Guidelines Workgroup

- Carolyn Cutilli, PhD, RN, NPD-BC, Co-chair, Penn Medicine; American International College
- Sarah Christensen, MA, Co-chair, The University of Texas MD Anderson Cancer Center
- Marianne Aloupis, MS, RD, Hospital of the University of Pennsylvania
- Marina Arvanitis, MD, Northwestern Medicine, Internal Medicine
- Colleen Chancler, PT, MHS, PhD, Pennsylvania Physical Therapy Association
- Sandra Cornett, PhD, RN, The Ohio State University
- Judi Dunn, DNP, RN, University of Kentucky Healthcare
- Joseph Favatella, PharmD, MBA, BCPS, CSP, Penn Medicine
- Ann Findeis, MS, RN, Northwestern Memorial Hospital (retired)
- Janette Helm, MA, RN, MCHES, Indiana State Medical Association
- Danielle Housman, MS, OTR/L, OTD, CLT, Craig H. Neilsen Rehabilitation Hospital
- Erica Lake, MLS, AHIP, University of Utah
- Fran London, MS, RN, Author, No Time to Teach
- Ann Longo, PhD, MBA, RN, NEA-BC, Longorosa Healthcare Consulting
- Sharon McHugh, MSN, RN, Northwestern Memorial Healthcare
- Kristin Mosman, MS, SLP-CCC, Utah State University
- Diane Moyer, MS, RN, The Ohio State University Wexner Medical Center
- Michele Mulhall, PT, PhD, Bryn Mawr Rehabilitation Hospital
- Garry Nichols, Patient Advisor
- Magdalyn Patyk, MS, RN, BC, Northwestern Memorial Hospital
- Jessica Retzlaff, MS, The Rees Group
- Jackie A. Smith, PhD, University of Utah college of Nursing (Emerita)
- Jan Stucki, MA, MPH, AMWA, Intermountain Health
- Lindsay Thrall, MOT, OTR/L, The University of Vermont Health Network
- Lauren Tormey, MD, Dartmouth-Hitchcock Medical Center
- Ruti Volk, MSI, AHIP, Michigan Medicine
- Barbara Wagner, PT, DPT, MHA, University of Scranton
- Michael Wolf, PhD, MPH, Northwestern University
# Table of Contents

1. Patient Education Practice Guidelines for Health Care Professionals
2. Frequently Asked Questions
3. Assessment
6. Planning
14. Implementation
17. Evaluation
19. Appendices
23. Guidelines Quick Guide
25. References By List
77. References Alphabetically
Patient Education Practice Guidelines for Health Care Professionals

The Patient Education Practice Guidelines for Health Care Professionals was developed by the Health Care Education Association to provide concise direction for frontline health care providers. Patient education is defined as “A process of assisting consumers of health care to learn how to incorporate health related behaviors (knowledge, skill, attitude) into everyday life with the purpose of achieving the goal of optimal health” (Bastable, 2017, p. 542). Over 10,000 articles and resources were reviewed to identify evidence-based practice for patient education.

Four Components of the Patient Education Process

The guidelines are based on the four components of the patient education process: assessment, planning, implementation and evaluation (APIE) (Bastable, 2017). Each component is essential for effective patient education. No component can be skipped or receive lesser attention. In this guideline, specific concise instructions are provided on how to address each of the components.

In the APIE process, individualizing education can only be accomplished through assessment of the patient (e.g., knowledge, goals, language). The education plan focuses on the patient’s priorities in addition to needs identified by the health care professional. Implementation uses key learning strategies and can be adapted based on the patient’s response. In the evaluation component, the patient’s knowledge/behavior and the health professional’s ability to teach are evaluated.

Overarching Elements

From the literature review, several overarching elements emerged which impact the APIE process. Effective patient education focuses on the concepts of “patient-centered” and “patient engagement.” Additionally, effective strategies include plain language and focusing on behaviors and actions, not just knowledge.

Best practice combines all of these elements. Ideally, education is an interactive process focusing on the desired patient behavior and patient’s stated priorities to achieve health goals. Use the guidelines to lead or direct you through the patient education process.

The term “patient education” is defined in this context to be a broad classification that includes not only patients, but also consumers, family, friends, neighbors, guardians, significant other/partner or anyone else designated to meet care needs.
Frequently Asked Questions

What are the guidelines?
A concise resource for patient education evidence-based practice for frontline health care professionals.

