

The Power of Plain Language

Connect and Reach Across the Web

Presented by: Mychal Voorhees
Health Communication Training Specialist
Washington University in St. Louis School of Medicine



1

After this talk, you will be able to:

- Recognize the importance of plain language
- Identify ways to improve your writing using plain language

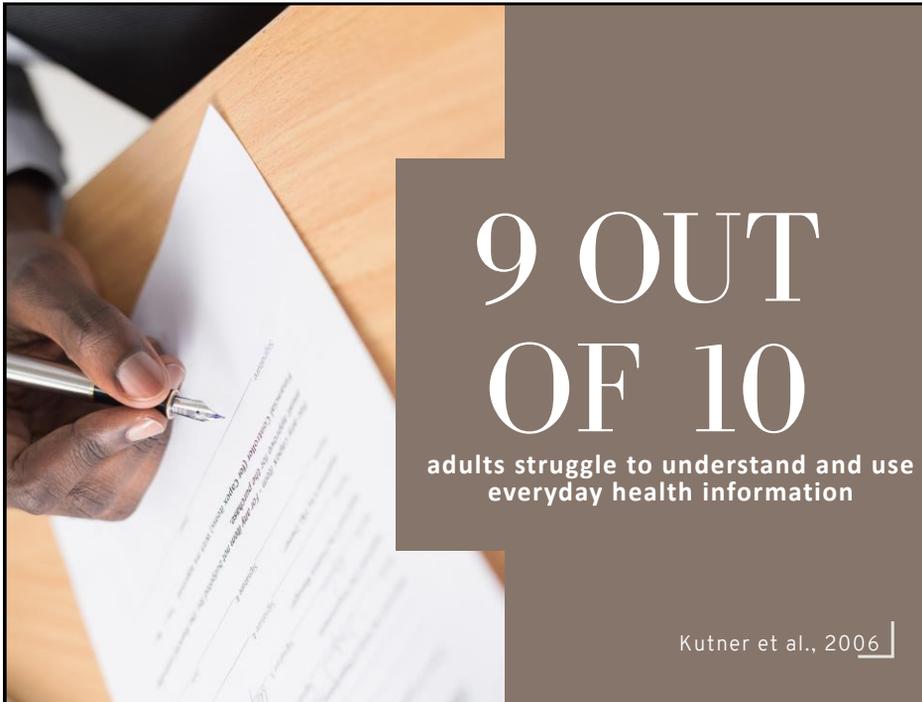
2

“The curse of knowledge:
when we are given knowledge,
it is impossible to imagine
what it's like to
LACK that knowledge.”

•Chip & Dan Heath,
Made to Stick



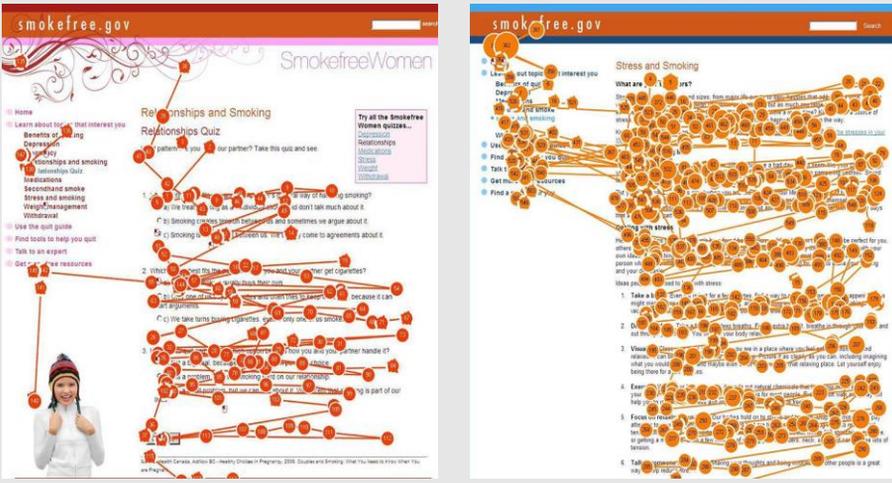
3



**9 OUT
OF 10**
adults struggle to understand and use
everyday health information

Kutner et al., 2006

4



Reader who does NOT have limited literacy skills

Reader who has limited literacy skills

Colter & Summers, 2014

5

“Writing that is clear, concise, well-organized, and follows other best practices appropriate to the subject or field and intended audience.”

•Plain Writing Act of 2010

6

Plain language is defined by results.



It is easy to understand, read, and use.

7

**Nielsen (2008) found that people
read an average of 18% of the
content on a web page.
The percentage goes down
with more text.**



8

Plain Language Principles

Simplify complicated words

Intermittent

Better term:

Off and on

Explain terms as they are introduced

Bone density screening

Further explain:

A test to see how strong your bones are

9

Plain Language Principles

Be specific

Don't lift anything heavy.

