# Strategies to Improve Communication Between Pharmacy Staff and Patients: A Training Program for Pharmacy Staff

# **Curriculum Guide**

# **Prepared for:**

Agency for Healthcare Research and Quality U.S. Department of Health and Human Services 540 Gaither Road Rockville, MD 20850 www.ahrq.gov

Contract No. 290-00-0011

# **Prepared by:**

Sunil Kripalani, MD, MSc Kara L. Jacobson, MPH, CHES

The Pharmacy Intervention for Limited Literacy (PILL) Study

AHRQ Publication No. 07(08)-0051-1-EF October 2007 This training curriculum was produced under contract to the Agency for Healthcare Research and Quality (AHRQ) under Contract No. 290-00-0011 TO7. The AHRQ Task Order Officer for this project was Cindy Brach, M.P.P. The Robert Wood Johnson Foundation provided funding for this training curriculum. The Robert Wood Johnson foundation Program Officer was Pamela S. Dickson, M.B.A.

We would like to thank the following pharmacists from Grady Health System for their contributions to the PILL (Pharmacy Intervention for Limited Literacy) study: Douglas E. Miller, Pharm. D.; George Bachman, R.Ph., M.S.; Julie Rubin, Pharm. D., BCPS; and Shelley Nebel, Pharm. D. We would also like to thank Julie A. Gazmararian, Ph.D., M.P.H., and Karen J. McMorris, members of the PILL study research team.

The findings and conclusions in this document are those of the authors, who are responsible for its contents; the content does not necessarily represent the views of AHRQ, the U.S. Department of Health and Human Services, or the Robert Wood Johnson Foundation. Therefore, no statement in this report should be construed as an official position of AHRQ, the U.S. Department of Health and Human Services, or the Robert Wood Johnson Foundation.

# **Overview of the Training Program**

<u>Objective</u> :	This training program is designed to introduce pharmacists to the problem of low health literacy in patient populations and to identify the implications of this problem for the delivery of healthcare services. The program also explains techniques that pharmacy staff members can use to improve communication with patients who may have limited health literacy skills.
Suggested Audience:	This program is intended for pharmacy staff members who regularly interact with patients and provide them with health information. This includes both pharmacists and pharmacy technicians. Other pharmacy staff members who interact with patients may also benefit from this training.
Materials Provided:	The training materials provided with this program include a PowerPoint slide set for presentation and handouts for use in the final section - hands-on practice of the communication techniques presented in the slides. A reference list is also provided at the end of this document and on the last PowerPoint slide.
Format of Program:	A slide set is included for presentation of the material. Notes for the trainer are included with each slide, and these may be viewed electronically by choosing View $\rightarrow$ Notes Page after opening the PowerPoint slide set document.
	The last section of the training lets participants practice the techniques presented. The handouts for this section are also included. The participants will split into groups of three. Each group will get one copy of each handout (instructions for pharmacist, patient, and observer roles). This is a role-play exercise in which everyone with the "pharmacist" role will practice counseling the "patient" using the clear health communication techniques covered in the presentation. The "observer" will provide feedback to the "pharmacist." After each round, members of each group should switch roles. All three people in each group should have a chance to act as the pharmacist. This exercise will require about 15 minutes total.
	After completing the role-play exercise, the group should re- convene. The trainer can use this time to ask for feedback on the role-play exercise, answer any questions that participants may have, and emphasize take-home messages.

Suggested Agenda:

This program will require about 2 hours to present. A suggested agenda for the program is:

- 1. Welcome and Introductions......10-15 minutes
- 2. Interactive Delivery of Slide Set.....1 hour
- 3. Small Group Breakout Sessions......15 minutes (Role Play Exercise Using Handouts)

# Slide Set and Notes for the Trainer

Slide 1



[Introductions: Please have participants introduce themselves. During their introduction, ask them to share an experience during which a patient had difficulty understanding something about their medications, or made an error due to misunderstanding].

# Slide 2



[This training program was originally developed by researchers at Emory University in Atlanta, GA. The PILL study - Pharmacy Intervention for Limited Literacy was funded by Agency for Healthcare Research and Quality and the Robert Wood Johnson Foundation. The training program is part of a larger study addressing health literacy systems-based interventions.

We are using this program to identify ways in which we can better communicate with our patients.]

