

Building Blocks of Organizational Health Literacy: Strategies and Frameworks



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*Oral Health
2024 Symposium*

Objectives

1. Recognize the significance of organizational health literacy and how it contributes to employee well-being, productivity, and organizational success.
2. Explored the key elements and dimensions of organizational health literacy.
3. Understand the interplay between communication, culture, and health literacy.
4. Discuss the positive impacts of organizational health literacy on employees, clients, and the organization including improved health outcomes, enhanced decision-making, and increased trust and satisfaction.

Resources

National Action Plan to Improve Health Literacy



U.S. Department of Health and Human Services
Office of Disease Prevention and Health Promotion

Ten Attributes of Health Literate Health Care Organizations

Cindy Brach, Debra Keller, Lyla M. Hernandez, Cynthia Baur, Ruth Parker, Benard Dreyer, Paul Schyve, Andrew J. Lemerise, and Dean Schillinger

June 2012

**Participants in the activities of the IOM Roundtable on Health Literacy.*

The views expressed in this discussion paper are those of the authors and not necessarily of the authors' organizations or of the Institute of Medicine. The paper is intended to help inform and stimulate discussion. It has not been subjected to the review procedures of the Institute of Medicine and is not a report of the Institute of Medicine or of the National Research Council.

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

Advising the nation • Improving health

Discussion Paper

AHRQ Health Literacy Universal Precautions Toolkit

Third
Edition



Which of the following is the strongest predictor of a person's health status?

- a. Age
- b. Income
- c. Literacy skills
- d. Employment status
- e. Education level
- f. Racial or ethnic group

Which of the following is the strongest predictor of a person's health status?

The correct answer is “c.” Although low health literacy can affect everyone regardless of background or educational level, studies on the issue show that **limited literacy skills** are a stronger predictor of an individual's health status than age, income, employment status, education level, and racial or ethnic group.

“Health Literacy: Report of the Council on Scientific Affairs.” JAMA 1999;281:552-557.

What percentage of patients forgets what the doctor told them as soon as they leave the office?

- a. 80 percent
- b. 50 percent
- c. 10 percent
- d. Less than 10 percent

What percentage of patients forgets what the doctor told them as soon as they leave the office?

The correct answer is “a.” **Up to 80% of patients forget** what their doctor tells them as soon as they leave the office. And nearly 50% of what they do remember is recalled incorrectly.

“Patients’ memory for medical information.” Journal of the Royal Society of Medicine 2003:96:219-222.

Which of the following are coping mechanisms used by patients with low health literacy?

- a. Say they forgot their eyeglasses to avoid filling out forms or questionnaires.
- b. Laugh about being forgetful when asked about their medical condition or treatments.
- c. Nod politely when the doctor speaks and don't ask any questions.
- d. All of the above.

Which of the following are coping mechanisms used by patients with low health literacy?

The correct answer is “d.” People with low health literacy are often embarrassed or ashamed to admit they have difficulty understanding health information and instructions. **They use well-practiced coping mechanisms that effectively mask their problem.**

“20 Common Problems in Primary Care,” Barry D. Weiss, MD, editor. McGraw-Hill, 1999.

Health literacy refers only to the ability to read and understand written information.

a. True

b. False

Health literacy refers only to the ability to read and understand written information.

The correct answer is “b.” Health literacy is broader than general literacy; it includes the ability to process numbers (numeracy) and navigate the health care system.

*“Health Literacy: A Prescription to End Confusion.”
Institute of Medicine of the National Academies,
April 2004.*

Definition

Definition of Health Literacy
(Healthy People 2010)

“The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.”

Literacy is multidimensional

Beyond education level and knowledge

Ability to process information

Cognitive skills: reading, writing, numeracy

Computer literacy, financial literacy, etc..

Epidemiology

Nearly a quarter to a half of Americans are functionally illiterate (NLS, 2000)

90 million Americans struggle to understand basic health information

This includes consents, verbal instructions and drug labels



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FIGURE 1A Foundations of a Health Literate Organization

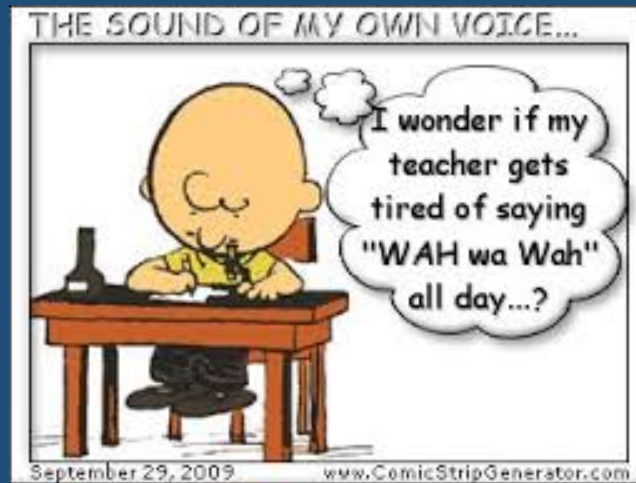
Communication

Communication

- the act or process of using words, sounds, signs, or behaviors to express or exchange information or to express your ideas, thoughts, feelings, etc., to another person
- is verbal speech or other methods of relaying information that get a point across.

