

Health Literacy Matters: How Can We Improve?


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Objectives

- 
- Define health literacy and its importance in regards to health outcomes
 - Describe mental health literacy and review interventions, including at the NCH organizational level
 - Discuss organizational health literacy related to written materials and analyze current educational handouts
 - Discuss next steps in enhancing health literacy and making it a part of our culture using a QI approach

Why health literacy?

My own family experiences

My own patient experiences



What is health literacy?

Health Literacy

- Personal
- Organizational

Personal

- The degree to which **individuals** have the ability to find, understand, and **use** information and services to inform health-related decisions **and actions** for themselves **and others**.

Organizational

- The degree to which **organizations equitably enable** individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.

Healthy People 2030's two definitions, taken together, constitute health literacy.

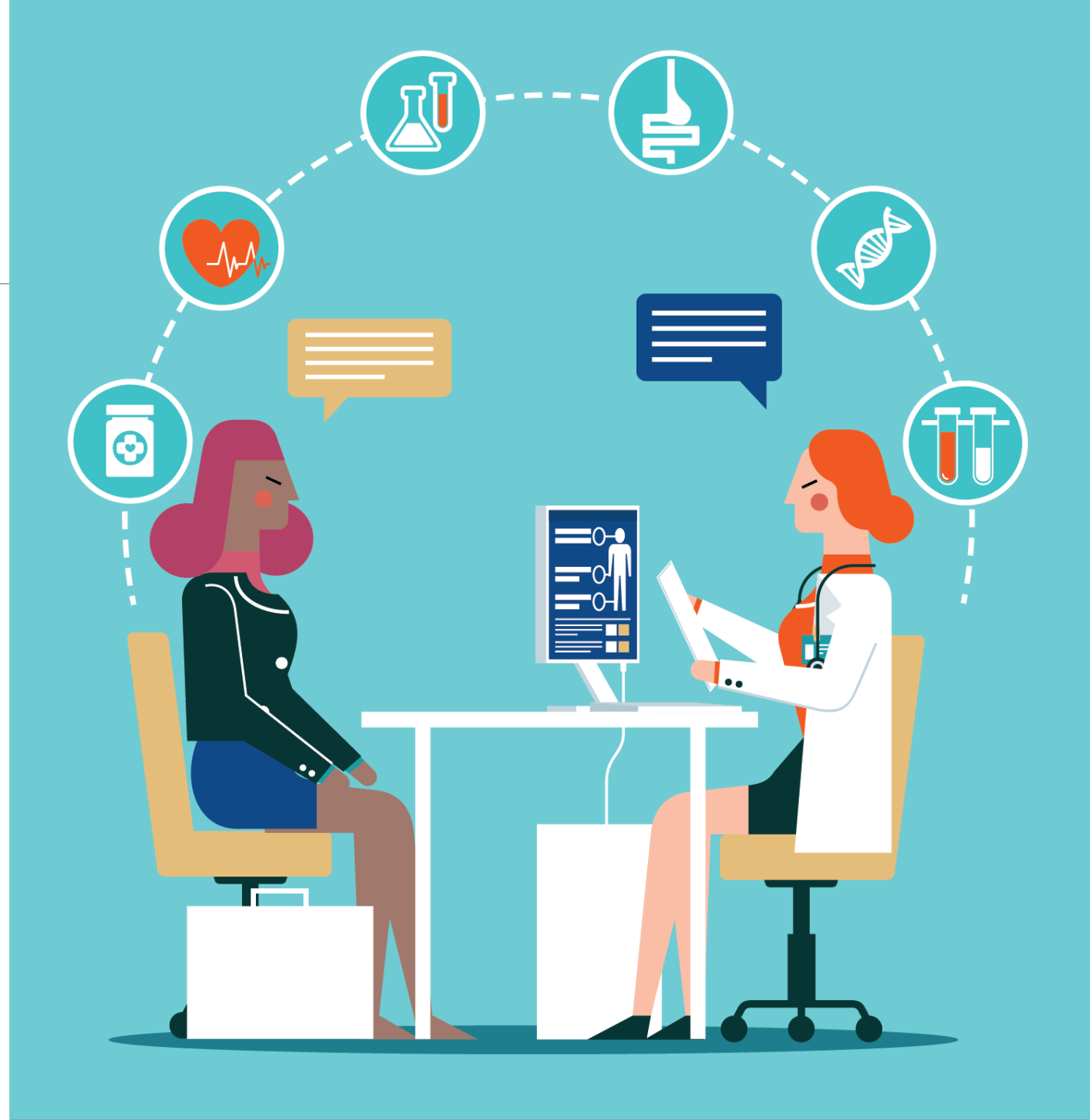
Is it different than literacy?

Yes!

Closely linked with literacy and numeracy

Able to access, use, and evaluate:

- Literacy - written text
- Numeracy – numbers/calculations



Why is it important?

Healthcare is for everyone!

