

The needs assessment in continuing medical education

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Abstract

The needs assessment component of a continuing medical education grant proposal document describes why a specific programme should be developed. Medical writers frequently play a central role in producing the needs assessment as an important first step in the development of an educational activity. By focusing on very specific practice gaps, and highlighting how the programme would help close those gaps, the medical writer plays a critical role in helping accredited sponsors document educational needs, and subsequently obtain funding for the activity.

Keywords: Continuing medical education, Needs assessment, Practice gap, Best practice, Evidence-based, Learning objective

Introduction

Continuing medical education (CME) comprises educational activities that function to maintain, develop, and enhance the knowledge, skills, and professional performance that healthcare providers use to manage their patients,¹ and it is typically how providers earn educational credits to maintain their professional licenses.² Its ultimate goal is to enhance patient outcomes by improving providers' practice behaviours.³ Although the educational activities may take various formats, including live events, online programmes, educational videos, self-study guides, and monographs, their common aim is to update providers on current and emerging information on treatment paradigms, evidence-based clinical practice guidelines, and other topics.² Programmes are regulated by regulatory bodies that set and enforce standards for determining the eligibility of organisations for CME accreditation, and require programmes to indicate objectives based on the identified needs of the target audience.⁴ These include the Accreditation Council for Continuing Medical Education in the United States,⁵ and the

European Accreditation Council for Continuing Medical Education in Europe.⁶

The needs assessment and its components

What is a needs assessment?

The needs assessment (NA) is one of the most important parts of an educational grant proposal, and serves to help produce an effective CME activity.⁷ It is the component of a grant document that CME companies submit to funding bodies such as industry sponsors to obtain funding for CME programmes for healthcare providers. Data have shown that CME programmes based on well-conducted NAs are effective in changing providers' practice behaviours.³

Glossary of key CME terms

- *Continuing medical education (CME)* – Educational activities that function to maintain, develop, and enhance the knowledge, skills, and professional performance that healthcare providers use to manage their patients, and it is typically how providers earn educational credits to maintain their professional licenses.
- *Needs assessment (NA)* – The component of a grant document that CME companies submit to funding bodies such as industry sponsors to obtain funding for CME programmes for healthcare providers.
- *Professional practice gap* – The difference between what providers already know and what they should know to be competent or an expert in their field.
- *Clinical practice gap* – The gap between current and optimal medical practices. It might refer to a gap in patient care, for example, or a lack of knowledge, skills, or attitudes. It justifies the need for education.

- *Learning objectives (LOs)* – What participants can expect to get out of the activity. In contrast to the overall goals, the LOs are precise and measurable aims that define how the programme will improve participants’ knowledge and skills, and subsequently enhance patient outcomes. In essence, an LO represents an action statement that contributes to the goal being achieved.

CME programmes are developed based on an identified professional practice gap – the difference between what providers already know and what they should know to be competent or an expert in their field (Figure 1). The NA is performed to determine what the intended audience needs to learn from the planned activity,² and represents the basis for the whole programme. It specifically identifies the gap between current practice and best practice and essentially represents a systematic means of collecting information that helps to determine the instructional solutions to close it. This information is subsequently used to identify programme goals and LOs.⁷

Where do data for the NA come from?

Data for the NA are derived from three areas⁸:

Inferred needs

- New diagnostic or treatment methods/technologies/agents

- New indications for current agents
- Opinions of key experts about advancements on medical knowledge
- Regulatory and legislative changes that affects patient care

Verbalised needs

- Survey results of potential learners
- Learner evaluations of previous CME activities
- Consensus opinion of members of a medical specialty group

Proven needs (based on objective data sources)

- Guidelines and recommendations published by professional societies
- Quality assurance data
- Review of journal articles
- Morbidity and mortality data

What are the main components of the NA?

