Implementation Guide for the Canadian Adaptation of The Newest Vital Sign™

Health literacy – the ability to read, understand and act upon health information – is now known to be vital to proper patient care and positive health outcomes. While Canadians have higher levels of health literacy than Americans, 60% of adults in Canada lack the capacity to obtain, understand and act upon health information and services in order to make appropriate health decisions on their own. 1

The Canadian adaptation of the Newest Vital Sign is designed to assess a patient’s health literacy skills quickly and simply. It can be administered in only 3 minutes, and is available in English and French. The patient is given a specially designed Nutrition Facts Table for ice cream to review, and is asked a series of questions about it. Based on the number of correct answers, health care providers can assess the patient’s health literacy level and adjust the way they communicate in order to ensure that the patient understands.

There are many ways to integrate The Newest Vital Sign (NVS) into a private practice or clinical setting in order to improve communication with patients. Improved communication can help to increase your patients’ ability to understand and act upon the information that you provide, which will ultimately improve patient satisfaction and health outcomes.

How to Use Canadian Adaptation of The Newest Vital Sign

1. Who should administer The Newest Vital Sign and when.
   - A nurse (or other trained member of the clinic staff) is the preferred administrator of The Newest Vital Sign.
   - Administer while other vital signs are being taken.

2. Ask the patient to participate.
   A useful way to ask the patient is to provide an explanation similar to this:
   “We are asking our patients to help us learn how well patients can understand the medical information that doctors give them. Would you be willing to help us by looking at some health information and then answering a few questions about that information? Your answers will help our doctors to learn how to provide medical information in ways that patients will understand. It will only take about 3 minutes.”

3. Hand the Nutrition Facts Table to the patient.
   The patient can and should retain the Nutrition Facts Table (NFT) throughout the administration of The Newest Vital Sign. The patient can refer to the NFT as often as desired.

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4. Start asking the 6 questions, one by one, giving the patient as much time as needed to refer to the Nutrition Facts Table and answer the questions.
   - There is no maximum time allowed to answer the questions. The average time needed to complete all 6 questions is approximately 3 minutes. However, if a patient is still struggling with the first or second question after 2 or 3 minutes, the likelihood is that the patient has limited literacy, and you can stop the assessment.
   - **Ask the questions in order.** Continue even if the patient gets the first few questions wrong. However, if question 5 is answered incorrectly, do not ask question 6.
   - If the patient gets the first four correct, you can stop asking the questions. With four correct responses, the patient almost certainly has adequate literacy.
   - **Do not prompt patients who are unable to answer a question.** Prompting may jeopardize the accuracy of the test. Just say, “Well then, let’s go on to the next question.”
   - **Do not show the score sheet to patients.** If they ask to see it, tell them that “I can’t show it to you, because it contains the answers, and showing you the answers defeats the whole purpose of asking you the questions.”
   - **Do not tell patients if they have answered correctly or incorrectly.** If patients ask, say something like: “I can’t show you the answers until you are finished, but for now, you are doing fine. Now let’s go on to the next question.”

5. **Score by giving 1 point for each correct answer (maximum 6 points).**
   - **Score of 0-1** suggests a high likelihood (50% or more) of limited literacy.
   - **Score of 2-3** indicates the possibility of limited literacy.
   - **Score of 4-6** almost always indicates adequate literacy.

   Record the NVS score in the patient’s medical record, preferably near the other vital sign measures.

   **Best Practices for Implementation: Summary**

   - A nurse (or other trained member of the clinic staff) is the preferred administrator of The Newest Vital Sign.
   - Administer the NVS while the patient’s other vital signs are being taken.
   - Record the NVS score in the patient’s chart, preferably near the other vital sign measures.
   - Tailor communication in order to ensure that the patient understands.
Why Does an Ice Cream Label Work as a Predictor of the Ability to Understand Food Labels?

A patient’s ability to read and analyze any kind of Nutrition Facts Table requires the same analytical and conceptual skills that are required to understand and follow a provider’s medical instructions. These skills, which are known as health literacy, are defined as the understanding and application of words (prose), numbers (numeracy) and forms (documents).

The use of an ice cream label is especially relevant because research in the American Journal of Preventive Medicine 2 has shown that poor comprehension of food labels correlates highly with low-level literacy and numeracy skills. However, the study found that even patients with better reading skills may have difficulties interpreting the labels.