Goals

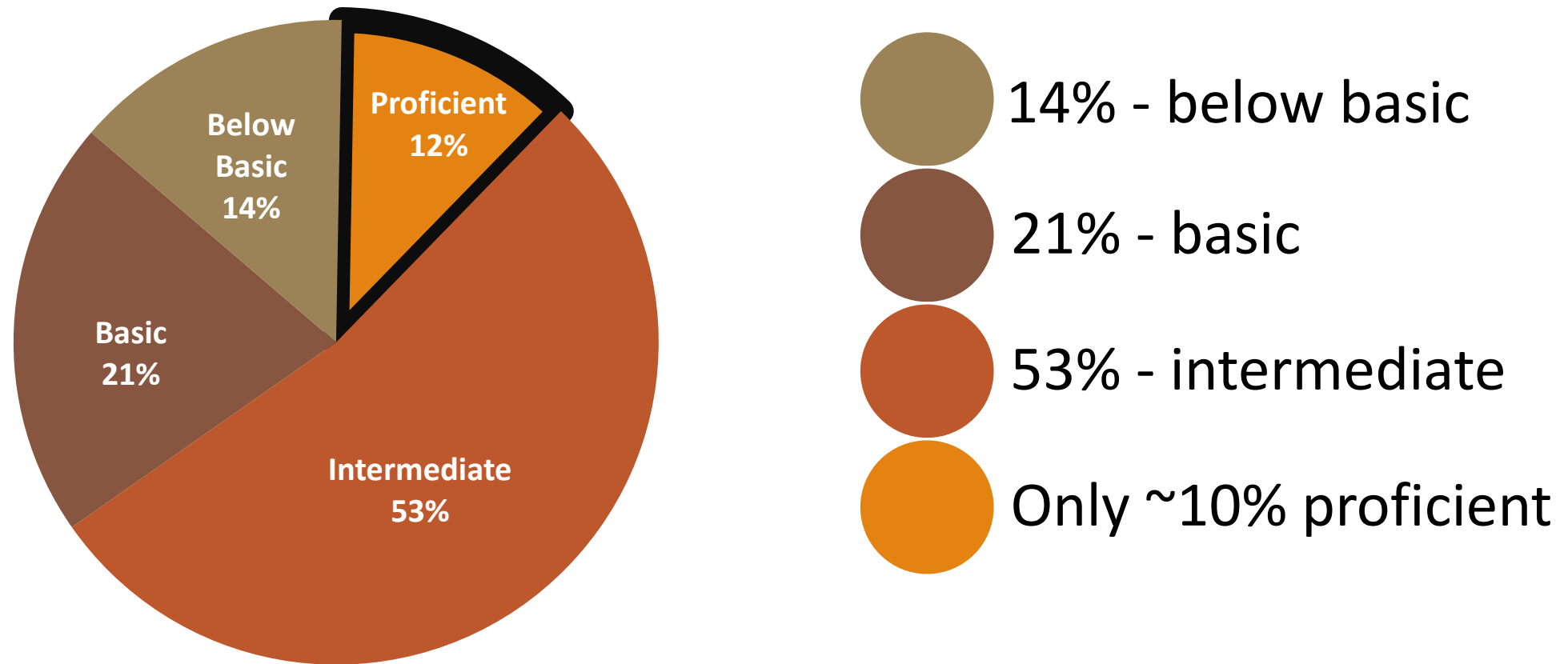
- Managing own health
- Making informed/appropriate health choices
- Improving health outcomes
- Reducing health risk
- Improving quality of life

Integral to quality, safe, and equitable care

Examples of low health literacy

- ❖ Using an SSRI only “when I need it”
- ❖ Symptoms significantly improved after a few doses of medication
- ❖ Taking a nighttime medication in the morning or vice versa

National Assessment of Adult Literacy Health Literacy, NAAL 2003



What can you do?

Use a Universal Precautions approach:

- ❖ Assume everyone has limited health literacy!
 - Everyone benefits from clear communication.
 - Anyone can experience limited health literacy depending on the circumstances.
- ❖ Focus on the need-to-know and need-to-do
- ❖ Use teach-back method
 - Confirm understanding (NOT “do you have any questions?”)
- ❖ Clearly written education materials
 - Use PEMAT, CDC-CCI, SMOG to assess

Low health literacy and outcomes

More missed appointments

More severe symptoms

Higher probability of hospitalization

Less shared decision-making

Worse quality of care

Lower utilization of preventive services

Higher costs of care

Greater morbidity and mortality

Reduced access to care

Who is vulnerable?

- ❖ Elderly
- ❖ Racial and ethnic minorities
- ❖ Unmarried
- ❖ Less than high school education
- ❖ Unemployed
- ❖ Low socioeconomic status

How are these factors impacting the adults who take care of our patients?

Signs of low health literacy

- Frequently missed appointments
- Incomplete registration forms
- Non-adherence with medication
- Unable to name medications, explain purpose or dosing
- Identifies pills by looking at them, not reading label
- Unable to give coherent, sequential history
- Ask fewer questions
- Lack of follow-through on tests or referrals

Common hurdles

Mismatched communication

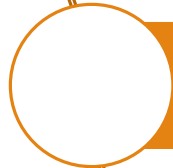
Increasing expectations of patients

Complicated processes

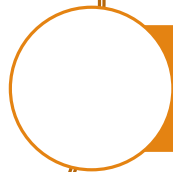
Objectives



Define health literacy and its importance in regards to health outcomes



Describe mental health literacy and review interventions, including at the NCH organizational level



Discuss organizational health literacy related to written materials and analyze current educational handouts



Discuss next steps in enhancing health literacy and making it a part of our culture using a QI approach

What about mental health literacy?

Extension of these principles

Definition evolving as health literacy also evolves

4 domains:

- Obtaining/maintaining positive mental health
- Understanding disorders and treatment
- Decreasing stigma
- Enhancing self-efficacy

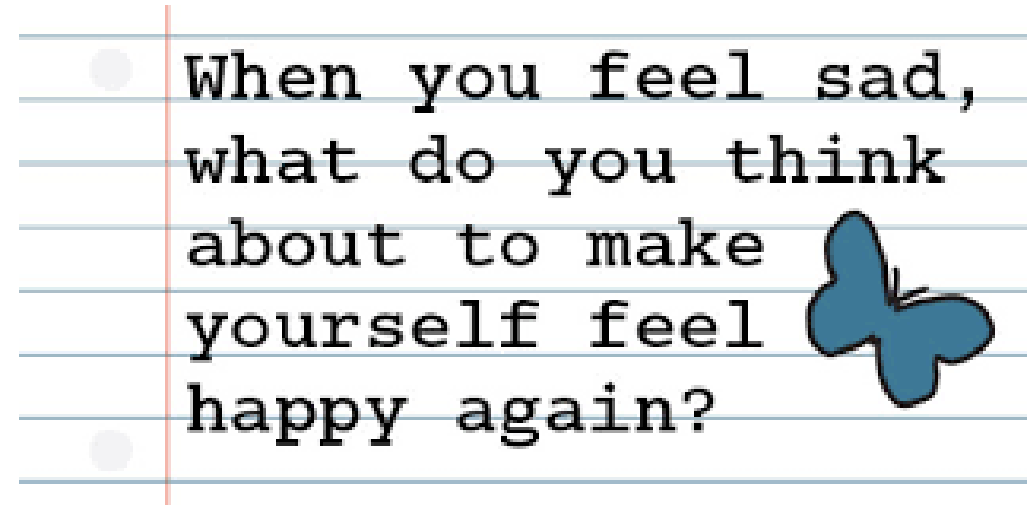
What about at NCH?

On Our Sleeves

- 50% of mental health disorders present before age 14
- 1 in 5 children is struggling with a mental health disorder
- Suicide is second leading cause of death in children ages 15-25

National conversation

- “Start the conversation” cards
- Breaking stigmas





On Our Sleeves

Empowering caregivers and providing resources

Helping adults build resiliency in children

Helping parents feel more confident in working through children's mental health issues

Addressing multiple domains of mental health literacy!

What about talking to kids directly?