Who should use the guidelines?
Any health care professional who provides patient education.

Where should the guidelines be used?
In any setting where patients learn about how to achieve health care goals.

When should the guidelines be used?
Any time patient instructions are being given such as disease information, test preparation/results, treatment, accessing care, appointments and resources.

Why should the guidelines be used?
To ensure the implementation of evidence-based patient education thereby assisting health care consumers in achieving optimal levels of health.

How do you use the guidelines?
Follow the steps in each section of the guidelines (assessment, planning, implementation and evaluation) along with explanations, examples, and scripts.
Effective patient education is based on a learning needs assessment. Health care professionals assess by interviewing the patient and family, communicating with the medical team and/or observing the patient. An examination of barriers that impact delivery of care is key in the development of a tailored plan to meet the needs, abilities and preferences of the patient. These practices empower patients to change behaviors and are referred to as “patient-centered” care.

Assessment Steps

1. Assess sociodemographic information as well as support system, culture/values/beliefs and barriers to learning.
2. Assess learning needs based on current health issues, knowledge and worries.
3. Assess patient engagement in learning process (patient’s goals and priorities, motivation to learn).
4. Assess learning preferences (verbal, written, visuals, multi-media, technology).
5. Consider specific assessment tools.
<table>
<thead>
<tr>
<th>Assessment Steps</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
</table>
| **1. Collect Information** | Review culture, social support and sociodemographic information directly with patient or from health record. Includes:  
• Age  
• Gender/preferred pronoun  
• Ethnicity  
• Social determinants of health: education, socioeconomic status, access to food and health care  
• Establish rapport, use caring tone and note body language.  
• Address culture, values, attitudes, beliefs:  
  » “Do you have any beliefs or feelings related to your health condition that we need to know so we can help you learn to care for yourself?”  
  » “What do you fear most about your sickness?”  
• Inquire about social support network:  
  » “Who is your family member or friend who can help you with your healthcare?”  
Note: Higher education and/or social economic status does not indicate better understanding of information. | List 1 |
| **2. Current Status** | Address patient concerns and priorities first, then current knowledge and physical abilities.  
• “What are you most concerned about?”  
• “What do you do at home now to care for yourself?”  
• “Do you know anyone who has this condition?”  
• “What do you know about caring for someone with diabetes?” | List 2 |
| **3. Patient Engagement** | Assess patient confidence related to treatment plan adherence; self-efficacy  
• “Based on our discussion, here are the top 3 concerns you have for your health. What would you like to learn first?”  
• “On a scale of 0 to 5, zero being low and five being high, how would you rate your confidence that you can follow your instructions and care for yourself at home?”  
• “What would you do if you have questions or doubts?” | List 3 |
<table>
<thead>
<tr>
<th>Assessment Steps</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4. Learning Preferences</strong></td>
<td></td>
<td>List 4</td>
</tr>
<tr>
<td>Consider a variety of options and best timing for education.</td>
<td>• “The last time you had to learn something, how did you go about it?”&lt;br&gt;• “How do you learn best/prefer to learn?”&lt;br&gt;  » Reading&lt;br&gt;  » Demonstration&lt;br&gt;  » Video&lt;br&gt;  » Verbal&lt;br&gt;  » Technology&lt;br&gt;• Before offering technology (internet, patient portal, smart phone, computer, apps) ask:&lt;br&gt;  » “What technology do you use?”&lt;br&gt;  » “What technology are you interested in using?”&lt;br&gt;• Best time to teach may be based on patient’s pain level, toileting needs, family member or friend support availability, quiet environment.</td>
<td></td>
</tr>
<tr>
<td><strong>5. Specific Assessment Tools</strong></td>
<td></td>
<td>List 5</td>
</tr>
<tr>
<td>Health Care Professionals have the option to use specific assessment tools.</td>
<td>• Pre- and post-tests are designed to measure changes in self-care knowledge and/or behavior.&lt;br&gt;• Assessment tools are typically used in research and quality improvement initiatives.&lt;br&gt;• Knowledge/behavior assessments are used for specific health education.&lt;br&gt;  » Patient Engagement tools (Appendix 1)&lt;br&gt;  » Health Literacy tools (Appendix 2)&lt;br&gt;  » Risk Evaluation and Mitigation Strategy Assessment (Appendix 3)&lt;br&gt;  » Motivational Interviewing (Appendix 4)</td>
<td></td>
</tr>
</tbody>
</table>
Planning

The **planning stage is critical for successful patient education.** The health care professional and patient partner to develop an education plan. The choice of evidence-based strategies depends on many factors, most important being the patient's unique learning needs identified in the assessment, followed by availability of resources.

