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MUHC Standards for Developing Effective Written Patient Learning Materials

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The MUHC Patient Education Network Committee

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With today's shorter hospital stays and the increasingly complex nature of treatment, we need to ensure our patients and their caregivers have the best available information as they take on a more active role in their care.

The MUHC Patient Education Network Committee has created these standards to guide clinicians in the development of written patient learning material. Written materials may take the form of a pamphlet, an educational CD, a web-based program and so on.

Written patient learning materials are an important adjunct in informing and educating patients. They do not replace face-to-face discussion. (S. Johnson, Cochrane Collaboration, 2002).

Standard 1: MUHC patient learning materials are developed based on identified patient and family learning needs and health professionals' priorities

- **Create an interprofessional team.** Identify the key MUHC health professionals who are involved in the care of this patient population and form a working group. Involve a patient representative in your team and consider involving community partners.
- **Check for existing materials.** Don't reinvent the wheel. If your specialty is also offered at another MUHC site, collaborate to create an MUHC patient education approach. This will prevent unnecessary duplication and ensure consistent messages. Check also for literature produced outside the MUHC, for example by provincial and national associations.
- **Determine your target patient population.** Be specific. For example, cancer patients have multiple information needs. Is your target group all cancer patients or only those about to receive their first chemotherapy treatment? Consider the influence of factors such as reading level, cultural background, age and first language of your target group. By knowing your patient/family/caregiver population it is easier to tailor material to your audience. If you are producing general public health material, you have to be more global in your delivery.
- **If your target audience is pediatric, consider whether your primary audience is parents or children or both.** Material prepared for children must take into account their developmental stage. For more information contact: Lisa Dutton, Communications Department, ext. 23991, MCH F371.
- **Conduct a needs assessment with members of your target patient/family population.** Interview six to ten former patients or conduct a focus group in order to learn about educational needs of your target group [[Click here for focus group and interview guidelines: "Learning about the Needs of your Target Audience."](#)] Former patients can tell you what information they feel is important for new

patients. They can also provide feedback about how to best deliver the information. You may want to include family members in your focus group or interviews.

- **Determine the objectives and outcomes of your educational program.** Identify key messages or objectives you want to deliver, as well as the end result or behavior you would like to see. Using the results from your interview or focus group, determine the best method of delivery (ie. face-to-face discussion, brochure, video, and so on).
- **Develop and plan your educational program.** Using the educational needs you have identified you can now plan your educational project/program. For example, an educational project might be a same-day admission pamphlet. A patient education program might, for example, focus on helping cardiovascular patients through the entire treatment process, from diagnosis to treatment and rehabilitation. Patient educational needs/resources would be developed for each phase. (Maidment, 2005). [[Click here for “Checklist for Planning Educational Projects”](#)].
- **Consider time-line and budget.** For further details, consult the Patient Education Committee Grant Proposal Deadlines (call local 36212). Also investigate if your department has money reserved for patient education.

The best way to make sure your materials are appropriate is to talk to members of the target audience before designing your materials. Then, let them review your draft and provide feedback.

Standard 2: MUHC patient learning materials are evidence-informed, clearly written and in keeping with current health literacy standards

2.1 General Points

- **Ensure the MUHC logo is present**
[\[http://www.intranet.muhc.mcgill.ca/PRC/logos/\]](http://www.intranet.muhc.mcgill.ca/PRC/logos/)
- **Ensure the information provided is up-to-date and evidence-based**
- **Ensure that information provided is consistent.** Check that information provided in inpatient and outpatient settings is consistent.

- **Maintain a reading level between grade six to eight** [[Click here to learn how to evaluate grade level](#). Also [click here for “The MUHC and Health Literacy—A brief summary.”](#)]
- **Accommodate our patients and families across the spectrum of learning needs, interests and abilities.** For more **advanced learning**, identify websites you consider to have evidence-based information, or create your own material. For those who have **difficulty understanding material at a grade 6 to 8 level**, develop other ways of teaching/learning: video, audiotape, one-to-one discussion.
- **Keep in mind that some MUHC patient information material may need to be written at a slightly higher literacy level. For example if the name of a procedure or a device is longer than three syllables this can raise the literacy level.**

A word of caution! Readability tests give you a general idea of how hard the document will be to read based only on the words it contains. They do not consider the effects of layout or design elements. And they cannot tell you how well your audience will accept or understand your message. Pretesting your material with the target audience is the best way to judge if it will be effective.

