



## NEEDS ASSESSMENT

### What is it?

Needs Assessment is defined in the CME Primer as "any systematic approach to collecting and analyzing information about the educational needs of individuals or organizations." Needs may be either perceived, imagined, desired or thought to be important or real. Needs assessment can also be identified as a gap, the difference or distance between what is occurring in practice and what is expected (the desired outcome), or, the difference between what is and what should be.

It is the step in the educational process, that like the mission statement, is used to help achieve an effective continuing education activity. The needs identification process sets the stage for the development of the learning objectives (what the participants can expect to get out of the activity) which is then followed by format selection (the best method to deliver content and teach those objectives).

The needs assessment process must be documented in a manner that conveys what the need is. For example;

*"Many of the technological developments in the last century have transformed American medicine from a symptom focused tradition to a scientific disease-based model. Through this process, the patient has become depersonalized; the health care professional distanced from the unique nature of the patient. Physician and patient surveys identify a lack of and the importance of compassionate but truthful communication with patients and their families about the dying process. Surveys also indicate positive effects and perceptions associated with the hospice model as a collaborative and interdisciplinary system which provides a medical/psycho-social program for the terminally ill..." or;*

*"Hospital quality assurance (QA) reports indicate a rise in the infection rates amongst elderly patients undergoing treatment for joint replacement, causing an increase in re-admissions or;*

*"Evaluation results of an activity aimed at the practicing ophthalmologist indicate an interest in additional CME in the areas of glaucoma management, laser specific issues, macular disease, and diabetic retinopathy.*

☛ *Pearl: A medical terminology course is a good investment for CME staff without clinical backgrounds; the orientation to prefixes and suffixes used by physicians will help you to ask better clinical questions and probe/or specific needs during the needs assessment process (not to mention the benefit when writing learning objectives).*

### Applications

In general needs assessment data may come from three (3) areas:

- reports/surveys/studies
- documents, and
- people (i.e. experts, intended audience).

There are a variety of sources within each of these categories available to you. The following list is neither inclusive nor true to one type of organization. Specialty societies, community hospitals and academic center audiences may vary and so do the sources for collecting needs data.

### Needs assessment sources

- Evaluation results from previous CME activities

- Expert opinion from practitioners or other knowledgeable sources
- Data from outside sources (e.g.: National Institutes of Health, Public Health Service)
- Medical staff input (e.g.: department meeting discussion of CME needs, periodic survey of medical group, interview with physician leaders)
- Medical audit results (e.g.: quality assurance studies, input from physician review organizations)
- Input from CME Committee
- Formal or informal requests from physician members
- Literature review
- Hospital admissions/diagnosis data
- Patient satisfaction surveys
- New medical technology
- Tests that determine physician competence (e.g.: pre and post test results, self-assessment activities)

Another way of viewing these and other needs assessment sources comes from the Spring, 1994 edition of CME *Briefing* as:

## DATA SOURCES

### People

- Course directors
- Potential learners and their peers
- Potential faculty
- Planning committee members
- Experts in the field
- Hospital administrators
- Researchers
- Patients

### Documents

- Patient records and databases
- Committee notes
- Incident reports
- Continuous quality improvement issues
- Site visit reports
- Government reports on health statistics/technology developments

### Special Studies

- Research reports
- Health policy studies
- Professional review organization activities

There is a difference between felt and real need sources. Felt needs are commonly thought of as those perceived by an individual as important or of interest. Real needs, on the other hand are more likely to be data driven through means such as patient satisfaction surveys, statistical input from the infection control department, or QA results. While felt needs may appear more subjective, they have a definitive role in the needs assessment process.

☞ *Pearl: Make periodic "lounge or educational rounds" with your physician membership. Ask them what is out there that is important to you? What is your highest learning priority? How do you want to learn about it?*

Time, staffing and budget all reflect on our ability to conduct needs assessment. Access to a library or having on-line search capability will enhance your ability to gather data.

Many organizations use a two-step approach in determining needs. Whether it's called "two-step" or "gather and verify," it is similar. In practice, it is effective in attracting audiences and meeting their needs. The first step includes such things as:

- An informal physician request
- The arrival of a piece of new technology at your institution
- Input from an industry representative
- Recent regulatory changes
- Results from a national survey

As this first information arrives, we should be asking ourselves if:

- This information is reflective of a need (a gap in knowledge/skills/attitudes) by our physician audience
- The data is reliable
- The need is appropriate to our primary audience and if the audience will recognize and "buy into" it as a need
- It is information we can document as an area of need.

The first step includes fact-finding. The second step is used to verify the information presented. Further fact-finding measures or verification steps will ensure a "need to audience match" and include sources such as:

- survey of the intended audience expert interviews
- input from the CME committee
- a review of recent QA/medical audit data

Here are two examples:

1. The CME office is approached by a surgeon who suggests a hands-on endoscopic surgery workshop for primary care physicians.

The surgeon's request is considered as he/she represents an expert opinion, is trained in this area and is familiar with surgical referral patterns of primary care physicians.

- How might you respond to this and verify its need?
- Interview the primary care physician audience.
- Research referral patterns of the intended audience.
- Determine which endoscopic procedures will be expected of the primary care physician under health care reform.
- Review patient satisfaction surveys/reports.

