



Ix Solutions for Addressing Language and Health Literacy Issues

Speakers:

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Introduction:

This IxInsights session examined real-life examples of technology-based Ix solutions for addressing health literacy and language issues. Our speakers shared their experiences developing such tools. Ms. Krull described the approach Eliza has developed to continually tailor health information. Dr. Zarcadoolas described the work she has done as a health literacy and usability design consultant developing a patient portal for the Institute for Family Health, another IxAction Alliance member organization.

Background:

While conversations in the 1990s often mentioned the “digital divide,” this concept has become outdated. It is no longer a meaningful way to frame discussions about access to health information because technology has shifted in unpredictable ways. It continues to shift in ways that challenge traditional assumptions about how groups use technology tools.

For example, according to the Pew Internet & American Life Project, over the last 5 years, cell phones have become more important to people than televisions. This reflects a shift in technology from internet access via a land line and prohibitively expensive desktop computers to mobile access using relatively inexpensive equipment (phones, PDAs, and net books).

The demographics of those utilizing technology is also undergoing a transformation. While Latinos, overall, are not “online” quite as much as blacks and whites, the percentage of English speaking Latinos is higher than blacks and whites. Also, English speaking Latinos who have cell phones (or PDAs) are heavier users of non-voice capabilities (text messaging, email, IM, sending pictures, and watching videos) than blacks or whites. This opens up opportunities for delivering Ix to broader populations using multiple methods.

Addressing Health Literacy Issues in a Patient Portal: Institute for Family Health

Ix Insight #1: Considering approximately half of the adults in the US read at an 8th grade level or lower or have low health literacy, Ix solutions should routinely take into account limited literacy skills among the general US population. This will facilitate more equitable access to health information, which is an important component of good health care. Other costs or implications of low health literacy include:

- having poorer health
- being less likely to utilize screening and preventive services
- being more likely to enter the health care system at later stages of disease/illness
- being more likely to be hospitalized
- having poorer understanding of treatment and their own health
- having lower adherence to treatment regimens.

Ix Insight #2: Clear language is a necessary, but not sufficient, part of the solution.

Fundamental literacy is a good place to start, but is the first of several issues to consider. Literacy is about more than just words and sentences. Dr. Zarcadoolas defines four critical domains of health literacy:

- fundamental literacy: reading/writing/numeracy
- science literacy: method/process/concepts/technology
- civic literacy: judging sources of information/media
- cultural literacy: identity/perception schema

Ix Insight #3: Science literacy is lower than fundamental literacy (with only 17% of the population understanding scientific concepts), creating a particular challenge for communicating health information. Scientific literacy includes understanding the significance of an archived (medical) record. Other scientific concepts to take into consideration when developing interventions include:

- scientific methods
- process in science
- how science works
- how health technology and science work together

Ix Insight #4: User-centered design facilitates the development of understandable health information for patients varying levels of health literacy.

The five major steps in user-centered design include:

- health literacy load analysis (audit the content for complexity and types of understanding needed)
- tasks analysis (what does a user have to do on any given page to make things work)
- usability testing (observing patients using the site and attempting to complete tasks)
- revision (make improvements based on user observations and feedback)

- usability testing and evaluation in live use (continue the iterative feedback cycle over time to make improvements)

A Tailored Approach to Communicating Health Information: Eliza Corporation

Ix Insight #5: When tailoring Ix solutions, focus on the most salient patient characteristics, which often are knowable primarily through patient-reported data.

While as a general rule, the more tailoring the better, this is not always feasible. While it makes sense to start with basic demographic information such as age, gender, and ethnicity, there are a number of other factors to consider when tailoring Ix interventions:

- income level
- suburb or city dweller
- presence of aging parents
- presence and age of children
- self-definition of culture
- self assessment of importance of culture in life
- key motivating factors (e.g., facts, competition, family, fear)
- experience with the health care system

Ix Insight #6: Tailoring needs and preferences are not static; they change over time and according to context. Eliza has found, through its ongoing efforts to refine tailoring, that a one-time language preference for a particular phone call doesn't necessarily translate into the same language preference for email, regular mail, or even the next call. Also, an individual's health needs change over time. A young, healthy person has different information needs than someone who is older and having trouble prioritizing their own health care due to the health care needs of other family members.

Ix Insight #7: When tailoring Ix interventions for different languages or geographic regions, strict translation needs to be balanced with cultural sensitivity. For example, American Airlines introduced a new campaign to advertise the availability of leather seats in first class. "Fly in Leather" literally meant "Fly Naked" (vuela en cuero) in Spanish. Examples of how this plays out within regional and age segments of the US population include using terms like having "a touch of sugar" versus having "the sugar." Asking someone if they are testing their blood sugar may not resonate as much as asking them if they are "taking their blood in the morning."

Ix Insight #8: If possible, build your capacity to address additional health information needs as they are discovered. As you begin implementing your Ix solution, continually measure responses and feedback. For example, if Spanish-speaking members express a strong desire for further education and support, build solutions to meet this need.

Ix Insight #9: Never assume that an individual from a particular ethnic group shares all of the traits of that ethnicity or culture. While culturally sensitive interventions often produce the desired result, this is not always the case. In testing responses to culturally sensitive messages as compared to general messages, Eliza has discovered instances where the latter is more effective than the former.

Additional Resources

For the PowerPoint presentation, visit the IxInsights section of the member portal: <http://www.ixcenter.org/members/insights.cfm> and click on “PowerPoint Presentation” for IxInsights #43.

Advancing Health Literacy: A Framework for Understanding and Action by Christina Zarcadoolas, Andrew Pleasant, and David S. Greer.

If you are interested in health literacy and work for one of our member organizations, join our social network at www.ixcenter.ning.com. See who else is interested in Ix and health literacy!

Previous IxInsights Session on Usability Testing

IxInsights #36: The Shared Care Plan: Designing a Truly Patient-Centered HIT Tool and Evaluating its Impact

Previous IxInsights Session on Health Disparities

IxInsights #37: Ix Killer Apps, Health Disparities, and the Patient-Centered Medical Home
IxInsights #30: Early Findings from PCHIT: Report on New York City Safety Net Providers
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