



Wright State University Boonshoft School of Medicine is an Accreditation Council for Continuing Medical Education (ACCME) accredited provider of continuing medical education (CME). All activities must adhere to ACCME **policies** including the **Essential Areas and Their Elements** and **Standards for Commercial Support**.

## Message from the Director

### How does Continuing Medical Education transform medical practice?

This is the question which sets the stage for any CME activity. Unfortunately, extensive research demonstrates that traditional CME lectures have little, if any, lasting impact on the practice patterns of their attendees. As a result, authorities including the ACCME and the Institute of Medicine (IOM) have called for a reevaluation of the design and evaluation of CME activities.

Effective design of CME activities should include three components:

- Gap Analysis
- Learning Objectives
- Evaluation



David Little, M.D.

**Gap Analysis** is a significant area of emphasis in the new ACCME Accreditation Criteria. A “professional practice gap”, as defined by the Agency for Healthcare Research and Quality (AHRQ), describes “the difference between health care **processes or outcomes** observed in practice, and those **potentially achievable** on the basis of current professional knowledge.” Effective CME must do more than simply present new knowledge. The process must begin with an analysis of current professional practice to identify specific health issues and interventions where outcomes fall short of achievable goals.

Gap analysis may take many forms. Examples include Quality Improvement initiatives at the practice level, observation of disease epidemiology and outcomes at the community level, and IOM physician competency statements. The common theme among these examples is the need for reflective practice, an ongoing exercise of evaluating what we do as physicians in comparison to the best available evidence supporting the decisions we make.

Continued on page 2...

### In this Issue:

- What is gap analysis: pg. 3;
- How to start gap analysis: pg. 4;
- Linking needs assessment with outcomes: pg. 6.

## Message from the Director continued...

**Learning Objectives** represent the translation of identified practice gaps into relevant educational goals. These objectives reflect the overarching goals of the educational activity. The ACCME describes the mission of a CME program on three levels: competence, performance, and patient outcomes. Although dissemination of knowledge (competence) is an accepted goal of CME, providers are encouraged to pursue the higher targets of improving physician practice and, ultimately, patient outcomes. Specific, measurable objectives define these improvements in a tangible way and stimulate both teachers and learners to consider the transformations necessary to address identified professional practice gaps.

**Evaluation** of CME effectiveness gives the provider, and the learner, the opportunity to assess the impact of an activity on professional practice. This assessment should go beyond **reaction** (Did you enjoy today's activity?) to incorporate **learning** (What new knowledge did you gain today?), **transfer of skills** (How will your practice change after this session?), and ultimately **results** (How did your patient outcomes improve as a result of this information?).

To improve upon activity assessment, the CME Program has created a standardized evaluation form. Use of this form will be required by all WSU CME providers effective January 1, 2010. The form will address the issues of learning and transfer of skills in a format that is customizable to individual activities. In addition, online follow-up surveys of CME attendees will be performed to report on the persistence of learning and skills transfer three months after each accredited CME activity.

Effective design of a CME activity requires understanding of the professional practice gaps which need to be addressed, specific measurable learning objectives to bridge the gaps, and meaningful evaluation to demonstrate the improvements in practice which result. Think of a CME activity as an opportunity to transform the practice of medicine!

### Snapshot of Wright State University Boonshoft School of Medicine CME

#### *Directly Sponsored*

Live Events: 11  
Enduring Materials: 17  
Journal: 2  
RSS: 11 series  
Total over 191 individual events

#### *Jointly Sponsored*

Live Events: 14  
Enduring Materials: 1

Total Hours provided: 449.5 hours of AMA PRA Category 1 credit<sup>®</sup>

Figures based on CME data collected 2008-2009

## Sources Used in CME Highlights

Electronic Health Record. (2009) In *Wikipedia* online. Retrieved July 10, 2009, from <http://www.wikipedia.org>

Mejicano, G. (2009). Presentation given at *CME: The Basics* Not the same old CME- selecting learning formats for the physician learner. Chicago, IL.

knowledge. (2009). In *Merriam-Webster Online Dictionary*.

