10 Emerging Criteria of Visual Communication

For Patients Education

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Those are emerging criteria of visual communication design for patients education from synthesis of existing studies. Because using comics for patients education is a new domain where no disciplined practices are established, we think referring to relevant visual communication principles in healthcare can benefit. Also comics as a media is not originally designed for healthcare communication, so there may be conflicts when using good practices of making comics to make patients education material. So there are lots of trade-offs we need to make to optimize the communication efficiency. This document can serve as a reference and checklist to make sure we always keep an eye on good practices out of making comics.

1. Reduce noise

- Present one message per visual.
- Remove superfluous information or too many details in photography.
- Use illustration or drawing to highlight key components of an idea.
- Remove decoration.
- Use cues like arrows and circles to point out key information in visuals.
- Clarify the goal of the whole tool, each section, and each visual.

2. Use visuals and texts to support each other

- Place text nearby related visuals (and captions).
- Use visuals to emphasize or explain the text.
- Caption visuals briefly including key messages.
- Connect caption with body text by repeating each other.
- Use narrative in caption and body text to tell stories.
- Use drawings alone when it's self-explanatory.

3. Make desired actions clear

- Show desired actions, and avoid showing what the audience should not do.
- Number the images when showing a sequence.
- Use pictographs when focusing on a specific action.
- Use pictographs to convey a lot of information quickly.

4. Tell stories to engage audiences

- Combine data with stories to make the data more relevant to patients.

5. Choose the right abstraction level

- Use more abstract images to

§ Show desired actions.
§ Address abstract subjects.
§ Show a procedure.
§ Depict socially sensitive issues.
§ Explain an invisible or hard-to-see event.

- Use more realistic images to

§ Illustrate internal body parts or small objects.
§ Show the entire body for context. Don't take audiences taken out of context to understand the meaning of visuals.
§ Show "real life" events, people, and emotions.

- Use icons when:

§ Use images and symbols familiar to the audience.
§ Pretest any use of symbols. What is meaningful and natural for one audience may be confusing or misleading to others

- Balance the credibility and engagement.
- Combine images with a layer of illustrations to highlight information.

Good Examples

1. Show, don't tell: how visuals improve healthcare visits
https://medium.com/@katiemccurdy/show-dont-tell-how-visuals-improve-healthcare-visits-1b994f7fd90e

2. Insulin on Board
http://dougkanter.me/filter/data-visualization

3. Pictal: health visualization tools for patients
http://katiemccurdy.com/portfolio/pictal/

4. Health Chronicles
http://www.soniakneepkens.com/index.php?/projects/health-chronicles/

5. Case Study: Healthcare Communication Tools—Empowering the People of Kibera
http://www.aiga.org/case-study-healthcare-communication-tools

6. Infographic Design 101 For Healthcare Professionals
https://www.visme.co/infographic-design-101-for-healthcare/

7. Mike Natter
https://portraitsforgood.com/collections/mike-natter/Standard

8. Graphic Medicine | The interaction of comics & healthcare
http://www.graphicmedicine.org/

6. Be cautious with using visuals to represent abstract concepts

- Make visual look like the thing that it represents.
- Use comparison to explain abstract concepts.
- Use actually activities to complement abstract concepts. In other words, transfer intangible into tangible.
- Be cautious when using metaphor to convey information. Metaphor may be compelling to show emotions, but confusing for critical information.

7. Frame information in an unbiased way

- Draw small objects larger to show detail. Also show something familiar as reference to give a sense of scale.
- Be cautious when use "representations" (faces, stick figures, etc).
- Avoid using areas or volumes to depict quantities.
- Using comparison to make risks more understandable.

8. Make visuals which are culturally appropriate and efficient for intended audiences

- Try to make visuals of the same racial or ethnic group as intended audience when designing for a homogeneous audience group. Select images that are familiar and the audience can relate to.
- Show people from a variety of ethnic, racial, and age groups when designing for a heterogeneous audience group. Illustrations can be inclusive among disparate audiences, especially mixed cultural groups.
- Include illustrations that are inclusive and appealing to people who may have physical challenges or constraints.
- Use culturally appropriate logic, language, and experience of the printed piece, images and examples.
- Think about overall style, how detailed should it be, and what visuals to use.

9. Consider who may also access to and use the tool

- Consider other people may use this tool:

§ Families
§ Other patients
§ Other medical members
§ Non-medical staff

- Consider how the tool may distribute support conversation:

§ From medical staff to patients and families: consider that information physicians think important may be irrelevant to patients.
§ Between medical staff: consider how to support collaboration between medical to staff to better support patient education.
§ From patients and families to medical staff: consider how can the tool help patients to express their concerns and symptoms.
§ From patients to other patients: consider how the tool can convey accurate information and help patients support each others.

10. Take account of when and where the audiences will use the tool

- Consider where and when patients will use the tool:

§ Home
§ Work
§ Transportation
§ Hospital
§ Community center
§ Support group
§ Meeting with non-medical staff

- Consider the conditions of patients:

§ Kinds of cancer
§ Stages of cancer
§ People involved
§ Stability of emotions

Reference

1. International Patient Decision Aid Standards (IPDAS): beyond decision aids to usual design of patient education materials
http://onlinelibrary.wiley.com/doi/10.1111/j.1369-7625.2007.00445.x/full

2. Improving comprehension for cancer patients with low literacy skills: Strategies for clinicians
http://onlinelibrary.wiley.com/doi/10.3322/canjclin.48.3.151/full

3. Explaining risks: turning numerical data into meaningful pictures
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1122766/

4. Design, development, and evaluation of visual aids for communicating prescription drug instructions to nonliterate patients in rural Cameroon
https://drive.google.com/drive/folders/0By_IlcSr2MMvR0NjVGhlLXVpRG8

5. Health Communications Toolkits: Improving Readability of Patient Education Materials
http://www.ihi.org/resources/Pages/Tools/HealthCommunicationsToolkitsImprovingReadabilityPtEdMaterials.aspx

6. Enhancing Written Communications to Address Health Literacy
http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol142009/No3Sept09/Enhancing-Written-Communications.html

7. Patient Experience Design: Expanding Usability Methodologies for Healthcare
https://drive.google.com/drive/folders/0By_IlcSr2MMvR0NjVGhlLXVpRG8

8. The Patient Education Materials Assessment Tool: use of visual aids
https://www.ahrq.gov/professionals/prevention-chronic-care/improve/self-mgmt/pemat/pemat8.html

9. Designing A Health Communication Strategy
http://ccp.jhu.edu/documents/A%20Field%20Guide%20to%20Designing%20Health%20Comm%20Strategy.pdf

10. Simply Put: A guide for creating easy-to-understand materials
https://drive.google.com/drive/folders/0By_IlcSr2MMvUndmX0FKc05qMFE