Health literacy... it’s not just plain English

In this day and age, you would think that clear communication would be second nature to us all, but this is not so. In our digital world misunderstanding and confusion can easily occur, especially when dealing with medical information.

Healthcare is complicated, full stop. Bursting with complicated language, random abbreviations, medical jargon and complex statistics, it is no wonder many people find health information so difficult to understand. This struggle becomes even more difficult when you are suffering from an illness or being treated for a chronic condition.

This is where health literacy plays a vital role. It ensures that patients understand the information they have been given but most importantly that they can act upon it. Defined as the communication of health information in ways that others can understand and act on, ‘health literacy’ is a crucial step in helping your patients make informed choices about their own health.

However, health literacy is not just about plain English, it is also about putting the right words into context and simple visualisation to ensure your target audience get the most out of the communication materials you produce.

In this article, we want to share with you some great examples that show when done well, how context and simple clear visualisation can really make a difference.
Blood Test Results

David McCandless, the author of *Information is Beautiful* and *Knowledge is Beautiful*, and Stefanie Posavec demonstrate how simple graphics can be used to explain complex medical information. Many of us have been on the receiving end of blood test results, only to be given a sheet of meaningless numbers and figures and told not to worry as everything is fine. But how do you really know everything is fine and there is nothing to worry about?

They took a complex blood test result and transformed it into something that is easy to read, understand and act on; all principles of health literacy.

David McCandless & Stefanie Posavec for Wired Magazine // informationisbeautiful.net
Blood Test Results – a breakdown

Lead the way

Using orange sparingly as a highlight colour creates a pattern of “hot-points” down the page to encourage the audience to read the information in a particular order. Also known as eye tracking.

Sort out your hierarchy

The temptation with a condensed report is to assume that everything is important and therefore must be pulled out. However, this piece avoids that pitfall and limits the bold type to headlines and chart headings making it clearer and easier to read.

Make the data sing

Results have been transformed into an easy to understand scale. The colours used are subtle and although John is at high risk of CV disease, the chart is not scaremongering by using a violent red and simply shows John is in the section which is high risk. It also puts John’s level of CRP into context on the scale.

The same idea has been used to show John’s overall cholesterol levels and how much is LDL vs. HDL.

Consider the storyflow

The document has been created as a logical story based on what John needs to know and then what he would want to know after receiving the results.
White space is good space

Clear layout using lots of white space. This makes the layout easier to understand. It also makes the information more accessible and less overwhelming.

Explain up front

Simple explanation of the reason for the test and the medical terms are explained to give John some context.

Use colour intelligently

Colour is used sparingly for clarity. The user knows where to look and what’s important because they are the only parts that are highlighted.

Put it into context

This section explains in very simple and easy to understand language what John’s overall risk of CV disease is and what it means using statistics which are immediately relevant to a person with this type of condition.

Include an action plan

The last section is a call to action. Again using simple graphics to highlight the changes John needs to do to reduce his risk and how to manage his condition.

**Bloodwork Cardiology Result**

**Patient info**

NAME: John Doe  
GENDER: M  
AGE: 49  
DOB: 01/10/1961

**About this test**

This report evaluates your potential risk of heart disease, heart attack, and stroke.

**Your results**

CRP level test  
3.3 your level of a specific protein in the blood linked to inflammation of blood vessels

Total cholesterol level

- **Desirable**: 0
- **Low risk**: 0 - 1
- **Average**: 1 - 3
- **High risk of cardiovascular disease**: 3 - 50

**Your risk**

You show an elevated risk of cardiovascular disease.

If you’re a smoker with normal blood pressure, (130 mm/Hg) but family history of heart attack before age 60 (one or both parents) your risk over 10 years is:  
15%

Use your CRP results and cholesterol level to calculate your 10 risk of a cardiovascular event at ReynoldsRisk.org

**What now?**

- **Diet & exercise**: can improve your cholesterol levels  
- **Quitting smoking**: can decrease your heart disease risk by 50% or more  
- **Ask your doctor**: about statins or other medications that can lower your cholesterol

David McCandless & Stefanie Posavec for Wired Magazine // informationisbeautiful.net

Explain up front  
Simple explanation of the reason for the test and the medical terms are explained to give John some context.
The second example we have chosen by Mucca Design takes another complex set of blood test results and transforms them into an understandable document. Along with clear and concise language, we like the way this example highlights the benefits of simple graphics to explain complex data.

### Your Test Results

**Cora Peterson**

- **Gender:** Female
- **Age:** 41
- **Date of Birth:** August 12, 1969
- **Date Tested:** November 13, 2010, 8:40 a.m.
- **Doctor:** Dr. Pico Duval
- **Date of Report:** November 13, 2010, 8:12 p.m.