Retrieved July 23, 2009, from <http://www.merriam-Webster.com/dictionary/knowledge>

Lawson, K. (2009). *The Trainer's Handbook*. San Francisco, CA: Pfeiffer

## What is gap analysis?

Since the ACCME released the 2006 updated criteria for accreditation, the CME industry and key opinion leaders have moved away from using the term *needs assessment* to describe the process of assessing professional practice gaps. In the past, a simple literature search, topics gleaned from past evaluations, or a planning committee member’s opinion was sufficient in describing the *need* for any given topic. However, in the current world of proving that continuing education through certified CME events has an impact on practice patterns and patient outcomes, these simple steps are no longer enough. To prove that a certified CME program has the potential to change patient outcomes, one must prove that there is a professional practice gap in knowledge, competence, and/or performance.

In the most straightforward way, professional practice gap is described as the difference between what is and what should be.



This assessment is not a simple printout of last year's evaluations or topics, or a literature search. Gap analysis includes information on current practice patterns and what the practice pattern should be. Both parts of this analysis should be clearly documented and linked.

Starting the analysis includes finding the current need. That can come from inferred methods, verbalized interest, and/or proven needs. Planning committees should use a combination of these methods and optimal practice data to clearly state the practice gap on the CME application and include supporting documentation. Formation of the educational activity comes from answering the questions “Why is there a practice gap?” and “How do we close the gap?”

<p><b>Inferred Methods</b>                  New methods of diagnosis or treatment                  New medication(s) or indication(s)                  New technology                  Input from experts regarding advances in medical knowledge                  Acquisition of new facilities or equipment                  Legislative, regulatory, or organizational changes affecting patient care</p>	<p><b>Verbalized needs and interests</b>                  Requests submitted on participants' activity evaluation forms                  Formal surveys of potential participants                  Focus groups                  Informal comments                  Patient problem inventories                  Consensus of faculty members within a department or service area</p>	<p><b>Practice Gaps</b>  <i>Knowledge:</i> the fact or condition of knowing something with familiarity gained through experience or association <i>Merriam-Webster Online Dictionary.</i>  <i>Competence:</i> ability to verbalize the transfer of knowledge into an action plan  <i>Performance:</i> observable and documentable behavior in professional practice.</p> <p><b>Example</b>                  A pulmonary specialist developed a program to tell primary care physicians how to care for asthma. In the application, she attached articles on the correct treatment steps for a patient with uncontrolled asthma as a needs assessment. In addition to this literature, the pulmonologist needs to communicate why this information should be presented as a certified CME activity. One option: cite an observed pattern in her practice of referred patients who have not been treated appropriately before being referred. This clearly states current practice patterns this physician sees and what the practice should be.</p>
<p>For more information, please visit:  <a href="http://www.med.wright.edu/fca/cme/needs.html">http://www.med.wright.edu/fca/cme/needs.html</a></p>	<p><b>Proven needs</b>                  Epidemiological data                  Re-credential review                  Statistics Infection control data                  Professional society requirements                  News media                  Quality assurance/audit data                  Morbidity/Mortality                  Surgical procedures statistics                  Journal articles/literature citations</p>	

## How to start gap analysis

The shift from simple literature searches to a more in-depth examination of the practice gap can be confusing. The purpose of gap analysis is to create a better educational program by asking: “What’s the problem?” “Whose problem is it?” “Why is there a problem?” “How can it be fixed?” Analyzing the learning environment including the physical atmosphere, faculty requirements, available resources, and learning barriers is another step in the gap analysis. All these answers should be used to develop learning goals.

Topics for continuing education usually are brought up informally through the planning committee meetings. This is a good start to defining the activity but cannot be the only source to define the entire project. Once the topic has been chosen, it should be researched to find the depth and scope of the professional practice gap. The next step for the planning committee is analyzing the results from past evaluation comments/suggestions, surveying the intended audience, reviewing current literature, identifying new methods, gathering local statistics, etc. In this step, the planning committee should identify potential learning barriers and current available resources. Having this analysis will define the initial suggested topic to a specific issue or set of issues, the reason why there is an issue, and proposed solutions and recommendations. A traditional live CME event may not be the most effective. The planning committee should review the possible delivery methods for certified CME, such as enduring materials, a new procedures skills course, or performance improvement.