# Slide 3



5. Hands-on practice!

Let me share with you what we'll be covering in our training today.

When you leave here today, I want you to able to... [State learning objectives here]

- Define health literacy,
- Describe the health care experiences of lowliteracy patients,
- Discuss health literacy and medication use,
- Review techniques to improve communication with low-literacy patients, and
- Have an opportunity for hands-on practice!

Adult learners learn best by doing. This is where our hands-on activity comes into play.



Everyone is probably familiar with the definition of literacy- the ability to read and write, but what about Health Literacy?

Health Literacy refers to a **constellation** of reading and numeracy skills required to function in the health care environment.

These include:

- Reading prescription bottles
- Figuring out appointment slips
- Understanding informed consent documents
- Understanding discharge instructions
- Following diagnostic test instructions
- Reading health education materials

• Completing health insurance applications Health literacy is context specific. Someone who has excellent reading and writing skills, and who functions very well in another environment (for example, an accountant), may still have low health literacy.



Slide 6



The National Assessment of Adult Literacy (NAAL) provided the first measure of our country's health literacy. This household survey found that 14% of American adults function at the below basic level, 22% function at the basic level, 53% have an intermediate level of health literacy, and 12% have proficient health literacy. Note that interpreting medication labels requires intermediate skill. This means that 36% of adult Americans have levels of health literacy BELOW what is required to understand typical medication information.

Certain groups are more likely to have limited health literacy. These groups include...

However, it is important to remember that low health literacy is a problem that touches all groups and segments of society. In terms of raw numbers, most people with low health literacy are White.

Slide 5



	Literacy of Populations	
Group		Low Literacy (%
All		50
Elderly (≥ 65)		81
Racial/Ethnic group: White		41
E	Black	77
ŀ	lispanic	78
Education level: 0	)-8 yrs	96
9	)-12 yrs	81
ŀ	IS/GED	55
Immigrants: 0-8 yrs prior educ		91
9+ yrs prior educ		71

Here are some figures from another national study which looked at general literacy skills.

Of those aged 65 or greater, 81% have low literacy Blacks and Hispanics are more likely to have low literacy: 77% and 78% compared to 41% of Whites Those with the least amount of education have the highest prevalence of limited literacy.

# Slide 8



Now, let's talk about how it might feel to be a patient who has trouble understanding medical information.

# Slide 9



Your experiences?

You can't tell by looking. Patients are very savvy in masking the signs of limited health literacy, as there is a great deal of shame associated with this. In fact, one study found that 24% of individuals who suffered from limited health literacy had never informed their spouse (Parikh et al 1995).

Patients with limited health literacy skills may be very articulate, and smart enough to navigate through life and the health care environment with these limitations.

Tell me, when do *you* suspect a patient has low health literacy? What are some of your experiences with low-literacy patients?

# Slide 10 Possible Indicators of Low Health Literacy Excuses: "I forgot my glasses." Lots of papers folded up in purse/pocket Lack of follow-through with tests/appts. Seldom ask questions Questions are basic in nature Difficulty explaining medical concerns or how to take meds

**Universal Precautions** 

Communicate clearly with everyone

Confirm understanding with everyone

Can't tell by looking

Some excuses you may hear from patients with low health literacy include:

"I forgot my glasses. I'll read this when I get home." "I forgot my glasses. Can you read this to me?" "Let me bring this home so I can discuss it with my children."

Other possible red flags for low health literacy are:

- Lack of follow-through incomplete forms/ missed appointments
- Patients cannot describe how to take their medications, have difficulty explaining medical concerns, or seldom have any questions.

Because we can't tell by looking who is affected by low health literacy, we advocate using a Universal Precautions approach - that is, simplify information for *everyone*, independent of their perceived health literacy abilities. By simplifying information for all and assuming that most patients may have difficulty in understanding the information, we are paving the way for improved communications and, hopefully, improved adherence and health outcomes.

# Slide 12

Slide 11

# Overview Define health literacy Describe the health care evo

- literacy patients
- 3. Discuss health literacy and medication use
- 4. Review techniques to improve communication with low-literacy patients
- s. Hands-on practice!

Now, let's transition to what is known about health literacy and medication use.