Further explain:

Don't lift anything over 25 pounds.

Avoid abbreviations

PRN

Better:

As needed

10

PASSIVE VOICE

Tests will be ordered by the doctor.

ACTIVE VOICE

The doctor will order tests.



11

INDIRECT

The patient will submit the form to the doctor's office.

DIRECT

You will submit the form to the doctor's office.



12

DIAGNOSIS

How Can I Prevent Getting Hepatitis C?

There is no vaccine to prevent **Hepatitis C**, but there is research being done to develop one. Currently, vaccines are only available for **Hepatitis A** and **Hepatitis B**. If you don't have Hepatitis C, you can reduce your risk of becoming infected by doing the following:

- If you're injecting street drugs, try to get into a treatment program. If you continue to use drugs, don't share needles or other equipment with anyone else. Many cities have needle exchange programs that provide free, sterile needles.
- Make sure all equipment has been sterilized if you're getting body piercings or a tattoo.
- If you're a healthcare worker follow your institution's safety precautions. For example, wear protective clothing and gloves and dispose of contaminated sharp objects properly.

Liverfoundation.org

13

Shorter isn't always better

Version A: You can prevent problems from diabetes. You should lose weight. You should take your insulin as prescribed.

Version B: If you lose weight and take your insulin as prescribed, you can prevent problems from diabetes.

14

“No matter how wonderful a sentence is, if it doesn’t add new, useful information it should be removed.”

•Kurt Vonnegut

15

Remove unnecessary words

A large number of	Many
In the event that	If
At this point in time	Now
Present a report	Report
Utilize	Use

16

Keep it conversational

- Contractions are okay.
- Avoid trendy abbreviations (you're not UR).
- Use first and second person (I, we, you).
- Write like you talk.



17

Let's recap...

- Simplify words
- Explain terms as they're introduced
- Be specific
- Avoid abbreviations
- Use active voice
- Speak directly to readers
- Shorter isn't always better
- Remove unnecessary words
- Keep it conversational



18

What about readability?

- Readability formulas assess difficulty of vocabulary and sentence structure
- Several options (Flesch-Kincaid, SMOG, Fry Formula)
- Results are often reported as a grade level

19

How do they calculate readability?

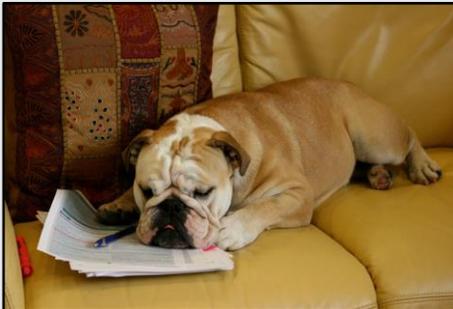


Photo Credit: Andrew Roberts

1. Sentence length
(average words/sentence)

2. Word length
(average syllables/word)

20

Bold Italic H1 H2 H3 Quote Bullets Numbers Link
 Write Edit

Hemingway App makes your writing bold and clear.

- Check inspection scores. Check a restaurant's score at your health department's website, ask the health department for a copy of the report, or look for it when you get to the restaurant.
- Look for certificates that show kitchen managers have completed food safety training. Proper food safety training can help improve practices that reduce the chance of spreading foodborne germs and illnesses.
- Look for safe food-handling practices. Sick food workers Cdc-pdf can spread their illness to customers. Most kitchens are out of the customer's sight, but if you can see food being prepared, check to make sure workers are using gloves or utensils to handle foods that will not be cooked further, such as deli meats and salad greens.
- Order food that's properly cooked. Certain foods, including meat, poultry, and fish, need to be cooked to a temperature high enough to kill harmful germs that may be present. If you're served undercooked meat, poultry, seafood, or eggs, send them back to be cooked until they are safe to eat.

Hemingway
Editor

Readability

Grade 7
Good

Words: 353
Show More ▼

4 adverbs. Aim for 3 or fewer.

7 uses of passive voice. Cut to 6 or fewer.

0 phrases have simpler alternatives.

2 of 28 sentences are hard to read.

3 of 28 sentences are very hard to read.

Hemingway App

21

Untitled Document Save

Check inspection scores. Check a restaurant's score at your health department's website, ask the health department for a copy of the report, or look for it when you get to the restaurant. Look for certificates that show kitchen managers have completed food safety training. Proper food safety training can help improve practices that reduce the chance of spreading foodborne germs and illnesses. Sick food workers can spread their illness to customers. If you can see food being prepared, check to make sure workers are using gloves or utensils to handle foods that will not be cooked further, such as deli meats and salad greens. Certain foods, including meat, poultry, and fish, need to be cooked to a temperature high enough to kill harmful germs that may be present. If a restaurant serves you undercooked meat, poultry, seafood, or eggs, send them back to be cooked until they are safe to eat. Avoid food served lukewarm. Cold food should be served cold, and hot food should be served hot. If you're selecting food from a buffet or salad bar, make sure the hot food is steaming and the cold food is chilled. Germs that cause food poisoning grow quickly when food is in the danger zone, between 40°F and 140°F.

