Appendix A:

The planning process is initiated after identifying that accredited continuing education might be an appropriate intervention to address a change to a standard of care, a problem that exists in practice, or an opportunity for improvement. The planner initiates the process by analyzing data to validate the need for the activity. This analysis becomes the basis for the professional practice gap.

Professional Practice Gap(s):
 Current State, Desired State, Gap
 (3.10, 3.11, 3.12)
	The professional practice gap – difference between current state (what is happening) and desired state (what should be happening). Professional practice gaps may occur in administration, clinical practice, education, and research. Gaps can be at the individual level, the group level, the community of providers level, etc.
	
	 Gaps exist when learners are:
	 • *Not doing everything they could*
	 • *Are not doing things correctly*
	 • *Could improve what they are doing*
	
	 Gaps can be in:
	 • *Knowledge: don't know something*
	     o *Example: Misdiagnosis because of lack of knowledge*
	 • *Skill/Competence: don't know how to do something , don't have methods or strategies*
	     o *Example: Unable to insert catheter due to lack of knowing how to do it*
	 • *Performance: Don't do something in practice*
	     o *Suboptimal patient outcomes because of lack of action, intervention, barriers, etc.*
	     o *Example: Healthteam member did not gown up prior to entering isolation room when signs in place and return demonstrations previously completed.*
	 • *Patient outcomes: consequences of performance*

Educational Need Identified: *Gap due to knowledge, skill/competence and/or Practice* *(3.13a/b, 3.14a/b, 3.15a/b)*	*A need can be defined as the cause or reason for the gap. Why do you think the current state exists? What is the underlying or root cause (lack of knowledge, skill/competence, or performance) that caused the gap? Note: You may choose to not address all identified educational needs in your education. For example, you may start with education focused on the knowledge gap, then build to the skill or performance gaps in later sessions.* <u>*Reasons for the gap or problem could be:*</u> *1. Lack of prompt or early recognition of …..* *2. Inappropriate management of ……* *3. Application of wrong or incorrect techniques* *4. Not applying current clinical algorithms* *5. Challenging to stay current with rapid advances in the field, new drugs, etc.* *6. Treatment not happening in a timely manner*

	7. Lack of experience in managing or treating 8. Lack of education or training 9. Training is inadequate, inefficient, out of date 10. Condition is difficult or challenging to diagnosis or treat 11. Condition is poorly understood 12. Providers don't know when to refer patient to specialist 13. Providers lack the time to properly diagnose and/or treat condition 14. Providers don't get appropriate patient history 15. Patient not in compliance with treatment or does not adhere to treatment protocol
Needs Assessment: *Methods used to Identify Professional Practice Gap* *(3.20)*	*What evidence do you have to validate the gap exists?* *Ask yourself:* • *"What patient problems or professional challenges is the target audience unable to meet?" and* • *"Why are they unable to address the patient problems or challenges articulated above?" and* • *"What evidence, data, or sources were consulted in the identification of the professional practice gaps?"* *Examples of needs assessment sources:* • *Evidence-based, peer-reviewed literature* • *Outcomes data that supports team-based education* • *Quality care data* • *Direct observation of staff* • *Issues identified by colleagues* • *Problematic/uncommon cases* • *Ongoing consensus of diagnosis made by physician on staff* • *Advice from authorities of the field or societies* • *Formal or informal survey results of target audience, faculty or staff* • *Discussions in departmental meetings* • *Government sources or consensus reports* • *Board examinations and/or re-certifications requirements* • *New technology, methods or diagnosis/treatment* • *Legislative, regulatory, or organizational changes impacting patient care* • *Joint Commission Patient Safety Goal/Competency* • *Other* *When you document the source your information is obtained from, also document a brief description. For example: Quality scores show a CLABSI rate of 20% and national benchmark by JCAHO is less than 5%.*

