On Becoming a Health Literate Organization: A Journey with Urgency

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Health Literacy Equation

Skills / Abilities \times \text{Difficulty} / \text{Complexity} = \text{Health Literacy}
Carolinas HealthCare System

• One of the nation’s largest public, not-for-profit healthcare systems

• Full spectrum of healthcare and wellness programs throughout North and South Carolina

• 38 hospitals and 900 care locations

• 7,500 licensed beds

• 60,000 employees

• Annually serve over 3 million patients and have over 9 million patient encounters

• Region’s only Level I Trauma Center
Carolinas HealthCare System

• Began as a single community hospital, but has evolved into a fully-integrated healthcare delivery network

• Operating as a single-unified enterprise, our goal is to provide seamless access to coordinated, high quality healthcare to everyone in our communities, close to home

• Nationally-recognized clinicians sharing expertise and collaborating with care teams across the system

• Unique structure allows us to deliver value in 3 important ways: through the patient experience, through quality outcomes and delivery process, and through cost and efficiency
This graphic reflects the views of the authors of the Discussion Paper “Ten Attributes of Health Literate Health Care Organizations” and not necessarily of the authors’ organizations or of the IOM. The paper has not been subjected to the review procedures of the IOM and is not a report of the IOM or of the National Research Council.
### TABLE 1 Attributes of a Health Literate Organization*

<table>
<thead>
<tr>
<th>A Health Literate Organization:</th>
<th>Examples</th>
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</thead>
</table>
| 1. Has leadership that makes health literacy integral to its mission, structure, and operations | - Develops and implements policies and standards  
- Sets goals for health literacy improvement, establishes accountability and provides incentives  
- Allocates fiscal and human resources  
- Redesigns systems and physical space |
| 2. Integrates health literacy into planning, evaluation measures, patient safety, and quality improvement | - Conducts health literacy organizational assessments  
- Assesses the impact of policies and programs on individuals with limited health literacy  
- Factors health literacy into all patient safety plans |
| 3. Prepares the workforce to be health literate and monitors progress                          | - Hires diverse staff with expertise in health literacy  
- Sets goals for training of staff at all levels |
| 4. Includes populations served in the design, implementation, and evaluation of health information and services | - Includes individuals who are adult learners or have limited health literacy  
- Obtains feedback on health information and services from individuals who use them |
| 5. Meets needs of populations with a range of health literacy skills while avoiding stigmatization | - Adopts health literacy universal precautions, such as offering everyone help with health literacy tasks  
- Allocates resources proportionate to the concentration of individuals with limited health literacy |
| 6. Uses health literacy strategies in interpersonal communications and confirms understanding at all points of contact | - Confirms understanding (e.g., using the Teach-Back, Show-Me, or Chunk-and-Check methods)  
- Secures language assistance for speakers of languages other than English  
- Limits to two to three messages at a time  
- Uses easily understood symbols in way-finding signage |
| 7. Provides easy access to health information and services and navigation assistance           | - Makes electronic patient portals user-centered and provides training on how to use them  
- Facilitates scheduling appointments with other services |
| 8. Designs and distributes print, audiovisual, and social media content that is easy to understand and act on | - Involves diverse audiences, including those with limited health literacy, in development and rigorous user testing  
- Uses a quality translation process to produce materials in languages other than English |
| 9. Addresses health literacy in high-risk situations, including care transitions and communications about medicines | - Prioritizes high-risk situations (e.g., informed consent for surgery and other invasive procedures)  
- Emphasizes high-risk topics (e.g., conditions that require extensive self-management) |
| 10. Communicates clearly what health plans cover and what individuals will have to pay for services | - Provides easy-to-understand descriptions of health insurance policies  
- Communicates the out-of-pocket costs for health care services before they are delivered |

*Reproduced from [1].

**Measures to Assess a Health-Literate Organization**, Vanderbilt Center for Effective Health Communication
Health Literacy Key Driver Diagram

Outcomes

Data and Performance Management

Effective Health Literate Leadership

Workplace Culture and Learning

Patient Engagement & Environment

Primary Drivers

Secondary Drivers

#1 - Has leadership that makes HL integral to mission, structure, operations

#2 - Integrates HL into planning, evaluation measures, patient safety and quality improvement.

