Chunk and Chew: Nurses’ Role in Helping Patients to Understand and Integrate Health Information

With

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Objectives

At the end of this workshop participants will be able to:

- apply HL skills in a “universal precautions” approach
- demonstrate the ‘teach back’ and ‘chunk and check’ method
- effectively integrate written and other education media according to HL
- have an awareness of available HL resources
Overview of Workshop

• Background
  – What it is
  – Why is it important
  – Universal precautions approach

• Spoken communication technique
  – Teach-back, chunk and check

• Written communication considerations
  – Plain language

• Effective education delivery: right time, right place, right person
  – Digital resources, skills of HCP
What is Health Literacy?

The degree to which an individual has the capacity to obtain, communicate, process and understand basic health information and services to make appropriate health decisions \{according to their own values, context, and beliefs\}.

Patient Protection and Affordable Care Act, 2010 – US Law, Title V

https://www.cdc.gov/healthliteracy/learn/index.html
HL Is Important…

More Engagement
More Empowerment/Advocacy
EB Decision-making
Cost Reduction

Poor Self-Care
Less Advocacy
Increased healthcare use
Poor overall health

Red Flags: Recognizing LHL

- Family members as surrogate readers
- Without completed forms
- Frequently miss appointments
- Ignore and/or misunderstand advice, instructions
- Claim vision problems to avoid reading
- Avoid referring to written information
- Low/lack of adherence with Rx, lifestyle mod etc.
Example of HL Screening Tool: The Newest Vital Sign™

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>2 %</td>
</tr>
<tr>
<td>Sodium 55 mg</td>
<td>2 %</td>
</tr>
<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 SUBJECT:
This information is on the back of a container of a pint 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: 1 cup (or any amount up to 1 cup), half the container. Note: If patient 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 consuming 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?
   Answer: 10% is the only correct answer

READ TO SUBJECT:
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 patient responds “no” to question 5): Why not?
   Answer: Because it has peanut oil.

Number of correct answers:

Interpretation
Score of 0-1 suggests 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.
Because limited health literacy is common and is hard to recognize, we recommend using health literacy universal precautions...all patient and caregivers may have difficulty comprehending health information and should communicate in ways that anyone can understand.

Simplify communication, to reduce error

Make health systems, environment easy to navigate

Support patients’ efforts to improve health
The Progression of HL

90’s to approx. 2010
- Definition focused on patient
- How to identify
- Assessment of approaches in different contexts

2010 – 2015
- Context as integral variable, HCP skills focus
- Skill requirements
- Implementation/incorporation in practice

2015 - present
- HCP skills require resources, supports
- Institutional needs/gaps
- Responsibilities/constraints
- Impact/approaches
AHA SCIENTIFIC STATEMENT

Health Literacy and Cardiovascular Disease: Fundamental Relevance to Primary and Secondary Prevention
A Scientific Statement From the American Heart Association

ABSTRACT: Health literacy is the degree to which individuals are able to access and process basic health information and services and thereby participate in health-related decisions. Limited health literacy is highly prevalent in the United States and is strongly associated with patient morbidity, mortality, healthcare use, and costs. The objectives of this American Heart Association scientific statement are (1) to summarize the relevance of health literacy to cardiovascular health; (2) to present the adverse associations of health literacy with cardiovascular risk factors, conditions, and treatments; (3) to suggest strategies that address barriers imposed by limited health literacy on the management and prevention.

Summary: AHA assessment article

• Expresses essential nature of HL for health and outcomes
• Summary of contemporary sciences related to CVD and HL with the goal enhancing knowledge/awareness
  – Addresses how limited HL may contribute to increased risk for a range of CV risk factors and conditions
• Health literate organizations: responsibility belongs to all
Teach-Back Skill

SPOKEN COMMUNICATION
Tips for Talking – by Nova Scotia Health Authority
YouTube: https://youtu.be/CpHnIZ_HvcA
Published Oct 2, 2015 2 min 32 sec
Elements of (Successful) Exchange

Cultural Awareness

Expect/Engage Inquiry

Plain Language

Teach- Back
Teach-Back

• An approach to patient education that confirms that critical information has been received and understood
• Involves asking the patient/learner to explain back what has been covered using their own words
• NOT a test or quiz
  – Should be understood to be an assessment of the HCP’s performance rather than the patient’s
• Shown to improve communication and patient health outcomes compared to ‘typical’ teaching
Teach-Back Framework

• At the end of the meeting/conversation, you should be confident that you have met these 3 objectives (the ‘Safe to Ask’)
  – Does the patient (& caregiver) know the health problem?
  – Does the patient (& caregiver) understand/demonstrate what needs to be done?
  – Does the patient (& caregiver) understand why the care must be done?
Teach-Back Exercise

• In pairs, one person will be the instructor, the other the learner

• Instructor:
  – Review the information on the provided handout
  – Present the information to the learner in simple terms
  – Prompt the learner to repeat back the information in his/her own words
  – Re-review any information that is missed or incorrectly presented by the learner
Teach-Back Exercise (5 minutes)

Work in pairs, with one person designated “teacher” and one designated “learner”.

