The purpose of the AAP CME Outcomes Project is to obtain and analyze changes in learners’
  • competence (abilities),
  • performance (what is done in practice), and/or
  • patient outcomes
resulting from participation in individual AAP CME activities and the overall AAP CME program.

To achieve this, the AAP Committee on CME (COCME) has outlined the models below, in accordance
with the Accreditation Council for CME (ACCME) Accreditation Criteria.

The committee recognizes that flexibility is needed to accommodate the diversity of AAP CME planning
groups, editorial boards, and joint/direct sponsors in exploring outcomes of their learning activities, and
additional strategies beyond those listed here for compiling and analyzing changes in learner competence,
performance, or patient outcomes are encouraged.

AAP CME planning groups, editorial boards, joint/direct sponsors, and staff (“CME planners”) may
choose among the models below for pursuing outcomes measurement of their activities effective at the
earliest opportunity. However, because learners are not engaged following a CME activity about the
changes they made and their impact on patient care, use of Model III is discouraged and should only be
used when it is not possible to follow-up with learners about their practice changes and any barriers they
encountered when making practice changes. The COCME intends to phase out Model III as an option in
the future.

MODEL I: Outcomes-based Questions and Follow-up With Learners

**ACCME C3 – Provider generates activities/educational interventions that are designed to change
competence, performance, or patient outcomes as described in its mission statement.**

Specific outcomes-based questions will be asked of learners or a sample of learners in 1) AAP CME
activities overall, 2) select sessions or articles within CME activities, and/or 3) other educational
endeavors associated with CME activities. While a commitment to change contract or a written or online
survey is an effective way to ask these questions of learners, CME planners may also wish to consider
conducting either a phone survey/interview or a focus group of learners or a sample of learners.

**COCME Implementation Tip:** To assist in the selection of a session/article around which to
assess outcomes, CME planners are encouraged to consider which professional practice gap(s) is
being addressed in their CME activities and to select a session(s)/article(s) for outcomes
measurement based on the gap(s). Correlating a CME activity’s professional practice gap(s) to
outcomes measurement would enhance planners’ ability to assess if they were successful in
implementing practice changes in learners based on their needs assessment processes.

The questions (Ques 1a, 1b, 1c) below are designed to assess change in learners’ abilities (competence),
what learners actually do in practice (performance), and/or the impact on the patient or on healthcare
(patient outcomes). They should be stated “as is” and asked separate from an evaluation, so learners
may be identified with their responses for individual follow-up to occur. (Please note: Those words stated
in brackets below should be omitted when printed or published.)
1a. As a result of participating in this learning activity, do you intend to make a change in practice to provide better patient care? ____ Yes ____ No

If yes, 1b. Please describe what you will do differently in practice [performance] and how you will accomplish this change in practice [competence]. _____

If no, 1c. Why not? (Please check all that apply)
____ The learning activity reinforced what I am already doing in practice.
____ Lack of time and/or resources would limit making change(s) in my practice setting.
____ There were no appropriate change options offered for my practice.
____ Other – please specify: ____________________

COCME Implementation Tip: In lieu of asking an open-ended outcomes question (Ques 1b above), it is suggested that CME planners identify and outline suggested changes as a “checklist” of options that may be considered and selected by learners for improving their competence and/or performance. Some CME planners have found implementation of this strategy to be beneficial not only in identifying categories of suggested changes to assist them in their review and analysis of the learning outcomes, but also in focusing faculty/authors to reflect on the key changes and actions they wish to convey to learners in relation to the learning objectives. Additionally, with many CME activities already asking faculty to include “practice changes” slides or information in their material, this information could also be used as part of the CME activity’s outcomes measurement endeavors.

ACCME C11 - Provider analyzes changes in learners (competence, performance, or patient outcomes) achieved as a result of the overall program’s activities/educational interventions.

All AAP CME planners must compile and analyze changes in learners’ competence, performance, and/or patient outcomes that resulted from their individual CME activities that comprise the overall AAP CME program. (Analysis of change in knowledge alone is not sufficient.) This information should then be used to draw conclusions about the impact of the activities (and CME program) on physician change.