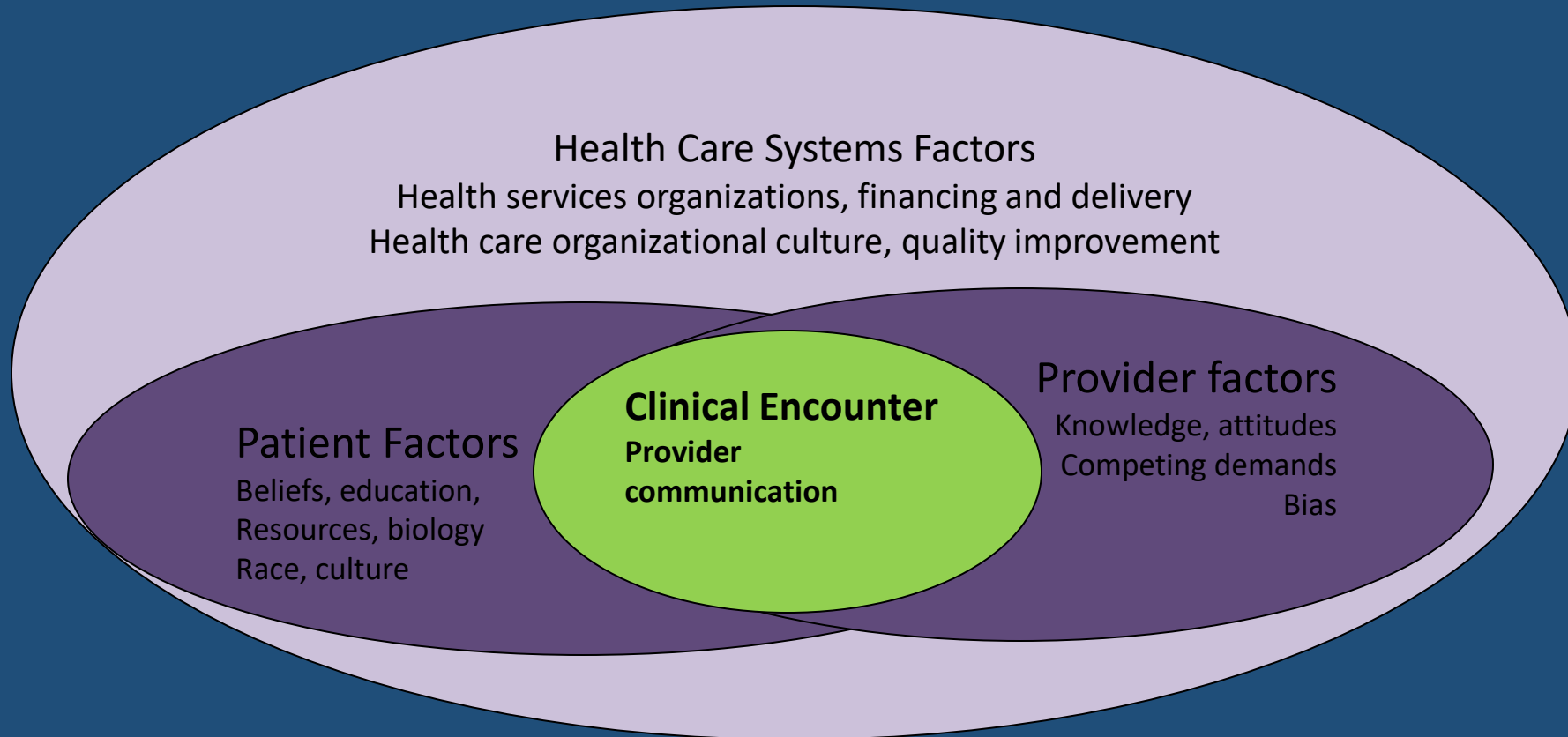
“It takes two to speak the truth - one to speak and another to hear.”