It is critical that the health care professional possess knowledge and skill for implementing patient education strategies. Ultimately, patient education should be a conversation where the patient’s current knowledge and **goals/priorities,** as well as **health information needs,** are incorporated.

**Planning Steps**

1. Use all aspects of patient assessment information to guide plan development and determine **mutual educational goals.**
2. Develop teaching plan utilizing evidence-based teaching strategies (e.g., easy to understand language and multi-modal approach) with a focus on patient's needs, priorities and behaviors.
3. Identify educational resources to achieve identified learning goals.
<table>
<thead>
<tr>
<th>Planning Steps</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
</table>
| 1. Mutual Goal Setting Strategies                                            | Patient and health care provider develop diabetic diet. The patient chooses the type of carbohydrate to eat based on their preferences and what makes them feel less sluggish. The patient will learn the skills needed to demonstrate the following behaviors:  
  • Check blood pressure every day when you wake up.  
  • Take your blood pressure medicine every day.                                                                                             | List 6   |
| Partner with patient to devise mutually agreed upon learning goals.          |                                                                                                                                                                                                        |          |
| Goals should focus on patient behaviors and be clearly stated, action-oriented, measurable and achievable by the patient.                     |                                                                                                                                                                                                        |          |
| Individualize/tailor education                                                | • Education meets patient’s individual health literacy needs such as patient with disability who needs recorded instructions.  
  • Education is approached in culturally sensitive manner. For example, patients are given diabetes diet information based on the foods they normally eat. | List 7   |
| Consider preferred language                                                  | • Offer education tailored to preferred oral and written language.  
  • Provide interpreter/translator as needed.                                                                                                  | List 8   |
| Include family, caregiver or significant other                               | Identify support individuals and include in education whenever possible.                                                                                                                               | List 9   |
| Build on current knowledge                                                   | "Based on what you told me, you know the basics; the next step will be to learn how this will affect your day to day life.”                                                                             | List 10  |
| Use Motivational Interviewing (MI) (Appendix 4)                              | Motivational interviewing (MI) techniques include:  
  • Open-ended questions  
  • Affirmations (positive feedback)  
  • Reflection (mirror patient’s statements)  
  • Summary (summarize what the patient has said)                                                                                         | List 11  |
## Planning Steps

### 1. Mutual Goal Setting Strategies (continued)

<table>
<thead>
<tr>
<th>Planning Steps</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consider the educational setting</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| A. Primary/Outpatient Care | Primary care settings: education focuses on goal setting to optimize behavior change and safely transition patient from hospital to home.  
• HbA1c at 6.0; able to count carbohydrates  
Outpatient setting: add delivery of education through the internet, phone, and/or groups, based on patient and caregiver preferences and skills.  
• Follow-up phone calls and text messages to remind patients to weigh themselves and take medication. | List 12 |
| B. Pre-operative | Education should be given pre-operatively to improve knowledge and reduce anxiety.  
• Pre-operative class | List 13 |
| C. Acute Care | In hospital settings, patient education should be started on admission and taught over time, allowing patients time to demonstrate comprehension.  
• Session 1: Teach signs of infection  
• Session 2: Dressing change  
• Session 3: Follow-up care | List 14 |
| D. Discharge/last session  
E. Education in all settings | Include opportunities for structured education, including teach back and content reinforcement to achieve optimal outcomes.  
• "What would you do if you gained more than 4 lbs in 24 hours?" | List 15 |
### Planning Steps

