LEARNING OBJECTIVES
Upon completion of this module, the subscriber will be able to:

1. Define health literacy and cultural competency.
2. Describe the difference between health literacy and literacy.
3. Identify techniques that will enable effective communication with patients with various levels of health literacy.
4. Explain the role of diversity and cultural competency in patient care.
5. Identify techniques that will enable provision of culturally competent patient care.

ACCREDITATION
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This module will provide 2.5 contact hours of continuing pharmacy education credit for pharmacy technicians.
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Release Date: 10/01/16  |  Expiration Date: 10/31/18
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**Health Literacy and Diversity**

**Introduction: The Variety in Diversity**

Pharmacy technicians are taking on greater roles and added responsibilities in the profession. These roles and responsibilities allow the technician to play a more integral part in the patient care process, and have more interaction with patients. As an example, pharmacy technicians’ roles have expanded to include responsibilities related to medication reconciliation and medication therapy management. Medication reconciliation pharmacy technicians have been responsible for interviewing patients to obtain a list of home medications; contacting pharmacies, physician offices, or care giving facilities to gather more information about prescription and nonprescription medication use, among other responsibilities.1,2,3

In the profession of pharmacy, pharmacists and pharmacy technicians have the privilege of providing care to a diverse patient population. Though often used when referring to ethnicity and culture, diversity encompasses more than ethnic and cultural diversity. For example, diversity can span areas including but not limited to age, religious beliefs, languages spoken, economic status, sexual orientation, education levels, and literacy. Each of these elements can have an effect on patient care (Table 1, page 4). Diversity also exists in how people view health, causes of illness, treatments, and medication use.4,5,6 As a result, beliefs, behaviors, and practices of a group of people or an individual regarding health and illness can influence how an illness is perceived and treated by that group or individual.

Scenario 1:
Allison is a pharmacy technician who works in the local pediatric hospital. She is the Medication Reconciliation Technician for the hospital emergency room. While on shift today, she meets EM, a 4 year old girl who has just been admitted to the hospital after arriving at the Emergency Room complaining of shortness of breath and wheezing due to an asthma attack. Allison reviews EM’s medications on file and finds that she has been prescribed the following medications by her primary care provider. Because EM’s mother fills her prescriptions at the hospital outpatient pharmacy, Allison is able to see that the medications have not been refilled in 4 months.

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuterol</td>
<td>1 ampule</td>
<td>Q 4-6 h prn</td>
</tr>
<tr>
<td>Advair 100/50</td>
<td>1 inhalation</td>
<td>Twice a day</td>
</tr>
<tr>
<td>Montelukast 4mg</td>
<td>1 chewable tablet</td>
<td>Daily</td>
</tr>
</tbody>
</table>

After reviewing the medication list, Allison begins to interview the patient’s mother to determine if there are other medications that EM takes that are not on the profile and to see why the prescriptions have not been picked up in four months. EM’s mother tells Allison that she does not give EM the medications regularly, but only when the other treatments do not work. EM’s mother does not believe that children should be given medications, and that asthma is something that happens when children are too hyper and overactive. EM was ‘born overactive’, and so her mom believes that it is her job to teach EM how to calm down, or she will have asthma for her entire life. Allison inquires further and learns that when EM becomes too active, she begins wheezing, so her mother prays over her and has her lie down on the cold floor with a fan blowing over her in order to calm her down and bring her back to a normal state of calm. If her symptoms worsen, she will give EM hot tea to drink to relax her. Only after these methods are tried and do not work does she give EM the medication, but it is always with hesitation, because she thinks that giving medications means she does not trust God to heal her child. She brought EM to the hospital today, however, because not even the medication worked, and she is afraid that she has now angered God. Allison reacts in disbelief about what she is hearing. She has always prided herself on treating all patients the same and not judging, but she has never encountered a situation like this before. She does not know how to respond to the patient’s mother, and does not understand how someone could put their child’s health in danger by delaying care. Allison ends the interview and walks away, shaking her head. She decides that she will only report to the pharmacist the patient’s medication list and how she has not picked up medications in four months.
As displayed in the scenario above, the technician learned information from the patient's mother that appears to not be in line with her beliefs about how the patient should have been taking the medication. Whereas the technician thought that the mother was not treating the child's asthma appropriately, the mother believed that she was treating the child's asthma in a manner that she thought was best, based on practices done in her family for years when children have asthma. Knowledge and awareness of the impact of culture in health care practices can help pharmacy technicians provide best care for all patients. The concept of cultural competence helps to provide guidance for how to accept cultural differences and incorporate skills into our practice in order to provide the best care for all patients.

<table>
<thead>
<tr>
<th>Type of Diversity</th>
<th>How it plays a role</th>
<th>How it can impact care</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Age may help the provider determine the best dosage form for a patient.</td>
<td>Failure to consider age and dosage form could prevent proper use of medication.</td>
<td>A child receives an oral suspension form rather than a tablet.</td>
</tr>
<tr>
<td>Languages spoken</td>
<td>Understanding the patient's preferred language can help determine if additional services are needed to provide care and communicate with the patient.</td>
<td>Not sharing the same language of the patient can lead to misunderstanding of instructions for how to take medications.</td>
<td>A patient with limited English proficiency thinks that she understands the instructions for insulin injection told to her in English, but when she goes home, she realizes that she does not know how to obtain the correct dose of insulin.</td>
</tr>
<tr>
<td>Economic status</td>
<td>Knowing a patient's economic status and insurance coverage can help in the selection process for medications.</td>
<td>Patients receiving an expensive medication or a medication that is not covered on his/her insurance plan may forego purchasing the medication.</td>
<td>A patient with no insurance coverage is prescribed a new SGLT-2 inhibitor for diabetes, but he cannot afford it. Rather than telling the pharmacist, he decides to not take the medication and looks for a non-expensive natural way to treat his diabetes.</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>Decisions on health care management.</td>
<td>A patient may not receive proper screenings for conditions with a disproportionately high incidence in the LGBT population.</td>
<td>A female patient may be hesitant to go to a gynecologist for fear of having to disclose her sexual orientation.</td>
</tr>
<tr>
<td>Disabilities</td>
<td>Understanding if a patient has a disability that may impact the administration of medication can help in the selection of the proper dosage form, storage container, or administration method for a medication.</td>
<td>A patient with limited use of an extremity may have difficulty in administering or opening a prescription bottle, thus possibly resulting in the patient not receiving the correct amount of medication, or improper administration of the medication.</td>
<td>A patient with limited use of an extremity due to a disability may not be able to self-administer insulin or check blood glucose without assistance, unless he was taught an alternative way to do so.</td>
</tr>
<tr>
<td>Religious beliefs</td>
<td>Religious beliefs can determine which medications are appropriate to use.</td>
<td>Failure to consider this may result in the patient not taking a medication.</td>
<td>A patient needs to take an over-the-counter medication for a cold, but is unsure if it is Kosher.</td>
</tr>
</tbody>
</table>
care for patients of diverse cultural backgrounds. An understanding and implementation of cultural competence could have helped Allison in her interaction with the patient's mother. Therefore, it is important that pharmacy technicians demonstrate culturally competent communication skills when speaking with patients.

Cultural Competence

What is Cultural Competence?

Cultural Competence has been described and defined in many different ways, however the foundation of each of these definitions originate in Cross’ definition of cultural competence – “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable that system, agency or those professions to work effectively in cross-cultural situations.” Cross’ definition continues by listing five elements that could help in becoming more culturally competent (Table 2) and explains that cultural competence is a practice that should be integrated into all levels involved in the provision of health care. Therefore, cultural competence practices should be seen at the system level, the agency level, and at the professional level. One way to think of this in the pharmacy realm is that cultural competence practices should not only be practiced by the pharmacists and technicians who provide care to patients, but it should also be integrated into the store or setting practices, as well as corporate practices. Policies that govern the practice of pharmacy should also incorporate cultural competence in the development of the policies.