#3 - Prepares the workforce to be HL and monitors progress.

#4 - Includes populations served in the design, implementation and evaluation of health information and services.

#5 – Meets the needs of populations with a range of HL skills while avoiding stigmatization.

#6 - Uses HL strategies in interpersonal communications and confirms understanding at all points of contact.

#7 – Provides easy access to health information and services and navigation assistance.

#8 – Designs and distributes print, audiovisual and social media content that is easy to understand.

#9 – Addresses health literacy in high-risk situations, including care transitions and communications about medicines.

#10 – Communicates clearly what health plans cover and what individuals will have to pay for services.

Changes to Test/Interventions

- Included in strategic roadmap
- Reporting through DPE
- HL Steering Committee
- Financial Commitment

- Include wayfinding & instructions in safety tracers
- Include in Safety & QI processes
- Whiteboards
- Embedded in written plans for patient safety & QI (HEN’s, QSOCs)

- TeachWell Initiative – RN’s
- TeachWell – Enterprise-wide

- Patient & Family Advisors
- Focus Groups

- Review process for all materials/resources
- 5th-6th grade reading level
- Variety of techniques for communicating – video, audio, etc.

- Care Coordination
- Standardization of materials across continuum of care

- GetWell – Acute
- GetWell – Ambulatory
Next Steps

In May 2012, CHS responded to a system-wide health literacy survey.

Over 365 nurse executives, leaders & employees completed the survey.

Over 300 care locations across the care continuum were represented.

Teach Back
- 32.6%
- 8.9%
- 58.5%

Ask Me 3
- 47.1%
- 7.4%
- 45.5%

CHS Barriers to Success....
- “Roll-out not executed well”
- “Lack of observations after training”
- “Pushback because how long it takes”
- “Lack of training on how to phrase questions”

Nursing staff observed using Teach Back & Ask Me 3 Some or None of the Time...
A Bold Goal

To have all 10,000 CHS nurses trained and using two evidence-based health literacy practices, **Teach Back** and **Ask Me 3**, by December 31, 2012!

Quick  Economical  Sustainable  Single Unified Enterprise
Next spread phase led by nursing division: 2012 TeachWell

• System Chief Nurse Executive joined CHS, became champion

• Surveyed >365 nurse executives, leaders, and staff at >300 care locations

• Management Company sponsorship with “Design Thinking” strategies:
  o Combine empathy with creative solutions
  o Brainstorm sessions
  o Created “Playbook”
TeachWell in Action

**Storytelling Worksheet**

**Observation Title:**

- **Who we observed:**
  - Observed by:
- **Where:**
- **When:**

**What we saw...**

2-3 sentences summary of the related events.

These should be verifiable points or observable facts.

**Supporting Items**

- Draw a sketch/lake to help explain the story and depict what was observed.

**Health Literacy Tracking Metrics**

1. What was the context (i.e., shift change, discharge, office visit, transfer, etc.) of the interaction?

2. How many questions were asked by the patient/caregiver?

   - Was Teach Back used? Yes or No
   - Was Ask Me 3 used? Yes or No

3. What is the preferred technique for this type of interaction?

**Health Literacy Quiz Cards**

**What are the "Ask Me 3" questions?**

**Clinical - Healthcare Literacy**

**Improving Patient Understanding**

CHS is committed to improving health outcomes for patients which will increase patient satisfaction and reduce readmissions by closing the gap between what we communicate to our patients and what our patients understand.

**TeachWell Challenge: Help us reach our goal!**

We have set a bold goal! Educate 10,000 nurses by December 31, 2012. Help achieve the goal of increased patient understanding. Learn TeachWell today.

Join Mary Ann Wilcox, System Nurse Executive for Carolinas HealthCare System, as she introduces TeachWell, explores the importance of patient communication, and shares examples of how Ask Me 3 and Teach Back can be applied and reinforced successfully with patients.

