

An Organizational Health Literacy Assessment at an Academic Health Center

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Background

- **Organizational health literacy (OHL)**

... the degree to which an organization considers and promotes the health literacy of patients by making it easy to navigate, use, and understand health information and services.

- Research supports the need for health-literate healthcare organizations to help reduce the health literacy demands often placed on patients. (Weaver et al., 2012; Prince et al., 2017; Kowalski et al., 2015; Palumbo, 2016)

- Assessing strengths and weaknesses in OHL practices is an important step in becoming a health-literate healthcare organization.



Specific Aims

The purpose of this quantitative research study was to assess *organizational health literacy* at a major academic health center by applying criteria found in the *Ten Attributes of Health Literate Health Care Organizations*.

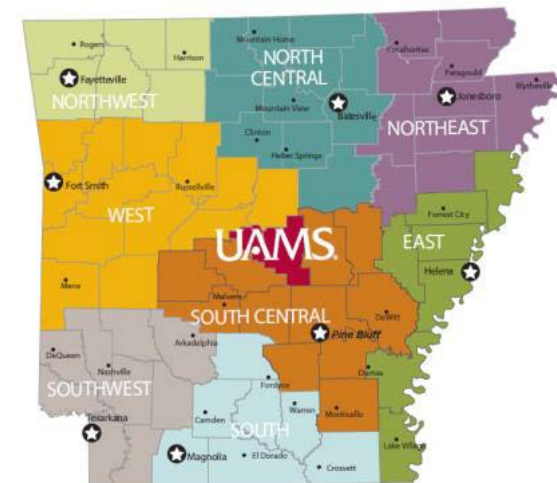


10 Attributes of Health Literate Health Care Organizations

1. Leadership makes health literacy important to its mission, structure, and operations
2. Health literacy is a part of planning, evaluation measures, patient safety, and quality improvement
3. Health professionals are trained on health literacy best practices and progress is monitored
4. Patients are included in the design, implementation, and evaluation of health information and services
5. Patients of all health literacy levels have their needs met and stigmatization is avoided
6. Health literacy strategies are used in interpersonal communications and patient understanding is confirmed at all points of contact
7. Health information and services are easily accessible, and patients receive navigation assistance
8. Print and audio/visual materials and social media content is easy to understand and act on
9. Health literacy is addressed in high-risk situations, including care transitions and communications about medicines
10. Health plan coverages and out-of-pocket costs are clearly communicated

Setting & Sample

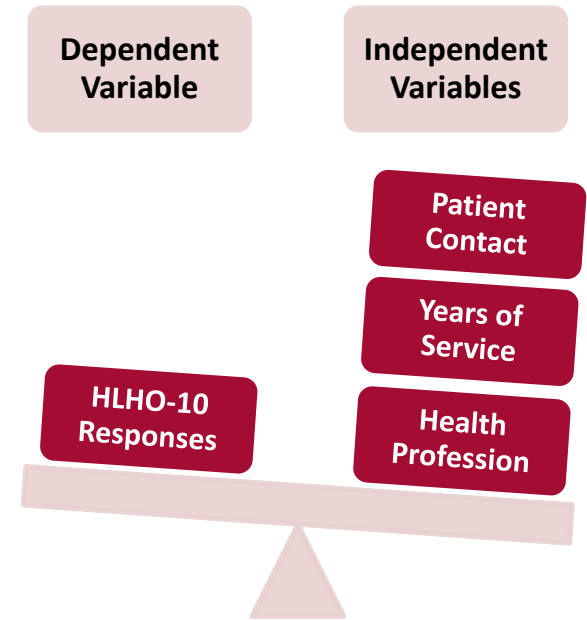
- University of Arkansas for Medical Sciences
 - Arkansas' only academic health center
 - Only adult Level One Trauma Center in Arkansas
 - Eight regional centers and several health clinics
 - UAMS Center for Health Literacy
- Population: ~ 10,300 employees
 - Non-probability purposive sampling
 - Targeted sample size (n = 371)
- Inclusion
 - Current UAMS employees
- Exclusion
 - No UAMS students or patients



Source: UAMS, 2017

Methods

- Needs assessment
 - OHL practices at UAMS
 - Employee feedback
- Data collection
 - Recruitment: UAMS weekly announcements
 - Instrument: HLHO 10-Item survey
 - Online survey: Qualtrics
 - Enrollment period: 10 weeks (Summer 2016)
- Data Analysis
 - SPSS v22 statistical software
 - Descriptive statistics
 - Demographics
 - Employee ratings of OHL practices
 - Factorial ANOVA ($\alpha = .05$)
 - HLHO-10 responses
 - Health profession, years of service, and level of patient contact
 - Other analyses
 - Age, race, gender, and education