Henry David Thoreau

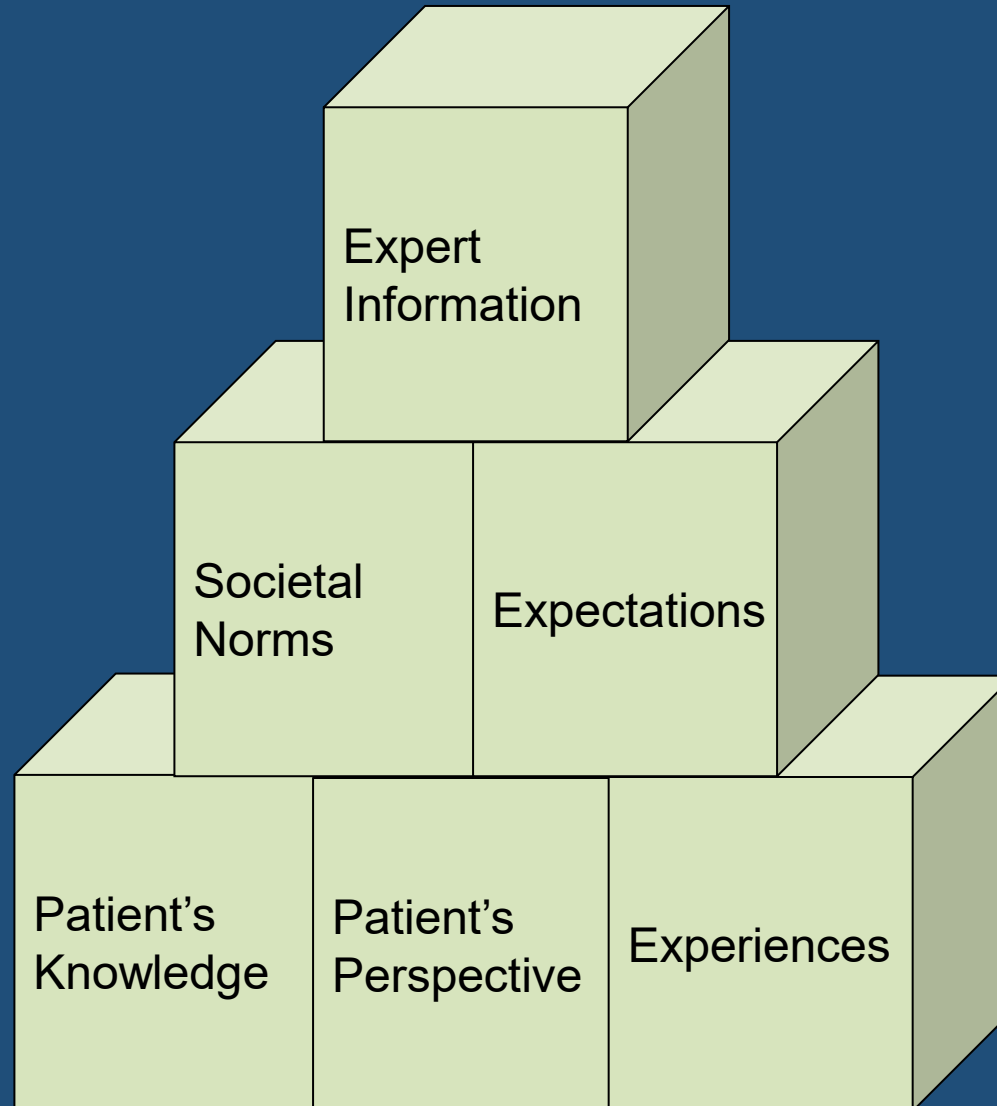


Understanding the Origins of Health Care Disparities: Key Potential Determinants

Kilbourne et al., AJPB 2006



Components of Health Literacy



Assessment of Caregivers/Patients

Readiness to Change

Pre-contemplation	28%
Contemplation	10%
Action	31%
Maintenance	31%

Confidence/Self efficacy

**WHY effective
communication is critical in
the delivery of optimal oral
health care?**

Fluoride Knowledge

Parents should brush their child's teeth twice a day until the child can handle the toothbrush alone	88%
All children older than 6 months should receive a fluoride supplement every day	20%
Parents should start brushing their child's teeth with toothpaste that contains fluoride at age 3	6%
Children younger than 6 years should use enough toothpaste with fluoride to cover the brush	32%

IODENT

Cavity Fighting Toothpaste Fluoride



NET WT 6.4 OZ (181g)

CAVITY PROTECTION & EXTRA BREATH FRESHENING

Regular Flavor

Drug Facts

ACTIVE INGREDIENT **PURPOSE**
Sodium difluorophosphate 0.15% Anticavity
(and Fluoride Content 100 ppm Approx.)

Use Regular brushing with fluoride toothpaste helps protect teeth and keep away cavities.

Warnings
Keep out of the reach of children under 6 years of age. In case of accidental overdose, see professional healthcare or contact a Poison Control Center immediately.