- **Use the objectives you established in your educational plan to guide and structure your content.**
- **Limit number of messages.** Present readers with no more than three or four main ideas per document or section of your document
 - **Clearly state the actions readers are to take.** Skip details that are irrelevant to the reader’s healthcare needs. For example, if you are writing a brochure about how to prevent Lyme Disease, you don’t need to tell readers how and when Lyme disease was discovered.
 - **Stick to one idea at a time.** Skipping back and forth between topics can confuse readers.
 - **Avoid lengthy lists.** Limit lists to five or six items. Readers—especially unskilled readers—tend to forget items in longer lists. If some items are more important than others, list them in order of priority.
- **Tell readers what you want them to do.** State clearly the actions you want your readers to take. Use concrete nouns and an active voice.
 - *Say:* To avoid getting sick from food, follow these rules:
 - Wash hands after handling raw meat
 - Wash fresh fruits and vegetables before eating, etc.

- Don't say: Following safety precautions can reduce food borne disease transmission
- **Tell readers what they will learn from your material.** Answer the question: “What’s in it for me?” For example, in a booklet about how to quit smoking, tell readers right away that the information in the booklet could help them live longer, healthier lives.
- **Organize your messages so they are easy to act on and recall.**
 - **Present one complete idea on one page or two facing pages**—if readers have to turn the page in the middle of your first message they may forget your first message.
 - **Place the most important information at the beginning and end of your document.** State your main message first, expand on it in the middle of the document and repeat the main message at the end.
 - **Use headings and sub-headings to “chunk” text.** Use headings that express a complete idea, rather than just a word or two. For example: *Wear a seatbelt—it could save your life*, instead of *Seatbelts*. Questions often work well as sub-headings because readers can skim questions to see which ones apply to them or are of greatest interest. Also, questions can make your materials seem interactive.
 - **Leave more space above headings and subheadings than below them.** This gives a stronger visual link between the heading and the text that follows.

Do not make assumptions about people who read at a low level. Maintain an adult perspective throughout your document.

- **Ensure that the document is available in at least both official languages** (French and English). Make sure to include those whose first language is the language of the document in the review process.
- At the end of your document, **add a disclaimer** stating that this information is presented as a guideline and may not contain information about all aspects of care. See sample below:

IMPORTANT! PLEASE READ

Information provided by this pamphlet is for educational purposes. It is not intended to replace the advice or instruction of a professional healthcare practitioner, or to substitute for medical care. Contact a qualified healthcare practitioner if you have any questions concerning your care.

- **Provide contact telephone number(s) for patient follow-up.** Make sure staff members are fluent in the target language and are available during business hours (or around the clock if on a 24-hour hotline).

- **Include the name of the department that prepared the document and the date it was prepared.**

2.2 Language and writing style

- **Choose your words carefully.**
 - **Use words with one or two syllables when you can.** Limit sentences to ten words. Limit paragraphs to three to five sentences.
 - **Write as though you were talking to a friend.** A conversational style has a more natural tone and is easier to read and understand. Read your material aloud to see how it sounds.
 - *Say:* If you go near this chemical, you could get sick
 - *Not:* Exposure to this chemical could cause adverse health effects.
- **Use “you” throughout the material.** Addressing readers directly helps them understand what they are supposed to do.