OHL Assessments

Name	Description
<p>Primary Care Health Literacy Assessment (DeWalt et al., 2010; Brega et al., 2015)</p>	<ul style="list-style-type: none"> • Assesses all 10 attributes • Toolkit: surveys, checklists, materials (100+ Likert-scale questions) • Paper or electronic administration • A self-administered survey that rates OHL practices on a scale of 1 to 4 (Doing Well, Needs Improvement, Not Doing, Not Sure or N/A)
<p>Enliven Organisational Health Literacy Self-Assessment (Thomacos & Zazryn, 2013)</p>	<ul style="list-style-type: none"> • Assesses all 10 attributes • Checklist (85 Questions) • Paper or electronic administration • A self-administered survey that uses a checklist to assess use of each attribute. Participants are asked to simply check if their organization is performing a specific task. Each item in the checklist has a space for comments or plans for future action.
<p>Health Literate Healthcare Organization 10-Item Questionnaire (Kowalski et al., 2015)</p>	<ul style="list-style-type: none"> • Assesses all 10 attributes • Survey (10 Likert-scale questions) • Paper or electronic administration • A self-administered survey that rates OHL practices on a scale of 1 to 7 ('Absolutely Not' – 'To a Very Large Extent')

HLHO 10-Item Questionnaire

To what extent...	Absolutely Not		Neither/Nor			To a Very Large Extent	
	1	2	3	4	5	6	7
1) ...is the management at your organization explicitly dedicated to the subject of health literacy (e.g. mission statement, human resources planning)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2) ...is the topic of health literacy considered in quality management measures at your organization?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3) ...are employees at your organization trained on the topic of health literacy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4) ...is health information at your organization developed by involving patients?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5) ...is individualized health information used at your organization (e.g. different languages, print sizes, braille)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6) ...are there communication standards at your organization which ensure that patients truly understand the necessary information (e.g. translators, allowing pauses for reflection, calling for further queries)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7) ...are efforts made to ensure that patients can find their way at your organization without any problems (e.g. direction signs, information staff)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8) ...is information made available to different patients via different media at your organization (e.g. three-dimensional models, DVDs, picture stories)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9) ...is it ensured that the patients have truly understood everything, particularly in critical situations (e.g. medication, surgical consent), at your organization?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10) ...does your organization communicate openly and comprehensibly to patients in advance about the costs which they themselves have to pay for treatment (e.g. out-of-pocket payments)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Demographics (N = 463)

Demographic	Category	n (%)
Race*	American Indian or Alaskan Native	2 (.4)
	Asian	8 (1.7)
	Black or African American	84 (18.1)
	White	326 (70.4)
	Two or more races/Some other race	5 (1.1)
	Hispanic	15 (3.2)
	Choose not to disclose	2 (.4)
Gender*	Male	87 (18.8)
	Female	355 (76.7)
Age*	Under 25	6 (1.3)
	26-29	32 (6.9)
	30-39	91 (19.7)
	40-49	125 (27.0)
	50-59	127 (27.4)
	60 or older	61 (13.2)
Education*	High school graduate	16 (3.5)
	Completed some college	41 (8.9)
	Associate degree	31 (6.7)
	Bachelor's degree	99 (21.4)
	Completed some post graduate	21 (4.5)
	Master's degree	120 (25.9)
	PhD, MD, PharmD, or Law degree	95 (20.5)
	Other advanced degree beyond Master's	19 (4.1)

*Missing data = 21 (4.7%)

Demographics (N = 463)

Demographic	Category	n (%)
Health Profession*	Nurse	39 (8.4)
	Physician	28 (6.0)
	Pharmacist	7 (1.5)
	Therapist	13 (2.8)
	Administration	108 (23.3)
	Research	53 (11.4)
	Education	61 (13.2)
	Other**	133 (28.7)
Level of Patient Contact*	0-10% Direct patient contact	323 (69.8)
	11-50% Direct patient contact	31 (6.7)
	> 50% Direct patient contact	88 (19.0)
Years of Service*	Less than 1 year	57 (12.3)
	1-5 years	153 (33.0)
	6-10 years	80 (17.3)
	11-15 years	59 (12.7)
	16-20 years	42 (9.1)
	21 years or more	51 (11.0)

* Missing data = 21 (4.7)

** Operations, patient care technician, housekeeping, etc.

Research Question

To what extent do UAMS employees think that their organization considers and promotes the health literacy of patients?