There are six levels to Cross’ cultural competence model. Each level describes attitudes, policies, practices, and/or actions that can move a system, agency, or individual closer to “Cultural Competence” and “Cultural Proficiency”. On the most extreme end would be a system, agency, or individual that has “attitudes, policies, and practices that are destructive to cultures and individuals within that culture”. This would be described as “Cultural Destructiveness”. Situations in which a system, agency, or individual is not addressing cultural differences in a manner that is unintentional, but due to the lack of ability to address the needs, can be described as “Cultural Incapacity”. Systems, agencies, or individuals that work under the thought that everyone is the same regardless of culture, and therefore do not address culture in their practices, is considered “Cultural Blindness”. Those systems, agencies, or individuals that realize that they are not addressing cultural needs and then attempt to make changes to address them are termed “Cultural Pre-Competence”. Moving closer to Cultural Proficiency is “Cultural Competence”, in which systems, agencies, and individuals function under attitudes, polices, and actions that describe the definition of cultural competence. One step beyond cultural competence is “Cultural Proficiency”, in which a system, agency, or individual not only exemplifies the definition of cultural competence, but they ‘give

<table>
<thead>
<tr>
<th>Table 2. Elements for Becoming Culturally Competent</th>
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<tbody>
<tr>
<td><strong>Examples</strong></td>
</tr>
<tr>
<td>Value Diversity</td>
</tr>
<tr>
<td>Understand Cultural Dynamics</td>
</tr>
<tr>
<td>Ability to do Self-assessment</td>
</tr>
<tr>
<td>Adaptation to How Services are Provided</td>
</tr>
<tr>
<td>Cultural Knowledge</td>
</tr>
</tbody>
</table>
back’ by advocating for and contributing to research to help further cultural competent practice. Though this model is outlined on a continuum, it is important to note that the goal is to strive towards cultural competence and cultural proficiency. As no one person can know everything about every culture, and because culture is an ever evolving concept, setting a goal to master cultural competency would be difficult to achieve.

How Can I Become a More Culturally Competent Pharmacy Technician?

Perform a Self-Assessment

There are a number of steps that a technician can take to become more culturally competent. As mentioned in Cross’ definition of cultural competence, self-assessment is a key element. As such, this may be a good first step in the journey of becoming more culturally competent. Performing a self-assessment first can help provide a starting point or a baseline for where one is on the cultural competence continuum. This will then allow one to reflect upon areas of strengths and weaknesses in areas related to cultural competency, and determine a plan for improving areas of weakness. A number of self-assessment checklists and questionnaires have been published to help assist in this process. The National Center for Cultural Competence (http://nccc.georgetown.edu/) has a list of a number of checklists and assessments available for use. Table 3 shows links to two examples of self-assessment tools for individuals.

Become Aware of the Community Served by the Facility

Another early step that can help one become culturally competent is to become aware of the communities served by the facility. Learning about the patient populations that frequent the facility can help the technician determine which factors he or she could focus on first when trying to improve his or her cultural competence. As an example, if the technician works in a facility that primarily serves the surrounding neighborhood, the technician could explore the neighborhood to learn about languages, foods, beliefs, and cultural practices that are common to the cultural groups that live in the area. This could be done by visiting local restaurants and stores, reading community newspapers, and speaking to members of the community. Seeing billboards or newspapers in the neighborhood written in another language may clue the technician on the idea that there may be members of the community that speak languages other than English. The technician can apply this information at his or her facility by checking to see if there is an interpreter available at the facility that he or she can use if necessary, or making sure that forms that he or she may have patients fill out are written in other languages. Seeing stores that sell herbal products, folk medicines, or other alternative medicine products in the community could remind the technician to ask about the use of herbal, folk, or traditional medications when taking a medication history.

Test Your Knowledge #1

Review Scenario 1 on page 3. Based on Allison’s actions, attitudes and behaviors, at which level of Cultural Competence is Allison during this interaction?

A. Cultural Incapacity
B. Cultural Blindness
C. Cultural Pre-Competence

Answers on page 22.

Table 3. Examples of Cultural Competency Self-Assessment Tools

<table>
<thead>
<tr>
<th>Self-Assessment Tools</th>
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<tbody>
<tr>
<td>Promoting Cultural and Linguistic Competency-Assessment Checklist for Personnel Providing Primary Health Care Services</td>
</tr>
<tr>
<td><a href="http://nccc.georgetown.edu/documents/Checklist%20PHC.pdf">http://nccc.georgetown.edu/documents/Checklist%20PHC.pdf</a></td>
</tr>
<tr>
<td>Quality and Culture Quiz</td>
</tr>
<tr>
<td><a href="http://erc.msh.org/mainpage.cfm?file=3.0.htm&amp;module=provider&amp;language=English">http://erc.msh.org/mainpage.cfm?file=3.0.htm&amp;module=provider&amp;language=English</a></td>
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</tbody>
</table>
Adopt Cross-Cultural Communication Techniques

Another step to becoming more culturally competent involves implementing culturally competent practices when communicating with patients. Communication, regardless of if one is speaking with someone that shares a culture or not, is important in patient care, and is certainly an important piece in the new roles of pharmacy technicians. Communication that enables the provider to understand the patient; for the patient to feel understood; and for the provider to feel understood; can occur with introducing skills for cross cultural communication.

In order to help ensure that patients receive quality care, the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (CLAS) were created. The CLAS Standards are comprised of standards that aim to “Provide effective, equitable, understandable and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy and other communication needs” (Standard 1). Standards 2-4 address areas related to how an organization is governed, its workforce, and leadership. The goal is to have policies and practices that promote the CLAS standards (Standard 2), diversity in workforce and leadership (Standard 3), as well as regular cultural and linguistic training for the workforce (Standard 4). The Standards also provide guidance on

Test Your Knowledge #2

Review the CLAS standards located at https://www.thinkculturalhealth.hhs.gov/content/clas.asp. In particular, take a look at Standards 5-8, “Communication and Language Assistance”. Match the following activities to the CLAS standard it addresses.

DK is a 68-year-old man who just moved to the United States from Greece. He moved here to be closer to his grandchildren. He chose to move to a neighborhood with a large Greek community, because he is not comfortable speaking English. DK just visited his new doctor, who speaks Greek, and is now at the pharmacy to pick up his medications.

1. While DK is waiting for his prescription to be filled, he notices a sign that is written in Greek that says “Get your flu shot today!”

2. DK is happy to see the sign, but is worried about whether or not the pharmacist can speak to him in Greek. His worries went away when he saw a sign at the pharmacy counter that said “Prefer to speak in a language other than English? We can help you! Language assistance services are available” in multiple languages, including Greek! When he approaches the counter to receive his prescription, the pharmacy intern asks DK in Greek “Would you like to use an interpreter?”

3. The pharmacist, overhearing the intern, asks her if she is fluent in Greek. The pharmacy intern tells the pharmacist that she took Greek in high school 7 years ago, and remembers a little. She offers to help her counsel the patient. Although the pharmacist expressed her appreciation to the intern, she decides to call the interpreter service associated with her pharmacy, as all of the interpreters have been certified and trained in language interpretation.

4. DK is grateful for the service, and feels better that he can speak to someone about his medications in Greek. He asks the interpreter how much he owes for the interpretation service. He was surprised when he was told that the service was free.
the use of communication and language assistance services, providing information in languages that are spoken by the community that utilizes services in the area. Standards 5-8 are particularly of interest for pharmacy as these standards address communication and language assistance for patients. In adherence to the CLAS standards, language assistance should be available at no charge to health care consumers (Standard 5), and knowledge of this service should be made available verbally and in writing in various languages (Standard 6). It is important to note that language assistance should be provided by competent and trained individuals rather than untrained individuals or minors (Standard 7). In addition to language assistance services, print and media materials and signage should be easy to understand and available in the languages spoken by the populations that are served by the facility (Standard 8). Standards 9-15 address methods to encourage engagement with CLAS standards within organizations by establishing goals and policies within the organization that integrate the Standards at all levels (Standard 9), conducting assessments and collecting data to ensure continuous improvement (Standards 10-12), establishing community partnerships to assist in the development, implementation, and evaluation of policies and practices (Standard 13), and the development of processes for conflict resolution (Standard 14). In addition, the CLAS standards address communication to the public and stakeholders of the organizations efforts with implementing these (Standard 15).

