web Postings, and Patient Portals through the lens of health literacy.

- Part 1 focuses on Print Materials.
  - This part offers a frequency rating scale to indicate the extent to which each item is practiced related to **print materials**.

- Part 2 focuses on Forms.
  - This part offers a frequency rating scale to indicate the extent to which each item is practiced related to **forms**.

- Part 3 focuses on Web Postings.
  - This part offers a frequency rating scale to indicate the extent to which each item is practiced related to **websites**.

- Part 4 focuses on Patient Portals.
  - This part offers a frequency rating scale to indicate the extent to which each item is practiced related to **patient portals.**

Suggested Process

To conduct an assessment for each part, please follow these steps:

1. **Review the criteria for the part to be assessed.**
2. **Select a sample of 3-5 items appropriate for each part.**
3. **Review the sample items with the criteria in mind.**
4. **Rate the frequency with which each of the criterial items is practiced across your sample. Note that the rating serves as a summary across the sample you chose.**

Part 1: Print Materials

Part 1 addresses the 'usability' of print materials through the lens of health literacy. Before you complete this section, review all the items listed for your ratings. Next, draw a small sample (3 to 5) of your organization's printed materials in current use. Look over these materials with the criteria in mind. Then, rate the frequency with which each of the items is practiced across your sample of materials. This rating serves as a summary across the materials you chose.

Scoring Guidance for Frequency Rating and Score

Rating	Score	Example
Never	0	This is not practiced as yet.
Rarely	1	This has been practiced only once or twice OR in one or two units. Less than 25% of the time.
Occasionally	2	This is practiced from time to time but not on a regular basis. Less than 50% of the time OR in fewer than half of the units.
Frequently	3	This is practiced on a regular basis. More than half the time [about 75% of the time] OR in most units.
Always	4	This is an institutional expectation. Practiced with a goal of 100%.

Part 1: Print Materials					
Directions: Indicate the extent to which each item is practiced. Enter the number of points earned in the appropriate box.					
Organization	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
1. Materials open with the main message statement.					
2. Materials present information in a logical flow.					
3. The information is grouped into meaningful sections.					
4. Materials use clear headings, subheadings, or other devices to signal what is coming next.					
5. Action steps are clearly stated.					
6. Materials summarize the main points at the end.					
Sum the points in each of the columns.					
Organization: Add the points for items 1-6 total = _____					

Writing Style and Vocabulary	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
7. Materials are written in the active voice.					
8. The words and sentences are generally short, simple, and direct.					
9. Everyday terms are used when possible, such as *brothers* and *sisters* for *siblings* and *use* rather than *utilize*.					
10. If medical words (such as patella) are used, the term is defined in plain language and, if possible, with a helpful example or illustration.					
11. If math terms (such as mean, average range, rate, or risk) are used, the term is defined in plain language and, if possible, with a helpful example or illustration.					
12. Abbreviations and/or acronyms are used only after they are explained in the first use.					
13. The material avoids asking readers to perform math tasks unless there are clear directions for computation and/or use of an illustration or chart.					
14. The material adds graphics when possible to illustrate math information.					
Sum the points in each of the columns.					
Writing Style and Vocabulary: Add the points for items 7-14 total = _____					
Design	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
15. The material looks uncluttered, with generous margins and white space.					
16. The printed text is clear. (e.g., there is contrast between the text and background and pictures do not over-lay the text).					
17. The font size is 12-point or greater.					
18. The material uses photos, illustrations, symbols, and/or other visuals only to support key messages.					
19. Illustrations, diagrams, tables, charts, and/or graphs are placed near the text that explains them.					
20. Illustrations, diagrams, tables, charts, and/or graphs are clearly labeled (including rows and columns).					
Sum the points in each of the columns.					
Design: Add the points for items 15-20 total = _____					
Print Materials Points: Add the points for questions 1-20 total = _____					

Scoring Instructions

Number of items =	**20**
Highest possible points =	**80**
Print Materials Score Expressed as a Percentage	
Total number of points earned =	
Divide the number of your total points by **80** (the highest possible number of points) =	
Multiply by 100 =	
% Score of Print Materials =	

Part 2: Forms for Patients and Families

Part 2 addresses the 'usability' of forms through the lens of health literacy. Before you complete this section, review all the items listed for your ratings. Next, draw a small sample (3 to 5) of your organization's forms in current use. Look over these forms with the criteria in mind. Then, rate the frequency with which each of the items is practiced across your sample of forms. This rating serves as a summary across the forms you chose.