Drug Facts (continued)

DIRECTIONS
Adults and children 2 yrs and over
Children under 6 yrs
Children under 2 yrs
Ask a dentist or physician.

INGREDIENTS
Dentin Carbohydrates, Pectin, Potassium Hydroxide, Silica, Sodium Hexafluorophosphate, Sodium Fluoride, Sodium Lauryl Sulfate, Sodium Pyrophosphate, Sodium Saccharin, Xanthan Gum, Water, Sodium Chloride, Zinc Oxide, Zinc Phosphate, Zinc Sulfate, Zinc Oxide, Zinc Oxide.

Manufactured by
GlaxoSmithKline Consumer Healthcare
1110 N. Mountain Ave., New Hope, PA 19380
Made in India
©2008 GlaxoSmithKline
Exp. Date & Batch No. on reverse

NET WT
6.0 OZ (170.0g)

Clinically proven to fight cavities

tartar control WHITENING

Helps stop new tartar build-up

Aquafresh
tartar control WHITENING

- ✓ Helps to maintain healthy gums with regular brushing
- ✓ Clinically proven to fight cavities
- ✓ Helps prevent new tartar build-up
- ✓ Removes stains to help whiten teeth
- ✓ And a fresh, clean sensation that lasts



Aquafresh Tartar Control Whitening fights cavities with fluoride...



helps prevent new tartar build-up above the gumline and removes stains to help whiten teeth...



and gives your whole mouth a fresh, clean sensation that lasts.

**Healthy Gums
Strong Teeth
Fresh Breath**

Drug Facts		
Active ingredient	Purpose	
Sodium fluoride (0.15% w/v of fluoride ion)	Anticavity	
Use	Aids in the prevention of dental cavities	
Warnings	Keep out of reach of children under 6 years of age. If you accidentally swallow more than used for brushing, get medical help or contact a Poison Control Center right away.	
Directions	adults and children 2 years and older • apply toothpaste onto a soft bristle toothbrush • brush thoroughly after meals or at least twice a day or use as directed by a dentist or physician	
GlaxoSmithKline	Consumer Healthcare, LP, Moon Township, PA 15108, Made in the U.S.A.	

Drug Facts (continued)	
Other information	<ul style="list-style-type: none">• to minimize swallowing for children under 6, use a pea-sized amount and supervise brushing until good habits are established• children under 2 years ask a dentist or physician
Inactive ingredients	D&G red #30 lake, FD&C blue #1 lake, flavor, glycerin, hydrated silica, PEG-8, sodium benzoate, sodium lauryl sulfate, sodium saccharin, sorbitol, tetrapotassium pyrophosphate, tetrasodium pyrophosphate, titanium dioxide, water, xanthan gum
Questions or comments?	call toll-free 1-800-897-6623 (English/Spanish) weekdays
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	Dental patients N=102	Medical Patients N=202	WIC N=221
Floss	100%	100%	100%
Brush	100%	100%	100%
Pulp	97%	87%	83%
Fluoride	98%	95%	95%
Abscess	86%	82%	74%
Extraction	97%	91%	71%
Dentition	44%	37%	20%
Plaque	94%	87%	92%
Incipient	61%	48%	25%
Caries	93%	87%	75%

Comprehension Increased with Patient Literacy Level

* p<.0001, † p<.05

	<u><6</u>	<u>7-8</u>	<u>>9</u>
 TAKE WITH FOOD © 1992	79%	86%	88% †
 DO NOT CHEW OR CRUSH. SWALLOW WHOLE. © 2002	35%	66%	78% *
 FOR EXTERNAL USE ONLY © 2002	8%	64%	82% *
 REFRIGERATE-SHAKE WELL DISCARD AFTER © 2002	8%	18%	23% *
 DO NOT TAKE DAIRY PRODUCTS, ANTACIDS, OR IRON PREPARATIONS WITHIN ONE HOUR OF THIS MEDICATION. © 2002	0%	6%	15% *

In multivariate analysis only literacy and age predicted comprehension.

Patients with low literacy (< 6th gd.) 3x more likely to incorrectly interpret warning labels.

TABLE 3-1 Health Information Seeking by Current Internet Use

	Internet Users	Non-Users	P Value
“I have difficulty understanding a lot of the health information I read.”	70 (21.2)	128 (42.0)	<0.0001
“When I read or hear something concerning my health care, I bring it up with my doctor.”	274 (83.3)	272 (87.7)	0.1101
“It is hard to find good answers to my health questions and concerns.”	90 (27.5)	142 (47.3)	<0.0001
“Very” or “Somewhat” confident in ability to get health advice OR confidence in ability to get health advice or information if needed	290 (88.2)	247 (80.7)	0.0096
Scale: (1) Very confident, (2) Somewhat confident, (3) Slightly confident, (4) Not confident at all.	Mean (SD) 1.53 (0.77)	Mean (SD) 1.75 (0.92)	0.0014

SOURCE: Kukafka, 2008.