Shared or different language does not always relate to cultural diversity. For example, two people of the same cultural and ethnic background may speak different primary languages. This may be the case when a patient speaks Polish as their primary language, but perhaps their children speak English as their primary language. Likewise, two people that speak the same primary language may have different ethnic and cultural beliefs. An example of this can be seen in the area of mental health. In certain African American cultures in the US, it is more customary to pray or rely on spiritual comfort as a means to cope with stressors, compared to Non-Hispanic white counterparts. Having a shared language does not always mean that words used have the same meaning. For example, “torta” is a word in the Spanish language. In Mexico, “torta” means “sandwich”. However, in other Spanish-speaking countries, “torta” means “cake” or “omelet”. Imagine that a patient with diabetes is being asked about his or her diet. The patient replies that he eats a torta daily for lunch. Eating cake for lunch may not be the best thing for this patient with diabetes, however, eating a sandwich daily may not be such a bad thing. In this example, understanding a little more about how the word is being used and perhaps the patient's ethnic background may help the provider determine if eating “tortas” every day is actually harming his diabetes control. Additionally, it is also important to remember that diversity in communication also includes communication with patients who may be deaf or hard of hearing. Use of an interpreter can be helpful in situations where language diversity prohibits communication due to that fact that the technician and patient do not share a common language. Table 4 outlines some tips for communication when using language assistance services.

### Integrate Explanatory Models of Illness Into the Patient Interview

Another suggestion to help technicians to incorporate cultural competence into practice is to integrate interviewing techniques into their current practice that focus on learning more about the patient's views and beliefs regarding illness. One particular tool that can be used is the Kleinman's Questions (Table 5). These eight questions have been designed to help the provider interviewing the patient understand the patient's views on illness. During

<table>
<thead>
<tr>
<th>Table 4. Tips for Communicating with a Patient through an Interpreter</th>
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<tbody>
<tr>
<td>Talk and ask questions directly to the patient, rather than asking the interpreter to ask the patient what you need to know.</td>
</tr>
<tr>
<td>Realize that most often there will not be a 'word-for-word' translation of what is being asked. Be patient with the process.</td>
</tr>
<tr>
<td>Expect the interview to take a longer time than usual. Therefore plan time accordingly.</td>
</tr>
<tr>
<td>Speak in short phrases.</td>
</tr>
<tr>
<td>Do not use slang, jargon, or terms that are not common.</td>
</tr>
<tr>
<td>Limit conversations that are not related to the purpose of the patient interview.</td>
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an interview with a patient, these questions can be used in addition to the questions that the technician will already ask, rather than in place of those questions.

Another model that can be incorporated into the interview is the B.E.L.I.E.F. model.15 This model does not require any diagnostic or therapeutic skills of the interviewer, and therefore should not place the technician in an uncomfortable position of questioning whether he or she is working outside his or her scope of practice. In the B.E.L.I.E.F. model, each letter represents an action. “B” represents health beliefs, in which the interviewer can ask questions to elicit the patient’s belief on what caused their problem. “E” stands for explanation. This provides a time for the interviewer to ask a question to enable the patient to explain why the problem occurred. “L” is for learning, and this is the opportunity for the interviewer to ask the patient for help in understanding the patient’s belief. “I” is for impact. This enables the interviewer to ask how the illness or problem is impacting the patient’s life. “E” is for empathy, more of demonstrating and verbalizing how the interviewer can imagine how the patient is feeling. And last “F” is to gather how the patient is feeling about the situation.15

Incorporating the above methods into Allison’s experience could have led to different outcomes. Allison would have had a better understanding of the mother’s actions. This understanding could have led Allison to realize that the information provided by the patient about how she treats her child's asthma needed to be shared with the pharmacist and other health care providers. As a result of sharing this information, it is possible that the providers could have learned more about how EM’s mother treats asthma, and then share with EM’s mother how asthma is treated using western medicine techniques and her mother’s treatment methods as well.

As pharmacy technicians take on more roles that involve patient care, interactions in which a patient’s culture and beliefs influence health and medication usage will become more common. Utilizing cultural competency skills can help the technician understand the patient, and provide valuable information that can be integrated in the patient’s care. Remembering that cultural competence is a process, it is important that the technician strives to become more culturally competent, rather than trying to master cultural competency.

**Health Literacy**

As mentioned earlier, diversity can span multiple areas, including the area of literacy. In a typical day, one may be exposed to multiple situations in which many types of literacy must be exercised (Table 6, page 10). For example, a person who is employed in a job that requires use of a computer would need to have some degree of computer literacy in order to successfully complete the job. Having a certain degree of financial literacy would

<table>
<thead>
<tr>
<th>Table 5. Kleinman’s Eight Questions14</th>
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<tbody>
<tr>
<td>1. What do you call the problem?</td>
</tr>
<tr>
<td>2. What do you think has caused the problem?</td>
</tr>
<tr>
<td>3. Why do you think it started when it did?</td>
</tr>
<tr>
<td>4. What do you think the sickness does? How does it work?</td>
</tr>
<tr>
<td>5. How severe is the sickness? Will it have a long or a short course?</td>
</tr>
<tr>
<td>6. What kind of treatment do you think the patient should receive?</td>
</tr>
<tr>
<td>7. What are the chief problems the sickness has caused?</td>
</tr>
<tr>
<td>8. What do you fear most about the sickness?</td>
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</table>

**Test Your Knowledge #3**

Review Scenario 1 on page 3. Imagine you are Allison and you are interviewing EM’s mother using the Kleinman questions. Complete the questions in Table 5 to the best of your ability with the information that EM’s mom provided during her interview with Allison. Not all of the questions may have an answer provided.

*Answers on page 22.*
help one determine if buying a car or piece of clothing at a certain price would be a good decision considering their financial responsibilities. Similarly, one needs a certain degree of health literacy to determine when they are to show up for a doctor’s appointment, how long prior to surgery they need to stop eating, which Medicare Part D insurance plan is the best, or how to take a certain medication or give a medication to others. Additionally, in this day and age of online health resources, one would also need to have a certain level of “eHealth Literacy” in order to properly navigate the internet to determine if information found is from a reliable source and then whether to follow it. Although one can make an argument for how each of these areas of literacy are related (eg. financial literacy may play a role in helping determine if one prefers to pay for a higher cost brand name drug versus a cheaper generic), this module will focus solely on health literacy.

Health literacy is defined by the US Department of Health and Human Services as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions”. Understanding how to properly take a medication, fill out health related forms, and determine co-pays, requires one to have some level of health literacy. On the surface, one may assume that since each of these skills requires reading; health literacy and literacy are the same. However, there is a difference. Literacy is defined “by the ability to read, write, and speak; compute and solve problems at a level necessary to function on the job and in society; to achieve goals and develop ones’ knowledge and potential”. When it comes to the health care setting, a person needs to have the ability to apply their literacy skills to communicate and make decisions that require understanding of terminology, practices, and procedures that he or she may not experience on a daily basis. In other words, a person may have the ability to read, write, and speak in a functional manner for daily living, but may still have difficulty in understanding health information in a manner that would allow himself or herself to make decisions related to their health and healthcare or his or her child, spouse, or person for whom he or she is the primary caregiver. To further explain the difference, one can think of the steps needed in order to change health insurance plans and see a healthcare provider. For instance, a person receives a notice that she can switch health insurance plans during the time period that starts on January 1st and ends February 28th of the upcoming year. She also reads that the request to switch plans has to be submitted to her human resources department at her place of employment. As a result, she decides to write these dates on the calendar as a reminder, along with a note that says “go to HR”. This is an example of how a person was able to use reading and writing skills to perform an action necessary to function in society. This is an example that would satisfy the definition of literacy.