#### RESULTS:

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Normal Range</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comprehensive Metabolic Panel</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glucose (fasting)</td>
<td>106 mg/dL</td>
<td>&lt;100</td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 to 155</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;155</td>
<td></td>
</tr>
<tr>
<td><strong>Vitamin D</strong></td>
<td>10 ng/mL</td>
<td>&lt;30</td>
<td>Deficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30 to 100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;100</td>
<td></td>
</tr>
<tr>
<td><strong>Complete Blood Cell Count (CBC)</strong></td>
<td></td>
<td>Normal for all values, including white blood cell count (a high count can indicate infection)</td>
<td></td>
</tr>
<tr>
<td><strong>Urinalysis</strong></td>
<td>Normal for all values, including color, appearance, and protein</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Endocrinology</strong></td>
<td>Normal for TSH, which is an indicator of thyroid function, and for microalbumin and creatinine, measure of kidney function</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chemistry</strong></td>
<td>Normal for ion, transferrin saturation, and hemoglobin. Anemia levels could indicate anemia, hepatitis, or other problems</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Lipid Profile

- **Total cholesterol:** 201 mg/dL
- **HDL (“good” cholesterol):** 46 mg/dL
- **LDL (“bad” cholesterol):** 165 mg/dL
- **Triglycerides:** 160 mg/dL

#### WHAT DO YOUR RESULTS MEAN?

- **ELEVATED GLUCOSE:** The relatively high amount of sugar in your blood is typical of a patient with prediabetes, which can double your risk for heart disease, depending on other risk factors. See diabetes for more information.
- **ELEVATED CHOLESTEROL:** Your relatively high cholesterol is a very strong indicator of your risk for heart disease, and depending on other risk factors. See therapy for more information.
- **LOWER LEVELS OF VITAMIN D:** Our results suggest insufficient vitamin D, which promotes bone density and immune-system function. Women who are infertile or have a low BMI may also have lower vitamin D levels.

#### WHAT CAN YOU DO?

- **CONSIDER YOUR LIFESTYLE:** If you are inactive, overweight, and/or a smoker, you are at risk for developing diabetes and heart disease. Exercise regularly (60 minutes/day) and reducing your weight by 5 to 10 percent lowers your risk of diabetes by 50 percent.
- **ADDRESSES OTHER RISK FACTORS FOR DIABETES AND HEART DISEASE:** Dietary changes, like reducing animal consumption and increasing fruit and vegetable intake, can decrease your cholesterol and triglyceride levels.
- **ASK YOUR DOCTOR ABOUT REDUCING YOUR RISK FOR HEART DISEASE:** Medications like statins can lower cholesterol and delay the onset of heart disease. Calculate your risk at ihbp.org/wbc/redflagcalculator.php.
- **CONSIDER LIFESTYLE CHANGES TO CORRECT VITAMIN D INSUFFICIENCY:** These include diet, vitamin D supplements, and more exposure to sunlight.
Blood Test Results mark 2 – a breakdown

Make it accessible
Clear, easy to read font with an obvious text hierarchy. Both of which make the document easier to read.

Obey cultural norms
A universal traffic light system is used. This technique uses common cultural norms in order to build a relationship with the new data.

Divide and conquer
All content aligns to a structured grid, making it easier to read and follow. Results are divided into clear sections with white space between to help your eye differentiate between the data.
Instant recognition

‘Your results at a glance’ appears right at the top of the page as one of the first things the user will read. This means the reader instantly knows where they stand, before they look at their results in detail.

Clear support link

Clearly highlights how the user should get in touch if they have more questions.

Guide their next steps

Data is organised in a structured story. The call to action pieces at the bottom of the document give context to the data and explain in plain English what the results mean and how to act on them.

This document encourages the reader to have a proactive attitude to their health rather than reactive.
www.clinicaltrialsexplained.com

This is an example which we are really proud of. Following the success and endorsement by the Clinical and Contract Research Association (CCRA) of our e-book, we developed a supporting website. The website showcases how health literacy principles can be used successfully across different media to ensure information is understandable for all.

By keeping the website design clean and using splashes of colour for the icons and graphics alongside the use of simple language, we ensured that key points are not lost in a sea of information.
Let it breathe

Lots of white space surrounds the content on the website to ensure everything is clear and easy to read.

The white space also helps to keep the information from becoming too overwhelming.

Keep it simple

All headings are kept short without long-winded explanations and a clear sans-serif font is used throughout to make it easier to read and digest.

Consistency is key

Use of simple icon style for clarity. The icon style is also used across the rest of the website and within the original book. This keeps a consistent brand style which is more accessible for users.
Reinforce with repetition

The same icons from previous sections are carried through here for consistency and to give patients something to refer back to.

Use their knowledge

Use of familiar colours to highlight specific action points.

Green for go, red for stop. This relies on user’s subconscious knowledge of what the colours mean.

Don’t break convention

Use of a very straight forward flow diagram to show the processes involved. By running from top to bottom, it follows the natural way people read (in western culture).

Shorten the journey

Instead of users needing to navigate away from the page to get definitions of words, we used tooltips to help explain some of the complex terminology.

Words that had a tooltip were highlighted for ease of navigation.
Break it down

Questions have been broken down into sections to make it easier to navigate through them.

Consider the way it will be used

The entire website is mobile friendly. This means that sections like this are easy to pull up on users mobile phones when they are with their doctor.

A PDF is also available for users to download, print and take to the doctors with them.

The PDF uses very little ink and uses colours that are vibrant enough to be printed in black and white without loss of clarity.

Limit the palette

Colour is limited to alerts and the most important sections to ensure that they are not lost within all the information.

Top 5 tips for creating great health literacy pieces

1. Write copy in plain English
2. Always provide context
3. Use clear visualisation and simple graphics
4. Use lots of white space for clarity
5. Include a call to action
A final word

As a healthcare communications agency we have a responsibility to take away the fear of the unknown and ensure patients understand the health information they have been given and when to act.

However, as we have highlighted in this article, understanding health information is not just about using plain English. Visualisation and putting the right words into context are key to maximising accessibility.

By using these principles, we can all help people feel more in control of the choices they make about their own health and actually make a difference to their lives. At the end of the day isn’t that what we all want as patients?

If you would like to find out more email us at: letstalk@cuttsyandcuttsy.com

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