GoNoodle



School lesson
plans



Social media
content

Other mental health literacy interventions



School-based interventions
Multiple modalities

Objectives

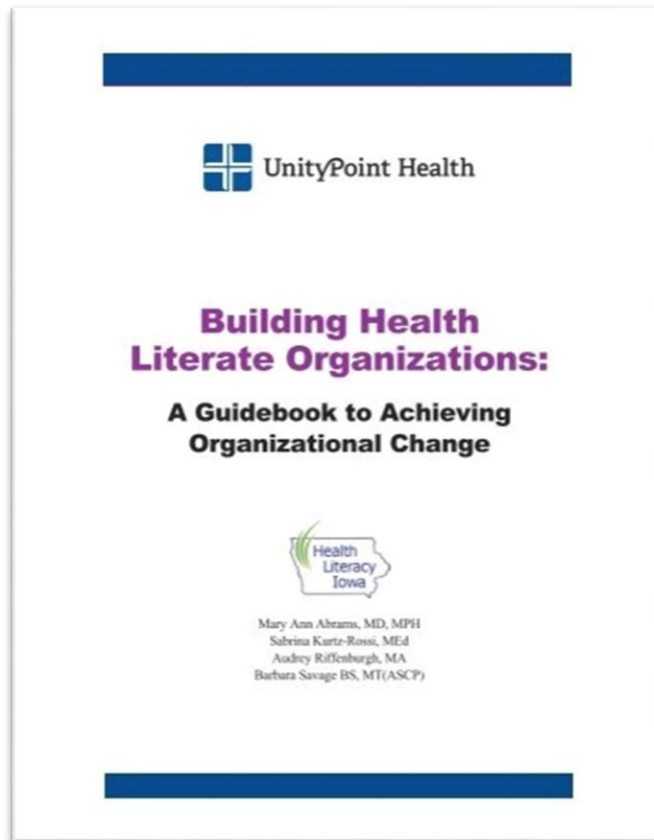
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Improving organizational health literacy



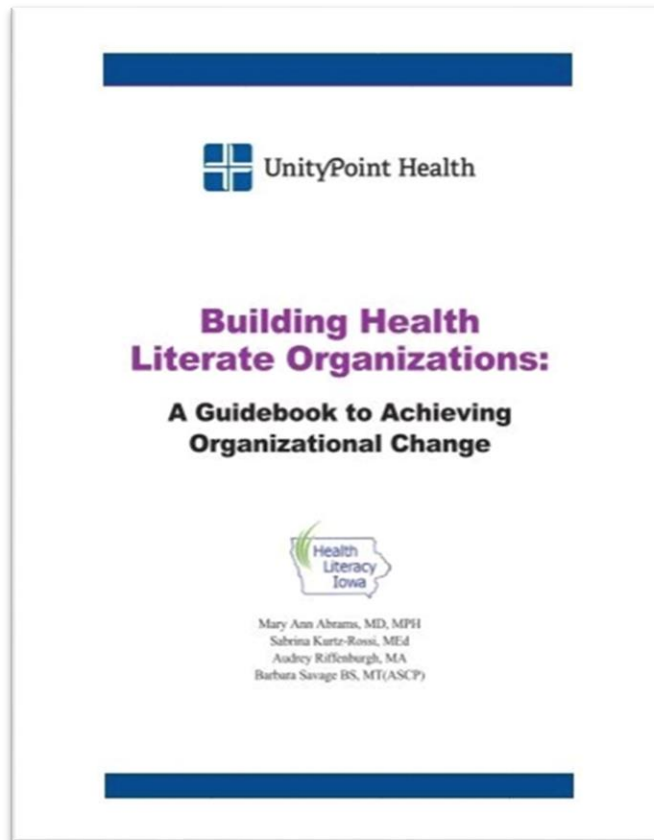
- ❖ Leadership promotes
- ❖ Plans, evaluates, and improves
- ❖ Prepares workforce
- ❖ Includes consumers
- ❖ Meets needs of all
- ❖ Communicates effectively
- ❖ Ensures easy access
- ❖ Designs easy to use material
- ❖ Targets high risks
- ❖ Explains coverage and costs

Improving organizational health literacy



- Engaging leadership
- Preparing the workforce
- The care environment
- Involving populations served
- Verbal communication
- Reader-friendly materials

Improving organizational health literacy



- Engaging leadership
- Preparing the workforce
- The care environment
- Involving populations served
- Verbal communication
- **Reader-friendly materials**

Measuring health literacy

How
confident
are you
filling out
medical
forms by
yourself?