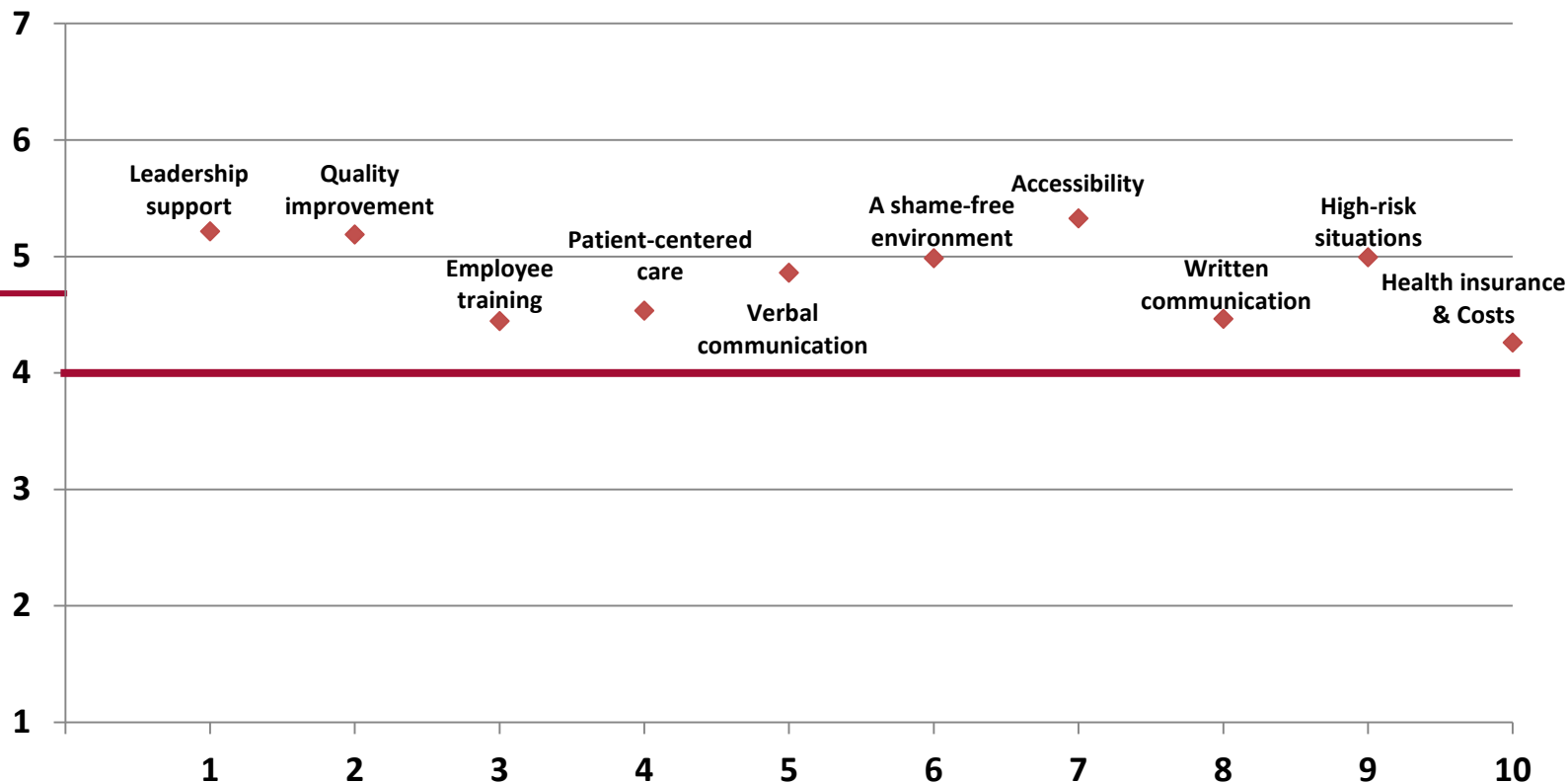


Image Source: Communicate Health, 2012

Results: OHL Assessment

To a very large extent

$\bar{x} = 4.72$



Ten Attributes
of Health Literate Health Care Organizations

Absolutely not

Important Findings

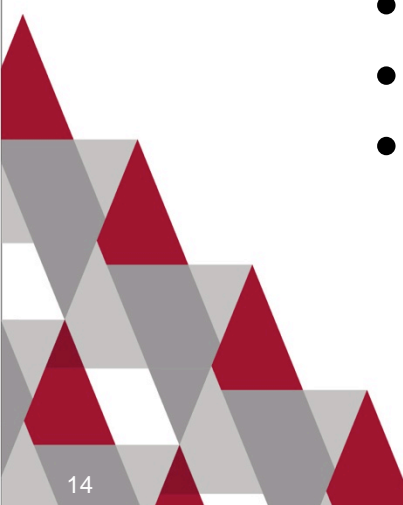
- **H1.** There were *no statistically significant* differences among employee ratings of OHL practices at UAMS based on **health profession.** ($p = 0.918$)*
- **H2.** There were *no statistically significant* differences among employee ratings of OHL practices at UAMS based on **years of service.** ($p = 0.372$)*
- **H3.** There were *no statistically significant* differences among employee ratings of OHL practices at UAMS based on **level of patient contact.** ($p = 0.112$)*
- **Strengths:** Accessibility ($\bar{x} = 5.33$); leadership support ($\bar{x} = 5.22$)
- **Weaknesses:** Employee training ($\bar{x} = 4.45$); communication about costs ($\bar{x} = 4.26$)
- Highest ratings by employee demographic
 - Nurses ($\bar{x} = 5.12$)
 - Employees with 5 or less years of service ($\bar{x} = 4.8$)
 - Employees with 11% or more direct patient contact ($\bar{x} = 4.98$)
- Statistically significant differences by education only
 - Highest ratings: employees with less than a college degree ($\bar{x} = 5.09$)

* Computed using $\alpha = .05$

Conclusions

- Recommendations for improvement
 - Provide employee training and monitor performance
 - Promote patient-centered care in all areas
 - Improve patient-provider communication about health insurance and costs

- Next Steps
 - Perform follow-up OHL assessments
 - Increase the survey response rate
 - Collect qualitative data
 - Consider patient feedback



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