Scoring Guidance for Frequency Rating and Score

Rating	Score	Example
Never	0	This is not practiced as yet.
Rarely	1	This has been practiced only once or twice OR in one or two units. Less than 25% of the time.
Occasionally	2	This is practiced from time to time but not on a regular basis. Less than 50% of the time OR in fewer than half of the units.
Frequently	3	This is practiced on a regular basis. More than half the time [about 75% of the time] OR in most units.
Always	4	This is an institutional expectation. Practiced with a goal of 100%.

Part 2: Forms for Patients and Families					
Directions: Indicate the extent to which each item is practiced. Enter the number of points earned in the appropriate box.					
Forms Item	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
1. The layout is uncluttered and has sufficient white space.					
2. The font size is 12 point or greater.					
3. The form provides adequate space for write-in responses.					
4. The questions are organized into meaningful groupings.					
5. The form primarily uses rating type questions (e.g., checklists, yes/no, frequency, etc.).					
6. Brief instructions on how to respond to questions are provided (especially when the response set changes).					
7. The respondent can indicate when an item is not relevant or not appropriate (e.g., I do not have diabetes or: NA).					
8. Everyday terms are used when possible, such as *brothers* and *sisters* for *siblings* and *use* rather than *utilize*.					
9. If medical words (such as patella) are used, the term is defined in plain language and, if possible, with a helpful explanation or illustration.					
10. If math terms (such as mean, average range, risk, or rate) are used, the term is defined in plain language and, if possible, with a helpful example or illustration.					
11. The form avoids asking respondents to perform math tasks (e.g., calculate 10% of your fee).					
12. The form limits the number of 'detours' (e.g., *if yes…if no…*questions).					
Sum the points in each of the columns.					
Forms Points: Add the points for questions 1-12 total = _____					

Scoring Instructions

Number of items =	**12**
Highest possible points =	**48**
Forms Score Expressed as a Percentage	
Total number of points earned =	
Divide the number of your total points by **48** (the highest possible number of points) =	
Multiply by 100 =	
% Score of Forms =	

Part 3: Web Postings for Patients and Families

Part 3 addresses the 'usability' of web postings through the lens of health literacy. Before you complete this section, review all the items listed for your ratings. Next, draw a small sample (3 to 5) of places on your organization's website. Look over these web pages with the criteria in mind. Then, rate the frequency with which each of the items is practiced across your sample of web pages. This rating serves as a summary across the pages you chose.

If you choose to conduct a more thorough assessment of the web pages, use the print materials assessment items in addition to the web specific criteria.

Scoring Guidance for Frequency Rating and Score

Rating	Score	Example
Never	0	This is not practiced as yet.
Rarely	1	This has been practiced only once or twice OR in one or two units. Less than 25% of the time.
Occasionally	2	This is practiced from time to time but not on a regular basis. Less than 50% of the time OR in fewer than half of the units.
Frequently	3	This is practiced on a regular basis. More than half the time [about 75% of the time] OR in most units.
Always	4	This is an institutional expectation. Practiced with a goal of 100%.