#### 2. Develop the Education Plan

<table>
<thead>
<tr>
<th>Planning Steps</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
</table>
| Teach all patients in a manner they can understand | • Use simple, direct messaging  
• Avoid medical jargon  
• Use common everyday language  
• For a patient who has diabetes and eats rice with every meal, use plain language/clear communication such as, “You may eat a half-cup of rice 2 times a day for your carbohydrate servings.” | List 16 |
| Identify content/key message to support learning objectives | Objective: Daily Dressing Change  
• Content to include:  
  » Hand hygiene  
  » Preparing dressing change area  
  » Old dressing removal/disposal  
  » Apply new dressing | List 17 |
| Keep the message focused | • Limit education to several key points  
• Place most important information first  
• Educate in small segments, “chunk and check”  
• Stepwise instructions | List 18 |
| Identify patient behaviors to demonstrate knowledge | Build education to teach desired patient behaviors (teach to goal).  
• Patient demonstrates toe-touch weight bearing  
• Implement behavioral contract | List 19 |
<p>| Employ effective communication strategies | Consider need for staff training in effective communication strategies (e.g. active listening, build rapport) and content. | List 20 |</p>
<table>
<thead>
<tr>
<th>Planning Steps</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Develop the Education Plan (continued)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote self-efficacy, skill mastery</td>
<td>Maximize self-efficacy/ build confidence through • Use of short term achievable goals • Knowledge acquisition (classes, one on one sessions, practice hands on skills/problem solving) • Modeling of behavior; self monitoring • Positive reinforcement/ persuasion</td>
<td>List 21</td>
</tr>
<tr>
<td>Use team-based approach</td>
<td>Team members (nurse, primary care provider, pharmacist) work with patient to achieve objectives. • Use physicians, pharmacist or other health experts to teach health information</td>
<td>List 22</td>
</tr>
<tr>
<td>Use multi-modal approach</td>
<td>For each learner use more than one teaching strategy at a time. For example, when teaching verbally provide a simple written handout. Additional examples of strategies that incorporate multi-modal approaches or can be combined with other strategies: • Shared Decision Making (Appendix 8) • Teaching verbally with written handout then follow-up with phone call. • Education program with immediate feedback • Addressing knowledge, emotional and behavioral changes • Social support (parents, peers, school, healthcare team) • Self-regulatory learning (self-testing, monitoring) (Appendix 9) • Positive Affect and self-affirmation (Appendix 10)</td>
<td>List 23</td>
</tr>
<tr>
<td>Use multi-sensory approach</td>
<td>Education should engage as many senses as possible (e.g., auditory, visual, tactile, smell). • Combination of verbal and written health education • Video with auditory and visual content • Edutainment • Pictures, illustrations, 3D models, images etc. • Hands-on skill sessions • Interactive games</td>
<td>List 24</td>
</tr>
</tbody>
</table>
2. Develop the Education Plan (continued)

<table>
<thead>
<tr>
<th>Planning Steps</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
</table>
| Use multi-prong approach                                 | Offering the same education in various formats to meet the learning preferences of patients. Patients can select method to learn health information.  
  • In-person class, webinar, videos, 1 on 1 session, written materials                                                                                     | List 25  |
| Have repeated contact with patient to reinforce teaching  | Examples: Follow-up phone calls, counseling or coaching sessions, group classes over a designated time period, pharmacy visits, unlimited access to skill learning on the web, start education early.                      | List 26  |
| Use problem-centered learning - patient knowledge is gained through solving real world problems                                               | • Patient can demonstrate what to do when blood sugar is too high or too low.  
  • Patient given physiological feedback with goal to improve health measure (i.e, HbA1C, blood pressure, cholesterol level).                                      | List 27  |
| Use experiential learning                                | • Learn through “doing” and reflecting on learning.  
  » Patient with diabetes plans, shops for and prepares meal.  
  • Role Modeling: Provide role models for patients to learn from.  
  • Performance: Give patient an opportunity to perform health behaviors.                                                                                   | List 28  |
|                                                          | • Use analogies during education:  
  “Your knee joint is like a door hinge. A door hinge can become hard to move and squeaky over time. That is what can happen with your knee when you start to have arthritis.”                                      |          |
| Use personalized action plans                            | Develop an action plan with the patient that is individualized and meaningful to them.                                                                                                                                  | List 29  |
|                                                          | • When blood sugar is low, patient will eat quick acting sugar product they prefer (favorite candy or juice)                                                                                                                 |          |
### 3. Select Educational Resources

<table>
<thead>
<tr>
<th>Planning Steps</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
</table>
| Consider available resources that support educational content | • Written materials: use easy to understand language; available in languages other than English.  
  • Videos: available in languages other than English.  
  • Technology: promote ease of access to health information and interactive format (app, smart phones, tablets, kiosks, video games, eBooks, automated phone disease management, computer assisted video instruction).  
    » Blood pressure kiosks at mall or a phone "app" for tracking carbohydrate intake & blood sugars.  
  • Interactive games or activities: use to reinforce teaching message and skills.  
  • Decision aids used in shared decision making (Appendix 11)  
  • Pictures, illustrations, 3D models, images pictograms | List 30 |
## Education Concepts/Models

The following educational concepts/models provide unique approaches that may be helpful to educators when planning and providing patient education.