For the Teacher:

You are teaching the learner – for the purpose of this exercise, a patient or caregiver – on the indication, mechanism of action, benefits, and adverse effects of the medication **ivabradine**.

Review the information below. **Translate the information to patient-friendly language** and present it to the “patient/caregiver” using the teach-back method.

Try to use teach-back in a way that is less likely to be perceived as a “challenge” or “test” by the learner. Be sure to translate information into “patient-friendly” terms.

**Ivabradine in Heart Failure**

In patients with heart failure with reduced ejection fraction, an elevated resting heart rate is associated with increased hospitalizations and death.

Beta-blockers lower heart rate, but are often poorly tolerated due to fatigue or hypotension. Therefore additional rate slowing effects may be useful in this population. Ivabradine is a rate-slowing agent which causes a dose-dependent reduction in heart rate without causing hypotension or fatigue.

Ivabradine has been shown to reduce hospitalizations and death from heart failure patients with a low ejection fraction and resting heart rate over 70 beats per minute.

Adverse effects of ivabradine include bradycardia, atrial fibrillation, and visual changes including rings/spots of light or excessive brightness on exposure to brighter lighting conditions, and blurred vision.
Discussion

Teacher:
- Did the conversation feel natural?
- Did you “chunk” the information?

Learner:
- Did you feel like you were being quizzed or tested?
- Was repeating back the information helpful for learning?

General:
- How do you see integrating this into practice (barriers, facilitators?)
Teach back in a cardiology practice. “Daily Weight Monitoring”.
https://youtu.be/e5jxeZWM3tw
Making Education Digestible: Chunk and Check


• Break down the information into “spoonfuls”
• In-between each set of spoonfuls, check in with Teach-Back
• Consider using ‘spoken pictures’ that seem to resonate with patients to enhance recall
How to Give Subcutaneous LMWH Injection

<table>
<thead>
<tr>
<th>Chunk</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why:</td>
<td>Ask the client about his/her understanding of reason for the use of medication. If information previously given by care provider appears incorrect, explain and check knowledge again.</td>
</tr>
</tbody>
</table>
### Chunk and Check (Example)

<table>
<thead>
<tr>
<th>Chunk</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What</strong> supplies: Show and Tell Medication (it is usually pre mixed in a retractable needle syringe)</td>
<td>Tell me what supplies you will need to give yourself the injection</td>
</tr>
<tr>
<td>Alcohol swab</td>
<td></td>
</tr>
<tr>
<td>Container for disposing syringes with lid</td>
<td></td>
</tr>
<tr>
<td>Label container BIOHAZARD-SHARPS</td>
<td></td>
</tr>
</tbody>
</table>
### Chunk and Check (Example)

<table>
<thead>
<tr>
<th>Chunk</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How</strong></td>
<td>I would like to ask you to show me what you will need to do before giving yourself the injection.</td>
</tr>
<tr>
<td>Wash hands</td>
<td>Show me how to clean the needle site.</td>
</tr>
<tr>
<td>Gather supplies</td>
<td></td>
</tr>
<tr>
<td>Select spot in the abdomen (use picture to show sites)</td>
<td></td>
</tr>
<tr>
<td>Check site for sores, swelling, bruises, hard areas. Do not use these spots (Pause and check)</td>
<td></td>
</tr>
<tr>
<td>Clean site with alcohol using circular motion starting from the centre out. Allow alcohol to dry (Pause and check)</td>
<td></td>
</tr>
<tr>
<td>Chunk</td>
<td>Check</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Clean site with alcohol using circular motion starting from the centre out.</td>
<td>Show me in your abdomen, how to clean the needle site.</td>
</tr>
<tr>
<td>Allow alcohol to dry (Pause and check)</td>
<td>After cleaning the site, show me what you will do next</td>
</tr>
<tr>
<td>Pull cap off the syringe</td>
<td></td>
</tr>
<tr>
<td>Hold the needle like a dart.</td>
<td></td>
</tr>
<tr>
<td>Use other hand and gently grab skin to form a skin fold about an inch (Pause and check)</td>
<td></td>
</tr>
</tbody>
</table>
## Chunk and Check (Example)

<table>
<thead>
<tr>
<th>Chunk</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insert needle all the way into the skin fold at a 90-degree angle.</td>
<td>Remembering how I gave your first injection, pretend that you are giving yourself the injection and show me how you will insert the needle and how to take the needle out (may use the used syringe with needle retracted)</td>
</tr>
<tr>
<td>While holding the skin, slowly push plunger all the way down</td>
<td>Repeat procedure if the client is not able to show proper sequence/method.</td>
</tr>
<tr>
<td>Pull the syringe / needle out and let go of the tissue at the same time. Pause and check)</td>
<td></td>
</tr>
</tbody>
</table>
### Chunk and Check (Example)

<table>
<thead>
<tr>
<th>Chunk</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discard syringe in the container and close lid. Put container in a</td>
<td>Ask client what he/she will do with the used syringe and correct if</td>
</tr>
<tr>
<td>safe area away from children until next injection. (Pause and Check)</td>
<td>necessary.</td>
</tr>
<tr>
<td>Discard labelled and covered container in the garbage or return to</td>
<td>Ask client how and where to discard used syringe container when full</td>
</tr>
<tr>
<td>pharmacy</td>
<td>or no longer needed.</td>
</tr>
<tr>
<td>Chunk</td>
<td>Check</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Discuss frequency and duration of treatment (may use calendar-write start date and end date.)</td>
<td>Tell me how often you will need to give yourself an injection and for how long</td>
</tr>
</tbody>
</table>

Provide the client with written instruction or education pamphlet used by the institution.

Provide client with phone number to call for any questions regarding the medication and giving self-injection.

If available, client can also be provided with other learning materials, however, be careful not to overwhelm your client with information.

Schedule return appointment or phone call to assess client’s progress in giving self-injection.
Looking for Plain Language

WRITTEN COMMUNICATION
Easy HL for HCP = Well Resourced, Well Organized

• What did you notice about how the HCP in the Cardiology teach-back video used the written material?

• What steps/practices/resources need to be in place to do that as efficiently, easily as in the video?
10 Attributes of HL Organization

https://www.ncbi.nlm.nih.gov/books/NBK201212/?otool=icaumlib

“Style is a construct: what the learner brings is as much a part of the context as the features of the experience itself”

• How do you most like to learn? When you need to learn quickly, what preference do you have for how to get information?

• VARK (visual, aural, read/write, kinesthetic) Questionnaire: http://vark-learn.com/the-vark-questionnaire/

Components of Plain Language

Words  Design

Format  Accessibility

Impact
Plain Language Infographic

https://www.decoda.ca/read-all-about-lit/health-literacy-month/attachment/health-literacy-infographic/

Accessed: April 10, 2019
More Plain Language Considerations

• Materials need to support and reinforce education of HCPs in team

• Accessibility:
  – Materials in translation
  – Accommodation of visual/audio impairment etc.

• Supporting evidence meets critical evaluation: provenance, authority etc.

• Supporting documentation (author, source etc) for update
Evaluating Readability


• Plain Language Materials & Resources: https://www.plainlanguage.gov/

• Plain Language Medical Dictionary: https://www.lib.umich.edu/plain-language-dictionary
Cardiology Discharge Checklist: Does This Tool Meet the PL Criteria?

Part B: Cardiology Discharge Checklist for Patients
For patients admitted to Cardiology being discharged from hospital

Why this is important

Many heart medications must be taken without missing any doses. In some cases it may be very dangerous to miss taking a medication for even a day. To make sure you can get your medications right away after leaving the hospital, you need to think about where you can have your prescription filled and how you can get your supply.

The following flowchart will help make sure that you can get your medications right away when you are discharged from hospital:

- Prior to Discharge
  - Your prescription will be faxed to your pharmacy or provided to you to bring to your pharmacy
  - Your nurse or hospital pharmacist will teach you about your new medications
  - You will get a copy of the medication information sheets for your heart medications

- After you are discharged, will you be returning to a remote location (a place far away from a major town or city)?
  - No
  - Prior to Discharge
    - Before leaving the hospital, decide with your nurse or hospital pharmacist where you will fill your prescription
    - You may have to fill your prescription at a different pharmacy than usual before you return home. If so, you can ask the pharmacy that fills your prescription to transfer the remaining refills on your prescription to your usual pharmacy. This will let you get your medications at home from your usual pharmacy later
    - Your nurse or hospital pharmacist will teach you about your new medications
    - You will get a copy of the medication information sheets for your heart medications

  - Yes
  - After Discharge
    - Go to the pharmacy that filled your prescription to pick up your medications before going home or wherever you may be staying
    - Ask the pharmacist to clarify any questions you may have
    - Take your medications as prescribed
    - DO NOT STOP TAKING your medications without the direction of your healthcare provider

- Yes
Part B: Cardiology Discharge Checklist for Patients

For patients admitted to Cardiology being discharged from hospital

Why this is important

Many heart medications must be taken without missing any doses. In some cases it may be very dangerous to miss taking a medication for even a day. To make sure you can get your medications right away after leaving the hospital, you need to think about where you can have your prescription filled and how you can get your supply.

The following flowchart will help make sure that you can get your medications right away when you are discharged from hospital:

Wordy; could be briefer, more concise; some sentence content redundant with leading sentence to flowchart
Does This Tool Meet the PL Criteria? Part 2

- Colour use – ad hoc choice of colour (actually contradicts intuitive colour-association of yes/no)
- Photocopier/printing reproduction is sub-optimal
- Beginning question is too complicated for what is actually being asked (Where do you live?)
- Discharge is lingo
- Wordy
- Too many words with 3 or more syllables

Prior to Discharge
- Your prescription will be faxed to your pharmacy or provided to you to bring to your pharmacy
- Your nurse or hospital pharmacist will teach you about your new medications
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After you are discharged, will you be returning to a remote location (a place far away from a major town or city)?

No

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- Before leaving the hospital, decide with your nurse or hospital pharmacist where you will fill your prescription
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- Your nurse or hospital pharmacist will teach you about your new medications
- You will get a copy of the medication information sheets for your heart medications

Yes

After Discharge
- Go to the pharmacy that filled your prescription to pick up your medications before going home or wherever you may be staying
- Ask the pharmacist to clarify any questions you may have
- Take your medications as prescribed
- DO NOT STOP TAKING your medications without the direction of your healthcare provider
Does This Tool Meet the PL Criteria?  
Part 3

If returning to a remote area and/or your usual pharmacy is unable to supply your medications immediately:
• Fill at least a one week supply of all discharge medications at a pharmacy able to fill the prescription on the day you are discharged
• If you want, the pharmacy can be asked to transfer the remaining fills on your prescription to your usual pharmacy once the initial supply is filled

Ways to Get Medications Immediately

• Not all community pharmacies have all medications – sometimes you might have to go to a different pharmacy than normal to get all your medications right away
• It can be helpful to have the hospital fax your prescription to your pharmacy before you leave the hospital, so you can be sure that they have all the medications you need
• If your usual pharmacy does not have all of the medications you need right away, you can go to a different pharmacy that does. Your healthcare provider in hospital or the pharmacist at your community pharmacy may be able to help find another pharmacy for you so you can get your medications right away
• You can ask your usual pharmacy to try to get the medications that you need so you can get refills there in the future

• Too many boxes demanding equal attention - distracting
• Information that is providing/addressing immediacy should been given priority of placement (not on second page)
• Redundant - Some of this information is elsewhere
• Wordy
• Too many words with 3 or more syllables
Planning for Your Heart Medication: Important Information

Heart medications must be taken without missing any doses. If you miss even one day’s dose, it may cause dangerous heart problems like a heart attack. You need to plan how to get your heart drugs before you leave hospital so they are ready right after you leave.

Before you leave the hospital
• Your nurse or pharmacist will teach you about your heart drugs
• You will have a list of the heart drugs that you are to take

Steps to Get Heart Drugs Immediately
• Your usual drugstore may not have the drugs you need so you may need to go to another one
• If you don’t know what drugstore to use, ask your hospital nurse, doctor, or pharmacist
• For refills, ask your usual drugstore to order them before you need them so they will be ready

Where you live affects how easily you can get your heart medication. Use the graphic below for the steps you may need to take.
Does This Tool Meet the PL Criteria?
Revision Part 2

**I LIVE**

In a large town or city in Manitoba

**BEFORE I LEAVE**

- The hospital will send my drugstore my medication list

**AFTER I LEAVE**

- I pick up my heart drugs I ordered from the drugstore before I go home
- I ask the pharmacist any questions I have about my heart drugs
- I take my heart drugs as prescribed
- I don’t stop taking my heart drugs unless I ask my doctor

**Outside of town or city in Manitoba, or in another province**

- I will decide with my nurse or hospital pharmacist what pharmacy I will use so I can order them
- If my usual pharmacy cannot supply my heart drugs immediately, I will order from another drugstore and get at least 1 week’s supply
- If I need to order my heart drugs from a drugstore I don’t commonly use, I can ask that drugstore to send my refills for my drugs to my usual drugstore
We welcome your questions

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References (list)