One of the final steps is to put this analysis into words. Using the CME application questions in conjunction with the planning committee documentation will provide the review committee and ACCME strong evidence of links among the gap analysis, activity goal, and objectives.

### Example: High Blood Cholesterol

A faculty member wants to do a certified CME activity on cholesterol - commercials on television are prompting patients to ask for the newer drugs. This faculty member wants to review what the current recommendations on cholesterol levels are plus available FDA approved drugs. Is this an appropriate gaps analysis?

How do you proceed?

*One option of stepping through the gaps analysis is on page 5*

## Resources to explore

**National statistics archive** – National Statistics relating to the medical field

<http://www.hcup-us.ahrq.gov/reports/natstats.jsp>

**MedQIC** – Access to current performance measures that can link gap analysis to outcomes assessment

<http://www.qualitynet.org>

**Fordam Health Sciences Library** –Includes links to databases including Medline, MDCConsult, and more

<http://www.libraries.wright.edu/fordham/>

**Centers for Medicare and Medicaid Services CMS** - Database with current statistics and resources used for gap analysis

<http://www.cms.hhs.gov/>

**Hospital Compare** – Quality assurance tool comparing hospital care for patients with certain medical conditions or surgical procedures.

<http://www.hospitalcompare.hhs.gov>

**Ohio Department of Health** – Resource on the status of Ohio’s health care

<http://www.odh.ohio.gov>

## Example: High Blood Cholesterol Gap Analysis

On page 4, a planning scenario was presented as follows: *A faculty member wants to do a certified CME activity on cholesterol. Commercials on television are prompting patients to ask for newer drugs. This faculty member wants to review current recommendations on cholesterol levels plus available FDA-approved drugs. Is this an appropriate gap analysis?*

The following is one way to answer questions.

*What's the problem?* New drug therapies are available, and patients are asking for them. Some physicians are not aware of the advantages and limitations of each product.

*Whose problem is it?* Primary care physicians, cardiologists, etc.

*Why is there a problem?* Cardiovascular disease is one of the major killers in American society. New drug therapies are available with little information provided to physicians. Physicians may not be adequately counseling their patients on risk factors or consistently testing the risk factors.

*How can the gap be closed?* Education on new drug therapies both positive and negative, including a review of all FDA-approved therapies. In addition, the planning committee may want to create a quick reference card containing all current cholesterol drugs.

*What type of setting is appropriate?* Lecture, enduring material, etc. There may be grand rounds dates available.

*Are there any available resources?* Any physicians doing current research? Are there subject matter experts available? Who is doing research?

*What are the learning barriers?* Due to newness of the drug therapies, physicians are unlikely to be fully aware of the benefits or drawbacks of newer products. This lecture can be included in a current grand rounds schedule. The quick reference card can be distributed to those unable to attend.

### The following is one way to complete the CME Application, Section 2: Education and Planning

12. *What is the goal, purpose, or expectation of the activity planned?* The purpose of this activity is to review current recommendations on screening for high blood cholesterol and the current FDA-approved drug therapies available, including benefits and disadvantages of each therapy.
13. *Statement of Need: What is the professional practice gap?* According to the Ohio Department of Health report on Cardiovascular Disease in Ohio 2001, CVD is responsible for over 40% of all Ohio deaths. Risk factors of CVD include current cigarette smoking, obesity, high blood pressure, high blood cholesterol, diabetes, etc. The drug therapies that are newly available may help with the treatment of a combination of these factors. *(Note: Evidence of this cited research is attached to the application.)*
14. *Which professional practice gap(s) does the activity target?* Knowledge gap
15. *How were the educational needs determined?* Health statistics, new medical knowledge, new drug therapies
16. *How does the activity incorporate desirable physician attributes?* ACGME: Patient Care, Medical Knowledge; IOM: Employ evidence-based practice
17. *Which attribute(s) is/are the activity designed to change?* Physician Competence—this will be surveyed through the use of questions such as: “What will you do differently in practice?”
18. *What are the objectives for each speaker?*
  1. The learner will be able to discuss the current recommendations for the diagnosis and treatment of high blood cholesterol.
  2. The learner will be able to compare and contrast the available drug therapies used in the treatment of high blood cholesterol.
  3. The learner will be able to recognize the most appropriate drug therapy(ies) for each patient and clearly explain the choices to the patient.