<table>
<thead>
<tr>
<th>Education Concepts/Models</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
</table>
| EDUCATE model for verbal patient education (Appendix 12) | E = Enhance comprehension and retention  
D = Deliver patient-centered education  
U = Understand the patient  
C = Communicated clearly and effectively  
A = Address health literacy and cultural competence  
TE = Teaching and educational goal | List 31 |
| EMMA Dialogue Tools (Empower, Motivation, Adherence) | • Reflection tools: dialogue on the challenges experienced by patients related to their disease and its treatment.  
• Goal-setting tools: help patients in planning and adhering to goals for change.  
• Knowledge and learning tools: individualize knowledge and learning for patient. | List 32 |
| NEED (Appendix 13) | • Dialogue tools stimulate patients to express themselves and foster participant involvement.  
• Picture cards, quotations, and ‘gamification.’ Each tool has step-by-step instructions and promotes flexibility and individual variation. | List 33 |
| Stanford Chronic Disease Self-management Model (Appendix 14) | Interactive classes with peers providing education and training. Focus on problem solving abilities through discussion. | List 34 |
| Social learning and self-management theories | Social learning states that new behaviors can be learned by watching and imitating others. Self-management is geared toward patient managing own health concern through knowledge and skills. | List 35 |
| Health Coaching techniques with behavior and social support | • Identify what is most important to patient.  
• Guide self-discovery of ambivalence to making behavior change.  
• Assist to set realistic goals and develop action plans; identify support systems.  
• Explore/minimize obstacles to progress.  
• Hold patient accountable for the change. | List 36 |
Implementation

In the implementation phase, the health care professional puts into action the evidence-based teaching plan.

**Implementation Steps**

1. Implement teaching plan with the **focus** on the patient.
2. Keep the **key principles** of patient education in mind when teaching.
3. Adjust teaching based on patient’s response/changes in learning needs
<table>
<thead>
<tr>
<th>Implementation Steps</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Focus on the Patient</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use plain language</td>
<td>• Simple, direct message&lt;br&gt;• Use common everyday language&lt;br&gt;• Avoid medical jargon; if medical terms are needed, define the terms&lt;br&gt;&quot;To check how your heart is working, you will have an echocardiogram today. An echocardiogram is a test that uses sound waves to shows how well your heart is pumping blood. It is similar to when women have an ultrasound of their baby while pregnant.&quot;</td>
<td>List 37</td>
</tr>
<tr>
<td>Use active listening skills</td>
<td>Active listening skills include paying attention, withholding judgement, reflecting, clarifying, and summarizing. Be attuned to patient's non-verbal cues/responses such as facial expressions, eye contact, body language.</td>
<td>List 38</td>
</tr>
<tr>
<td>Identify &quot;teachable moments&quot;</td>
<td>When patient asks questions or shows an interest in learning about their health, use this opportunity to teach.</td>
<td>List 39</td>
</tr>
<tr>
<td>Maintain patient's self-esteem</td>
<td>Be respectful, using empathetic tone and language.</td>
<td>List 40</td>
</tr>
<tr>
<td><strong>2. Key Principles of Patient Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frame the message</td>
<td>Briefly, in 1 or 2 sentences, tell the patient what you will be teaching.&lt;br&gt;“Today we are going to talk about how to give an insulin shot. It will include filling the syringe and injecting insulin.”</td>
<td>List 41</td>
</tr>
<tr>
<td>Educate in small segments and verify understanding before moving onto next segment.</td>
<td>Chunk &amp; Check (provide 1 or 2 points followed by checking if patient understands)&lt;br&gt;Insulin Administration example:&lt;br&gt;Before teaching the patient how to inject insulin, be sure patient knows to how to accurately draw up insulin dose.</td>
<td>List 42</td>
</tr>
<tr>
<td>Reinforce teaching</td>
<td>Summarize/review key points.&lt;br&gt;Dressing Change example:&lt;br&gt;1. Clean work area&lt;br&gt;2. Gather supplies&lt;br&gt;3. Wash hands&lt;br&gt;4. Open packages&lt;br&gt;5. Remove old dressing/discard&lt;br&gt;6. Wash hands&lt;br&gt;7. Apply new dressing</td>
<td>List 43</td>
</tr>
<tr>
<td>Implementation Steps</td>
<td>Explanations/Examples/Scripts</td>
<td>Ref List</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>2. Key Principles of Patient Education (continued)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Ensure effective use of teaching resources | • Highlight key information that patient should learn from the resource.  
   » Mark written material with a highlighter  
   • Make sure educational resource is easily accessible to patient (i.e. computer, smart phone, internet).  
   • Review hands-on use of resource.  
   • Provide pen/paper for writing down questions or taking notes if needed.  
   • Follow up with patients after resource is used to address patient questions. | List 44 |
| **3. Adjust Teaching** | | |
| Address patient's questions | • Encourage patient to ask questions.  
   • Answer questions when asked.  
   • Avoid deferring questions to end of teaching session. | List 45 |
| If patient is not understanding information, try different words and/or analogies that are familiar to the patient. | When explaining a cardiac "pacemaker" to a car mechanic use a term that is more meaningful. For example, a pacemaker acts like a "sparkplug" to make the heart work.  
   In describing a blockage in the heart’s arteries to a plumber, an analogy would be to compare it to a pipe that is partially clogged so the flow of water is prevented. | List 46 |
| Repeat demonstration/hands-on practice | Provide time for repeat demonstration and allow more hands-on practice, as needed. | List 47 |
| As needed, use more than one teaching method to clarify concepts and/or foster understanding | Example: Patient is struggling to understand when to call doctor after viewing video. Staff engages with patient for 1 on 1 education on when to call the doctor. | List 48 |
Evaluation