Avoid complex words, medical jargon, abbreviations and acronyms. For example, rather than saying hypertension, say high blood pressure. When no alternatives are available, spell complex terms and abbreviations phonetically and give clear definitions. To find alternatives to complex words visit the toolkit section of the MUHC Health Education Collection at <http://infotheque.muhc.ca/toolkit.aspx>

- When using abbreviations and acronyms give them first and spell the word in parentheses. For example, *put your baby to sleep on his side or back to lower the risk of SIDS (sudden infant death syndrome).*
- **Be consistent with word use.** Choose the most familiar words and use them throughout. For example, Mad Cow Disease and Bovine Spongiform Encephalitis may be the same thing to you, but your reader may think they are two different diseases.
- **Use analogies familiar to your audience.**
 - *Say:* Feel for lumps the size of a pea.
 - *Not:* Feel for lumps about 5 to 6 mm in diameter.
- **Instead of statistics, use general words like most, many, or half.** If you must use stats, try putting them in parentheses.

Standard 3: The design and layout of MUHC patient materials facilitate learning

3.1 Use MUHC design templates or consult MUHC multimedia graphic designers for layout of publication

3.1.1 Single sheet, single folded sheet, and triple folded sheets are available from Printing. The template includes the MUHC logo and colours. You may add your own visuals.

3.1.2 **MUHC Multimedia graphic designers.** You can also hire an MUHC graphic designer to help with the layout of your patient education material. They charge \$35 an hour.

RVH: local 34248
MGH: local 43334
MCH: local 22368

3.1.3 **Available Funding Resources: MUHC Patient Education Network Committee.** Submissions are reviewed annually, generally in the spring. Call local 34396 for more information. Their guidelines are particularly useful for establishing a timeline and budget.

3.2 Text Appearance

- **Use font sizes between 11 and 14 points** (examples of font sizes: 8, 10, 11, 12, 14)
- **Justify text to the left**
- **Avoid words or sentences that only have CAPITAL LETTERS.** They are difficult to read.
- **Use Times New Roman or Arial font type.** Do not use Fancy or *script* lettering.
- **Use boldface or underlining to emphasize words or phrases.** Limit use of *italics*.
- **Use bolded subheadings to separate and highlight document sections**
- **Use dark letters on a light background**
- **Break up text with bullets.** For example: Children should get these shots by the age of two:
 - Measles/mumps/rubella
 - Polio

3.3 Visuals

If using colours, be aware that some people cannot tell red from green. However, effective products don't have to be in colour.

- **Use pictures and photos with concise captions.** Keep captions close to graphics.
- **Present one message per visual**
- **Number sequences of images and captions**
- **Create visuals that help to emphasize or explain the text**
- **Avoid visuals that decorate your materials or are very abstract.** Simple illustrations or line drawings often work best. Note that not all audiences understand cartoons or take them seriously.
- **When showing internal body parts, include the outside of the body to aid viewer understanding.** Avoid cutting off body parts.
- **Use images showing actions you want readers to take.** Avoid images that show what the reader should NOT do.
- **Avoid graphs and charts unless they really help readers to understand subject material.**
- **Balance the use of text, graphics, and clear “white” space.** In general:
 - Leave at least 0.5 to 1 inch of white around the margins of the page and between columns.
 - Limit the amount of text and visuals on the page.

Pretesting visuals with your target audience is important to make sure your message is clear and culturally acceptable.

Standard 4: MUHC patient learning materials are evaluated by patients/family members and health professionals before final approval and publication

4.1 Always test your materials on a sample group (six to ten persons) from your target audience. Evaluate feedback and revise your material as necessary. Testing during the writing process can help ensure your audience understands the message. [[Click here for “Feedback Procedure for Patient Education Material—step before final approval”](#)]

4.2 Have your interprofessional team review the final document before submission for approval.

Standard 5: MUHC patient learning materials are submitted to the Patient Education Network Committee for final approval prior to publication

5.1 Prior to printing your document sending it and a completed MUHC Patient Education Standards Checklist to the Patient Education Network Committee for approval. (Send documents to Rita Riccio by e-mail:

rita.riccio@muhc.mcgill.ca, by fax: 514.843.1470, or by mail: RVH, 687 Pine Avenue, room E4.02.). As part of your submission, you will be asked to fill out the MUHC Patient Education Standards Checklist. A letter of approval will be sent to the department that produced the document.

