AAP CME Outcomes Project In Conjunction With CME Planning Groups, Editorial Boards, and Joint/Direct Sponsors Supporting CME Activities as a Bridge to Quality

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

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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 pretest as well.

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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

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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.

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** *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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