# Slide 13 Low Literacy and Medication Use Ability to identify their own medications 12-18 x greater odds Understanding of how to take medications Take med on empty stomach 46% correct Understanding of drug mechanisms and side effects Warfarin works by thinning blood 70% correct Bleeding/bruising most common SE 49% correct Amore likely to misinterpret

in et al 1999. Fang et al 2006. Davis et al 200

# Slide 14

Misinterpreta	ation of Warning Labels
Construction of the second statements of the second statements of the second statements of the second statement of the second	
No. of the local division of the local divis	
A CONTRACT ON COMPACT AND A CONTRACT OF	
TAMEN WITH PLENTY OF WATER	
A ONLY_	

# Slide 15



Several studies have assessed patients' understanding of their medications.

In these studies, researchers found that individuals with limited health literacy demonstrated...

- 12 to 18 times the odds of being unable to identify their own medications and distinguish one from the other
- Common difficulty understanding simple instructions such as taking a medication every 6 hours or on an empty stomach
- Worse understanding of common drug mechanisms and side effects, such as how warfarin works (despite being on warfarin and having attended educational classes on its use)
- Greater misinterpretation of drug warning labels

Now, let's review some important health communication messages about drug warnings and patient safety. First, we find that warning labels are not regulated, and many have not been updated since the 1960s.

Dr. Terry Davis and colleagues conducted a study where she identified concerning misunderstandings of warning labels by patients. Let me share a few of these with you.

Other research studies have found that patients with low health literacy had...

- Greater difficulty understanding numerical information, such as INR levels for monitoring warfarin use.
- Lower medication adherence, though not all studies have shown this. One study showed that the majority of patients were non-adherent because they didn't understand their medication regimens.
- Anecdotal evidence of making mistakes with their medications and experiencing more adverse drug events (though this, too, is not consistently supported in research).
- Higher health care costs, due in part to greater use of Emergency Departments and higher hospitalization rates.





Greater demands are being placed on our patients as consumers of health care.

The health care system is increasingly complex and demanding of patients - from direct-to-consumer advertising to shorter hospitalizations with greater selfcare requirements after discharge. At times, physicians may actually place greater burdens on patients, such as in the process of informed decision-making for prostate cancer screening.

Most patient instructions are written. There is a consistent gap between the reading demands of the health care setting and the actual skills of many Americans. For example, the average American has an 8th grade reading level, while the average medical/health information is written at at least a 12th grade level.

Verbal instructions are often complex, rushed, and given at a time when patients and their families are stressed by illness.



Let's pause to check in and find out what questions you have so far...



Now let's shift gears to discuss techniques that you can use in your day-to-day interactions with patients that will improve communication, especially for those patients who have limited literacy skills.



All patients, not just those with low health literacy, will benefit from these 5 recommended strategies for patient-centered visits:

Using plain language is not easy for us as clinicians. Make a conscious effort to avoid medical jargon and vague instructions.

- Keep it short and simple. Only tell patients what they need to know, not what is nice to know.
- There is a growing body of research suggesting that asking patients to "teach back" what they have learned improves medical outcomes. This was recently listed as one of the top 11 patient safety practices for reducing medical errors (National Quality Forum 2003, Shojania et al 2001).
- Most pharmacists probably feel that they give patients a chance to ask questions, but some simple techniques can enhance patients' comfort level in asking questions.
- Because everyone has different learning styles, verbal messages should be reinforced with written information and pictures whenever possible. Everyone learns better if information is reinforced in multiple ways. Provide easy-to-understand information for ALL patients.

Together, these strategies and others will help ensure the environment is patient-friendly and shame-free for ALL patients.



"Take 1 hour before you eat breakfast" instead of "Take on an empty stomach" Think about how much easier it is for you to understand new information if it is presented a little more slowly.

Concrete examples or analogies can help give a sense of reality to abstract concepts or things that patients can't see in their own body.

Also pay attention to the patients' own terminology and use those terms yourself in the discussion.

Be careful about vague things that you are accustomed to saying in your counseling. Just what *exactly* does it mean to take a medication on an empty stomach. Be as specific as possible when providing instructions.

10



Slide 22



Let's practice a few simple alternatives to common jargon that may come up in medication counseling.