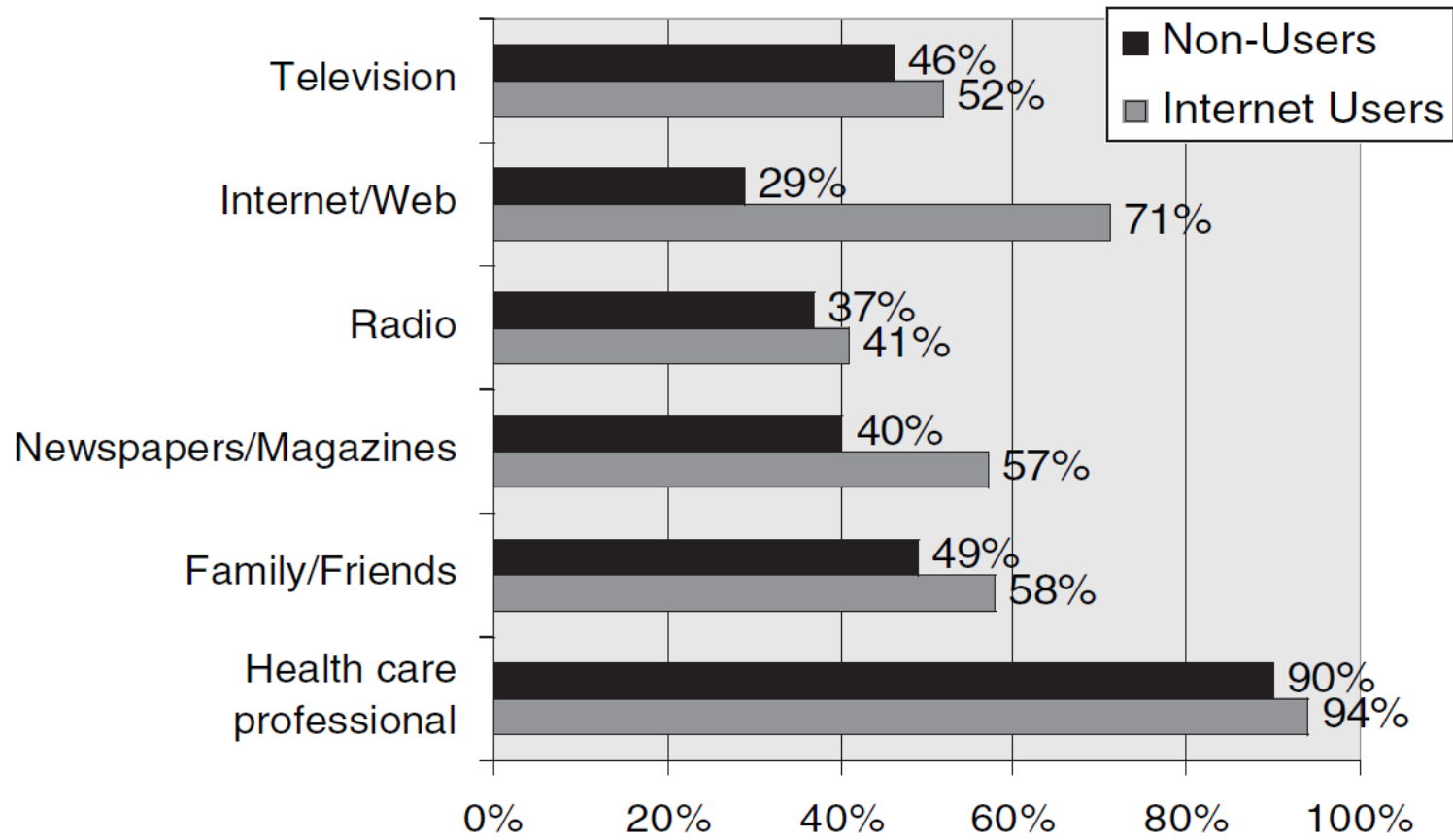


FIGURE 3-1 Trust in sources of health information.

SOURCE: Kukafka, 2008.

