

## Writing Learning Objectives for your CE Program (ACPE Standard 4)

Each CPE activity should have objectives that define what the pharmacists and technicians should be able to do upon completion. Learning Objectives should be:

- Specific and measurable
- Developed to specifically address the identified educational need (ACPE Standard 2)
- Addressed by an active learning activity (ACPE Standard 7)
- Covered by a learning assessment (ACPE Standard 9)
- Focused on the CE participant

### Specific and Measurable

A learning objective is measurable when the participant can perform a task identified in the learning objective

### Verbs to consider when writing learning objectives:

Knowledge (to recall facts)	Comprehension (to understand)	Application (to apply concepts/ demo skills)	Analysis (use info/make connections)	Synthesis (formulation)	Evaluation (judgment)
Arrange	Associate	Apply	Analyze	Arrange	Appraise
Cite	Classify	Choose	Appraise	Assemble	Argue
Count	Compare	Complete	Calculate	Collect	Assess
Define	Contrast	Construct	Categorize	Combine	Attach
Duplicate	Describe	Demonstrate	Compare	Comply	Choose
Identify	Discuss	Dramatize	Contrast	Compose	Compare
Label	Distinguish	Employ	Criticize	Construct	Conclude
List	Explain	Illustrate	Debate	Create	Critique
Memorize	Give examples	Interpret	Detect	Design	Defend
Name	Identify	Manipulate	Diagram	Detect	Determine
Outline	Indicate	Operate	Differentiate	Devise	Differentiate
Order	Interpret	Perform	Discriminate	Develop	Estimate
Read	Locate	Practice	Distinguish	Formulate	Evaluate
Recall	Outline	Predict	Examine	Generalize	Interpret
Recite	Predict	Relate	Infer	Integrate	Judge
Recognize	Recognize	Schedule	Inspect	Manage	Justify
Relate	Report	Sketch	Investigate	Organize	Measure
Repeat	Restate	Translate	Question	Plan	Predict
Reproduce	Review	Use	Research	Prepare	Rate
Select	Select	Utilize	Separate	Propose	Recommend
State	Tell	Write	Summarize	Provide	Revise
Tell	Translate		Test	Set up	Score
Write					Select
					Support
					Value

### Verbs to AVOID when writing learning objectives:

Know	Understand	Learn	Appreciate	Become aware of	Become familiar with
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### Examples of well written learning objectives:

*At the completion of this activity, the participant will be able to:*

- Summarize pharmacokinetic monitoring programs often offered by hospital pharmacy services.
- Recommend appropriate therapy based upon the patient's co-morbid conditions.
- Review potential outcomes from implementing a pharmacokinetic monitoring service at your facility.

### **Examples of weak, unmeasurable learning objectives:**

*At the completion of this activity, the participant will be able to:*

- Increase participant's knowledge of new drugs released in the last year.
- Understand the differences between long-acting insulin preparations.
- Become familiar with new treatment options for bipolar disorder.

### **Educational Need**

Develop your learning objectives based upon what has been identified as the audience's need. For example, if your topic was identified because of several warfarin-related dosing errors that have occurred within the pharmacy staff, you could have an objective on determining appropriate dosing for warfarin.

### **Active Learning Activity**

All CPE activities must include active participation and involvement of the pharmacist and technician. The methodologies employed should be determined by the CPE activity planned, objectives, educational content, and the size and composition of the intended audience.

### **Learning Assessment**

Learning Assessments must be included in each CPE activity to allow pharmacists and technicians to assess their achievement of the learned content. Recommend having at least one learning assessment cover each learning objective. For example, the presenter could have 5 learning assessment questions interspersed throughout the presentation that address a CE activity with 3 learning objectives.

### **CE Participant (Audience)**

Keep in mind that CE is to be designated as P (pharmacist) or T (technician) based on the content of the program. Your learning objectives should reflect this content and the designation. If your program is intended for both pharmacists and technicians, you should have separate learning objectives for each group unless all objectives are applicable to both groups' roles and responsibilities. These should be reasonable for each group to achieve within their specific performance objectives.

As experts regarding medication use, pharmacists will be responsible for:

1. Rational use of medications, including the measurement and assurance of medication therapy outcomes
2. Promotion of wellness, health improvement, and disease prevention
3. Design and oversight of safe, accurate, and timely medication distribution systems.

Pharmacists should also develop and maintain proficiency in five core areas:

- Delivering patient-centered care
- Working as part of interdisciplinary teams
- Practicing evidence-based medicine
- Focusing on quality improvement and
- Using information technology

The pharmacy technician performs activities related to three broad function areas. The specific responsibilities and activities that pharmacy technicians may perform within each function area are:

1. Assisting the pharmacist in serving patients
2. Maintaining medication and inventory control systems
3. Participating in the administration and management of pharmacy practice