Target Audience:	*Who is involved in the practice gap?* *Keep in mind that even if your role is to only educate the staff in your department, the target audience that relates to the professional practice gap may be more extensive. We highly encourage interprofessional collaboration.*
Learning Outcomes: *Outcomes vs Objectives*	*A learning outcome describes the overall purpose or goal for participation in an educational activity. Courses should be planned with a **measurable learning outcome** in mind. The learning outcome is identified from the gap analysis. The learning outcome is a reflection of the desired state.* *Objectives are used to organize specific topics or individual learning activities to achieve the overall learning outcome.* *Objective: Statements that define the expected goal(s) of an educational activity. Learning objectives can be used to structure the content of an educational activity. Objectives may include tasks such as "list", "discuss" or "state."* *Outcome: A written statement that reflects what the learner will be able to do as a result of participating in the educational activity. The outcome addresses the educational needs (knowledge, skills/competencies, and/or practices) that contribute to the professional practice gap and achieving the learning outcome that results in narrowing or closing the gap. The learning outcome can assess the overall impact of multiple objectives.* **Learning Outcomes** • *Are measurable and capable of being assessed* • *Are an outcomes-based approach* • *Are Learner-centric* • *Are explicit descriptions of what a learner should know, be able to apply and/or be able to do as a result of participating in the educational activity* • *Must be based on the desired outcome of the educational activity* • *Frame the context for objectives (why is it important to "list", "discuss" or "state" information?)* • *Provide measurable evidence of progress in closing the practice gap* **Learning outcomes connect the identified practice gap with the related educational need, while objectives are written as tasks:** <table><thead><tr><th>*Learning Outcome*</th><th>*Learning Objective*</th></tr></thead><tbody><tr><td>*Knowledge: Demonstrate knowledge of evidence-based treatment for hypertensive patients by passing post-test with score of ≥ 80%.*</td><td>*List 5 side effects of anti-hypertensive agents.*</td></tr><tr><td>*Competence/Skill: Correctly identify required actions to manage patients in hypertensive crisis by analyzing a case study.*</td><td>*Discuss risks associated with untreated hypertension.*</td></tr><tr><td>*Performance: Utilize an evidence-based protocol.*</td><td>*State normal range for blood pressure.*</td></tr></tbody></table>

The learning outcome demonstrates the behavior the learner will exhibit at the conclusion of the educational activity:

Learning Outcome	Learning Objective
Knowledge: At conclusion of the educational activity, participants will self-report knowledge gain of effective communication styles using a 5 point Likert scale.	Describe characteristics of effective communication styles.
Competence/Skill: At conclusion of the educational activity, participants will self-report an intent to change practice by applying evidence-based communication strategies.	List 5 methods of creating a safe environment for holding a confidential conversation.
Performance: At 6 month post-program evaluation, participants will self-report using SBAR for safe patient hand-off communication.	Define the components of the SBAR patient hand-off tool.

Below are a few great tools that help with educational design.

Competence area		Performance area			
Knowledge (recalling facts)	Comprehension (understanding)	Application (demonstrating skills / applying concepts)	Analysis (using information to make connections)	Evaluation (judging)	Synthesis (formulating)
Cite	Associate	Apply	Analyze	Appraise	Arrange
Count	Classify	Complete	Appraise	Assess	Collect
Define	Compare	Demonstrate	Categorize	Choose	Compose
Identify	Contrast	Illustrate	Compare	Critique	Construct
Label	Describe	Interpret	Contrast	Determine	Create
List	Discuss	Manipulate	Criticize	Decide	Design
Name	Distinguish	Operate	Debate	Differentiate	Detect
Read	Estimate	Perform	Detect	Estimate	Formulate
Recall	Explain	Practice	Diagram	Evaluate	Generalize
Recite	Give examples	Predict	Differentiate	Judge	Integrate
Relate	Interpret	Relate	Distinguish	Measure	Manage
Repeat	Locate	Report	Examine	Rate	Organize
Select	Predict	Restate	Inspect	Recommend	Outline
State	Report	Review	Question	Revise	Plan
Tell	Restate	Translate	Separate	Select	Prepare
Write	Review	Use			Propose
		Utilize			Provide
					Summarize