Imagine now that the patient has insurance, and she is now seeing a new provider for the first time. When she approaches the front desk, she is asked if she is here for a “follow-up” or “initial” visit. She tells the receptionist that she is “just here to see her new doctor to get prescriptions on her asthma medications”, because she isn’t sure what “follow-up” or “initial visit” means. While completing her medical history paperwork, she notices that she has had to use “chronic oral steroids” in the past. She is also asked to indicate if she or her family members have a history of “diabetes”, “angina”, “hypertension” or “hypercholesterolemia”. She is not really familiar with these terms, so she leaves the answers blank. She sees that “asthma” does not encompass her condition, but she is not sure if she should answer yes or no. In order to help patients understand these terms, the patient was asked if she had to use “asthma medications” , because she isn’t sure what “asthma” means. While completing the health literacy module, she notices that she has signs that show her medications, dosages, and what time of day to take them. She also notices that one of the signs says “follow-up” or “initial visit”. While looking through her calendar, she marks these dates so she will remember to bring her medications and dosages to the doctor’s appointment. She also makes a note to ask the doctor about her medications and what time of day she should take them. This is an example of how a person was able to use reading and writing skills to communicate with their healthcare provider. This is an example that would satisfy the definition of literacy.

Table 6. Examples of Different Types of Literacy

<table>
<thead>
<tr>
<th>Computer Literacy</th>
<th>Digital Literacy</th>
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<tbody>
<tr>
<td>Financial Literacy</td>
<td>Information Literacy</td>
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Test Your Knowledge #4

TJ is a 38-year-old website developer. She is highly educated and very successful in her career. At the age of 18 years, she started her own internet company. She was recently diagnosed with Crohn’s disease and now has to take medications daily and change her diet. Although TJ is considered literate, is it possible that she could have a low health literacy, and therefore have problems understanding how to manage her illness?

A. Yes, health literacy differs from literacy, it focuses on health related concepts, which can be hard to understand.

B. No, health literacy and literacy are the same, so TJ should not have a problem with understanding health related concepts.

Answers on page 22.
is on the list, and she places an “X” next to it, because she knows that she and her father both have asthma. She knows that her mother has “sugar”, and her father has “heart problems”, but those are not on the list, so she does not report this information. In this instance, it is clear that she knows how to read the form, however, because she is not familiar with some of the medical terms, this has impacted her ability to complete the form properly. This example shows the difference between health literacy and literacy. It is clear that she has the ability to read and perform actions necessary to function in society. However, she is not able to process and understand basic health information, in this case, medical terms, in order to make appropriate health decisions.

The following example outlines the steps in the process of seeking care for an acute illness and highlights the skills related to health literacy that are needed:

**Health Problem:** FV wakes up with a fever, cough, and increased sputum production. She realizes that she is sick and needs to see the doctor.

Definition of Health Literacy: “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions”.

1. FV finds her doctor’s office phone number on an appointment card and calls the office to schedule an appointment.
   
   **FV is demonstrating her ability to obtain health care services.** She was able to make the decision that she needed medical care. She found the phone number. Using her communication skills, she was able to communicate that she needed to see the doctor for an appointment.

2. FV is granted a same day appointment for 2pm and is told to come in 15 minutes early to complete paperwork. She leaves her home in time to arrive at the office at 1:45pm.
   
   **FV is demonstrating her capacity to process information.** FV was given instructions regarding her arrival to the office. She was able to determine that her arrival should be at 1:45pm, and she made plans accordingly to leave her home to get there on time.

3. FV is asked for her insurance card and to read and sign the office’s updated privacy information forms.
   
   **FV is demonstrating her ability to process and understand information.** At this stage she does show unfamiliarity with terminology used (NSAID) and fails to ask for clarification.

4. FV pays her copay in cash. FV is happy that she stopped at the ATM prior to arriving at the office for her appointment. She withdrew $40, even though her copay is $15. She decided to use the rest of the money to pay for her prescriptions if she gets any.
   
   **FV is demonstrating her ability to process and understand information.** Her ability to do this allowed her to make the decision to not give permission for her doctor’s office to leave information on her voicemail or share information with anyone else.

5. During the visit, FV is asked to discuss her symptoms. She explains to the doctor that she woke up with a fever, chest pain, and cough. She explains that she coughs up greenish phlegm when she coughs.
   
   **FV is demonstrating her ability to communicate her problems.** Though she is not a health care provider, she shows that she is familiar with some medical terminology.

6. FV is given a prescription for azithromycin and told to go to the pharmacy. She was also told to buy an NSAID at the pharmacy. She is familiar with azithromycin. That is an antibiotic that her sister took before. However, she hasn’t heard of NSAID. She wonders if it is a new medication. She leaves and goes to the pharmacy to drop off the prescription.
   
   **FV is demonstrating her ability to process and understand information.** At this stage she does show unfamiliarity with terminology used (NSAID) and fails to ask for clarification.

7. FV arrives at the pharmacy to pick up her prescription.

   **FV is demonstrating her ability to process information.** She followed instructions provided to go to the pharmacy for the prescription.
8. FV is counseled by the pharmacist to take the medication until it is gone, and to use an additional form of birth control for 30 days after taking the antibiotic. She is also told that she can eat yogurt to reduce her chances of developing a yeast infection. FV doesn’t understand why the pharmacist is telling her about preventing yeast infections when she is here for medicine for her cough. FV is confused because she only uses condoms for birth control. She does not know of any other option to use for 30 days. She is worried that the antibiotic will make her pregnant. She decides to ask the pharmacist about this.

_FV is demonstrating some areas of uncertainty in regard to the health information provided. Though she is unsure, she is able to make the decision to ask questions of the pharmacist._

9. FV asks for an NSAID and is directed to the pain aisle. She is confused because she is not in pain. So she decides not to buy anything, but plans on calling the doctor’s office to tell them that they told her the wrong medicine. She is upset, and wonders if her doctor really paid attention to her.

_FV is demonstrating difficulty in understanding medical related terminology. She does not realize that NSAIDs, such as ibuprofen, can be used for pain and for fever. Her deficit in this area has led her to question her doctor’s ability and to become upset._

10. When FV gets home, she reads that she is to take 2 pills today and 1 pill every day thereafter until gone. However, it does not say when during the day. She also isn’t sure if she is supposed to take the antibiotic with yogurt, or how much yogurt she needs to eat. As a result, she decides not to eat the yogurt at all.

_FV is demonstrating difficulty in processing the instructions for how to take the medication, when to eat the yogurt, and how much yogurt to eat._

As demonstrated in this example, FV’s health literacy ability enabled her to navigate certain parts of the health care process relatively well, whereas in other areas she experienced some difficulties. In some instances, FV asked questions to seek clarification. In other instances she did not. Her uncertainty about the word NSAID and being told that it was in the pain aisle prevented her from treating her fever. Her uncertainty about the use of yogurt in the prevention of yeast infections as a result of antibiotic use prevented her from taking the yogurt as a precautionary measure.