- Limit information
  - There's a tendency to try to explain everything to a patient at one visit. In most cases, the patient will actually be better off if you select just a few key points, reinforcing and repeating them during the discussion. Less is more.
  - In choosing the points to address, try asking the patient to identify the 1 or 2 most important things to them. Patients are far more likely to remember the answers to their own questions and concerns. This strategy will also reduce the "by the way..." questions as you are wrapping up your patient counseling.
  - You could combine the patient's 1-2 priority items with your top 1-2 things to develop a manageable list of just a few things to discuss. The patient's concerns might be the same as yours, or they could be totally different.
- Develop short explanations for common conditionshow can you explain a diabetes medicine in 2 or 3 brief sentences?
- Focus on behaviors- what do you want the patient to do?
- Review each point at the end- summarize and reinforce





Teach Back Scripts

would you say?

you to watch out for?

I want to make sure I explained everything clearly. If you were trying to explain to your husband how to take this medicine, what

 Let's review the main side effects of this new medicine. What are the 2 things that I asked

Show me how you would use this inhaler.

### Slide 24

How many of you know the teach back principle?

- Well, teach back is used to assess patient understanding. Asking patients to repeat something in their own words is a far better way to gauge comprehension than simply asking, "Do you understand?"
- Let me walk you through this diagram. After explaining a new concept, we should assess the patient's recall and understanding, clarify our explanation as needed, reassess comprehension, and continue to clarify until the patient expresses satisfactory understanding.
- Most of us who have performed a teach back assess patient recall and comprehension the first time, but if we need to clarify or tailor the information, rarely we re-assess patient comprehension. This is the most common mistake made when attempting to apply the teach back model.
- In one study, physicians who used the teach-back technique with their diabetic patients achieved better glycemic control. Teach back works.

\*Note: the process shown in this diagram may be modified as needed in each patient encounter. The cycle may repeat as many times as is necessary for sufficient patient recall and comprehension.

When asking patients to 'teach back', it helps to put them at ease by placing the burden on yourself. You want to know what information the patient understood.

You also need to focus the teach back on 1 or 2 points. If I asked you right now to tell me what I have shared with you in the last hour, you might recall 1 or 2 concepts, but this is not effective for assessing your knowledge. It would be more effective for me to assess your understanding of the impact of health literacy. I might say, for example, "We have covered a lot of information today. In order for me to be sure that I explained health literacy correctly (placing the burden on myself), tell me two things you can do to improve communications with patients (focuses the teach back on 1 point)."

What are some other ways you can ask for a teach back?



As pharmacists wrap up a patient encounter, they often solicit questions from the patient, in part to check patient's comprehension of the information that has been covered.

Unfortunately, we often do this in a closed-ended way with a yes/no prompt such as:

- "Do you have any questions?" or
- "Any questions?"

Remember, patients are often hesitant to admit that they don't understand something or they're afraid to ask what might be considered a "stupid question."

This is most true for patients with low health literacy. Open the door for them by effectively soliciting patient questions. Ask, "What questions do you have?"

Slide 26



Written materials are easy-to-read if they use:

- Few messages, with no assumptions that patients know about how the body works, diseases, or medications
- Short, simple, and familiar words
- Easy-to-understand phrasing of numeric information
- Large, sans serif fonts
- Short, simple, and familiar words
- Short lines and lots of white space
- Simple illustrations that are directly applicable to the text

Slide 27



- communication with low-literacy patients.
- Provide an example of the teach-back.

Let's try our own teach-back now...



- 3. Discuss health literacy and medication use
- Review techniques to improve communication with low-literacy patients
- s. Hands-on practice!



This last section of the training allows you to practice the techniques presented.

[For this section you will need the included handouts.]

Directions:

- Split your participants into groups of three.
- Each group will get one copy of each handout (instructions for pharmacist, patient, and observer roles).
- This is a role-play exercise in which everyone with the "pharmacist" role will practice counseling the "patient" using the clear health communication techniques covered in the presentation.
- The "observer" will provide feedback to the "pharmacist" after he or she is done "counseling."
- After each round, members of each group should switch roles.
- All three people in each group should have a chance to act as the pharmacist.
- This exercise will require about 15 minutes total.





- When you were the pharmacist, did you do anything different than you usually do when counseling a patient?
- Was explaining things using clear plain language hard? Was thinking of a way to clarify something the patient didn't understand the first time hard? Was it easier for the third pharmacist than the first?
- What did you notice when it was your turn to observe? How might you counsel patients differently when you get back to your pharmacy?