**PeopleConnect**

Web Site Safety - 8,729

**OUR GOAL: 10,000**

- Ambulatory Physician Office
- Care Event Reporting
- Clinical Nutrition
- CMS Physician Correction
- Formulary
- MedCon HD Web Links
- PACS Starter
TeachWell Spread

March

TeachWell Steering Committee

September

Facility/Business Unit Champions

Project Advisors

Small Team Leaders

October

November

December

Small Teams

Nurses

15 People

55 People

100 Nurse Leaders

1,000 Nurses

9,191 CHS RNs Trained

10/19/2016
2012 TeachWell

• Make evidence-based Teach Back and Ask Me 3 the “CHS way”

• Converge innovative design thinking methodology with change management techniques

• Package deliberately left unfinished; allow participants to make it their own

• Unique design captures the hearts and minds of frontline nurses through creativity and ownership
Resident Education

Multi-year Quality Improvement project in community clinic:
• Used Teach Back
• Created written materials to support education
• Used QI tools to confirm improvement
• Increased patient and staff satisfaction
• Maximized effectiveness of visit

Project continued after resident graduation, and spread to other providers.
Project Aim

To provide better communication between the provider and parent/patient during well child care visits, 3 key points will be discussed and Teach Back will be performed at 95% of well child visits by May 2012
Initial Outline for Newborn Visit

NB visit outline
weight changes: can lose up to 10% birth weight
feed him / her on demand - signs of hunger (sucking, smacking lips, fussy, hand in mouth)
if you need help with BF, let us know
may want to feed every 1-2 hours - this is normal
when to take baby to hospital - “worry signs”
• temp rectally less than 97, greater than 100
• less than half their normal wet diapers
• not waking up when you want to play with them
• poor feeding or very low muscle strength - floppy
• different color - pale or yellow
proper sleeping - sleep in own bed
always sleep on back
no pillows / blankets in crib
keep temp in room not too cold or too hot
Your baby is more sleepy than normal, hard to wake up, not sucking well, not as active as usual.

No wet diapers for 8 hours, changes in color that worry you.

It is normal for babies to lose weight at first. Your baby should regain their birth weight by 10 days.

With formula, your baby will eat every 2-4 hours.

With breast feeding your baby may eat every hour at first.

If you are having problems with breast-feeding, we can help.

Watch for signs of hunger, crying and sucking on hands.

1. Weight loss/feeding

2. Warning Signs: Reasons to call the clinic (or ER if we are closed)

- If you think your baby is sick:
  - Take their temperature in their bottom.
  - Call if their temperature is less than 97°F or more than 100°F.

- Your baby is more sleepy than normal:
  - Hard to wake up,
  - Not sucking well,
  - Not as active as usual.

- No wet diapers for 8 hours,
- Changes in color that worry you.

3. Co-sleeping (sleeping in the same bed as your baby)

Do NOT let the baby sleep in your bed.
Every night put the baby to bed in their own crib.
If you do not have a crib, let us know.

Your next visit is when your baby is 1 month old.
Perceived Barriers

- Teach Back takes too long, visit times will be prolonged
- Patients will not like being asked to repeat instructions, will feel insulted
- Staff will have to field complaints of parents/patients about being questioned
Impact of using Teach Back (TB) on Patient Visit Time

Patient with special language needs from Mongolia

Visit Time in Minutes

Consecutive Patients

UCL

LCL

0.0

5.0

10.0

15.0

20.0

25.0

30.0

35.0

40.0

45.0

50.0

0.1

20.2

40.2
Patient Satisfaction

Patients Satisfaction with Resident
Explanation

Level of Satisfaction

<table>
<thead>
<tr>
<th>Weeks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of satisfaction</td>
<td></td>
<td></td>
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Goaline

20/19/2016
Parent Level of Comfort

![Graph showing parent level of comfort with visits over weeks. The x-axis represents weeks (1 to 12), and the y-axis represents level of comfort (2 to 5). The graph includes a line for parent level of comfort and a dashed line for the goal line. TheComfort level increases and decreases over the weeks.](image-url)
Resident Satisfaction