The situation above provides an example of how health literacy can affect a person's health care decision making process. It also shows how literacy differs from health literacy, as FV’s problems were related to medical terms and processes, and not the ability to read, write, or communicate general day-to-day information. This example shows how FV’s care was somewhat compromised based on some of the deficiencies in health literacy. While the outcomes in this example would be considered minor, poor health literacy can have a greater impact than what is seen in this example. Studies have shown that poor health literacy can impact health care utilization and ultimately health outcomes. Health literacy levels classified as “low”, “below basic”, or “basic” have been associated with an increased use of healthcare services, such as hospitalizations and use of emergency care. Low health literacy was associated with a lower incidence of receiving mammograms and influenza vaccines. Poor health literacy also was associated with poor ability to interpret lab results and health related messages. Last, in addition to more health care utilization, people with lower literacy levels also have been reported to have a higher prevalence of chronic illness and poorer or less disease control. Poor health literacy can also impact pharmacy related care to a greater degree than what is seen in the example with FV. Low health literacy has been associated with a poor ability to demonstrate taking medication properly. In addition, patients categorized as having “below basic” or “basic” health literacy in a study had higher prescription costs compared to those in the “above basic” categories. To understand the impact of this on pharmacy related care, a study showed that 22% of the participants were categorized as having “below basic” or “basic” health literacy. Those skills necessary for a patient to take a medication appropriately were not found in the “below basic” or “basic” categories. Rather, these skills were found in the “above basic” category. This suggests that those patients with lower health literacy levels not only have the highest prescription costs, but they also don’t have the skills required to properly take a medication. This group of patients may then be at risk for medication errors and poor outcomes. A study performed to evaluate how well patients could understand and act upon medication instructions shown on a prescription label when compared with their health literacy level, found that those with low literacy levels were at twice the risk for misunderstanding a prescription label compared to those with adequate literacy levels. The following example highlights a more significant impact of poor health literacy on health care utilization and patient outcomes.
Scenario 2:
MD is a 60 year-old woman who has had Type 2 diabetes for five years. She arrives to the diabetes care clinic for a follow-up appointment with the pharmacist after having visited the emergency room (ER) last night for a low blood sugar reaction (hypoglycemia). This is the third time in a month that MD has gone to the ER for hypoglycemia. Each time that she is there, she is given orange juice, a turkey sandwich, and is told to buy glucose tablets at the pharmacy. The patient has been referred to the care clinic due to her poorly controlled diabetes and multiple hypoglycemia events. MD's doctor is having difficulty getting MD's diabetes under control because her home blood glucose readings can fluctuate between the low 50's to the upper 200 range on any given day. Her doctor is very hesitant to increase the insulin or add any new medications for fear of causing more hypoglycemic events. MD is taking metformin and insulin glargine. Her A1c is 8.5%. Upon meeting with the pharmacist, MD is adamant that she is taking her insulin as prescribed. She states, “I take it like it is on the label. I take the glargine twice a day and the metformin twice a day with food. I know what I eat has something to do with my diabetes, but I don't just eat twice a day. So, when I eat more than twice a day, I take more insulin and another metformin. When I don't eat more than twice a day, I don't take the extra medicine. But I know when my sugar is low, they always give me orange juice and a turkey sandwich. When I'm at home and my sugar goes low, I do the same thing. But, since that is food, I take more insulin. After all, the label says with food, and my doctor said I can take the insulin glargine when I eat in the morning and in the evening.” When asked if she purchased glucose tablets, she replied “No, I have diabetes, I can't have sugar. I looked it up and glucose is sugar.”

In the scenario above, it is clear that MD demonstrates that there may be some deficiencies in her level of health literacy. The result of this is increased healthcare utilization which has contributed to her poor health outcomes. As described in the scenario, MD has been to the ER three times in one month for hypoglycemia, a condition that can be properly treated at home in most cases. In addition, she has now been referred to a specialty diabetes clinic, as her primary care provider is seeking additional advice on how to care for her unstable diabetes. Because of the fluctuations in her blood sugars, proper management of diabetes to an A1c goal of 7% is difficult to achieve due to fear of causing additional hypoglycemic events. Alternatively, the longer that her blood glucose is poorly controlled, the more risk she has for developing complications due to diabetes. Since MD is not taking her insulin as prescribed, she may run out of insulin before her next refill. If this is the case, she may have to pay cash for more insulin, thus increasing her health care costs, or go without insulin until her refill date is due, which could result in further out of control glucose. Last, MD's comments regarding not being able to have sugar and diabetes being related to what she eats, suggests that there are some knowledge deficits about diabetes, diet, and management of hypoglycemic events.

Test Your Knowledge #5
Review MD's case along with the definition of health literacy. Which skills related to health literacy does MD appear to have difficulty with in this example?

Answers on page 22.

What Can Be Difficult for a Patient with Poor Health Literacy in the Process of Obtaining Medication?

The two examples above highlighted difficulties that patients can have related to health literacy in various stages in the health care system. In regard to pharmacy in particular, there are a few areas that can also cause difficulty for those patients related to health literacy. Although this module will focus primarily on patients with poor or low health literacy, it is important to note that patients of all levels of health literacy may at some point have difficulty or misunderstand prescription instructions. In a study examining correct understanding of prescription label instructions, it was found that approximately 46% of all participants, who had various levels of health literacy, misunderstood one or more of the prescription label instructions shown to them. Therefore, when working with patients in the pharmacy, having an awareness that prescription instructions may be difficult to understand for any patient may aid in helping those patients who may not overtly show difficulties in understanding instructions.
Reading Prescription Labels

Prescription drug labels serve as the manner for communicating to the patient how to correctly take a medication. Although the intent is to provide clear instructions, these labels can be a source of difficulty for patients with poor health literacy. In a study performed to determine the ability to understand and demonstrate medication instructions, 62% of the participants with low health literacy, defined as a 6th grade reading level or below, were found to have misunderstood 1 or more of the instructions. In this study, 395 participants were given instructions on five different medication labels and were asked to explain the instructions. In addition, the participants were asked to demonstrate how many tablets of selected medication they would take in one day based on the instructions. Overall, patients with low health literacy were less able to understand the instructions on the five labels provided compared to patients with marginal (7th to 8th grade reading level) or adequate health literacy. The difference was significant with prescription labels with the instructions “Take one teaspoonful by mouth three times daily”, “Take one tablet by mouth twice daily for seven days”, and “Take two tablets by mouth twice daily”. When asked to demonstrate how many tablets to take of a selected medication based on the label, although approximately 71% of the participants with low literacy were able to read the instructions correctly, only 35% were able to correctly demonstrate how many tablets to take. When applying this finding to daily practice, one can see how patient care could be affected if a person has difficulty with reading a prescription label. Confusion over this instruction could lead to administering the incorrect dose of a medication if the patient believes that the total daily dose taken is 2 tablets rather than 4.

Reading Prescription Warning Labels

Prescription warning labels can be easily misunderstood by patients with lower health literacy. Persons identified as having a reading level at a 6th grade level or below were involved in a study designed to determine the results of misunderstanding prescription warning labels. Seventy-four participants were involved in the study where they were interviewed and asked to comment on eight warning labels typically found on prescription bottles. The study concluded that labels that were at greatest risk for being misunderstood included those with multiple instructions, written at a high school reading level, included unfamiliar terms or included pictures that did not correlate well with the wording on the label, or those in which the message was not clear. Additionally, the color of the label caused misunderstanding, as participants noted that they related the color of the label to the severity of the message, with red labels relaying the most severe warning. Prescription warning labels communicate important information to patients, and if misunderstood could result in errors. As an example, in this study, only 13% of participants correctly interpreted the warning label “Refrigerate, shake well, discard after (date)”. This label is very commonly seen on antibiotic suspensions, especially those suspensions that are given to children. If the child’s caregiver has difficulty in understanding this label, potential problems that could occur include administering a medication of lower efficacy (as a result of the warmer temperature damaging the stability of the drug), not administering the correct amount of medication (if the bottle is not shaken well, and most of the medication is settled at the bottom, the patient may only receive part of the actual medication and mostly the water that has been added to the bottle), or the patient may receive expired medication (if months later the patient or caregiver decides to treat what appears to be similar symptoms with the suspension that has been “left over” from the last time the person was ill).