Whether reading a food label or following medical instructions, patients need to:

- Remember numbers and make mathematical calculations.
- Identify and be mindful of different ingredients that could be potentially harmful to them.
- Make decisions concerning their actions based on the given information.

PROSE LITERACY:

Clinical example: The patient has scheduled some blood tests and is instructed, in writing, to fast during the night before the tests. The skill required to follow this instruction is Prose Literacy.

Ice cream label example: The patient needs this skill to read the label and determine whether he/she can eat the ice cream if he/she is allergic to peanuts.

NUMERACY:

Clinical example: A patient is given a prescription for a new medication that must be taken at a certain dosage twice per day. The skill required to take the medication properly is Numeracy.

Ice cream label example: The patient needs this skill to calculate the number of calories in a serving of ice cream.

DOCUMENT LITERACY:

Clinical example: The patient is told to buy a glucose meter, and to use it 30 minutes before each meal and before going to bed. If the number is higher than 200, he/she should call the office. The skill required to follow this instruction is Document Literacy.

Ice cream label example: The patient needs this skill to identify the amount of saturated fat in a serving of ice cream and to understand how it will affect his/her daily diet if he/she doesn’t eat it.

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Nutrition Facts
Serving Size 1/2 cup (125 mL)
Servings Per Container 4

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>% Daily Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories 250</td>
<td></td>
</tr>
<tr>
<td>Fat 13 g</td>
<td>20 %</td>
</tr>
<tr>
<td>Saturated 9.0 g</td>
<td>45 %</td>
</tr>
<tr>
<td>+ Trans 0 g</td>
<td></td>
</tr>
<tr>
<td>Cholesterol 30 mg</td>
<td></td>
</tr>
<tr>
<td>Sodium 55 mg</td>
<td>2 %</td>
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<tr>
<td>Carbohydrate 30 g</td>
<td>10 %</td>
</tr>
<tr>
<td>Fibre 0 g</td>
<td>0 %</td>
</tr>
<tr>
<td>Sugars 23 g</td>
<td></td>
</tr>
<tr>
<td>Protein 4 g</td>
<td></td>
</tr>
<tr>
<td>Vitamin A 10 %</td>
<td></td>
</tr>
<tr>
<td>Vitamin C 0 %</td>
<td></td>
</tr>
<tr>
<td>Calcium 15 %</td>
<td></td>
</tr>
<tr>
<td>Iron 4 %</td>
<td></td>
</tr>
</tbody>
</table>

*Percentage Daily Values are based on a 2,000 Calorie diet. Your daily values may be higher or lower depending on your Calorie needs.

INGREDIENTS: Cream, skim milk, liquid sugar, water, egg yolks, brown sugar, milkfat, peanut oil, sugar, butter, salt, carrageenan, vanilla extract
### Score Sheet for The Newest Vital Sign

#### Questions and Answers

**READ TO THE PARTICIPANT:**

This information is on the back of a 500-ml container of ice cream.

1. If you eat the entire container, how many calories will you eat?
   - **Answer:** 1,000 is the only correct answer

2. If you are allowed to eat 60 grams of carbohydrates as a snack, how much ice cream could you have?
   - **Answer:** Any of the following is correct: 250 ml or 1 cup (or any amount up to 250 ml or 1 cup), half the container. Note: If the participant answers “two servings”, ask “How much ice cream would that be if you were to measure it into a bowl?”

3. Your doctor advises you to reduce the amount of saturated fat in your diet. You usually have 42 g of saturated fat each day, which includes one serving of ice cream. If you stop eating ice cream, how many grams of saturated fat would you be eating each day?
   - **Answer:** 33 is the only correct answer

4. If you usually eat 2,500 calories in a day, what percentage of your daily value of calories will you be eating if you eat one serving of ice cream?
   - **Answer:** 10% is the only correct answer

**READ TO THE PARTICIPANT:**

Pretend that you are allergic to the following substances: penicillin, peanuts, latex gloves and bee stings.

5. Is it safe for you to eat this ice cream?
   - **Answer:** No

6. (Ask only if the participant responds “No” to question 5) Why not?
   - **Answer:** Because it has peanut oil and/or peanuts.

Number of correct answers: