Background information about health literacy
Health literacy has come from the US where it has been an important part of health research and public policy for nearly 40 years. Most of our understanding of health literacy in New Zealand has been based on US research.

**Health literacy has gone through three main stages in the USA:**

- **Patient**
  - from late 1970s
  - Focused on the risk posed by patients’ health literacy because they were not able to read health-related material and use maths skills to carry out health related tasks.

- **Health Professionals**
  - from 1995
  - The focus shifted from the skills and abilities of individual patients, to the role of health professionals in developing patients’ health literacy.

- **Health System**
  - from 2005
  - Health professionals on their own cannot address health literacy. Health systems need to support health professionals to build people’s health literacy.

Now there is a greater understanding of the role that the health system plays in health literacy. Research has shown that the actions of health professionals can be limited by barriers within the health system. So any discussion on health literacy, and interventions to develop people’s health literacy, needs to look at ways the health system can support health professionals and people to develop health literacy.
Health professionals understand the concept of “universal precautions” when it comes to blood borne diseases and infections. You can’t tell by looking whether someone has a blood borne disease. As a result, all health professionals wear gloves when working with people where there is a risk of bleeding.

Universal Precautions

In Health literacy universal precautions is based on the same concept – “you can’t tell by looking”.

Universal precautions in health literacy means you assume that everybody could have low health literacy and therefore you provide good, clear communication to everyone that comes into your pharmacy. It doesn’t matter if people look educated, knowledgeable or experienced. Everyone can have low health literacy when they become confused about their medicines and treatment. Universal precautions makes it easy for you – treat everyone as if they will benefit from clear information and instructions. By applying universal precautions in your pharmacy you save time by not having to identify people with low health literacy and embarrassing them by testing them.

In the US, the Universal Precautions approach has been validated by the University of North Carolina and the Agency for Healthcare Research and Quality which published the Universal Precautions Toolkit.
Health literacy statistics in New Zealand

New Zealand was one of a number of western countries (Australia, US, Canada, Italy and others) which took part in the 2006 Adult Literacy and Life Skills (ALL) Survey. The questions in the survey were about health promotion, health protection, disease prevention, health care maintenance, and system navigation.

More than 50% of New Zealanders have poor health literacy skills:

Results from the 2006 ALL Survey showed that more than 56% of adult New Zealanders (more than 1.6 million people) are not able to obtain and understand basic health information and services to make informed and appropriate health decisions. People have low health literacy because information in health situations is often unfamiliar and complex.

- Māori and Pacific have lower health literacy than non-Māori.
- Older people and younger people also have low health literacy as do people who live in rural areas.
- The largest population in New Zealand with low health literacy is Pākehā.

Every person in New Zealand (including health professionals) will have at least one episode of low health literacy in their lifetime when they or a family member is diagnosed with a new condition or disability. In the initial stages, people’s knowledge is low but gradually they acquire new knowledge and skills about the condition or disability and so their health literacy improves.
If you Google ‘health literacy’ you will find lots of articles about testing patients to find out if they have low health literacy.

There are a number of health literacy assessments – the most popular ones are REALM (Rapid Estimate of Adult Literacy in Medicine) which tests patients’ word recognition (reading) and pronunciation skills and TOFHLA (Test of Functional Health Literacy in Adults) which tests reading comprehension skills. Tests like REALM and TOFHLA can be useful in some research studies where the focus is low health literacy populations. However, these tests are not at all useful in pharmacy or other health settings because:

• the tests do not give a true picture of a person’s health literacy levels as health literacy includes a lot more than being able to recognise and say a few single words. As we have already said, everyone will experience low health literacy during their lifetime when they, or a member of their family, is first diagnosed with a new and unfamiliar health issue or disability

• the tests can make the person feel embarrassed and uncomfortable

• the tests can take a lot of time to administer.

Instead use the Universal Precautions approach to health literacy – provide everyone with clear information and instructions.
A three step health literacy model for pharmacies

The Three Steps Model is based on adult education and adult literacy theories.

Step 1
Find out what people know

Step 2
Build health literacy skills and knowledge

Step 3
Check you were clear (and, if not, go back to Step 2)
Traditionally children have been regarded as “empty vessels” waiting to be filled up with knowledge. However, adults already have some prior knowledge and so have to be treated differently.

**Adults learn best when they:**

1. Know why they are learning something
2. Feel responsible for and involved in their own learning
3. Have opportunities to learn things themselves, including by trial and error
4. Are learning something that is relevant to them
5. Are motivated to learn

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Spoken language is the basis of how we communicate information and ideas, develop our thinking and build understanding. But giving information by speaking to someone is not enough. The person listening to the information must understand the information for the communication to be effective.

The person speaking is responsible for making sure that the listener understands. Checking you have been clear involves asking the listener questions, getting them to demonstrate what to do based on the information you gave, or asking them to explain what they are going to do. This is the basis of Step 3 (check you have been clear).
A lot of health information is given verbally, generally face-to-face, and sometimes over the phone.

Listening is more difficult than reading because listening happens in real time, the person listening is not in control of how quickly the other person is speaking, and often the person listening has no written material to refer back to.

Everyone has a purpose for speaking and as a result every listener has a reason for listening. Understanding happens when both the person speaking and the person listening have the same purpose e.g. to provide information about a new medicine (speaker) and to get information about a new medicine (listener).

You need to check that you have been clear and that the person listening to you understands what you are saying. If not, you need to change what you are saying, and how you are saying it and give the information and instructions again.
In your pharmacy you use a lot of technical terms and specialist vocabulary.

Research shows that adults need 40 exposures to a new word before they recognise and understand that word as part of their vocabulary.²

So you can’t just explain a word, phrase or concept to a person once and expect them to understand the new word the next time you use it with them. And if the word is hard to say, understand and write, such as the name of their medicine e.g. ACE Inhibitor, it will take longer for people to learn those words.

Everyone has prior knowledge about different aspects of their lives. Sometimes people know a lot and what they know is correct. Other times people don’t know very much or what they know isn’t quite correct.

Everyone has been in the situation where someone has told you something you already know. Sometimes you feel frustrated or you get distracted because you think “I know this already”.

We have also been in the situation where someone has told us something and it makes no sense in relation to what we already know so we reject the new information.

If we find out what people know, we can then add new information to their prior knowledge. This might mean you don’t have to say very much at all in Step 2, and people feel good when they have their prior knowledge validated.

If people have incorrect beliefs then these can be gently corrected in Step 2.

If you don’t find out what people know at the beginning, but just give them new information, they could easily reject that new information if it doesn’t make sense with what they already know.
People have to read many different types of health materials.

The two most common types are:

**Information documents:** *(tell you *about* something)*
- tell you about something
- contain facts
- explain what something is and then give more information
- have information about what something is, where it is, its parts, how it works or applies, and special features.

**Instruction documents:** *(tell you *what* *to* do)*
- tell you what to do
- contain a series of steps – usually these steps must be done in a certain order
- use ‘action’ words that tell you what to do
- sometimes have diagrams and pictures to help understanding

A lot of health and disability materials do both – tell you about something, **and** what to do.

Help people to understand which parts of the document contain information and which parts of the document contain instructions. Explain what they need to read first, so it is easier for people to read and follow the document.
Here is an example of a document containing both information and instructions:

**30 Diclofenac sodium Tablet 100mg**

Take ONE tablet ONCE daily with food. Swallow whole, do not crush or chew. Take with a large glass of water.

Ms Clare Jones $3.00
539109/0 25 Jun 12 DL PH: 4 Great South Rd

Sunrise Pharmacy
4 Great South Road
Phone: 07-9876543
Fax: 07-9876542

- Name of medicine
- Quantity (number of tablets)
- Type of medicine
- Size of each tablet
- Name of patient
- Date prescription made up by pharmacist
- Name, address and phone number of pharmacy where medicine has been dispensed

**Instructions**
- for taking this tablet - how many tablets you take each day and how often and special instructions
Teachable moments are based on the adult learning principles that adults learn best when motivated, they are learning something relevant, and are responsible for their own learning.

A teachable moment is when someone asks you a question or makes a comment about their medicines. You need to recognise teachable moments, acknowledge them ("that’s a good question" or “it’s interesting you raised that”) and then respond to the person by giving the information they want.

<table>
<thead>
<tr>
<th>Possible question</th>
<th>Possible response</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’ve got a question about my Warfarin</td>
<td>Warfarin is quite a complicated medicine to get right. Most people have questions.</td>
</tr>
<tr>
<td>Can you go over my diabetes medicines with me?</td>
<td>Sure I can do that. Have you got time to do that now? How about you tell me what you know and I’ll fill in the gaps for you.</td>
</tr>
<tr>
<td>I think I am having a side effect from my ACE Inhibitor.</td>
<td>It’s great that you realise something might be different. What seems to be happening?</td>
</tr>
<tr>
<td>Same as last time?</td>
<td>That’s right, these are the same medicines that you picked up three months ago. How are you going with your medicines - I am very happy to go through them with you if you want.</td>
</tr>
<tr>
<td>My Mum used to take this years ago.</td>
<td>Really, there have been some changes to how they prescribe this medicine these days - what did your Mum take it for?</td>
</tr>
<tr>
<td>I hope this fixes the problem.</td>
<td>What did your doctor or nurse say was the problem? And what did they say about how this medicine would fix it?</td>
</tr>
</tbody>
</table>

If you are not able to respond to a person’s ‘teachable moment’ immediately then you need to arrange another meeting or refer the person onto their doctor or practice nurse for an answer.
Scaffolding

When builders construct a new building they put scaffolding up so they can work safely as they build each storey. When someone is diagnosed with a new health condition or disability they may have very little prior knowledge of the condition or disability. The person needs to quickly learn a lot of new information so they can manage their new condition or disability.

When someone needs to learn a lot of new information, you need to plan how you are going to “scaffold” that new information:

<table>
<thead>
<tr>
<th>top storey</th>
<th>All the information they need to know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>next storey</td>
<td>The next logical pieces of information after that</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>second storey</td>
<td>What are the next logical pieces of information</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>first storey</td>
<td>What is the minimum they need to know right now so they can take action</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>ground level</td>
<td>What do they already know (Step 1) and how can I build on that</td>
</tr>
</tbody>
</table>

Plan to give all the new information in logical chunks that will make sense and help the person do what they need to do as well as gain all the knowledge they need for their new condition or disability.
Online resources

AHRQ - Information about other pharmacy health literacy tools (US): http://www.ahrq.gov/pharmhealthlit/.
Foundation Course in Cultural Competency (NZ): http://www.mauriora.co.nz/node/11.
Health Navigator website for consumers (NZ): www.healthnavigator.org.nz
Teachback – videos of rheumatologist (bad example) and cardiologist (good example): http://nchealthliteracy.org/teachingaids.html
Videos of USA health literacy expert Dr Rima Rudd discussing range of health literacy issues (NZ): http://www.youtube.com/watch?v=8tPxPLrS9xY&list=UU8_p3mo72s-DxkyzL1HQUUA&index=7

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