Patient Education Materials

Patients obtain education materials from physicians, pharmacists, and even online. These materials may provide additional information about disease states, management of illnesses at home, or additional medication information. Understanding the information in these materials can also serve as an area of difficulty depending on the health literacy level of the reader and the read-

Self-Directed Learning #2

Do you place auxiliary labels, or prescription warning labels on prescription bottles at your pharmacy? If so, take a look at each label. Are there labels that appear to be more difficult to understand? How could the label be misinterpreted? What suggestions could you give to make the labels easier to interpret?
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ing level in which the material is written. As an example, medication guides are handouts that are required to be given to patients taking certain medications to prevent serious adverse effects; when a known serious side effect of the product needs to be made known to the patient so that the patient can make informed decisions about the medication; or when the adherence to the instructions for taking the medication is of high importance to the drug's effectiveness. These medication guides are approved by the FDA and are given to patients along with their prescription. Because these medication guides contain important information that the patient needs to know and understand about a medication, the medication guides should be easy to understand and suitable for all patients at all levels of health literacy. In a study conducted for the purposes of examining the readability, suitability for lower literacy adults, and comprehension of medication guides, it was found that the mean reading level of the 185 guides evaluated was between the 10th and 11th grade reading level. In regard to suitability, only 1 medication guide met the criteria for "suitable" for lower literacy adults. For this study, "suitable" was defined as scoring the designation of "suitable" in 70% or more of the categories in which each medication guide was evaluated. The categories upon which the guides were evaluated were: content; literacy levels and vocabulary usage; layout; learning techniques utilized; and graphics. In regard to comprehension, 449 patients were each given three different medication guides to review and then answer questions regarding the information in the guide. Participants were allowed to refer to the medication guide while answering questions. The number of correct and incorrect answers were recorded. Participants could score a total of 99 points based on their responses. The average overall score was 52.7 points out of 99 points which suggests that all patients had difficulty with correctly answering questions related to the medication guide. Those patients with low literacy levels scored significantly lower, only achieving 24.9 points out of 99 points. This study suggests that medication guides in use are not suitable and are difficult for the low literacy patient to understand. Due to the nature of the information included in these guides, there is concern that patients with low health literacy levels may not understand the information well enough to make an informed decision. A patient may not be able to choose against using a medication because he or she was unable to understand the information presented about the medication's severe side effects.

Test Your Knowledge #6

YJ is a patient with low health literacy. She is coming to see the pharmacist today for Medication Therapy Management (MTM) services for the first time. During her visit, she is evaluated for health literacy and is discovered to have low health literacy. Which of the following could YJ have difficulty with as a result of this information? Select all that apply.

A. Understanding the instructions for how to take her medication for asthma
B. Understanding the warning labels on her pain medication
C. Understanding the medication information sheet that explains use

Answers on page 22.

How to Assess a Patient’s Health Literacy

Assessing the health literacy of a patient can help health care providers tailor the manner in which instructions are given to a patient and can help ensure that the patient understands instructions. The Agency for Healthcare Research and Quality (AHRQ) has published a few of the many tools available to help clinicians determine a patient’s health literacy level. Two of the most recent tools available from AHRQ are the Short Assessment of Health Literacy (SAHL-S&E) and the Rapid Estimate of Adult Literacy in Medicine-Short Form (REALM-SF).

Short Assessment of Health Literacy (SAHL-S&E)

The SAHL-S&E is a tool that can be administered in a rather quick manner. The assessment tool consists of 18 words, each of which are accompanied by two additional words. One of the two words has a similar meaning to the assessment word, or is related to the assessment word, whereas the other word is not. The patient is asked to correctly select the word that has the similar meaning to the assessment word. Patients are scored based on how many times they select the correct word. Patients that select the correct word 14 times or less are considered to have inadequate health literacy. This assessment is available in both English and Spanish.
Rapid Estimate of Adult Literacy in Medicine - Short Form (REALM-SF)\textsuperscript{30}

The REALM-SF tool consists of seven words that the patient has to read out loud. This tool will be helpful in determining if a patient would be able to understand written information. If the patient does not recognize a word, or if it takes more than five seconds for the patient to read a word, that word is passed over. The patient is scored based on the ability to read the word, and their reading level is then categorized either as “Third Grade and Below” (does not read any words), “Fourth to Sixth Grade” (reads 1-3 words), “Seventh to Eighth Grade” (reads 4-6 words), or “High School” (reads all 7 words). The creators of this tool indicate that patients who are categorized at or below the “Fourth to Sixth Grade” level may have problems with reading prescription labels. Currently, the REALM-SF is available in English.

Newest Vital Sign\textsuperscript{31}

The Newest Vital Sign is a tool that is available in English and Spanish. With this tool, patients are given a nutrition label, and then are asked six questions regarding the information on the label. Although this tool is a nutrition label, the results reflect the patient’s health literacy level.\textsuperscript{32} Patients are scored on the number of correct answers provided. Scores of 4-6 correct answers correlate to having adequate health literacy. Scores of 2-3 indicate possible limited literacy, and scores of 0-1 indicate high likelihood of limited literacy.

How Can I Work with Patients with Various Levels of Health Literacy?

It goes without saying that pharmacists and pharmacy technicians will interact with patients of varying degrees of health literacy. As mentioned in this module, poor health literacy can place the patient at risk for misunderstanding information, which could possibly lead to drug misadventures. It is important to remember that patients can have varying levels of health literacy yet be highly skilled and functional in other areas related to literacy. Therefore, it is important to keep in mind that although the patient may have low health literacy, the health care professional should not treat or talk to the patient in a way that may be viewed by the patient in a demeaning way.

Self-Directed Learning #3

Visit the Health Literacy Measurement Tools website on the AHRQ webpage (http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy/index.html#short) and complete the Health Literacy Assessments to determine your own level of health literacy. Ask a friend or family member if they can complete one of the tools for you. What were the results? Were your results as expected?

Self-Directed Learning #4

Visit the website for the Newest Vital Sign\textsuperscript{31} (http://www.pfizer.com/health/literacy/public_policy_researchers/nvs_toolkit). Complete the assessment to determine your own level of health literacy. What were the results? Were they as expected?

Techniques used to help patients with lower health literacy can be used with all patients, regardless of their health literacy level. The Joint Commission created a document that outlines suggestions on what can be done to help address the needs of patients who may have lower health literacy.\textsuperscript{33} Some of the suggestions that can certainly apply to any pharmacy setting are listed in Table 7. While the suggestions are not directly geared toward pharmacy technicians and their scope of practice, some of the techniques can be easily applied by pharmacy technicians when appropriate.

Use Plain Language

Using plain language when discussing health or medication related information can help with patient understanding. The use of plain language in written materials is also important because “plain language” for one person
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may actually be complicated for others. For the purposes of this module, “plain language” will mean language that will help a person “find what they need, understand what they find, and use what they understand appropriately”.

When using plain language, break down complex information into smaller pieces of information and define technical terms in a manner that others can understand. Also, when using plain language, the important points are discussed first. This technique can be used by pharmacy technicians when explaining issues to patients such as insurance coverage, copays, and the need for prior authorizations for medication.

Use Patient Education at a Level That All Patients Understand

When providing patient education, use of education materials at a lower reading level has been recommended. Using plain language in patient education is also helpful when making a document in a lower reading level. In a survey conducted in 2007, it was found that state Medicaid organizations have set guidelines for their reading materials to be between 6th and 8th grade levels. Pharmacy technicians may not typically be the person selecting and distributing patient education; however, they can play a role in assuring that their place of employment uses patient education materials that are appropriate by reading the materials, and making suggestions to the pharmacist or employers if they think that the patient education materials may be too hard for their patients to understand.