Implications of good communication

- Tolerate pain (Roder et al, 1996)
- Adhere to treatment (Greenfield et al., 1994)
- Recover from illness (Roder et al, 2002)
- Increased daily function (Smith et al., 2004)

Implications of good communication

- Patients judge good communication skills as a major indicator of their doctor's competence

Henrdon et al., 2002

Implications of good communication

- Increased patient satisfaction (Roter et al, 2002)
- Fewer complaints (Maguire et al., 2002)
- Fewer malpractice suits (Little et al, 2001)
- Greater job satisfaction (Brown et al., 2001)
- Less work related stress (Brown et al., 2001)
- Decreased burn out (Hall et al., 1998)

Best Practices



"The doctor will see you now —
I can't promise that he'll talk
to you, but he'll see you."

Treatment of Dental Caries

The management protocol (tx plan) should be based on:
1) Detailed history information 2) Clinical findings & diagnoses

A typical treatment plan should consider the following (in this order):
1) Preventive 2) Behavioral 3) Growth & Development 4) Restorative

More than 1 alternative treatment plans/strategies are usually available/possible

Provider and parent preferences come into the decision-making, while operating within the “**standard of care**”

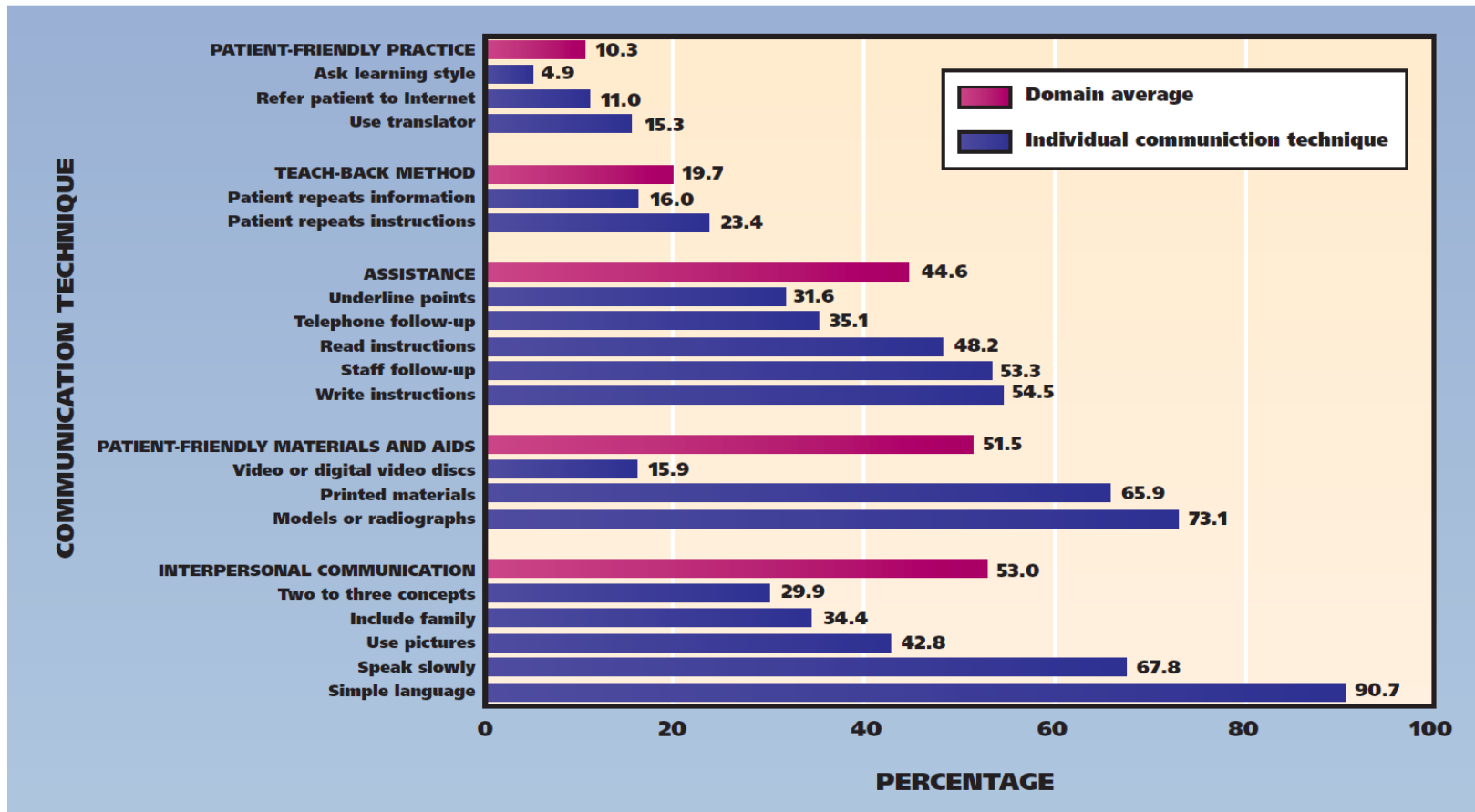


Figure. Percentage of dentists routinely using each technique, according to domain.