To accomplish this, the questions (Ques 2a, 2b, 2c. 2d) below related to individuals’ responses to the aforementioned outcomes questions (Ques 1a, 1b) should be asked and stated “as is” subsequent to the learning activity. (Please note: Those words stated in brackets below should be omitted when printed or published.) CME planners are strongly encouraged to provide or restate what the learner originally said would be done differently in practice in order for him/her to answer these follow-up questions. Follow-up with learners who had indicated that they would not be making changes in practice (per Ques 1a, 1c above) does not need to occur.

2a. Did you make the practice change you indicated you would? ___Yes ___ No

If yes, 2b. Describe the impact of your change on patient care [patient outcomes]: _____

2c. Indicate any/all barriers you encountered when making the change in practice.
____ Lack of resources (e.g., financial, staffing)
____ Lack of time
____ Systems-related
____ Patient is not complying with change
____ Patient/case related to my change has not presented yet
____ Still in process
____ Forgot, but appreciate the reminder
____ Other __________________

2d. How did you resolve the barrier(s) you encountered? ______
To assess learners’ abilities to successfully implement practice change, **follow-up** with learners should occur at least once between six (6) weeks and six (6) months after the activity (e.g., three months, three and six months) and may be preceded by providing learners with a reminder of their intended changes.

Strategies to obtain outcomes for individual learners are encouraged through the most efficient and effective methods, which may include electronic compilation (or manual processing) of information from respondents for a CME activity *overall*, for a *select* session or article, or for a *subset or sample* of all learners at an activity. It is the *quality* of the outcomes measurement activities that is important.

**ACCME C19 – Provider implements educational strategies to remove, overcome, or address barriers to physician change.**

Based on the compiled information of barriers to change applicable to their own learners (Ques 2c and 2d), CME planners should consider and incorporate into their future CME activity planning strategies to assist learners in overcoming the identified barriers to physician change. (Examples may include discussion in content of stereotypes, myths, or misconceptions to help learners minimize barriers; strategies learners may pursue to negotiate healthcare systems for achieving better patient care; strategies learners may pursue related to obtaining buy-in of partners or patients for a given change or treatment; etc.).

Upon analysis of the outcomes and follow-up data, CME planners are encouraged to subsequently provide individuals with specific resources (e.g., suggestions of AAP educational materials or toolkits) related to their intended changes or barriers to assist in implementation.

**MODEL II: Case-based Pre/Post-Test Questions**

**ACCME C3 – Provider generates activities/educational interventions that are designed to change competence, performance, or patient outcomes as described in its mission statement.**

Though not at the highest level of outcomes measurement, pre/post-tests consisting of case-based questions may be used to assess change in learners’ competence (abilities) following CME activities.

When this outcomes method is used, it should be planned and implemented according to the following:

- Case-based questions related to the content are communicated to learners, so the results are *shared in advance of an activity* with the faculty/authors and planners, enabling them to consider and refine their planned content according to the identified discrepancies of learners.
- The same case-based questions are asked via a post-test of learners *immediately following* the CME activity.
- At a point in time between six (6) weeks and six (6) months after the activity, the same case-based questions are communicated again to learners (e.g., “post post-test”).

**COCME Implementation Tip:** With the need to assess learners’ achievement of a minimum performance level for specific CME activities (e.g., enduring materials, journal-based CME activities), many CME activities are already implementing post-tests, which may be used as a pre-test as well.

**ACCME C11 - Provider analyzes changes in learners (competence, performance, or patient outcomes) achieved as a result of the overall program’s activities/educational interventions.**
Throughout the aforementioned process and most notably at its conclusion, CME planners should compile and analyze the pre/post-test data. (Analysis of change in knowledge alone is not sufficient.) This information should then be used to draw conclusions about the impact of the activities (and CME program) on physician change in competence.

**MODEL III: Global Evaluation of Learning Activities**

| ACCME C3 – Provider generates activities/educational interventions that are designed to change competence, performance, or patient outcomes as described in its mission statement. |

When it is not possible to follow-up with individual learners following their participation in an AAP CME activity, the questions below, designed to assess change in learners’ abilities (competence), what learners actually do in practice (performance), and/or the impact on the patient or on healthcare (patient outcomes), should be asked as part of an activity’s evaluation. *The responses would not be associated with individual learners, and follow-up with learners to assess application to practice at a future date would not occur.* Ques 1a, 1b, 1c, and 1d should be stated “as is,” although those words stated in brackets below should be omitted when printed or published.