The NA highlights four key features:

- *Current clinical practice:* What learners currently know and do.
- *Best clinical practice:* What learners should know and do.
- *Clinical practice gap:* The gap between current and optimal medical practices. It might refer to a gap in patient care, for example, or a lack

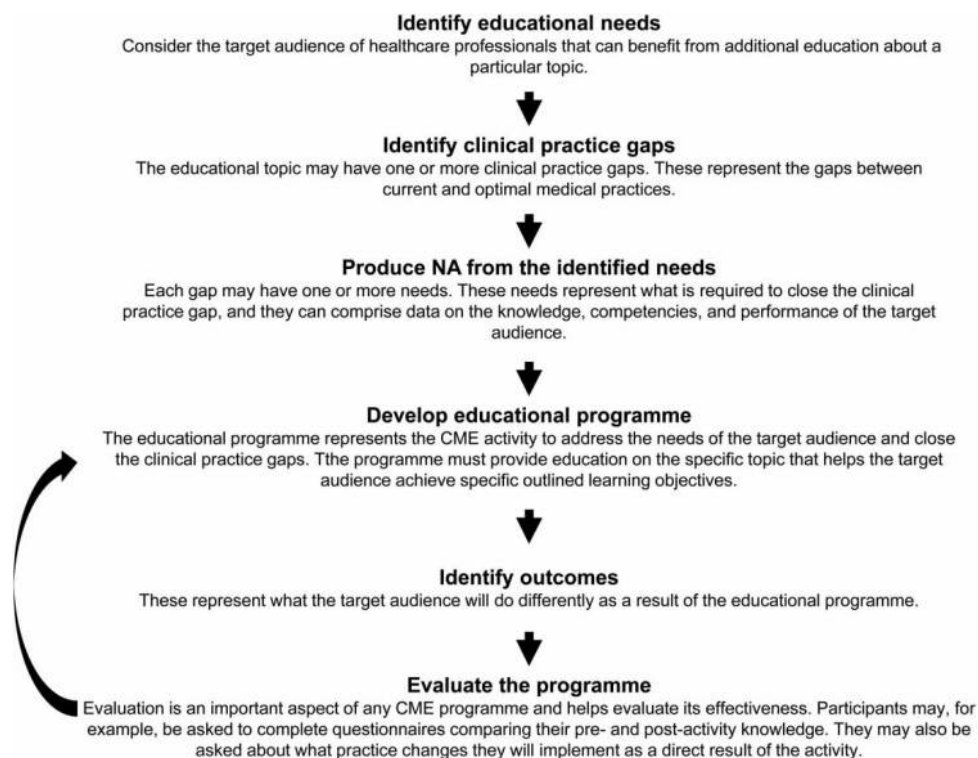


Figure 1: The hierarchy of CME and the NA. Medical writers are generally involved at the third and fourth steps, after data on educational needs and clinical practice gaps have been collected.

of knowledge, skills, or attitudes. It justifies the need for education.⁷

- *LOs*: What participants can expect to get out of the activity.

How to make the NA compelling

Since it is becoming increasingly difficult to obtain funding for CME programmes, the NA must stand out to gain approval. To achieve this, the NA must:

Be specific

Data must demonstrate a mechanism for measuring and publishing outcomes of educational activities, and therefore the NA should target specific aspects of a condition, rather than provide a general overview about it. Although a literature review may be informative, it may do little to document the very focused needs of the target audience with respect to managing the condition, and may therefore not be effective in gaining funding approval. In contrast, if the NA discusses data about certain practice gaps and describes how the proposed programme would target those needs, and highlights how the specific issues would be overcome by education, then it is more likely to be approved for funding.

Incorporate evidence-based data

Gaps in provider knowledge are typically identified via two methods:

- *Published or collected data*: For example, evidence-based articles published in the medical journals; healthcare statistics on government

websites, quality assurance reports, and pre-test and post-test results.

- *Physician self-assessment*: This may include physician self-testing results and quality assurance reports.

Data should be linked with the appropriate target audience specialty where possible, and also with particular geographic regions where relevant (see Figure 1).