5.2 Once approved, the Committee will send a copy to the librarian of the MUHC Health Information Collection.

5.3 Print a small number of the approved document and submit them to patients for their feedback. Once final changes are made, print a larger number

5.4 Send two final copies of your document to each of the appropriate MUHC Patient Resource Centres, locations below. A master list of all MUHC Patient Education material will be compiled and kept updated on the MUHC Intranet.

Montreal General Hospital Patient Resource Centre

Room E6-157

Tel: (514) 934-1934, ext. 43056

E-mail: prc.mgh@muhc.mcgill.ca

Royal Victoria Hospital Patient Resource Centre

Room H4.01

Tel (514) 934-1934, ext. 35290

E-mail: rvh.library@muhc.mcgill.ca

[Montreal Chest Institute
Patient Resource Centre](#)

9th Floor
Tel: (514)934-1934, ext. 32593
E-mail: ibtisam.mahmoud@muhc.mcgill.ca

[Montreal Neurological Institute and Hospital
Neuro-Patient Resource Centre](#)

Room 354
Tel: (514) 398-5358
E-mail: infoneuro@muhc.mcgill.ca

[Montreal Children's Hospital
Family Resource Library](#)

Room C-542
Tel: (514) 934-1934, ext. 22383
E-mail: bilblio@muhc.mcgill.ca

Standard 6: MUHC patient learning materials are reviewed every five years by the department that originally produced the document unless there is a change in practice or evidence

6.1 Mark document to be reviewed in five years from the time of publication.

Documents will be reviewed for:

- Changes in evidence/clinical practice
- Changes in contact numbers/persons
- Feedback regarding the effectiveness of the document:
 - Do patients appear to be confused by the information? Are they using the document?
 - Are patients following the information?
 - Is there a change in the number of cancellations or complications?
 - Have there been changes in the procedure, the time or place of events, the contact people?
 - Are there changes in the pre or post instructions?
 - Are there new drugs?
 - Are there changes in equipment that the patient needs to use?

6.2 For web-based information, changes in clinical practice or contact numbers should be made by the department as soon as possible. Changes can be made by contacting Rita Riccio by e-mail: rita.riccio@muhc.mcgill.ca, by fax: 514.843.1470, or by mail: RVH, 687 Pine Avenue, room E4.02.

Checklist for Planning Your Educational Project

Identify your target patient population

Create an interprofessional MUHC/community healthcare team. Include a patient representative.

Identify the information needs of your patient population: those identified by the patient themselves (focus groups, patient interviews), those identified by health professionals.

Identify learning objectives.

Prioritize your learning objectives and determine how they will be met.

- **Discussion with health professional(s)**
- **Written information (pamphlet or copy of health professionals' notes)**
- **Audiotape**
- **Videotape**
- **Hands-on demonstration**
- **Poster, signage**
- **Follow-up telephone call**
- **Computer-assisted/web-based learning**

Checklist for Planning Your Educational Project

An example

Identify your target patient population

Patients with new indwelling central venous catheters

Create an interprofessional MUHC/community healthcare team. Include a patient representative.

Veteran patients, representative nurses caring for patients with indwelling central venous catheters in-hospital (adult and children) and in the community, MD. Depending on what the line is being used for, you might include a clinical dietician or pharmacist in your group.

Identify the information needs of your patient population:

- *Patients: Who to contact if there is a problem. How to do the bandage? How to take care of it? Can I bathe with it?*
- *Family: who to contact if there is a problem plus daily care and how to get medication;*
- *Health professionals: above, plus importance of recognizing signs of infection and how to respond.*

Identify learning objectives:

That patient/family member upon discharge from hospital will:

1. *Demonstrate care of PICC line and understand limitations to daily life with the catheter,*
2. *Recognize signs and symptoms of infection and when to seek medical attention,*
3. *Know who to contact in the community/hospital if there is a problem.*

Prioritize information needs and determine how these needs will be met.

One-on-one discussion with doctor regarding importance of care and responding to infection, detailed teaching done by nurse includes who to contact and signs of infection. Patient or family member to repeat demonstration regarding care of PICC line. Clinical dietician or pharmacist will give specific information regarding nutrition/medications.