Export Text ▼ Share Results ▼

FAVES	GRADE	ISSUES	REACH	WORDS
☆	B	21	100%	209

Language Issues

- Spelling Issues 2 1%
- Grammar Issues 3 25%

Readability Issues

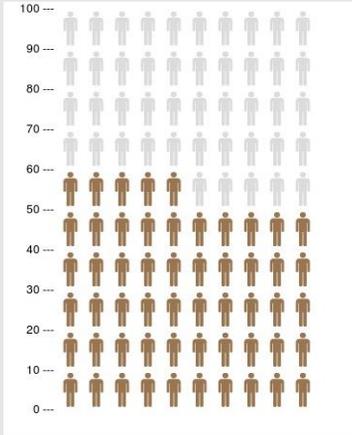
- Sentences > 30 Syllables 3 25%
- Sentences > 20 Syllables 8 67%
- Words > 4 Syllables 0 0%
- Words > 12 Letters 0 0%

Writing Style Issues

- Passive Voice Count 6 6%

app.readable.com

22



55 out of 100 adults struggle with quantitative skills

-National Assessment of Adult Literacy, 2003

Simplify Numbers in Your Writing

- Use absolute risk over relative risk
- Use frequencies, if possible
- Avoid decimals and fractions

23

RELATIVE

New drug reduced Alzheimer's risk by 50%

ABSOLUTE

New drug reduced Alzheimer's risk from from 2 per 100 people to 1 per 100 people

24

Beyond words and numbers

- Keep sections and paragraphs short
- Avoid typing in all caps
- Create white space
- Omit slashes and semicolons
- Create lists to break up text
- Use headers to guide your readers



25

“In well-educated and well-trained adults, short-term memory can rarely store more than seven independent items at one time.”

•Doak, Doak, & Root (1996)



26

A few notes on headings

- Use strong verbs and active voice
- Be as descriptive as possible
- Use questions to form headings

27

Example 1

- What ketones are
- Why ketones are produced
- What happens when ketones are produced
- When to test for ketones
- How to test for ketones
- What ketone tests are available

Example 2

Ketones: What are they?

What ketones are
What happens when ketones are produced?

Testing for Ketones

Why test for ketones
When to test for ketones
How to test for ketones
What ketone tests are available

Example from:
Doak, Doak, & Root (1996)

28

A few notes on using lists

- Lead-in sentences give context (be sure to use parallel structure)
- Great to use when order is important
- Creates white space on the page
- Don't overuse

29

Without lead-in sentence

Appointment needs

1. Your insurance card
2. Payment method for your co-pay
3. A list of questions for your doctor

With lead-in sentence

When you come to your appointment, please bring:

1. Your insurance card
2. Payment method for your co-pay
3. A list of questions for your doctor

30

Without parallel structure	With parallel structure
<p>At your appointment, your doctor will ask to review your:</p> <ul style="list-style-type: none"> • health history • current health concern • verify your medication list 	<p>At your appointment, your doctor will ask to review your:</p> <ul style="list-style-type: none"> • health history • current health concern • medication list

31

About Arthritis

1. What is arthritis?

Arthritis is a general term for conditions that affect the joints or tissues around the joint. There are more than 100 types of arthritis.

Most types of arthritis cause pain and stiffness in and around the affected joint or joints. Some types of arthritis, such as rheumatoid arthritis, also affect the immune system and some internal organs of the body.

Learn more about common forms of arthritis in the [Arthritis Types](#) section.

Experts use different definitions to gather information about arthritis in the population. Learn more on the [Arthritis Case Definitions page](#).

[Top of Page](#)

2. What are the most common types of arthritis?

The most common form of arthritis in the United States is [osteoarthritis](#). Other common types of arthritis include [rheumatoid arthritis](#), [gout](#), and [fibromyalgia](#). Fibromyalgia is included in arthritis for public health purposes.

[Top of Page](#)

3. What are the symptoms of arthritis?

Different types of arthritis have different symptoms. Pain and stiffness in and around one or more joints are common symptoms for most types of arthritis. Depending on the type of arthritis, symptoms can develop suddenly or gradually over time. Symptoms may come and go, or persist over time.

For information about the symptoms of specific types of arthritis, visit our [Arthritis Types](#) section.

[Top of Page](#)

4. What causes arthritis?

Experts don't know the causes of many forms of arthritis. However, we do know that [gout](#) is caused by too much uric acid in the body. Sometimes specific infections can also cause arthritis.