Present fair balance

Studies have demonstrated that when CME programmes favour the supporting company's products, healthcare professionals in attendance prescribe these products more frequently than those from other companies.⁹ Consequently, although one particular pharmaceutical company may be the sponsor, it is in the best interest of the target audience and their patients that the CME programme presents a fair balance among competing therapeutic and diagnostic choices.¹⁰

Include measurable LOs

LOs, a key component of the NA, are identified by investigating the issues that led to the gap (learner needs),^{7,9} and must be measurable through observation or documentation.⁴ When composing LOs, it is important to differentiate between the terms 'goal' and 'LO'. A goal represents the broad aim of a CME activity, while LOs represent more precise and measurable aims that define how the programme will improve participants' knowledge and skills, and subsequently enhance patient

Table 1: Examples of LOs related to CRC and mCRC

Current clinical practice behaviour	Best clinical practice behaviour	Educational need – the professional practice gap	LOs
Physicians who treat patients with CRC are unaware of current screening guidelines based on patient risk stratification and the guidelines for alternative screening tests for CRC	Physicians must follow the updated guidelines for patient risk stratification and utilise an appropriate CRC screening regimen	Physicians lack the most up-to-date information on current clinical practice guidelines relating to patient risk stratification and alternative screening tests for CRC	Determine the appropriate risk stratification for an individual patient and select the appropriate CRC screening strategy
Physicians lack knowledge of available therapeutic agents to treat mCRC and how to select the most appropriate options for individual patients	Physicians must stay abreast of current and emerging data to make individualised, evidence-based decisions about therapeutic agents that take into account patient risk factors, as well as drug-associated adverse effects and toxicities	Physicians lack the most up-to-date clinical trial data on available and emerging agents for the management of mCRC, that take into account patient risk factors, as well as drug-associated adverse events and toxicities	Select appropriate therapy for individuals with mCRC after considering patient characteristics, clinical factors, and the safety and efficacy of available therapeutic agents
Physicians are challenged to manage nonadherence with treatment regimens in patients with mCRC	Physicians must understand factors associated with treatment non-adherence and use a combination of strategies, including amending the treatment regimen, to improve adherence to medication	Physicians do not engage with patients sufficiently to identify non-adherence to treatment regimens	Identify the therapy-related, patient-related, and provider-related factors leading to medication non-adherence

outcomes.¹¹ In essence, an LO represents an action statement that contributes to the goal being achieved. For example, while the goal of a CME programme on colorectal cancer (CRC) might be ‘to provide education that will enhance participants’ competence in their ability to apply knowledge learned to patient care strategies’, its LOs will be more specific and focused (Table 1).

The ideal LO has three components¹¹:

- The learner
- A measureable action verb
- The desired result of learning.

The action verb is a key component.^{11,12} Not all verbs are created equal, however. Verbs such as ‘discuss’, ‘identify’, and ‘perform’, are more measurable as a direct outcome of a CME programme and are considered more effective as components of LOs. Verbs such as ‘understand’, ‘appreciate’, and ‘learn’, on the other hand, are considered weak for this purpose since they are less measureable, and should therefore be avoided.¹¹

Match the practice behaviours, gaps, and LOs

Be sure to match up the current and best practice behaviours with the practice gaps. And, in turn, make sure the LOs reflect the specific gaps. In the CME programme on CRC, current clinical practice behaviour might be that ‘clinicians lack knowledge of available therapeutic agents for mCRC, and of how to select the most appropriate options for individual patients’, while best clinical practice behaviour would require that ‘clinicians must stay abreast of available and emerging data to make individualized, evidence-based decisions about therapeutic agents for mCRC’. The corresponding practice gap would be that ‘clinicians lack the most up-to-date clinical trial data on available and emerging agents for the management of mCRC, that take into account patient risk factors, as well as drug-associated adverse events and toxicities’ (Table 1).

Conclusion

The NA is an important part of the CME grant, and justifies the agenda for the programme. It should be

crafted with provider performance improvement in mind, and must focus on important issues relevant to participants’ practice, and provide evidence-based information on common practice problems. To improve the chances of funding for the activity, medical writers must ensure that the NA is specific, gap-based, free of commercial bias, and includes measureable LOs.

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