## Linking needs assessment with outcomes

One of the most difficult issues the CME program at a community-based medical school like Wright State University Boonshoft School of Medicine faces is finding local, up-to date, and meaningful patient outcomes. Without access to hospital quality assurance officers and a robust system to track procedures and common problems, identifying possible vehicles for proving an educational intervention had an impact on patient outcomes is tricky. The most basic advice on linking the initial planning stages with outcomes is to start planning with the end in mind. Knowing what type of information is currently available, how that information is available, and what can be evaluated after the activity can help with planning an event that could have an impact on that data.

In the past few years, physician practice offices have invested in Electronic Health Records (EHR) with a variety of patient-related data such as demographics, medical histories, medicine and allergy lists, laboratory test result, billing, etc. These are a valuable tool for the physician office because they reduce errors and increase efficiency. EHR can also be used in the initial gap analysis. Analyzing current practice data can help in planning an activity and also be a vehicle to prove the educational intervention had an impact on practice.

Not all physicians use EHR, and not all planning coordinators have access to these types of tools. Using data from local health districts, the Ohio Department of Health, local hospitals, Medicare, literature searched, and other similar resources could help in creating thorough gap analyses. Use this data to help plan the activity and include a follow-up survey with similar targeted data to compare the data before and after.

The planning committee may even want to create a take-home tool for attendees to analyze their current practice before implementing the strategies of the CME event. Using this tool with a follow-up survey could prove an impact on practice.

Knowing that your activity will use follow-up surveys and evaluations, it is important to keep usable records on your attendees. Electronic follow-up evaluations through email are a popular and inexpensive way to contact the attendees. Using the free survey resource Lime Survey at the medical school can help in gathering relevant follow-up data – including suggestions and issues the physician learner ran into after the activity.

## Example

A faculty member comes to your office excited about planning an influenza program. She thinks that not enough patients are receiving yearly flu shots and a review of the current recommendations would help. However, the faculty member has no supporting documentation. A review of the EHR in her clinic showing the percentage of current patients receiving flu shots and the number of flu incidents the practice sees yearly could be compared to national averages. This could help in providing the necessary documentation for a gap analysis.

After the activity, a follow-up review of the same information from the EHR would provide information on the impact on the number of people being immunized and the effect on the number of flu cases seen in the practice.

## Questions?

Wright State University Boonshoft School of Medicine CME program is committed to the practice of continuing program improvement. In addition to the creation of the bi-annual CME Highlights in September 2009, the program uses an email discussion listserv to distribute monthly CME news and current events.

If you would like to be added to the listserv or for more information on the CME program, contact the CME program coordinator: [karen.bertke@wright.edu](mailto:karen.bertke@wright.edu), or 937-775-3435

# CME Highlights

**Editor**  
Phil Neal

**Contributing Writers**  
Karen Bertke  
David Little, M.D.

**How to contact us:**  
CME Program  
Wright State University  
Boonshoft School of Medicine  
3640 Col. Glenn Hwy.  
Dayton, Ohio 45435  
**Phone:** (937) 775-3435  
**Fax:** (937) 775-3256  
[www.med.wright.edu/fca/cme](http://www.med.wright.edu/fca/cme)

© 2009 Wright State University  
Boonshoft School of Medicine

CME Highlights is published twice a year for continuing medical education professionals affiliated with Wright State University Boonshoft School of Medicine.