- Extremely
- Quite a bit
- Somewhat
- A little bit
- Not at all

Methodology

Visual aid

Convenience sample

Asked at the beginning of the appointment

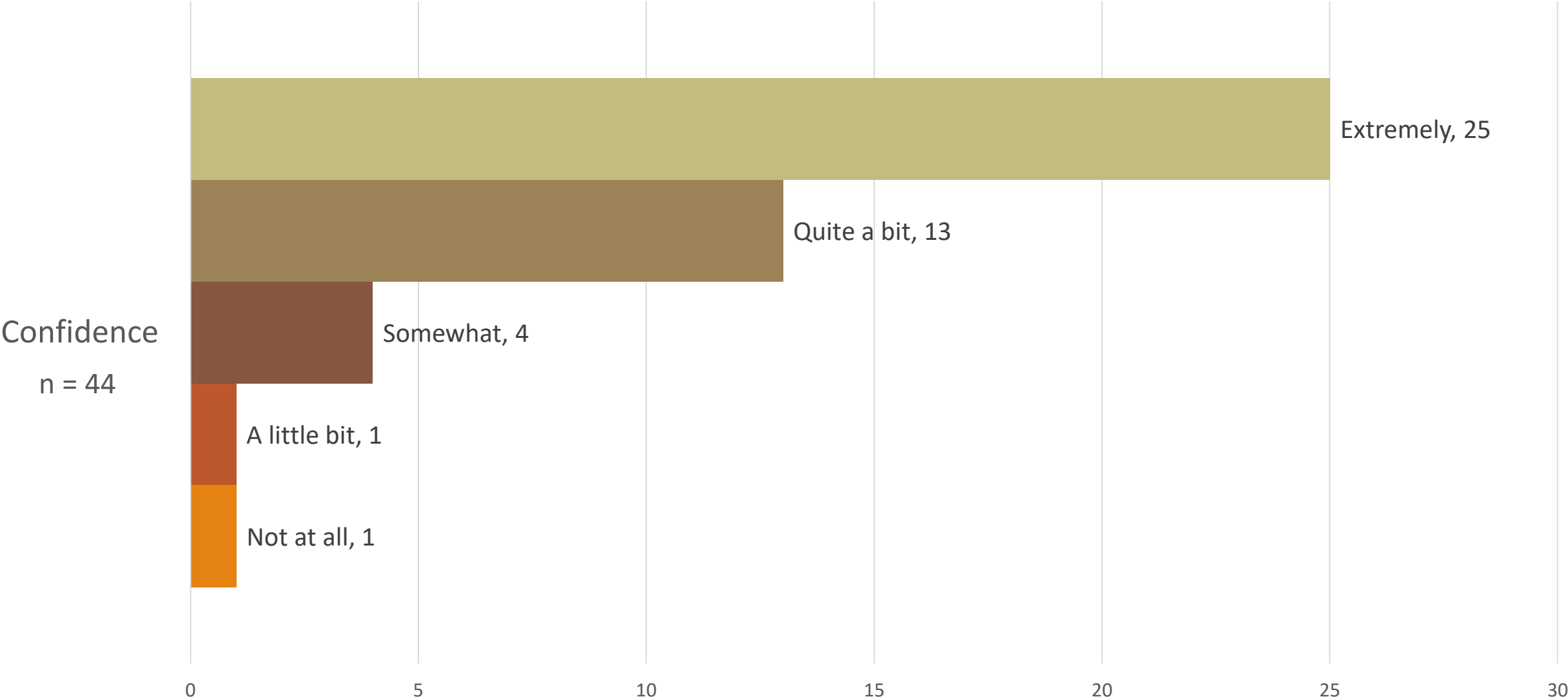
Same introduction every time

“Somewhat” and below responses grouped into “Limited”

Limitations:

- ❖ Small sample size
- ❖ Language barriers

How confident are you filling out medical forms by yourself?



Qualities of health-literate reading materials

- Appearance
- Need-to-know information
- Easily identifiable audience and subject matter
- Serve as a supplement to verbal communication
- Available in multiple languages
- Reading level

Tools for evaluating reading materials

PEMAT (Patient Education Materials Assessment Tool)

- Understandability and actionability
- <https://www.ahrq.gov/health-literacy/patient-education/pemat.html>

CDC-CCI (Centers for Disease Control Clear Communication Index)

- Clarity
- <https://www.cdc.gov/ccindex/index.html>

SMOG (Simple Measure of Gobbledygook)

- Reading level
- https://www.online-utility.org/english/readability_test_and_improve.jsp

PEMAT

Item #	Item	Response Options	Rating
Topic: Content			
1	The material makes its purpose completely evident.	Disagree=0, Agree=1	
2	The material does not include information or content that distracts from its purpose.	Disagree=0, Agree=1	
Topic: Word Choice & Style			
3	The material uses common, everyday language.	Disagree=0, Agree=1	
4	Medical terms are used only to familiarize audience with the terms. When used, medical terms are defined.	Disagree=0, Agree=1	
5	The material uses the active voice.	Disagree=0, Agree=1	
Topic: Use of Numbers			
6	Numbers appearing in the material are clear and easy to understand.	Disagree=0, Agree=1, No numbers=N/A	
7	The material does not expect the user to perform calculations.	Disagree=0, Agree=1	

PEMAT scores for medication handouts

PEMAT scoring	Handout 1 (shorter)	Handout 2 (longer)
Understandability	67%	17%
Actionability	40%	60%

Scoring:

- ❖ Up to 100%
- ❖ The higher the score, the more understandable/actionable

Questions	Score (Check one per question)
Main Message and Call to Action	
<p>1. Does the material contain one main message statement?</p> <p><i>A main message is the one thing you want to communicate to a person or group that they must remember. A topic, such as heart disease or seasonal flu, isn't a main message statement. If the material contains several messages and no main message, answer no. (User Guide page 5)</i></p> <p>NOTE: If you answered No to Question 1, score 0 for Questions 2-4 and continue to Question 5.</p>	<p><input type="checkbox"/> Yes = 1</p> <p><input type="checkbox"/> No = 0</p>
<p>2. Is the main message at the top, beginning, or front of the material?</p> <p><i>The main message must be in the first paragraph or section. A section is a block of text between headings. For a Web material, the first section must be fully visible without scrolling. (User Guide page 6)</i></p>	<p><input type="checkbox"/> Yes = 1</p> <p><input type="checkbox"/> No = 0</p>

CDC-CCI scores for medication handouts

CDC-CCI scoring	Handout 1 (shorter)	Handout 2 (longer)
Clarity	40	30

Scoring:

- ❖ Up to 100%
- ❖ Aiming for score of 90 or above

SMOG reading level for medication handouts

SMOG	Handout 1 (shorter)	Handout 2 (longer)
Reading Level	11 th grade	Undergraduate
Reading score	11.73	15.38

Scoring:

- ❖ Aiming for 8th grade reading level or lower
- ❖ Numbers correlate with reading level

Staff survey

Health literacy training?

Are we using handouts?

What are opinions
regarding the handouts?

Medication Handout Survey

Please complete the survey below.

Thank you!

D1A Please select your role(s):

* must provide value

- Fellow
- Resident
- RN
- NP
- PA
- Attending
- Pharmacist
- Other

D2A Please select your work setting(s):

* must provide value

- Inpatient (YCSU included)
- Outpatient
- Psychiatric Crisis Department (PCD)
- Other

D3A Please select your work location(s):

* must provide value

- BHP (Behavioral Health Pavilion)
- LAC (Livingston Ambulatory Center)
- Main Campus
- Community (school-based, etc.)
- East Main
- Westerville
- Other

D4A I had formal health literacy training within the past 3 years.