Evaluation demonstrates the degree to which learning is achieved. Evidence of learning can be demonstrated in a patient’s ability to apply information and problem solve a hypothetical or real world situation for practice.

It is important to evaluate the degree of learning, not the tool used to achieve learning. Evaluate after each concept is taught (chunk and check) and at the end of the teaching session. It may be necessary to re-teach using different methods and/or resources. Refer to Planning and Implementation to modify the teaching plan until learning is achieved.

**Evaluation Steps**

1. Evaluate learning using teach back strategy.
2. Evaluate learning of skill/behavior through return demonstration.
3. Evaluate learning by measuring a change in patient outcomes.
<table>
<thead>
<tr>
<th>Evaluation Steps</th>
<th>Explanations/Examples/Scripts</th>
<th>Ref List</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Direct patient input</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teach Back strategy</td>
<td>• Use in direct conversations or part of a classroom setting.</td>
<td>List 49</td>
</tr>
<tr>
<td></td>
<td>• Phrase teach back questions so patient does not feel as if being tested.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>» &quot;I want to make certain I've told you everything you need to know. Tell me in your own words:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- how you will....&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- what are you going to do if....&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- how would you explain....&quot;</td>
<td></td>
</tr>
<tr>
<td>2. Return demonstration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perform skill/behavior</td>
<td>• Evaluate skill performance, including purpose and steps in the process.</td>
<td>List 50</td>
</tr>
<tr>
<td></td>
<td>» Patient shows ability to troubleshoot a problem</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide feedback to support teaching during the demonstration.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>» Gently correct any misconceptions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>» &quot;How confident are you that you can do this?&quot;</td>
<td></td>
</tr>
<tr>
<td>3. Patient outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurable change in patient</td>
<td>• Measure adherence to self-management plan.</td>
<td>List 51</td>
</tr>
<tr>
<td>outcomes.</td>
<td>» Review:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- questionnaires, symptom logs, quality of life measures, validated tools</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Assess change in readmission rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Verify adherence to medications or treatment plan with lab results or other biometrics</td>
<td></td>
</tr>
</tbody>
</table>
Appendices

Appendix 1 Patient Engagement Tools

Patient Activation Measure (PAM) - Tool measures patient engagement by examining attributes (e.g., confidence and knowledge to take action, belief in active role)

Appendix 2 Health Literacy Tools

Implementing health literacy universal precautions is considered best practice. Health literacy universal precautions refers to using oral and written strategies as if all patients have some form of low health literacy. Various health literacy assessment tools have been developed for general and specific patient populations.