Discussion reinforced by:

- *written information (pamphlet or copy of health professionals notes) includes who to contact, how to do the procedure and signs of infection*
- *Audiotape, digital, videotape/DVD recording – possible that patient could make a tape of the demonstration/discussion*
- *hands-on demonstration*
- *poster, signage*
- *follow-up telephone call by nurse who did the teaching or CLSC RN*
- *Computer-assisted or web-based learning*

Learning about the Needs of Your Target Audience

An example

In order to determine the learning needs of a target population you might consider interviewing patients and/or family/caregivers who have had experience with the condition, test, drug, procedure, etc. Ask them what information they would have found helpful.

Below are questions you could include in the interview. Once you start to get repetitive answers, you have interviewed enough patients. This will probably be approximately 6-10. Record the information so that you are able to see trends.

Sample Questions to determine the Needs of the Target Population

1. a) General Information
b) Gender
c) Age
d) Cultural Background
e) First language
2. What kind of information would have been most helpful to you in understanding how to_____?

(Offer some suggestions if the individual or group has difficulty answering this)

For example:

Medical information about the illness, procedure

Information about daily living: diet, exercise, activity level, etc.

Teaching about how to take medication, about tests (blood tests, x-ray, etc.)

Information about how you feel, how you cope, how the illness has changed your life

Information about health places in the community

Information about how to get around the hospital

Help to fill out forms

3. How do you learn best about your health?
Do you like to be alone with a teacher?
Do you like to be learning in a group with other patients?
Do you like to read information?
Do you like to watch a video?
Do you like to have someone explain it to you verbally?
Do you like to use a computer?

4. If you have a skill to learn, (mention a skill needed for the patients in the unit or with the specific condition), do you prefer to

- Practice alone
- Practice in front of a healthcare worker

Adapted from - Health Literacy Project, Phase 1: Needs Assessment of the Health Education and Information Needs of Hard to Reach Patients, The Centre for Literacy, 2001

The Flesch-Kincaid Grade Level Index

What is Flesch-Kincaid?

Flesch-Kincaid is a simple tool you can use in Microsoft Word to assess the readability of a portion of text **in English**. The tool assesses two aspects of the text, reading ease and grade level, which are given corresponding scores. The Grade Level Index test is automatically calculated on your Word document. After Word completes a grammar check (under tools in the tool bar), readability statistics are displayed.

What do the numbers mean?

Readability is based on the average number of syllables per word and the average number of words per sentence. You will be given two numbers, one for Reading Ease and one for Grade Level. For example, the previous paragraph is given the following score, which is too high:

Flesch Reading Ease **50.3**

Flesch Kincaid Grade Level **10.3**

Reading Ease: the higher the score, the easier the text is to read. **Target score is above 60**, which is considered easily read and understood by students at the Grade 8 to Grade 9 grade level.

Grade Level: this number corresponds to grade level, i.e., the number of years of schooling required to be able to read the text. **Remember to maintain a reading level between Grade 6 and Grade 8.**

Tip: It is advisable to assess smaller chunks of your document separately, as well as the document as a whole. This will allow you to target “problem” areas.

How do I use the tool?

The Flesch-Kincaid tool is built into Word and is very easy to use:

1. Open your document in word.
2. Highlight the portion of text you would like to assess.
3. Run a spell check: from the **Tools** menu select **Spelling and grammar**. Click on Options. Under **Grammar** make sure that the **Show readability statistics** box is checked. Click **OK**.
4. When the spell check is complete, you will be asked if you would like Word to continue checking the rest of the document. Click **No**. You will then be shown your readability statistics for that section of text.

This test is automatically calculated on your Microsoft Word documents. After Microsoft Word completes a grammar check (under tools in the tool bar), readability statistics are displayed. This index computes readability based on the average number of syllables per word and the average number of words per sentence. The score in this case indicates a grade-school level. For example, a score of 8.0 means that an eighth grader would

understand the document. Standard writing approximately equates to the seventh- to eighth-grade level. You can check the literacy level by document/page or paragraph.