* must provide value

- Yes
- No

Demographics – Employee Roles

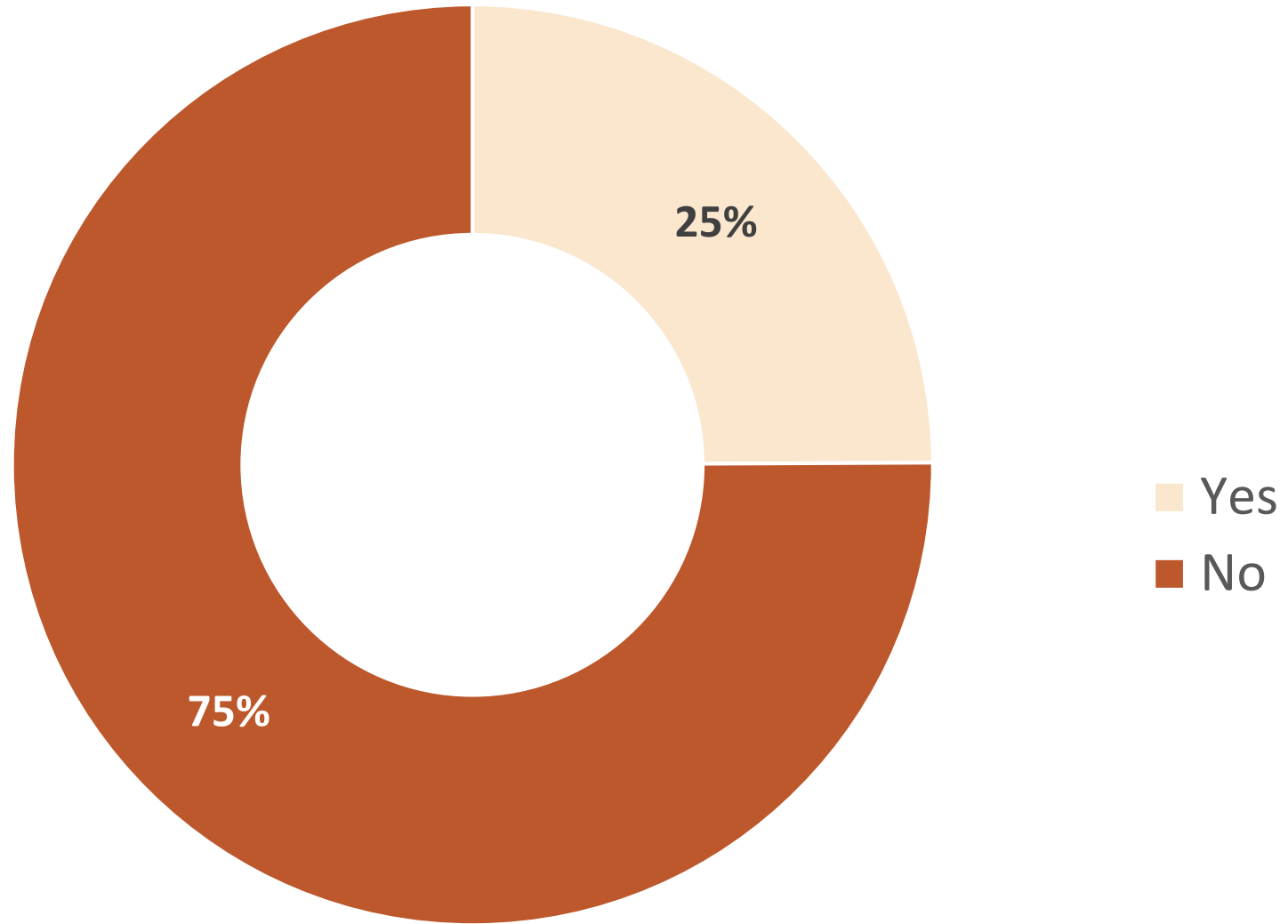
Employee Role	N = 89	Percentage
Registered Nurse	41	46%
Attending	18	20%
Other	11	12%
Nurse Practitioner	9	10%
Fellow	6	7%
Pharmacist	3	3%
Physician Assistant	1	1%
Resident	0	0%

Work Setting and Locations

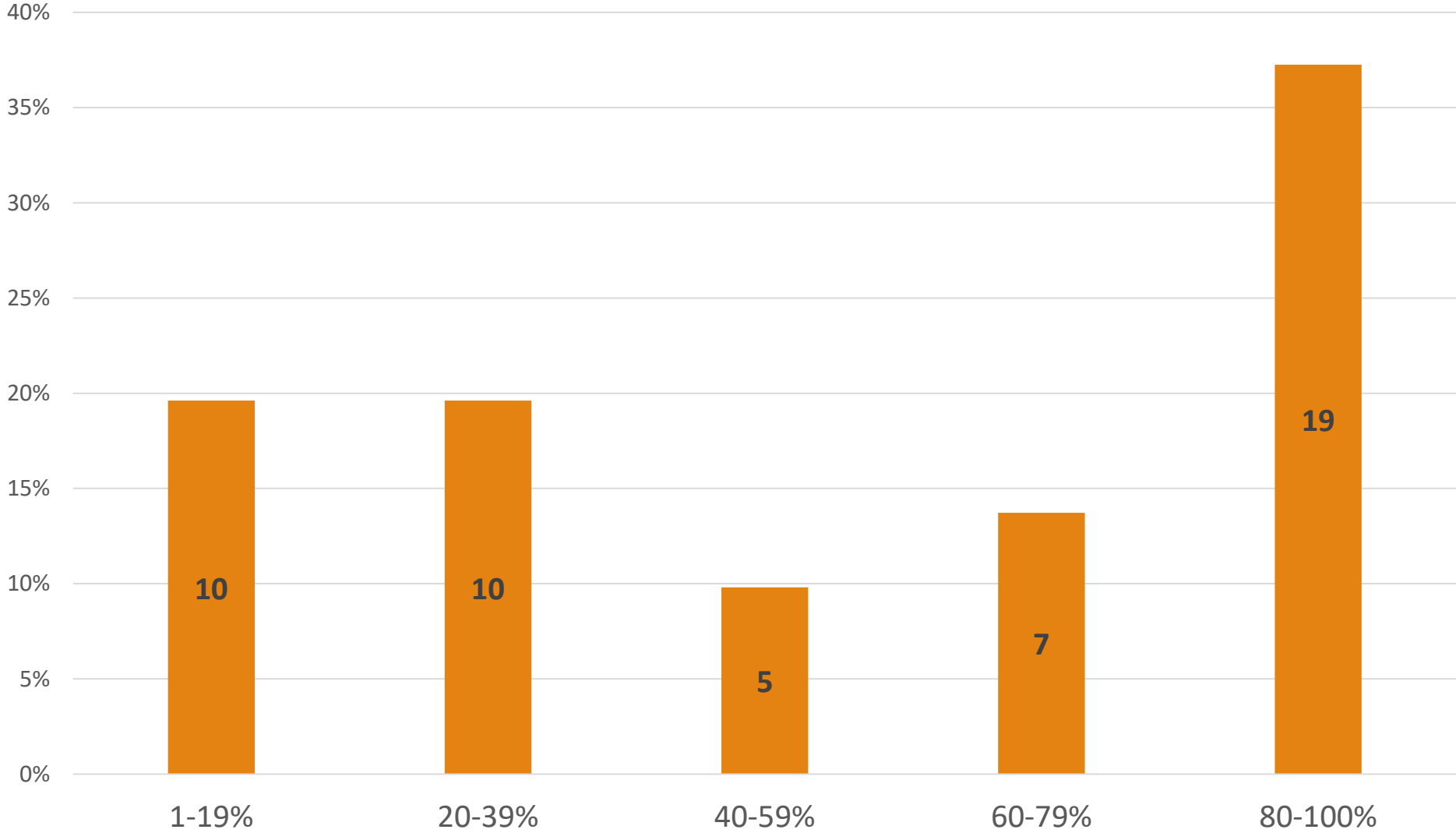


- Inpatient
- Inpatient, Outpatient
- Inpatient, Outpatient, Clinical Teaching
- Inpatient, Outpatient, PCN
- Inpatient, PCN
- Outpatient