TABLE 4

Mean number of communication techniques used routinely, according to area of dentistry.

AREA OF DENTISTRY*†	18 COMMUNICATION TECHNIQUES‡ (n = 1,730)		SEVEN BASIC COMMUNICATION TECHNIQUES§ (n = 1,825)	
	Sample Size (No. [%])	Mean No. of Techniques Used	Sample Size (No. [%])	Mean No. of Techniques Used¶
Oral and Maxillofacial Surgery	40 (2.3)	9.68	44 (2.4)	3.50 (3)
Periodontics	56 (3.2)	9.16	59 (3.2)	3.59 (2)
Dental Public Health	4 (0.2)	8.75	4 (0.2)	3.25 (5#)
Endodontics	34 (2.0)	8.06	35 (1.9)	3.29 (4)
Prosthodontics	19 (1.1)	7.47	22 (1.2)	3.91 (1)
Orthodontics and Dentofacial Orthopedics	79 (4.6)	7.35	84 (4.6)	3.25 (5#)
Oral and Maxillofacial Pathology	3 (0.2)	7.00	3 (0.2)	3.00 (8)
General Practice	1,454 (84.0)	6.94	1,530 (83.8)	2.99 (9)
Pediatric Dentistry	41 (2.4)	6.49	44 (2.4)	3.09 (7)

* Listed according to descending frequency for 18 communication techniques.

† Oral and maxillofacial radiology is not included in this table because none of the participants practiced in this area of dentistry.

‡ Analysis of variance $P \leq .001$.

§ Analysis of variance $P = .005$.

¶ The descending rank order for the seven basic communication techniques is shown in parentheses.

This communication technique tied for fifth place; therefore, there is no sixth place ranking.

TABLE 5

Percentage distribution of participants, according to beliefs about effectiveness of communication techniques.

DOMAIN AND ITEM	SAMPLE SIZE (NO.)*	RESPONSE (%)		
		Yes	No	Don't Know
Interpersonal Communication				
Present two to three concepts at a time	1,613	49.0	10.2	40.7
Ask patients whether they would like a family member or friend involved in the discussion	1,700	77.8	1.4	20.7
Draw pictures or use printed illustrations	1,672	84.2	0.7	15.0
Speak slowly	1,735	83.2	0.9	15.7
Use simple language	1,725	87.8	0.5	11.5
Teach-Back Method				
Ask patients to repeat information or instructions back to you	1,452	62.5	2.8	34.6
Ask patients to tell you what they will do at home to follow instructions	1,442	55.1	5.1	39.7
Patient-Friendly Materials and Aids				
Use a video or digital video disc	875	64.5	2.4	33.0
Hand out printed materials	1,718	75.9	1.5	22.4
Use models or radiographs to explain	1,745	89.3	0.8	9.8
Assistance				
Underline key points on print materials	1,412	59.8	2.9	37.1
Follow up with patients by telephone to check understanding and adherence	1,697	78.6	1.0	20.3
Read instructions out loud	1,545	67.9	3.4	28.6
Ask hygienist, assistant or other office staff to follow up with patients for postcare instructions	1,736	83.2	0.8	15.9
Write or print out instructions	1,660	77.7	1.2	21.0
Patient-Friendly Practice				
Ask patients how they learn best	850	35.5	3.0	61.4
Refer patients to the Internet or other sources of information	1,298	42.0	3.3	54.5
Use a translator or interpreter	1,403	82.1	0.7	17.1

* Excludes participants who reported "never" using a communication technique.

Goals for Healthy Teeth (Age 5 and younger)

Patient Name: _____
Date of Visit: _____
Dentist: _____
Hygienist: _____

Your child has been assessed to have the following for caries (cavities):

High Medium Low

Between today and your next visit, please work on the Goals checked (✓) below:



Next fluoride visit in ___ months



Healthy snacks such as fruit, carrot sticks, yogurt, low fat cheese, pretzels, whole grain crackers



No soda/energy drinks
 No juice
 Juice only with meals



Less or no candy & junk food
 Chew Sugarfree gum (eg Trident, Extra)



No sippy cup/bottle
 Only plain milk or water in cup or bottle
 If bottle to bed, use only water



Drink fluoridated water, tap water



Daily flossing with floss string or pick



Brush morning and before bed with fluoride toothpaste:
 Thin smear (<2 years old)
 Pea-size amount (2-5 years old)



Fluoride varnish was applied in clinic today.

* Wait until tomorrow to brush/floss. Avoid hard, crunchy, and sticky foods.

IMPORTANT:
The last thing that touches your child's teeth before bedtime is the toothbrush with fluoride toothpaste.



