The Plain Language Project: Assessing the Usability of Patient Information Documents

Mayor’s Office of Adult Education’s Health Literacy Fellowship 2008

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What is the Plain Language Project?

The Plain Language Project (PLP) is a collaborative effort between the Mayor’s Office of Adult Education and the HHC (Health and Hospitals Corporation).

Our goal is to scientifically evaluate and improve patient education documents in order to make them more accessible/usable for their intended population.
Adult Education-HHC Collaboration

- The CLAS (Culturally and Linguistically Appropriate Services) office at HHC had been working to create a series of standardized, bilingual, plain language documents in the 12 most common languages spoken by HHC patients, as part of a project funded by the Altman Foundation through the HHC Foundation.

- The Mayor’s Office of Adult Education promotes a state-of-the-art adult education system that serves more people with greater results to help learners reach their goals, working with adult learners, educators, and government agencies to achieve this vision.
Background

- The average patient information document is written at an 11th grade level. The average adult in America reads at an 8th grade level.

- EO 120 mandates City Agencies to provide communications in the City’s top languages.

- In accordance with providing meaningful access to service the order states, “Agency language access policies shall also reflect principles of plain language communication as provides in guidance issued by the Mayor’s Office of Adult Education.”

Project Goals:

- **#1: Assess Documents**
  - Use a sound methodology to determine the readability and usability of documents given to patients by HHC staff.

- **#2: Build Partnerships**
  - Establish a sustainable partnership between the adult education system and HHC to promote materials testing before distribution.

- **#3: Change Policy:**
  Collaborate to develop guidelines to use when developing documents.
Methods

- Collected patient information documents from CLAS.

- Assessed documents using the **Suitability Assessment of Materials (SAM)** metric.

- Conducted focus groups with adult learners to verify suitability of materials.

- Provided recommendations for hospitals on how to improve documents based on SAM scores and focus group feedback.
What is SAM?

- SAM is a scientifically proven protocol developed by Leonard and Cecilia Doak (Doak and Doak)\textsuperscript{2} to evaluate the readability and usability of health documents.
- It incorporates the Fry formula to determine grade level as one of its many components.
- Other evaluated components include: content, graphics, layout, typography, learning stimulation.
- Documents are rated as superior, adequate, or not suitable.

\textsuperscript{2}Doak, Cecilia C., Leonard G. Doak, and Jane H. Root. 
Methods: Using the focus groups & SAM

- We worked with focus groups of adult learners (Adult and Intermediate level ESL students) to evaluate medication information sheets for the following 5 medications:\(^3\)
  - Esomeprazole
  - Glucatrol-Glipizide
  - Insulin-Glargine
  - Repaglinide
  - Sitagliptin

- Our focus group protocol was based on five out of the six domains of Doaks’ Suitability Assessment of Materials (SAM).
  - Five domains: content, literacy demand, graphics, layout & typography, learning stimulation & motivation.
Methods: Focus Groups

- Questionnaire was developed using Doak & Doak guidelines.

- Comprehension
  - What is the purpose of this document? What is the document talking about?
  - What is the most important information in the document?

- Self-efficacy
  - If you were given this document at the doctor’s office, how and when would YOU actually use it in real life?

- Persuasion
  - Do you think this document would be helpful for someone with _________?

- Attraction
  - What you first saw the document, what did you notice? How do you think the document looks?
## SAM Results

<table>
<thead>
<tr>
<th>Document</th>
<th>Average Percent Grade</th>
<th>Rating*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulin-Glargine</td>
<td>69.34%</td>
<td>Adequate</td>
</tr>
<tr>
<td>Sitagliptin</td>
<td>74.98%</td>
<td>Superior</td>
</tr>
<tr>
<td>Repaglinide</td>
<td>69.45%</td>
<td>Adequate</td>
</tr>
<tr>
<td>Glipizide</td>
<td>73.60%</td>
<td>Superior</td>
</tr>
<tr>
<td>Esomeprazole</td>
<td>74.35%</td>
<td>Superior</td>
</tr>
</tbody>
</table>

* Superior = 70-100%, Adequate = 40-69.99%, Not Suitable = 0-39.99%

- Not only are the documents written in plain language, but the information is also presented in such a way as to encourage interactive reading and future action on the part of the patient/reader.

- Although the results of the SAM for all five documents were highly rated, it is the goal of this project to create the most superior documents possible as they will be translated and disseminated throughout HHC hospitals.
Before

(One example)

Esomeprazole:

• Long instructions on how to manage skipped doses were confusing to adult learners.
• Several images were confusing.
Feedback and Analysis

- Difficult words identified by focus group: tingling, fainting, hypoglycemia, blurred vision, store, “skip” (of “don’t skip a dose”).

- Participants had difficulty understanding complex instructions pertaining to storage of insulin and how to handle cases of missed doses.

- Several pictures were confusing:
  - “call your doctor” image: adult learners saw panic, but didn’t recognize either image as the “doctor”
  - “don’t share medication” image: adult learners thought this looked like “overdose” or “drug pusher.”
Resolving Barriers to Plain Language

- Some necessary difficult words (e.g., hypoglycemia) could be defined. Those that weren’t essential could be replaced or dropped.

- Added a bilingual header reading “Information about your medicine.” Replaced complex, potentially confusing instructions with referrals to clinical staff.

- Deleted any confusing images:
  - “call your doctor” image:
  - “don’t share medication” image:
After (One example): Esomeprazole:

- Confusing details on how to manage skipped dose were removed and replaced with simple instructions.
- New header is plain-language (no longer starts with long medicine name)
- Confusing images were removed.
Conclusions

- The SAM guide, though limited in some respects, is a multifaceted tool that allows for evaluation of the readability of health documents as well as their usability.

- Standardization of patient information documents is the key to providing consistently accurate, readable, and usable documents to the NYC patient population.

- Partnerships that link adult learners, educators, and government agencies and healthcare resources can improve the public’s access to plain language resources and improve health literacy.
The Road Ahead…

- The Health Literacy Fellows Program and HHC plan to continue collaboration to improve patient access to plain language healthcare information.

- The Mayor’s Office of Adult Education and HHC’s Office of CLAS are working to develop sustainable ways to continue focus group evaluation of materials.
Recommendations for Further Study

- Focus groups with participants who suffer from the illness to which the document pertains
- Bilingual focus groups to assess the readability/usability of the non-English text in the documents
- Do better documents lead to better health?
“Everything should be made as simple as possible, but not simpler.”

- Albert Einstein