Part 3: Web Postings for Patients and Families					
Directions: Indicate the extent to which each item is practiced. Put the number of points earned in the appropriate box.					
General Features	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
1. Home page has a simple search function.					
2. Home page contains links to major sections of the site.					
3. Links are clearly labeled.					
4. Larger font can be selected.					
5. Icons have clear labels that explain their function.					
6. The source of information is dated and reliable (source displayed).					
7. The page can send viewers to a mobile version (programmed into the html).					
8. Screen pages are formatted correctly when printed.					
Sum the points in each of the columns.					
General Features: Add the points for questions 1-8 total = _____					

Organization for Content Pages	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
9. The page opens with the main message statement.					
10. On the content pages, the back button returns viewers to the previous page.					
11. On the content pages, there is a button to return the viewer to the homepage.					
12. The information is grouped into meaningful sections.					
13. The page uses clear headings, subheadings, or other devices to signal what is coming next.					
14. Action steps are clearly stated.					
15. The page offers a summary of the main points.					
Sum the points in each of the columns.					
Organization for Content Pages: Add the points for questions 9-15 total = _____					
Automatic Features	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
16. Users can click on medical or math terms and be linked to a definition.					
17. There is an automatic calculation for all math tasks.					
18. The content page explains data/math information in text and illustrates with graphics as appropriate.					
Sum the points in each of the columns.					
Automatic Features: Add the points for questions 16-18 total = _____					
Web Postings Points: Add the points for questions 1-18 total = _____					

Scoring Instructions

Number of items =	**18**
Highest possible points =	**72**
Web Postings Score Expressed as a Percentage	
Total number of points earned =	
Divide the number of your total points by **72** (the highest possible number of points) =	
Multiply by 100 =	
% Score of Web Postings =	

Part 4: Patient Portals

Part 4 addresses the 'usability' of patient portals through the lens of health literacy. Before you complete this section, review all the items listed for your ratings. Next, draw a small sample (3 to 5) of sections of your organization's patient portal in current use. Look over these samples with the criteria in mind. Then, rate the frequency with which each of the items is practiced across your sample. This rating serves as a summary across the sections of the portal you chose.

If you choose to conduct a more thorough assessment of the patient portal sites, use the print materials assessment items in addition to the patient portal specific criteria.

Scoring Guidance for Frequency Rating and Score

Rating	Score	Example
Never	0	This is not practiced as yet.
Rarely	1	This has been practiced only once or twice OR in one or two units. Less than 25% of the time.
Occasionally	2	This is practiced from time to time but not on a regular basis. Less than 50% of the time OR in fewer than half of the units.
Frequently	3	This is practiced on a regular basis. More than half the time [about 75% of the time] OR in most units.
Always	4	This is an institutional expectation. Practiced with a goal of 100%.

Part 4: Patient Portals					
Directions: Indicate the extent to which each item is practiced. Enter the number of points earned in the appropriate box.					
General Features of the Portal	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
1. Larger font can be selected.					
2. Icons have clear labels that explain their function.					
3. The back button returns viewers to the previous page.					
4. There is a button to return viewers to the homepage.					
5. The portal can send the viewer to a mobile version.					
6. Portal users can click on links to be directed to additional information or to additional explanations.					
Sum the points in each of the columns.					
General Features of the Portal: Add the points for questions 1-6 total = _____					

Content of the Portal	Never 0	Rarely 1	Occasionally 2	Frequently 3	Always 4
7. The portal opens to a table of contents or provides clear section labels for viewing information.					
8. The information is grouped into meaningful sections.					
9. Lab tests are noted with the full name as well as the abbreviation.					
10. Lab results show the value in context (e.g., context of normal population range or noted as high or low or requiring action).					
11. Action steps are clearly stated.					
Sum the points in each of the columns.					
Content of the Portal: Add the points for questions 7-11 total = _____					
Design of the Portal	**Never 0**	**Rarely 1**	**Occasionally 2**	**Frequently 3**	**Always 4**
12. The portal pages look uncluttered, with generous margins and white space.					
13. The font size is 12-point or greater.					
14. Illustrations, diagrams, tables, charts, and/or graphs are clearly labeled (including rows and columns).					
Sum the points in each of the columns.					
Design of the Portal: Add the points for questions 12-14 total = _____					
Patient Portals Points: Add the points for questions 1-14 total = _____					

Scoring Instructions

Number of items =	**14**
Highest possible points =	**56**
Patient Portals Score Expressed as a Percentage	
Total number of points earned =	
Divide the number of your total points by **56** (the highest possible number of points) =	
Multiply by 100 =	
% Score of Patient Portals =	

Record and Review % Scores

We encourage you to review the percentage scores for each section. We do not suggest that you tally an overall score. An overall score for the organization will not provide any meaningful information for strategy development.