Health Literacy Universal Precautions Tool kit - Resource containing various aspects of how to address health literacy including assessments

Health Literacy Tool Shed
https://healthliteracy.bu.edu/

Newest Vital Sign (NVS) - Assesses reading as well as numeracy skills

Rapid Estimate of Adult Literacy in Medicine (REALM) - Tests reading ability through pronunciation of health terms

Tests of Functional Health Literacy in Adults (TFHLA) - Examines reading comprehension as well as numeracy skills

Parental Health Literacy Activities Test (PHLAT) - Assessment of health literacy skills and numeracy skills of parents of young children to determine ability to understand instructions for caring for young children.
Appendix 3 Risk Evaluation and Mitigation Strategy Assessment (REMS)

A REMS is an FDA required risk management plan that uses understandable patient education tools beyond the medication package insert. An example is a medication guide and patient package insert for patients and a communication plan focused on health care professionals.


Appendix 4 Motivational Interviewing

“Through motivational interviewing, clinicians can develop a stronger rapport with patients, better understand their concerns and goals, and address barriers to their engagement...

OARS is a frequently used framework for engaging patients through motivational interviewing. It’s an acronym for four key interviewing skills: asking open questions, reinforcing responses with affirmations, practicing reflective listening, and summarizing patients’ perspectives.

For example, instead of saying, “You really need to quit smoking,” a clinician using the OARS framework might say, “It sounds like there are some barriers in your life that are preventing you from quitting.” This shift in language creates space for the clinician and patient to talk through barriers to care and ensure the patient feels heard. By using OARS, clinicians can better empathize with the patients’ perspectives and choices.”


Appendix 5 Health Literacy Universal Precautions

“Health literacy universal precautions are the steps that practices take when they assume that all patients may have difficulty comprehending health information and accessing health services. Health literacy universal precautions are aimed at—

• Simplifying communication and confirming comprehension for all patients, so that the risk of miscommunication is minimized.
• Making the office environment and health care system easier to navigate.
• Supporting patients’ efforts to improve their health.”


Appendix 6 Oral and Written Plain Language

“Plain language (also called plain writing or plain English) is communication your audience can understand the first time they read or hear it.”

https://www.plainlanguage.gov/about/definitions/
Appendix 7 CDC Clear Communication Index

“CDC’s Clear Communication Index goes beyond checklists and readability formulas by:

• Focusing on the most important research-based items that enhance clarity and aid understanding
• Providing a numerical score so that you can objectively assess and improve materials based on the best available science”


Appendix 8 Shared Decision Making

“Shared decision making is a key component of patient centered health care. It is a process in which clinicians and patients work together to make decisions and select tests, treatments and care plans based on clinical evidence that balances risks and expected outcomes with patient preferences and values.”

“In many situations, there is no single “right” health care decision because choices about treatment, medical tests, and health issues come with pros and cons. Shared decision making is especially important in these types of situations:

• when there is more than one reasonable option, such as for screening or a treatment decision
• when no one option has a clear advantage
• when the possible benefits and harms of each option affect patients differently.”

“Shared decision making helps providers and patients agree on a health care plan. When patients participate in decision making and understand what they need to do, they are more likely to follow through.”


Appendix 9 Self-regulatory Learning

• Learning health information can be promoted by supporting patients’ self-regulatory learning processes (how they teach themselves). Self-regulated learning is a process where patients self-test and check responses against key concepts about a chronic disease before restudying information.

Appendix 10 Positive Affect and Self-Affirmation

Positive affect involves the patient thinking about small things which create good feelings. Positive affect should be done each morning. This may support the patient in overcoming challenges to improve health. With self-affirmation, patients think of a moment(s) when they were very proud of themselves to help them overcome health challenges.
Appendix 11 Decision Aids

“What are patient decision aids?

Patient decision aids are tools designed to help people participate in decision making about health care options. They provide information on the options and help patients clarify and communicate the personal value they associate with different features of the options.

Patient decision aids do not advise people to choose one option over another, nor are they meant to replace practitioner consultation. Instead, they prepare patients to make informed, values-based decisions with their practitioner.”

http://ipdas.ohri.ca/what.html

Appendix 12 EDUCATE model

The EDUCATE model is a guide for verbal patient education which leads the educator through five stages to reach teaching objectives. In addition to stages described in the EDUCATE acronym, the model focuses on adequate preparation for teaching and learning, good teaching methods, overcoming barriers to learning, teaching as an interactive process, and assessment of learning.