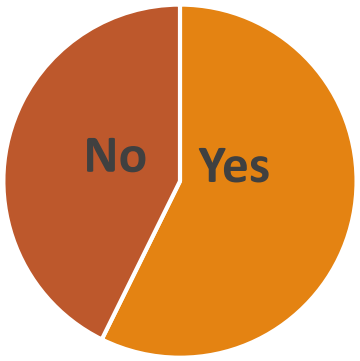
Have you had health literacy training?



Frequency of handout usage (percent)

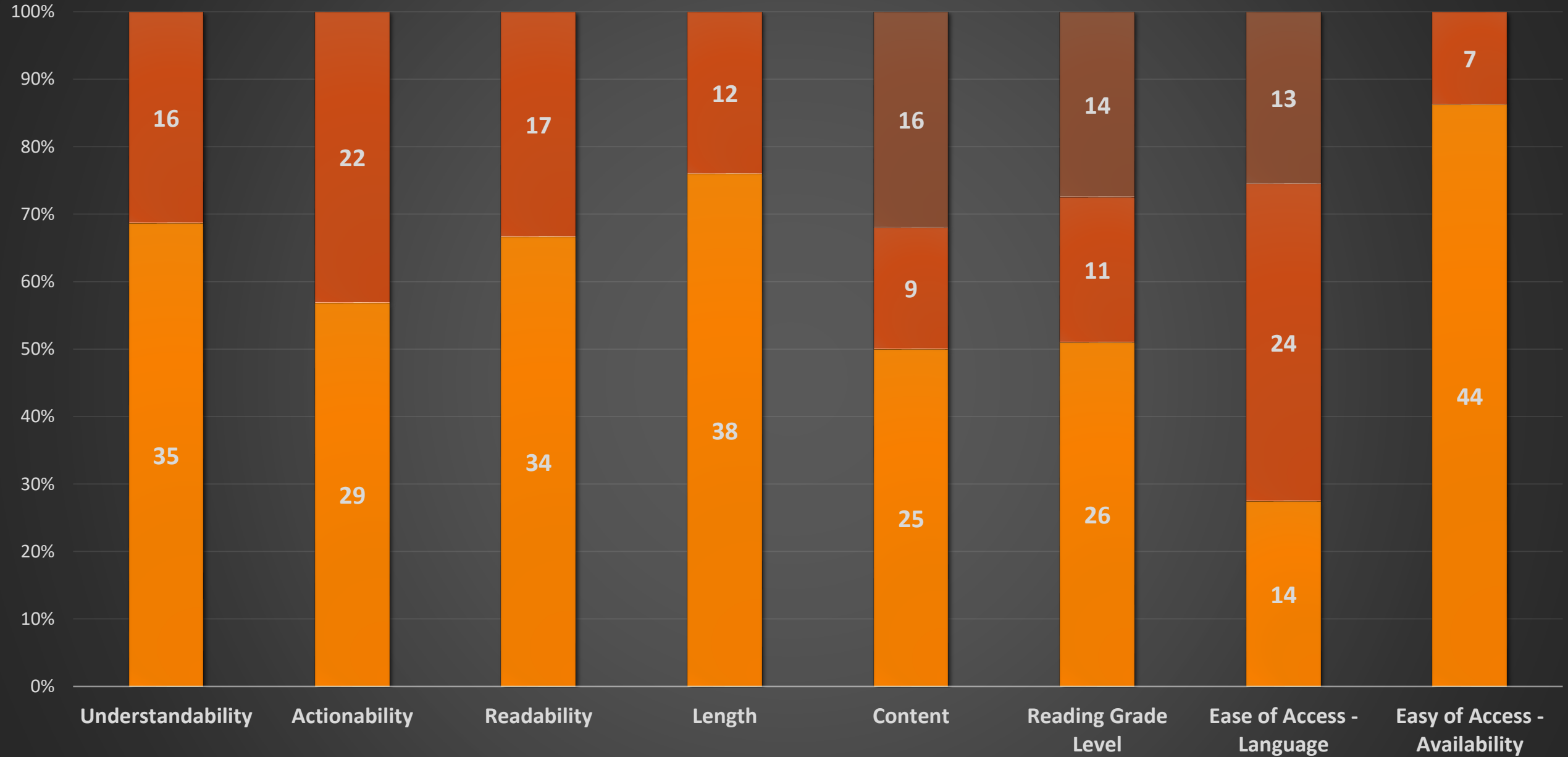


Do you use handouts?



n = 51

Do current handouts have these features?