Section	**% Score**
Policy	
Practice	
Navigation	
Culture & Language	
Communication	**% Score**
Print Materials	
Forms	
Websites	
Patient Portals	

Consider the following values and implications for action for the % score for each section:

Score Range	**Action to Consider**
Below 50%	Begin a focused health literacy initiative to eliminate literacy related barriers in this area
50% to 75%	Augment efforts to eliminate literacy related barriers in this area
76% to 85%	Continue to augment efforts; monitor and document changes
86% to 99%	Continue to monitor; consider a study comparing baseline values with values at a later date; share your experiences and finding with others

Planning for Action

As we noted in the introduction to the ***HLE2*** tool, you will find it most helpful to work with and report findings to an existing committee and key administrators. We encourage you to focus on the percentage scores for each section so that you can identify some strengths and weaknesses of your organization, determine priority areas, and generate ideas for action.

It is unlikely that any institution can eliminate all literacy related barriers. However, small improvements can make a difference. Small steps can spur larger action. Small studies can help garner research funds. An action plan for a health literacy initiative must be specific to an organization, should reflect the priorities of the organization, and must, of course, consider costs.

The original ***HLE*** workbook contained suggestions for and examples drawn from the field for the development of action plans for navigation, print communication, the oral exchange, technology, and policies and protocols [pages 27-62]. The literature in this area has expanded considerably. We provide some key resources in the appendix that follows.

Appendix: Resources

Selected Resources, Tools, Citations

Background

- *Health Literacy: A Prescription to End Confusion*. Institute of Medicine (US) Committee on Health Literacy. Washington (DC): National Academies Press (US), 2004. https://www.ncbi.nim.nih.gov/pubmed/25009856
- Rudd, R. E., & Anderson, J. E. *The health literacy environment of hospitals and health centers*. Boston, MA: National Center of the Study of Adult Learning and Literacy, 2006. https://www.hsph.harvard.edu/healthliteracy
- *National Action Plan to Improve Health Literacy.* U.S. Department of Health and Human Services, Washington (DC): Office of Disease Prevention and Health Promotion, 2010. https://health.gov/communication/HLActionPlan/pdf/Health_Literacy_Action_Plan.pdf
- Advancing Effective Communication, Cultural Competence, and Patient- and Family-Centered Care: A Roadmap for Hospitals. Chicago, IL: The Joint Commission, 2010. https://www.jointcommission.org/assets/1/6/ARoadmapforHospitalsfinalversion727.pdf
- Health Literacy Implications of the Affordable Care Act, Centers for Health Care Strategies, 2010. https://www.chcs.org/media/Health_Literacy_Implications_of_the_Affordable_Care_Act.pdf
- Healthy People 2030 Framework. US Department of Health and Human Services, 2019. https://www.healthypeople.gov/2020/aboout-healthy-people/develment-healthy-people-2030/framework

Communication: Health Materials

- Toolkit for Making Written Material Clear and Effective, Centers for Medicare and Medicaid Services, 2012. https://www.cms.gov/Outreach-and Education/Outreach/WrittenMaterialsToolkit/index.html
- CDC Clear Communication Index. Center for Disease Control and Prevention, 2015. https://www.cdc.gov/ccindex/index.html
- AHRQ Health Literacy Universal Precautions Toolkit. Content last reviewed August 2018. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/index.html
- The Patient Education Materials Assessment Tool (PEMAT) and User's Guide. Content last reviewed April 2017. Agency for Healthcare Research and Quality, Rockville, MD. https://www.ahrq.gov/professionals/prevention-chronic-care/improve/self-mgmt/pemat/index.html
- CDC Clear Communication Index. Center for Disease Control and Prevention, 2015. https://www.cdc.gov/ccindex/index.html
- Simple Measure of Gobbledygook (SMOG). MCLaughlin, 1969 https://library.med.utah.edu/Patient_Ed/workshop/handouts/smog_formula.pdf