Scientists are studying the role of factors such as genetics, lifestyle, and environment in different types of arthritis to learn more possible causes and risk factors.

For information about known arthritis risk factors, visit the [Risk Factors page](#).

Source: CDC

32

Diabetes

Diabetes is a disease in which blood sugar (glucose) levels in your body are too high. Diabetes can cause serious health problems, including heart attack or stroke, blindness, problems during pregnancy, and kidney failure.

Q: What are the different types of diabetes?

A: The three main types of diabetes are:

- **Type 1 diabetes.** If you have type 1 diabetes, your body does not make insulin, so you must take insulin every day.
- **Type 2 diabetes.** This is the most common type of diabetes. With type 2 diabetes, your body does not make enough insulin or is not able to use its own insulin correctly.
- **Gestational diabetes.** Gestational diabetes happens only during pregnancy. Gestational diabetes can cause health problems for the baby and the mother if not controlled.

Q: Am I at risk for diabetes?

A: Risk factors for **type 1 diabetes:**

- Age: It often develops in childhood.
- Family health history

Risk factors for **type 2 diabetes:**

- Overweight or obesity
- Older age: 45 or older
- Family health history
- Family background of African-American, American Indian/Alaska Native, Hispanic, Asian-American, and Native Hawaiian/Pacific Islander
- Having a baby that weighed 9 pounds or more at birth
- Having diabetes during pregnancy (gestational diabetes)
- High blood pressure: Taking medicine for high blood pressure or having a blood pressure of 140/90 mmHg or higher. (Both numbers are important. If one or both numbers are usually high, you have high blood pressure.)
- High cholesterol: HDL cholesterol of 35 mg/dL or lower and triglycerides of 250 mg/dL or higher
- Lack of physical activity: People who are active less than three times a week
- Having polycystic ovary syndrome (PCOS)
- Personal history of heart disease or stroke

Source: CDC

33

Always check your employer's style guide



34

Guidelines and Toolkits for Writing

Federal Plain Language Guidelines

<https://plainlanguage.gov/>

Teaching Patients with Low Literacy Skills

<https://www.hsph.harvard.edu/healthliteracy/resources/teaching-patients-with-low-literacy-skills/>

Centers for Medicare & Medicaid Services, Written Materials Toolkit

<https://www.cms.gov/Outreach-and-Education/Outreach/WrittenMaterialsToolkit>

ADA National Network, Guidelines for Writing

<https://adata.org/factsheet/ADANN-writing>



35

Tools to Get You Started

Icon Array

<http://www.iconarray.com/>

Readable

<https://readable.com/>

Hemingway Editor

<http://www.hemingwayapp.com/>

University of Michigan Medical Dictionary

<https://www.lib.umich.edu/plain-language-dictionary>



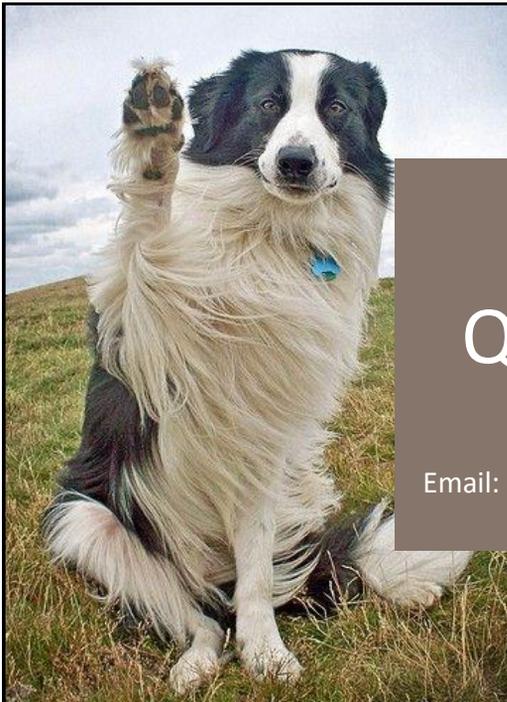
36

“Anyone who says
writing is easy isn’t
doing it right.”

•Amy Joy



37



Questions?

Email: mychal.voorhees@wustl.edu



38

References

Colter, A., & Summers, K. (2014). Eye Tracking with Unique Populations: Low Literacy Users. In J. Romano Bergstrom & A. J. Schall (Eds.), *Eye Tracking in User Experience Design* (pp. 331–346).

Doak, C.C., Doak, L.G., & Root, J.H. (1996). Teaching patients with low literacy skills.

Kutner, M., Greenberg, E., Jin, Y., & Paulsen, C. (2006). The health literacy of America's adults: Results from the 2003 National Assessment of Adult Literacy.

Nielson, J. (2008) How little do users read? Nielson Norman Group.

<https://www.nngroup.com/articles/how-little-do-users-read/>