n = 51

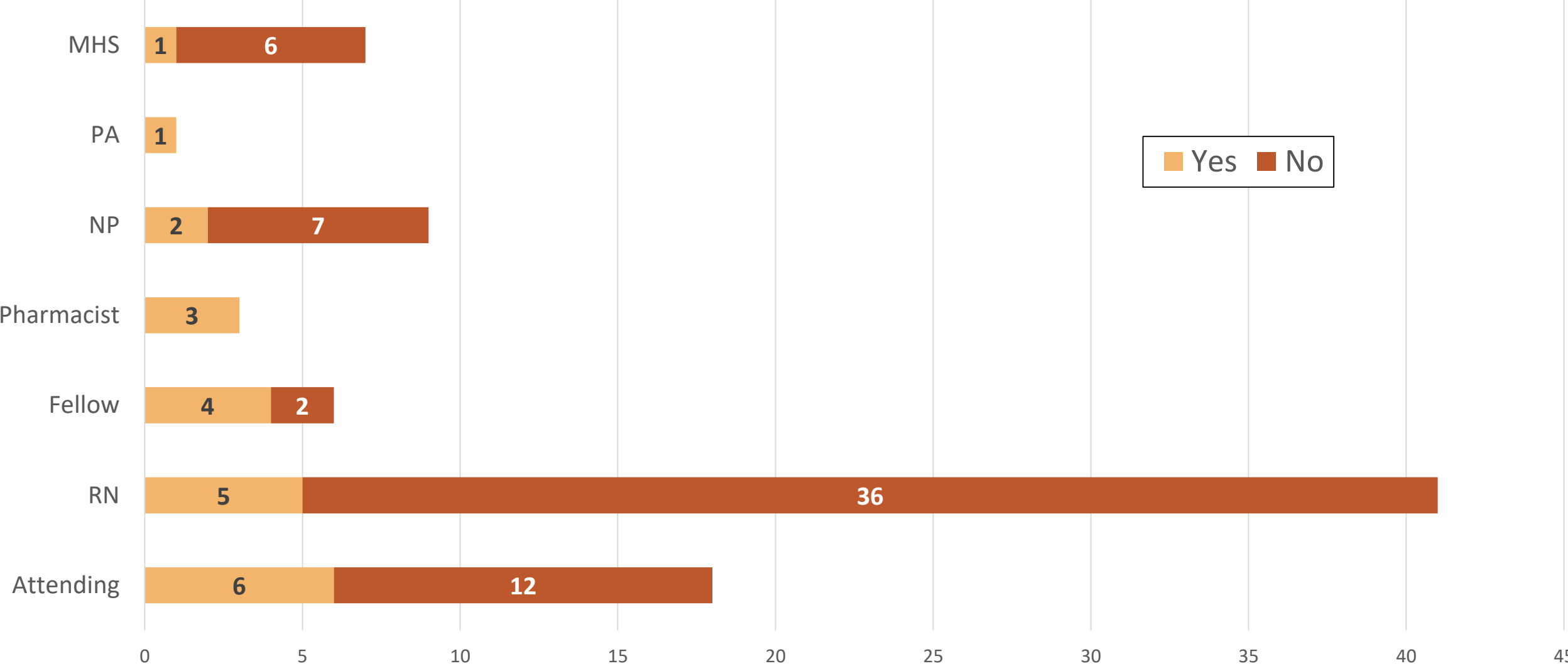
Yes No I Don't Know

Handouts – sources

What sources of handouts are available through NCH to help staff educate patients and families about their medications? (Multiple selections allowed)

Source	
Helping Hands	65
Lexicomp	53
Krames	12
Printouts from Dr. Dulcan's book ("Helping parents and teachers understand medications for behavioral and emotional problems")	11
Unsure/I don't know	23
Other	5

Using handouts from another source?



Open-ended responses

Understandability

- too wordy

Length

- too long
- ideal would be 1-3 pages

Content

- too much
- should be shortened to need-to-know only

Reading level

- unable to gauge
- too high

Ideal medication handout?!

Visuals

- Large enough font
- Pics of medication label, actual tablets/capsules

Content

- Easy to read, clear and concise
- “Why is my child being prescribed this medicine?”

Actions

- Who to call and when
- Phone numbers included in handout
- Calendar/schedule



Other ideas

Specific content

- Simplified mechanism of action
- Forms of medication
- Specific adherence concerns (ex. Lamictal)

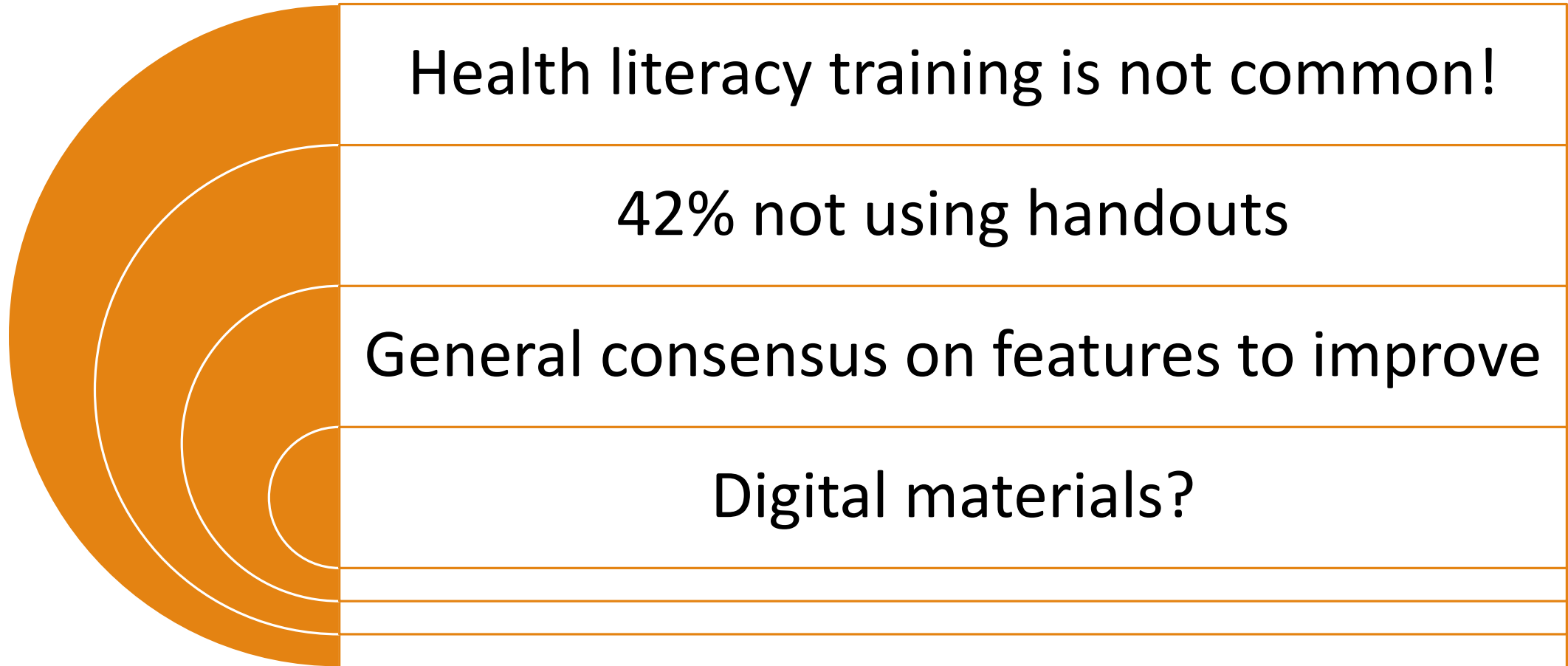
Access

- Written and digital versions, QR code
- Able to be included within AVS
- Central digital location, standardized

Other features

- Space for staff to write notes
- More frequent updates
- Based on diagnosis rather than medication?