Use Gel-kam ___ a day - Apply thin smear to all teeth

* Wait 30 minutes before eating, drinking or rinsing after

On a scale of 1-5, how likely do you think you can help your child meet these goals?

1 2 3 4 5
Not very Not sure Very
likely

Clinician's Comments:

Next visit Date: _____

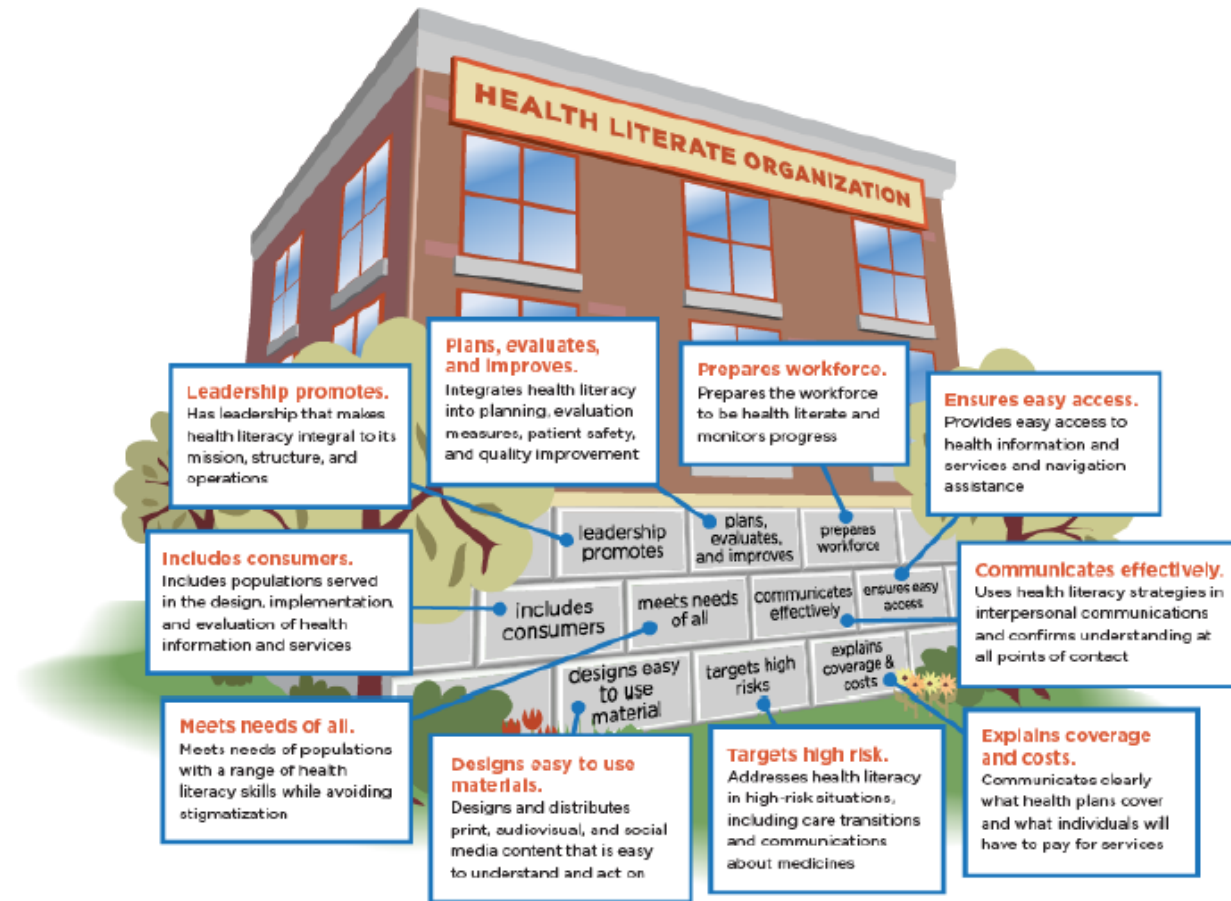
Preventative 1 month follow-up
 Restorative 3 month follow-up
 _____ 6 month checkup

Providers tend to overestimate their communication ability

75% providers believed they communicated satisfactorily

21% patients believed that their provider communicated satisfactorily

Tongue et al., 2002



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FIGURE 1B Elaborations on the Foundations of a Health Literate Organization

“Health care professionals do not recognize that patients do not understand the health information we are trying to communicate.

We must close the gap between what health care professionals know and what the rest of America understands.”



**Dr. Richard Carmona,
U.S. Surgeon General**

**Mentioned health literacy in
200 of last 260 speeches**

**The patient will never care how
much you know until they
know how you care**

Thank you!