Appendix 13 NEED

Next Education (NEED) approach is designed to guide educators in developing patient education to meet the needs and challenges of individual patients. The NEED program has specific dialogue tools which address different learning preferences and as a result engage patients who may have not been active in the education process.

https://doi.org/10.1016/j.pec.2016.01.006

Appendix 14 Chronic Disease Self-Management Program

“The Chronic Disease Self-Management Program (CDSMP) is an effective self-management education program for people with chronic health problems. It specifically addresses arthritis, diabetes, and lung and heart disease, but teaches skills useful for managing a variety of chronic diseases. This program was developed at Stanford University. CDSMP workshops are held in community settings and meet 2-1/2 hours per week for 6 weeks. Workshops are facilitated by 2 trained leaders, 1 or both of whom are non-health professionals with a chronic disease themselves. This program covers topics such as techniques to deal with problems associated with chronic disease; appropriate exercise and use of medications; communicating effectively with family, friends, and health professionals; nutrition; and how to evaluate new treatments.”

Guidelines Quick Guide

The Patient Education Practice Guidelines for Health Care Professionals provides concise direction for frontline health care professionals. The guidelines are based on the four components of the patient education process: **assessment, planning, implementation and evaluation (APIE)**. Each component is essential for the delivery of effective patient education. Effective patient education focuses on the concepts of “patient-centered” and “patient engagement.” Additionally, effective strategies include **plain language and focusing on behaviors, not just knowledge**. For this document, “patient” includes consumers, family, friends, neighbors, guardians, significant other/partner or anyone else designated to address care needs.

**Assessment**

- Assess patient’s:
  - Culture, social support and socioeconomic information
  - Knowledge of current health issues and recommended treatments
- Identify patient’s:
  - Learning preferences (verbal, written, visuals, multi-media, technology)
  - Priorities, concerns and motivations to learn
  - Barriers to learning (cognitive, sensory, physical, etc.)

**Planning**

- Partner with patient to develop mutual education goals utilizing all aspect of the assessment. Goals are clearly stated, action-oriented, measurable, and achievable.
- Develop teaching plan:
  - Focus on patient needs, priorities, behaviors and mitigate any barriers to learning
  - Use evidence-based teaching strategies (e.g., easy to understand language, multi-modal, multi-sensory, repeated contact, personalize)
  - Identify educational resources to achieve identified learning goals (e.g., decision aids, interactive games, videos, written information, phone apps, kiosks)
**Implementation**

- Implement the plan:
  - Focus on the patient by maintaining patient’s self-esteem; be attuned to patient’s verbal/nonverbal cues (active listening skills)
  - Use plain language, focused messaging, review of key points
  - Effectively use teaching resources with patient (how to use resource; highlight key information; follow-up on patient questions)
- Adjust teaching based on patient’s response/changes in learning needs.
  - Encourage and answer patient questions
  - Clarify messaging; using different words or analogies

**Evaluation**

- Evaluate patient understanding:
  - Use teach back strategy and return demonstration of hands-on skills
  - Evaluate learning by patient’s ability to relate how to deal with real life situational problems/when to seek medical attention
- Measure a change in patient outcomes.
References By List

Homepage References


Assessment References

List 1


**List 2**


List 3


List 4


List 5


Planning References

List 6


**List 7**


**List 8**


**List 9**


**List 10**


**List 11**


**List 12**


List 13


List 14


**List 15**


**List 16**


**List 17**


**List 18**


**List 19**


List 20


List 21


List 22


**List 23**


**List 24**


**List 25**


**List 26**


**List 27**


**List 28**


**List 29**


**List 30**


**List 31**


**List 32**


**List 33**


**List 34**


**List 35**


**List 36**


**Implementation References**

**List 37**


Shetty, F., & Gupta, R. (2013). Improved MDI inhaler technique observed in adult asthma patients with Web based education. *European Respiratory Journal, 42*


**List 38**


**List 39**


**List 40**


List 41


List 42


List 43


**List 44**


List 45


List 46


List 47

List 48

**Evaluation References**

List 49


List 50


List 51


References Alphabetically

A


D


S


T


V


W