Level of Satisfaction

Weeks

Resident Satisfaction

Goaline
Patient and Staff Satisfaction

Rating vs. Weeks

- Patient Satisfaction
- Staff Satisfaction
- Goal

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Percentage of Patients requiring Repeat Teach Back

Weeks

Percent

Goal

Median
Results

• Decreased cycle time
• More efficient visits
• High Staff / Provider Satisfaction
• High Patient Satisfaction
• Increased resident proficiency over time
# The Three Faces of Performance Measurement

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Improvement</th>
<th>Accountability</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim</strong></td>
<td>Improvement of care</td>
<td>Comparison, choice, reassurance, spur for change</td>
<td>New knowledge</td>
</tr>
<tr>
<td><strong>Methods:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Test Observability</strong></td>
<td>Test observable</td>
<td>No test, evaluate current performance</td>
<td>Test blinded or controlled</td>
</tr>
<tr>
<td><strong>Bias</strong></td>
<td>Accept consistent bias</td>
<td>Measure and adjust to reduce bias</td>
<td>Design to eliminate bias</td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
<td>“Just enough” data, small sequential samples</td>
<td>Obtain 100% of available, relevant data</td>
<td>“Just in case” data</td>
</tr>
<tr>
<td><strong>Flexibility of Hypothesis</strong></td>
<td>Hypothesis flexible, changes as learning takes place</td>
<td>No hypothesis</td>
<td>Fixed hypothesis</td>
</tr>
<tr>
<td><strong>Testing Strategy</strong></td>
<td>Sequential tests</td>
<td>No tests</td>
<td>One large test</td>
</tr>
<tr>
<td><strong>Determining if a change is an improvement</strong></td>
<td>Run charts or Shewhart control charts</td>
<td>No change focus</td>
<td>Hypothesis, statistical tests (t-test, F-test, chi square), p-values</td>
</tr>
<tr>
<td><strong>Confidentiality of the data</strong></td>
<td>Data used only by those involved with improvement</td>
<td>Data available for public consumption and review</td>
<td>Research subjects’ identities protected</td>
</tr>
</tbody>
</table>
CHS Collaborative

Goal 1: Successful Use of Teach Back

Goal 2: Successful Use of Ask Me 3

Goal 3: Completion of HL Education Module

Goals 4-5: Achieve a Change Score of 11.00

Goal 6: Patient Feedback Question #3
Questions Were Encouraged

Goal 6: Patient Feedback Question #4
Comfortable Asking Questions

Goal 6: Patient Feedback Question #1
MD Communication

Goal 6: Patient Feedback Question #2
Non-MD Communication

Goal 7: Achieve a Team Rating of 4.0
(4.0 = Significant Improvement)
Resources


U.S. Department of Health and Human Services, Health Resources and Services Administration (HERSA) [www.hrsa.gov/publichealth/healthliteracy/healthlitabout.html](http://www.hrsa.gov/publichealth/healthliteracy/healthlitabout.html)

Vanderbilt Center for Effective Health Communication for Institute of Medicine Health Literacy Roundtable, *Measures to Assess a Health-Literate Organization* [www.iom.edu/~media/Files/Activity%20Files/PublicHealth/HealthLiteracy/Commissioned-Papers/Measures_Assess_HLO.pdf](http://www.iom.edu/~media/Files/Activity%20Files/PublicHealth/HealthLiteracy/Commissioned-Papers/Measures_Assess_HLO.pdf)

Institute of Medicine, *Attributes of a Health Literate Organization* [www.iom.edu/~media/Files/Perspectives-Files/2012/Discussion-Papers/BPH_HLit_Attributes.pdf](http://www.iom.edu/~media/Files/Perspectives-Files/2012/Discussion-Papers/BPH_HLit_Attributes.pdf)


NC Program on Health Literacy (AHRQ Universal Precautions Toolkit) [www.nchealthliteracy.org/toolkit/](http://www.nchealthliteracy.org/toolkit/)
Acknowledgments

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