With permission from How to Create Effective Written Patient Education Materials adapted by the JGH Patient Education Network (PEN) Working Group from the MUHC Standards for Writing Effective Patient Education Materials 2008

The MUHC and Health Literacy – A brief summary

A Health Literacy study conducted at the MUHC from 1999-2000 found that patients, family members and caregivers have different health education needs (Centre for Literacy, 2001). The study found that patients want more information about their illness, about the tests and medications they are taking, and about daily living with their illness, including diet, exercise, and activity level. Similar to the study outcome of the patient, family members and caregivers want information about the illness, tests, medications, and daily living with the illness. This group is also interested in knowing about the patient's feelings, coping with the illness, impact on the family life and health resources in the community.

In 2003, the International Adult Literacy and Skills Survey assessed the literacy of 23,000 Canadians. It found that 54 per cent of Quebecers scored less than level 3, which is the minimum literacy skill level required for today's workplace. In a MUHC literacy study 60 per cent of patients said the written patient education documents that were given were not useful because of language barrier, or the patient could not read. The remaining 40 per cent found the documents very useful. The study also found that family members and caregivers act as interpreters, readers and mediators when there are barriers to communication.

Much work is needed to identify ways of reaching people who, by virtue of language or anxiety, are considered "hard-to-reach." The Health Literacy Study (2001) also asked patients who were identified as being "hard-to-reach" about their preferred ways to learn (patients could choose more than one option hence total is greater than 100 per cent). They responded as follows:

Verbal explanations from a healthcare worker	94 %
Learning one-to-one with a teacher (e.g. nurse, doctor, or other healthcare worker)	85 %
Watching videos	70 %
Reading	66 %
Learning in a group with other patients	65 %

For a more detailed summary and the original report consult:

<http://www.centreforliteracy.qc.ca/health/healthlt.htm>

Feedback Procedure for Patient Education Material: The step before final approval

To evaluate your educational material, get the opinion of between 6 and 10 members of your target population. Use a version of the product that is as close to the final version as possible including graphic elements

Whether you form a focus group or hand out a questionnaire, first ask if anything is unclear. In this way, if something about the document is bothering your readers, they can express their problem right away.

Your goal should be to find out if your patients can:

❑ **Understand the information**

This is both about words and ideas. For example, do readers understand the term *patient-controlled analgesia*? Ask your group if they understand this expression? Or, to ensure they understand a concept like *bandage check*, ask who does the checking and what are they checking for? The words are easy but the idea may not be clear.

❑ **Find the information they are looking for:**

Ask your patients questions from the document. This is not a memory test. You want them to be able to search the document and easily find the answers to your questions: For example, *When can you take a shower after your operation? When can you play golf?*

❑ **Act on instructions:**

For example, if the brochure says “If you get a fever, call your doctor.” Ask the participants what is considered a fever? Which doctor should they call? Is the phone number there?

Understand the illustrations/pictures:

Ask the patients to describe the pictures and ask them if they find them helpful.

If you ask these kinds of questions it will quickly become clear where and what you need to clarify.

Keep in mind that people often do not realize that they do not understand something or do not like to admit it when they do not understand something. You need to probe.

Finally, cut up your document into sections and ask your patients to put it together like a puzzle. How do THEY think it should be organized? You will be amazed!

Pretesting visuals with your target audience is important to make sure your message is clear and culturally acceptable.

Example Feedback Questionnaire

We are in the final stages of developing a booklet/information sheet on _____

We would appreciate your feedback.

What is the document about? _____

Is the information helpful? _____ Yes _____ No

1. Please read the booklet/sheet and circle any words or ideas you do not understand.
2. Please look in the booklet/sheet and tell us if you can easily find this information (This is not a memory test):
3. Please look in the booklet/sheet and tell us if you can easily find these instructions:
4. Is there other information that you think is important that we have not included?
5. Are the pictures helpful? Are any pictures missing?
6. Would you make any changes to how the information is organized?

Thank you for your help.

Adapted from: InfoNeuro: Patient Evaluation of Learning Material, 2006

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