1a. As a result of participating in this learning activity, do you intend to make a change in practice to provide better patient care? _____ Yes _____ No

**If yes, 1b. Please describe** what you will do differently in practice *{performance}* and how you will accomplish this change in practice *{competence}*. _____

1c. Which of the following barriers, if any, do you anticipate encountering when making your practice change(s)? (Please check all that apply)

- Lack of resources (e.g., financial, staffing)
- Lack of time
- Systems-related
- Patient non-compliance
- Other __________________

**If no, 1d. Why not?** (Please check all that apply)

- The learning activity reinforced what I am already doing in practice.
- Lack of time and/or resources would limit making change(s) in my practice setting.
- There were no appropriate change options offered for my practice.
- Other – please specify: __________________

**COCME Implementation Tip:** In lieu of asking an open-ended outcomes question (Ques 1b above), it is suggested that CME planners identify and outline suggested changes as a “checklist” of options that may be considered and selected by learners for improving their competence and/or performance. Some CME planners have found implementation of this strategy to be beneficial in not only identifying categories of suggested changes to assist them in their review and analysis of the learning outcomes, but also in focusing faculty/authors to reflect on the key changes and actions they wish to convey to learners in relation to the learning objectives. Additionally, with many CME activities already asking faculty to include “practice changes” slides or information in their material, this information could also be used as part of the CME activity’s outcomes measurement endeavors.

*Use of Model III is discouraged* and should only be used when it is not possible to follow-up with learners about their practice changes and any barriers they encountered when making practice changes.
All AAP CME planners must **compile and analyze intended changes** in learners’ competence, performance, and/or patient outcomes that resulted from their individual CME activities that comprise the overall AAP CME program. (Analysis of change in knowledge alone is not sufficient.) This information should then be used to draw conclusions about the impact of the activities (and CME program) on physician change.

### ADDITIONAL OUTCOMES MEASUREMENT STRATEGIES

In addition to the aforementioned Models outlined here, CME planners may explore other strategies to assess the impact of their CME activities on learners.

In some cases, outcomes measurement strategies are reflected in the actual design of the CME activities themselves. For example, as part of a formal three-stage cycle following the American Medical Association criteria to designate credit, performance improvement (PI) CME activities incorporate opportunities to learn from a current practice performance assessment, the application of PI to patient care, and the evaluation of the PI CME effort. Furthermore, chart reviews or other appropriate mechanisms may be incorporated in PI CME activities to assess one’s practice.

Acknowledging the correlation that many AAP CME activities have to the AAP Agenda for Children (strategic plan), some CME planners may choose to focus their outcomes measurement activities around topics associated with the AAP child health priorities (e.g., epigenetics; children, adolescents and media).

For some CME activities, CME planners may find it more efficient to follow-up with learners and inquire about their practice changes by incorporating outcomes-related questions into existing or ongoing communications. For example, if CME planners conduct annual needs assessments of their learners, there may be an opportunity to incorporate outcomes measurement questions into existing surveys or questionnaires, provided there is some correlation to the learning activities in which individuals had originally participated.

### SUMMARY

In conjunction with the COCME, CME planning groups, editorial boards, and joint/direct sponsors play key roles in facilitating the important outcomes measurement work of the AAP CME program.

Throughout this AAP CME Outcomes Project under the guidance of the COCME, CME planners are responsible for measuring learning outcomes of their respective AAP CME activities. Specifically, CME planners should:

- **Review the results** of the outcomes project for their respective activities in a timely manner.
- **Consider ways that cited barriers may be removed or addressed** through their respective CME activities or other AAP educational endeavors in the future.
- **Summarize the learner change information** and share an analysis with the AAP COCME.
- **Utilize the compiled outcomes measurement information in their needs assessment** and incorporate appropriate insights into future planning. This will assist CME planners in ensuring that the education they develop and deliver is effective in making positive change in learners. If positive change does not occur, then planners can also learn from this feedback and consider improvements that may be needed in their future CME activities.
The COCME is interested in hearing from CME planners about their CME activities’ outcomes measurement efforts. Which strategies work and should be shared with other AAP CME planners? Which strategies are more challenging to implement, and how can these be improved in the future?

Please feel free to share your feedback about the AAP CME Outcomes Project, outcomes measurement activities in general, or other questions you may have about AAP CME with the following individuals:

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