Use Drawings, Models, or Pictures

Describing how a medication works or how one develops an illness can be very abstract concepts that can be difficult to understand. Using models or pictures when explaining the concepts to the patient can be very helpful. As an example, when describing what happens to the lungs during an asthma attack, and how albuterol helps open the airways can be a difficult concept to understand. Therefore, it is common for health care providers to show a picture or a model of an inflamed, mucus filled airway to a patient, and explain that the mucus and swollen airways make it difficult for air to get in and out of the lungs. Using a model or picture which shows an open airway can help

<table>
<thead>
<tr>
<th>Table 7. Tips to Help Patients with Lower Health Literacy</th>
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<tr>
<td>✅ Use plain language</td>
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<tr>
<td>✅ Provide patient education at a level the patient</td>
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<tr>
<td>understands</td>
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<tr>
<td>✅ Use drawings, models or pictures when describing things</td>
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Figure 1. What Does Each Symbol Mean?*

You are doing refill reminder calls to patients at your pharmacy. You notice that MH, an 80-year-old woman has not been in to refill her medications in almost two months. When you call her, she tells you that she still has medications, because she hasn't had to take them daily because of the weather. She tells you that it hasn't been sunny, and she hasn't seen a half moon in a few weeks. You are confused, since you know that blood pressure and cholesterol medications should be taken daily, regardless of the weather. You then remember that your pharmacy has started putting stickers with a symbol of the sun on medications that the patient should take during the day, and a sticker with the symbol of the moon for the medications to take at night. You suspect that no one explained the symbols to MH.

*Note: Symbols above are not from USP Pictogram library.
the provider explain to the patient how using albuterol helps to open up the airways, making it easier for the patient to breathe. The U.S. Pharmacopeial Convention, or USP, offers a library of pictograms that can be used to communicate information about medication instructions, cautions, and warnings. When using pictures, it is important to explain the picture to the patient, as sometimes, it may be hard to determine the message that the picture is trying to convey. As suggested above, technicians can play a role in reviewing materials and making suggestions if materials do not contain many pictures or diagrams to aid in the patient's understanding.

**Discuss Only One or Two Key Points at a Time**

Medical instructions and concepts can be difficult to understand. Providing a lot of information at one time can make understanding even more difficult. When possible, discussing only one or two key points at a time can help patients understand. However, this may not always be possible. In this case, trying to break down the key points as much as possible is helpful. As an example, it can be overwhelming to learn how to use insulin in a syringe and vial. There are many steps involved, some of which are:

- Clean the top of the vial
- Inspect the insulin vial to make sure the insulin is clear and safe to use
- Remove the cap from the syringe
- Insert the needle into the vial
- Fill the syringe with the correct amount of insulin
- Select an area of the body to inject the insulin
- Clean the skin
- Inject the insulin, and
- Dispose of the syringe and return the insulin to storage area

Learning all of these steps at one time can be overwhelming. Therefore, in order to make the instructions more manageable and easier to understand, one option is to break the instructions down into smaller portions. As an example, one can divide the instructions into the following sections:

- Getting your supplies ready
- Getting your insulin ready
- Giving yourself the insulin
- Clean up

Within each section, the key points can be discussed. Though it is outside of the scope of practice for technicians to provide this level of instruction on how to use a medication, the skill of highlighting a few key points when working with patients can be used in any area within the technician's scope of practice, whether it is discussing with a patient why they are not able to get a medication refilled at a particular time, what needs to be done to get a medication prior authorized, or even explaining to the patient what to expect over the next few moments when the technician performs a medication reconciliation.

**Teach Back – Show Back**

As discussed earlier, patients may understand the instructions for taking a medication after reading a medication label, but still not be able to administer the correct dose of medication. Therefore, using the technique of not only asking the patient to repeat back what they were just told, but to also show how they would do it can help the provider or pharmacist identify and correct errors in administration before the patient leaves the doctor's office or pharmacy. This technique can help ensure that the patient is able to take the medication properly and could possibly reduce any errors in administration. When a technician is explaining to a patient that they are eligible for a refill in three weeks, the technician can use the teach back – show back technique by asking a patient to show him or her when three weeks falls on a calendar. The technician can take it a step further by then suggesting that patient write this date down on a card, or even providing a card to the patient with the date on it.

**Use a Medication List**

Another technique that is important to use is to provide a medication list to patients. This is especially helpful for the patient to have when navigating through the healthcare system. Since pharmacists and pharmacy technicians play a role in medication reconciliation, creating a medication list for the patient to carry and give to providers at doctor's visits or when visiting the hospital can be helpful, and can reduce confusion and errors.
Summary

We live and work in a diverse society. In recent years, pharmacy technicians have seen an expansion of their roles in practice, which have enabled them to interact more with an even more diverse patient population. As a result, pharmacy technicians not only have the opportunity to help patients of various ages, socioeconomic levels, education levels, cultural and ethnic backgrounds, and health literacy levels, but also have the opportunity to learn more about how a patient’s health beliefs and level of understanding can influence health care decisions. Implementing certain techniques in the pharmacy technician’s daily practice can help technicians as they work with an ever increasing diverse patient population.

Providing the best care to patients of diverse cultural and ethnic backgrounds can be achieved by incorporating culturally competent practices in all areas of the health care setting. Assessing one’s own cultural competence, utilizing techniques to improve cross cultural communication, and using explanatory models when interviewing patients are some ways that can help the technician move towards becoming more culturally competent. Though the goal is not to master cultural competency, striving towards cultural competence should be a goal of pharmacy technicians.

Understanding medical concepts, instructions, and terminology can be difficult for anyone. Patients with poor health literacy are more at risk for not understanding medication instructions, which can lead to medication errors. Having an awareness of a patient’s health literacy and utilizing techniques to assess patient understanding are helpful in the pharmacy setting.

Pharmacy technicians have the privilege of providing care to a diverse patient population. Implementing techniques into the technician’s daily interactions with patients can help in the provision of culturally competent care and care that is understood by all patients, regardless of health literacy levels. The utilization of these techniques by pharmacy technicians can help the healthcare team fulfill the goal of providing the best patient care to all patients.

Test Your Knowledge #7

You are the pharmacy technician working at a community pharmacy. JJ, a 39-year-old woman stops by the pharmacy to drop off her medications. JJ takes 12 different medications for her disease states. You have gotten to know JJ pretty well, and you understand that her health literacy levels have been documented as poor. JJ has a number of old prescriptions on hold, because when she goes to the doctor, she can’t remember which medications need to be refilled, so her doctor just writes new prescriptions for all of her medications. This confuses JJ, as every time she comes to the pharmacy, she complains that the pharmacy doesn’t give her all of her medications. Today while filling JJ’s medications, you receive notice that two of her prescriptions are early refill, and cannot be refilled for two more weeks. You also learn that one of her new prescriptions has just been taken off of her plan’s formulary, and now needs a prior authorization.

Using the techniques of “Plain language” and “Teach back – Show back”, explain how you would talk to JJ about the issues regarding early refill and the need for prior authorization? Would providing a medication list for JJ be helpful? Why or why not? What additional information could be added to the medication list to help JJ and her doctor understand her refill schedule?

Answers on page 22.
References


ANSWER KEY: TEST YOUR KNOWLEDGE

EXERCISES

Exercise #1:
B. Cultural Blindness – with cultural blindness, systems, agencies, or individuals work under the idea that everyone is the same regardless of culture. Allison stated that she prided herself in treating everyone the same. This influenced her choice to not share the additional information she learned from the patient’s mother.