2. The CME office and pharmaceutical industry representative have established a close working relationship and have successfully worked together in the past to deliver commercially supported CME. The representative makes it known

that a new pain control product is being released by his company, and he'd be willing to support a CME activity with a grant if it's related to pain control in general.

Is it appropriate to move forward hosting an event with the grant without other needs data? Probably not. Is it appropriate to review your own needs assessment data and review the information with the CME committee? Likely yes. What are the next steps in verifying this as a need (assuming pain control is matched on your needs assessment data)?

- Conduct a literature search to gain insight into the various other therapeutic modalities available.
- Contact the national specialty society for data or a program from their latest annual meeting.
- Conduct a survey of physicians and patients to identify perceived areas of need in the area of pain management.

Once gathered, this data should be reviewed for each activity by a planning committee composed of individuals *from* that specialty, the intended audience (if different from the specialty), representative(s) from the CME Committee and others who might help provide input such as a pharmacist, librarian or industry representative. These individuals offer considerable expertise and can provide certain types of needs assessment data, literature summaries or specific relevant articles. They can also note trends within their profession that may affect physicians and give you specific disease concept data.

There is needs assessment data available to CME providers both locally and nationally. This information, whether from your quality assurance committee or the American Heart Association, may be valid in your educational setting. After all, national surveys may include participants from all areas of the country and practice.

Both local and nationally acquired needs assessment data should be viewed as just that--sources of information. As such, each may prove useful in your setting. Of greatest importance is your effort to individualize the data to your membership, audience and situation. Work with your CME committee to best determine the use of locally/nationally obtained needs assessment data for its use in your CME program.

At a recent ACME conference on needs assessment, Terry Hatch, MD and Thomas Pearson, EdD, conducted a workshop on one type of needs assessment termed "environmental scanning." The following underscores the use of environmental scanning as a unique needs assessment method, particularly in today's environment.

Effective continuing medical education (CME) requires planners to undertake comprehensive needs assessment through the use of selected and appropriate assessment tools. One very powerful needs assessment tool is the environmental scan. Originally used in research in the social sciences and humanities, environmental scanning is found in business, futurism, strategic planning, higher education and now CME.

Environmental scans are sources of educational needs assessment data whose original purpose is usually different from that of solely identifying learning needs. They are generally categorized as being "internally" generated or "externally" obtained with reference to the educational sponsor. Included are quantitative and qualitative data. Common methods used for data collection and analysis include interviewing, observing, interpreting documents/materials, personal experience, data management/analysis, use of computers and narrative, content and semiotic analysis. In day to day activities, most CME planners rely on verbal sources and printed/written documents.

Environmental scanning data sources may be identified as internal or external (to the organization). Examples of internal sources include planning/advisory committee input, results of previous evaluation efforts, participant questionnaires from specific learning activities, requests from groups in-house, comments/recommendations from in-house experts or authorities, budget/attendance data, review of the organization's CME mission statement and review of organizational strategic plans or visioning documents. Examples of external sources include clinical practice


guidelines, literature searches, reports from outside agencies seeking trending, normative and benchmarking data, periodic reports from CME accreditors, and review of specialty oriented "core curricula."


The utility of environmental scans relates to several advantages. They are economical because they usually have been produced by another entity. They provide a diverse spectrum of information. Data may be used to support more than one educational activity. Environmental scans are often generated frequently so the data is current and readily available. They are often obtained "unobtrusively" so as not to inconvenience the target audience and not alter the phenomena being assessed (a very important advantage).

There are several disadvantages of environmental scans. They may be too broad to relate to a single activity. Obtaining these data may be time consuming or require expenditures. Internal "political realities" may make obtaining or using the data difficult. Analysis of scanning data may be time consuming to get to the useful "bits" of information. Finally, environmental scans may be seen as less "prestigious," objective or valid than other sources.

Environmental scanning can occur at two levels. At a more general or preliminary level the process involves awareness of subtle, unplanned triggering mechanisms or experiences that influence the planner's mind set about potential learning needs. When employed as a specific technique, environmental scanning can offer a powerful systematic review of environmental sources as part of a formal needs assessment process.

Borrowing language used in the higher education arena, CME planners need to develop a general awareness of environmental scanning and a specific "platforming" process within their organizations. Platforming is the design of an institutionally specific scanning process using individuals, committees and/or specific events. Of critical importance is the need for planners to be aware of and broaden their paradigm of needs assessment. Environmental scanning is both a general process by which events are interpreted and a specific needs assessment tool consciously employed in an organization. When used in conjunction with other needs assessment tools, environmental scanning can be a practical and basic means to determine the learning needs and interests of specific audiences.

 *Pearl: Needs assessment is the foundation of the educational process, systematically answering "why this subject?," helping to identify the audience and isolate the activity's learning objectives. Needs assessment may be considered the best tool providers have in ensuring participation.*

 *Pearl: Exemplary Needs Assessment*  
*Multiple needs assessment methods are utilized*  
*The CME planning process documents ways in which needs are prioritized*  
*Demonstrate linkages with Essential Area 2.1*  
*Use of peer review/quality improvement results*  
*Including members of the intended audience on the planning committee*