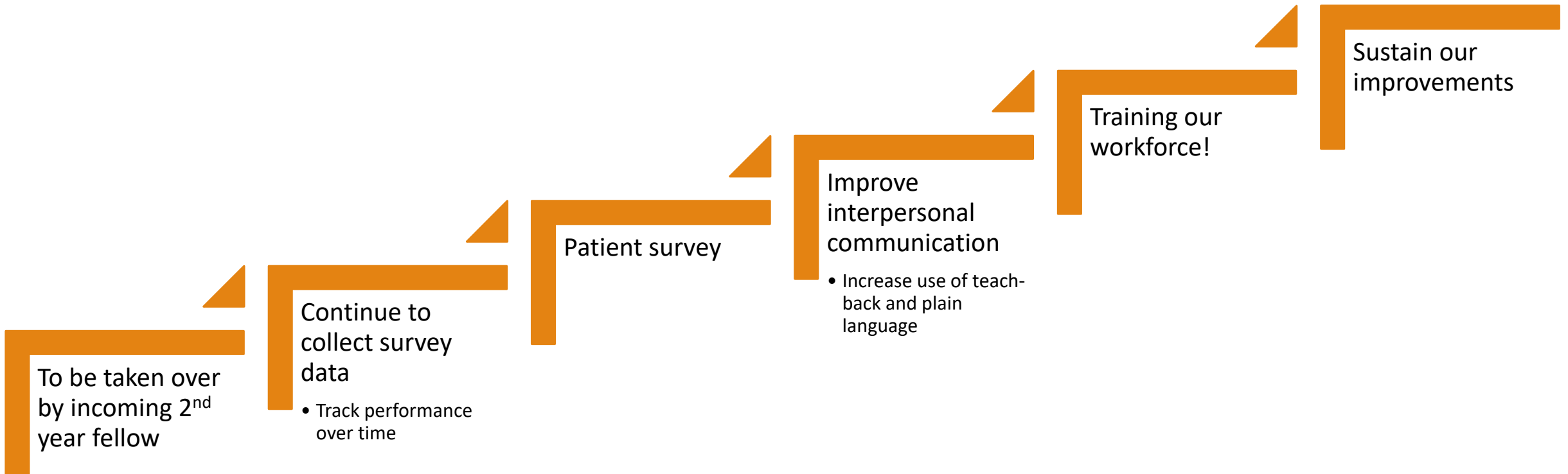
What did we learn?



Objectives

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Next steps for this project



Physician-patient communication

Internal medicine trial

- Significant improvement in knowledge and confidence related to health literacy; was deemed valuable

Hypertension trial

- Significant improvement in physician's communication skills, patients' HL skills, medication adherence, patients' self-efficacy, SBP and DBP

We have the data, we just need implementation!

Ongoing NCH initiatives

On Our Sleeves

SCOPE

Organizational health literacy grant

2021-2026

LEADING THE JOURNEY TO
BEST OUTCOMES
FOR CHILDREN EVERYWHERE

HEALTH EQUITY
AND POPULATION
HEALTH



BEHAVIORAL
HEALTH



INTEGRATED
CLINICAL CARE
AND RESEARCH



GENOMICS



QUALITY AND
SAFETY



CULTURE AND
TALENT



PARTNERSHIPS



TECHNOLOGY



OPERATIONAL
EXCELLENCE



UNIVERSITY of HAWAII at MANOA

THOMPSON SCHOOL

SOCIAL WORK & PUBLIC HEALTH



**NATIONWIDE
CHILDREN'S**

When your child needs a hospital, everything matters.

Franklin County
Public Health



THE CITY OF
COLUMBUS

ANDREW J. GINTHER, MAYOR

COLUMBUS
PUBLIC HEALTH



BUILDING A HEALTH LITERATE COMMUNITY:
TOWARD AN EQUITABLE RESPONSE TO COVID-19

Improving organizational health literacy



- ❖ Leadership promotes
- ❖ Plans, evaluates, and improves
- ❖ Prepares workforce
- ❖ Includes consumers
- ❖ Meets needs of all
- ❖ Communicates effectively
- ❖ Ensures easy access
- ❖ Designs easy to use material
- ❖ Targets high risks
- ❖ Explains coverage and costs

What can you do?

Use a Universal Precautions approach:

- ❖ Assume everyone has limited health literacy!
 - Everyone benefits from clear communication.
 - Anyone can experience limited health literacy depending on the circumstances.
- ❖ Focus on the need-to-know and need-to-do
- ❖ Use teach-back method
 - Confirm understanding (NOT “do you have any questions?”)
- ❖ Clearly written education materials
 - Use PEMAT, CDC-CCI, SMOG to assess

Other tips to promote health literacy

- Use plain language
- Limit information (3-5 key points)
- Be specific and concrete, not general
- Demonstrate, draw pictures, use models
- Repeat/summarize
- Be positive, hopeful, empowering

Resources you can use

Always Use Teach-back! Toolkit

- <http://www.teachbacktraining.org/home>

Ask Me 3

- <http://www.ihl.org/resources/Pages/Tools/Ask-Me-3-Good-Questions-for-Your-Good-Health.aspx>

Delivering Health Literate Care: a quick reference guide

- <https://healthliteracyca.org/wp-content/uploads/2018/10/Updated-PDF-of-Kardex.pdf>

The Health Literacy Environment of Hospitals and Health Centers

- <https://www.ncsall.net/fileadmin/resources/teach/environtitle.pdf>

Health Literacy Guidebook

- <https://www.unitypoint.org/filesimages/Literacy/Health%20Literacy%20Guidebook.pdf>

Health Literacy Universal Precautions Toolkit 2nd edition; AHRQ

- <http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/index.html>

Where to find NCH handouts

- Staff-made handouts: <https://nationwidechildrens.sharepoint.com/sites/H10378/BHNursing/SitePages/Outpatient%20Psychiatry.aspx>
- Helping Hands: <https://nationwidechildrens.sharepoint.com/sites/A10007>
- Krames: <https://patienteducation.nationwidechildrens.org/>
- [Lexicomp](#)

Health literacy affects everyone.

It is integral to patient-centered care, patient safety, and health equity.

Key Points

Addressing health literacy is essential to improving health outcomes.

Everyone can take part!

What questions do you have?

Appendix

[Survey PDF](#)

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