Exercise #2:
1. 8
2. 6
3. 7
4. 5

Exercise #3:
Kleinman Questions (Answers in italics)
1. What do you call the problem? – Asthma
2. What do you think has caused the problem? - EM was born overactive, and asthma occurs when children are too hyper and overactive
3. Why do you think it started when it did? - EM became too overactive
4. What do you think the sickness does? How does it work? - When children are too hyper and overactive, they get asthma. That’s how it works. When it happens, children wheeze.
5. How severe is the sickness? Will it have a long or a short course? - This question is not really addressed, but one can assume that EM’s mother believes that asthma will last her entire life if she doesn’t teach her how to calm down properly.
6. What kind of treatment do you think the patient should receive? - EM’s mother thinks that calming her daughter down is the treatment. She uses prayer, hot tea, and has her daughter lie down on a cold floor with a fan blowing on her. She does not believe that children should be given medications, but if nothing seems to work, she will give the medication.
7. What are the chief problems the sickness has caused? - This question is not really addressed.
8. What do you fear most about the sickness? - This question is not really addressed; however, EM’s mother fears that she has angered God by giving EM medication.

Exercise #4:
A. Health literacy and literacy are not the same. Health literacy focuses on health related concepts.

Exercise #5:
MD appears to have difficulty with processing and understanding the instructions for how to take her insulin. She also appears to have difficulty processing and understanding when it is okay to have sugar (glucose tablets) and how it can help with low blood sugars (or management of diabetes in general).

Exercise #6:
A, B, and C are correct. Low health literacy can result in difficulties with all of the options, as they require the need for understanding information in order to take her medication properly.

Exercise #7:
Using plain language, I would tell JJ, “I’m sorry, but it is too early to get X medication. Looking at the calendar, you can get them on ___date. (Key point #1). Please come on ___date, and we can fill this medication.” (Key point #2).

In regard to prior authorization, “Your insurance company is saying that your doctor needs to give them a little more information about why you need this medication. (Key point #1). We can’t fill it until the doctor does this.” (Key point #2). Providing a medication list would be helpful, because it will help her keep track of which medications she is taking. It will also help the doctor keep track of what she is taking. In terms of additional information, you can write on the medication list the date when she is supposed to run out of medicine, and on which date she should call to request a refill. This can also help the doctor determine which medications she needs during the doctor visits.

Regarding Teach back-Show back, ask JJ to repeat what was just said, and then ask her to show you which dates on the calendar correspond to two weeks. You may even suggest that she write it in her calendar if she has one available.
SELF ASSESSMENT QUESTIONS

1. Which of the following could occur if diversity is not considered when providing patient care?
   A. Patients are provided with better care
   B. Patients may not take medications prescribed to them
   C. Providers will be able to treat all patients the same
   D. Providers will be able to prescribe the best medication for the patient

2. Fill in the blanks to complete the definition of cultural competency. “A set of congruent ____________, ____________, and ___________ that come together in a system, agency, or among professionals and enable that system, agency or those professions to work effectively in cross-cultural situations”.
   A. skills, behavior, knowledge
   B. behaviors, attitudes, policies
   C. procedures, rules, regulations
   D. laws, suggestions, recommendations

3. Which of the following is one of the five elements that Cross lists that could help in becoming more culturally competent?
   A. Working effectively in cross-cultural situations
   B. Adaptation to how services are provided
   C. Offering free language assistance services
   D. Encouraging patients to use the explanatory models when talking to providers

4. Which of the following stages of cultural competence is described as “situations in which a system, agency, or individual is not addressing cultural differences in a manner that is unintentional, but due to the lack of ability to address the needs”?
   A. Cultural destructiveness
   B. Cultural blindness
   C. Cultural incapacity
   D. Cultural pre-competence

5. Pharmacy technicians can take which of the following steps to become more culturally competent?
   A. Use explanatory models when talking to the pharmacist
   B. Become aware of the community served by the pharmacy
   C. Administer the “Quality and Culture Quiz” to the patient prior to performing a medication reconciliation
   D. Treat every patient the same

6. Fill in the blank. ___________ of the CLAS Standards states. “Provide effective, equitable, understandable and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy and other communication needs”.
   A. Standard 1
   B. Standard 5
   C. Standard 6
   D. Standard 7

7. A&Z Pharmacy is an independent pharmacy serving a largely Chinese and Russian community. Which of the following is an example of how A&Z pharmacy can apply CLAS Standard 8 in their daily business?
   A. Inform patients that they offer free language assistance in Mandarin and Russian
   B. Recruit pharmacists and pharmacy technicians that are from the same ethnic backgrounds as the patients that use the pharmacy
   C. Hang posters and show easy to understand videos in the waiting area written in Mandarin and Russian languages about common illnesses
   D. Offer cultural competency training to the pharmacy employees monthly
8. When communicating with a patient who is using an interpreter, which of the following techniques should you utilize in your communication?
   A. Talk directly to the interpreter
   B. Ask questions saying one word at a time, pausing between each word
   C. Refrain from using slang terms
   D. Tell the interpreter everything that you want the patient to know and then wait for him to tell the patient

9. Which of the following is considered a Kleinman question?
   A. What are the chief problems the sickness has caused?
   B. How does having this sickness make you feel?
   C. What would you do if you didn’t have this sickness?
   D. What did the doctor tell you about this sickness?

10. One can learn more about a patient’s beliefs regarding illness by using which of the following?
    A. CLAS Standards
    B. B.E.L.I.E.F. Model
    C. TRUE Model
    D. REALM-SF Form

11. Fill in the blanks to complete the definition of health literacy. “The degree to which individuals have the capacity to ________, ________, and understand ________ health information and services needed to make appropriate health decisions.”
    A. obtain, process, basic
    B. obtain, process, complex
    C. read, write, basic
    D. read, write complex

12. Which of the following describes the difference between “health literacy” and “literacy”?
    A. “Literacy” describes abilities to function on the job and society; “health literacy” focuses on the ability to make appropriate health decisions.
    B. “Health literacy” applies to the ability to process complex health information; “literacy” includes the ability to process basic health information.
    C. “Health literacy” applies to the ability to write a physician’s appointment date on a calendar; “literacy” applies to the ability to read a notice about a pharmacy’s business hours.
    D. There is no difference between “health literacy” and “literacy”

13. Some degree of health literacy is required to do which of the following tasks?
    A. Properly take a prescription medication
    B. Pay for a prescription using a debit card
    C. Determine if you are not feeling well
    D. Answer a phone call from your doctor reminding you of an appointment

14. In regard to medication use, which of the following is true regarding patients with low health literacy, based on the studies discussed in this module?
    A. The instruction “take one teaspoonful by mouth three times a day” is easiest to understand
    B. The majority of patients with low health literacy are able to understand warning labels correctly
    C. Patients with low health literacy may be able to read prescription instructions, but still may not be able to correctly take medications
    D. Patients with low health literacy may not be able to understand prescription instructions, but are still able to correctly administer medications

15. Studies show that patients with poor health literacy have which of the following?
    A. Less doctors’ visits
    B. Less disease control
    C. Less hospitalizations
    D. Less diagnosed chronic illnesses
16. Warning labels with which of the following characteristics are at greatest risk for being misunderstood?
   A. Labels written at a 6th grade reading level or lower
   B. Labels with clear messages written
   C. Labels with multiple instructions
   D. Labels with familiar pictures

17. Which of the following tools can be used to assess a patient’s health literacy in Spanish?
   A. CLAS Standards
   B. SAHL-S&E Form
   C. REALM-SF Form
   D. Quality and Culture Quiz

18. The “Newest Vital Sign” uses which of the following to assess health literacy?
   A. A nutrition label
   B. A prescription label
   C. An appointment card
   D. A word list

19. Which of the options below best describes instructions using plain language?
   A. Instructions using plain language will help a person find out additional names for the medications.
   B. Instructions using plain language break down complex information into smaller pieces of information.
   C. Instructions using plain language discuss the most important points last.
   D. Instructions using plain language include technical terms as to not confuse health caregivers

20. Which of the following tips can be used when working with patients with low health literacy?
   A. Write all materials in large type
   B. Ask the patient to show you how they would take the medication (teach back-show back)
   C. Write all patient education materials at a 9th grade level
   D. Ask the patient to write down how to take the medication