	Bloom Taxonomy **Action verbs and Activities** lecture visuals video audio examples illustrations analogies **REMEMBER** define list recall identify questions discussion review test assessments reports learner presentations writing **UNDERSTAND** restate summarize explain illustrate give example match classify practice exercises demonstrations projects sketches simulations role play teach back **APPLY** choose dramatize explain organize prepare produce demonstrate sketch solve use problems exercises case studies discussions questions test **ANALYZE** categorize classify compare differentiate distinguish point out select subdivide survey projects problems case studies simulations appraisals critiques debates **EVALUATE** appraise judge criticize defend compare develop plans creative exercises projects constructs **CREATE** construct create design develop formulate hypothesize invent make up originate organize plan produce role play Bloom Taxonomy Action Verbs and Activities by Iida Hokkanen is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. Adapted from: ftp://ftp-fc.sc.egov.usda.gov/NEDC/isd/taxonomy.pdf
Method of Evaluation:	*A clearly defined method that includes learner input is used to evaluate the effectiveness of each educational activity and determine whether learning outcomes were met. Results from the activity evaluation are used to guide the development of future activities. The method and content of evaluation should support measurement of the desired learning outcome(s) of the educational activity.* ***Some examples of evaluation methods are:*** ***Knowledge/Competence:*** *CE Portal Evaluation (Most commonly used)*

Paper Evaluation
Audience Response System
Customized pre/post test
Return Skill demonstration
Focus group discussion
Case study analysis
Role Play

Performance in Practice:
Adherence to guidelines
Case-based studies
Chart audits
Customized follow-up survey/interview/focus group about actual change in practice at specified intervals
Physician or patient feedback, surveys and evaluations
Reminders and feedback
Observation of performance in practice

Patient/Population Health
Change in health status measure
Change in quality/cost of care
Measure mortality and morbidity rates
Patient feedback and surveys

Miller's Pyramid of Assessment (Example)

	Assessment Construct	Assessment Methods
Does	• Knowledge, skills and attitudes integrated into context (performance in authentic clinical practice)	• Direct observation • Practice portfolio • Workplace-based assessments • Narratives
Shows How	• Integrated knowledge, skills and attitudes (demonstration of learning)	• Simulation • Standardized patient-based tests • Objective structured clinical examination (OSCE)
Knows How	• Applied knowledge (interpretation, clinical reasoning, application, problem-solving)	• Problem-based scenarios • Extended matching • Case-based multiple choice questions
Knows	• Knowledge (factual recall)	• Multiple choice • Short answer

Summative Evaluation: *QI Form*	*A summative evaluation shows that you and your committee have reviewed the evaluation data and outcomes, that were created to measure learners change as it relates to your professional practice gap, and made a determination on whether or not your met your stated outcomes. It also must state how this information will be used to guide future educational offerings. In addition, you can review the overall activity. If a live event, speaker performance and engagement would be beneficial to evaluate. Also, length of time allowed for each speaker and if any adjustments need to be made for future sessions.* *Depending on the evaluation type chosen, the Avera CE Portal may be able to provide you with analysis of your pre/post test scores, and evaluation data, but it is up to you as the planner to review and interpret the data in relation to meeting your stated outcomes and identify changes in future education.* *Example:* *On 2/2/2020 we had 50 participants attend a live, virtual 3 hour presentation. The outcome of the educational activity was that 100% of participants would demonstrate knowledge of the NIH Stroke Scale by achieving 80% or greater on the post-test. After the activity100% of the learners achieved >8-% on their post-test with the average post-test score of 92%.* *We feel this demonstrates that the knowledge gap has improved. However, the learners provided feedback in the evaluation that they would have appreciated a few more breaks and that there was not enough engagement strategies used.* *For future activities we are also going to add in a few short breaks throughout the event and utilize polling and chat room questions and answers to increase learner engagement.*

References:
1. 2015 ANCC Primary Accreditation Provider Application Manual.
2. California Board of Registered Nursing, Title 16.
3. Keating, S. (2011). *Curriculum development and evaluation in nursing*. New York, NY: Springer Publishing Company.
4. UCLA Health
5. ACCME Tool Kit