In sum, we need to adopt Universal Precautions since we do not know which patients have low health literacy. In fact, research shows that **all** patients, even those with high health literacy, benefit from clear communication.

Today we've gone over some of the strategies to improve communication. It will take practice to incorporate these strategies into your daily routine.

- What might prevent you from implementing the strategies we've been discussing?
- How might you overcome those barriers?

What questions do you still have about what we've talked about today?



Finally, I want to point out that included in your handouts is a list of references you can consult if you want to learn more about health literacy.

# References

- 1. Davis TC, Wolf MS, Bass, PF III, Middlebrooks M, Kennen E, Baker DW, Bennett CL, Durazo-Arvizu R, Bocchini A, Savory S, Parker RM. Low Literacy Impairs Comprehension of Prescription Drug Warning Labels. *Journal of General Internal Medicine*. 2006;21(8):847–851.
- Fang MC, Machtinger EL, Wang F, Schillinger D. Health Literacy and Anticoagulation-related Outcomes Among Patients Taking Warfarin. *Journal of General Internal Medicine*. 2006;21(8):841-846.
- 3. Freidland RB. Understanding Health Literacy: New Estimates of the Costs of Inadequate Health Literacy. Washington, DC: National Academy on an Aging Society; 1998.
- 4. Gazmararian JA, Baker DW, Williams MV, Parker RM, Scott TL, Green DC, Fehrenbach SN, Ren J, Koplan JP. Health Literacy Among Medicare Enrollees in a Managed Care Organization. *JAMA*. 1999;281:545-551.
- 5. Gazmararian JA, Kripalani S, Miller MJ, Echt KV, Ren J, Rask K. Factors Associated with Medication Refill Adherence in Cardiovascular-related Diseases: A Focus on Health Literacy. *Journal of General Internal Medicine*. 2006;21(12):1215-C15.
- 6. Howard DH, Gazmararian J, Parker RM. The Impact of Low Health Literacy on the Medical Costs of Medicare Managed Care Enrollees. *The American Journal of Medicine*. 2005;118(4):371-377.
- 7. Kirsch I, Jungeblut A, Jenkins L, Kolstad A. *Adult Literacy in America: A First Look at the Results of the National Adult Literacy Survey*. Washington, DC: National Center for Education Statistics, US Department of Education; September 1993.
- 8. Kripalani S, Henderson LE, Chiu EY, Robertson R, Kolm P, Jacobson TA. Predictors of Medication Self-management Skill in a Low-literacy Population. *Journal of General Internal Medicine*. 2006;21(8):803-900.
- 9. Kripalani S, Weiss BD. Teaching About Health Literacy and Clear Communication. *Journal of General Internal Medicine*. 2006;21(8):888-890.
- 10. Kutner M, Greenberg E, Jin Y, Paulsen C. *The Health Literacy of America's Adults: Results from the 2003 National Assessment of Adult Literacy (NCES 2006-483)*. Washington, DC: U.S. Department of Education, National Center for Education Statistics; 2006.
- 11. National Quality Forum. Safe Practices for Better Healthcare, 2003; Washington, D.C.
- 12. Parikh N, Parker R, Nurss J. Shame and health literacy: the unspoken connection. *Patient Education and Counseling*. 1995;25:109–199
- 13. Schillinger D, Piette J, Grumbach K, Wang F, Wilson C, Daher C, Leong-Grotz K; Castro C, Bindman AB. Closing the Loop: Physician Communication With Diabetic Patients Who Have Low Health Literacy. Arch Intern Med. 2003;163:83-90.
- 14. Shojania KG, Duncan BW, McDonald KM, Wachter RM, eds. *Making Healthcare Safer: A Critical Analysis of Patient Safety Practices. Evidence Report No. 43 from the Agency for Healthcare Research and Quality. AHRQ Publication No. 01-E058*; 2001.
- 15. U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.
- 16. Weiss, BD. Epidemiology of Low Health Literacy. In: Schwartzberg JG, VanGeest JB, Wang CC, eds. Understanding Health Literacy: Implications for Medicine and Public Health. AMA Press; 2005:19.
- 17. Weiss BD. *Health Literacy: A Manual for Clinicians*. American Medical Association and American Medical Association Foundation; 2003.