- Suitability Assessment of Materials (SAM).in Teaching Patients with Low Literacy Skills Doak, Doak, and Root, 1996
  https://cdn1.sph.harvard.edu/wp-content/uploads/sites/135/2012/09/doakchap1-4.pdf
- U.S. Department of Health and Human Services, Toolkit for making written material clear and effective, 2012
  https://www.cms.gov/Outreach-and Education/Outreach/WrittenMaterialsToolkit/index.html
- Mosenthal PB, Kirsch IS. A new measure for assessing document complexity: The PMOSE/IKIRSCH document readability formula. J Adolescent & Adult Literacy. 1998; 41(8):638–57. Tool Extract on line at:
  https://www.hsph.harvard.edu/healthliteracy
- ADA Standards for Accessible Design, Department of Justice, 2010.
  https://www.ada.gov/regs2010/2010ADAStandards/2010ADAStandards.pdf

Numbers

- Health Literacy and Numeracy: Workshop Summary Washington D.C. National Academy of Medicine, 2014.
  https://www.nap.edu/catalog/18660/health-literacy-and-numeracy-workshop-summary
- Rudd RE. Numbers get in the way. Health Literacy Roundtable Commentary. Washington DC: National Academy of Medicine. 2016.
  https://nam.edu/numbers-get-in-the-way

Websites

- U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Health literacy online: A guide to writing and designing easy-to-use health websites. Washington, DC., 2010
  https://health.gov/healthliteracyonline/2010/Web_Guide_Health_Lit_Online.pdf
- National Academies of Sciences, Engineering, and Medicine. Health literacy and consumer-facing technology: Workshop summary. Washington, DC: The National Academies Press, 2015.
  https://www.nap.edu/read/21781/chapter/1

Appendix: Examples of Use of the 2006 Health Literacy Environment

Location	Institution (s)	Assessment	Notes
Wisconsin	St. Mary's Hospital (2008)	Navigation and print communication	Partnership between institution, Wisconsin Literacy organization and "ad agency" Recommends the use of the evaluation tool.
Pennsylvania (Philadelphia)	Fox Chase Cancer Center- (published 2009)	Navigation, Print communications	19 members of multi-department team divided into sub-teams. Recommendations sent to leadership
Spain-Catalonia	Ten hospitals (published 2011)	Navigation, Print Communications, Oral Exchange,	"the tools offer a feasible way for professionals and administrators to begin the process of identifying and improving the health literacy environment."
Missouri	Ten local public health departments (LPHD) in Missouri assessed health literacy, best practices and policies already in place. (published 2012)	Navigation, Print Communications, Oral Exchange, Technology, Policies and Protocols	Partnership of Health Literacy Missouri and Missouri Department of Health and Senior Services. Provided recommendations for improvement.
Australia	Small rural health Service (published 2014)	Navigation, telephone, website	Consultants and Public Health Department. Used "consumers." Concentrated on "First Impressions Activities." Recommends the use of these tools for health services.
Maryland	Assessment of 26 community based dental clinics published (2014)	Navigation, Print Communications and Oral Exchange	"….findings can help administrators and practitioners identify and modify inadvertent barriers…"
New York (South Bronx, Queens)	Urban Health Plans, Inc. (2013)	Navigation, Print Communications, Oral Exchange, Technology, Policies and Protocols	Team developed "next steps" for the future
West Virginia	West Virginia University Healthcare- Family Medicine Center and Geriatric Center (2014-2015)	Used the tool as a model for health care provider and staff.	West Virginia University Healthcare, Family Medicine Center and Geriatric Center
Tennessee	The University of Tennessee Medical Center (published 2017-2019)	Navigation, Oral Communication, Print Communication, Policies and Protocols, Technology	Health Literacy Task Force implemented all aspects of the tool as a research project and published the results

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