

Best Practices for Writing and Editing CME Needs Assessments: 2014 and 2015 Results From Surveys of Practitioners

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We have been involved in a multiyear research project aimed at identifying best practices in writing and editing needs assessments (NAs) for continuing education in the health professions, including continuing medical education (CME). NAs for CME programs, for example, typically analyze health care providers' deficiencies in knowledge, confidence, competence, or performance in a given therapeutic area. These deficiencies, or gaps, are important because they are used to guide the development of educational interventions, with the ultimate goal of improving patient care. NAs can vary in length from 1 page to more than 10 pages depending on the number of gaps, the quantity of supporting evidence, and the resources available. Since the ultimate goal of our project is to improve the quality of CME needs assessment, this update will follow the standards for quality improvement reporting excellence (SQUIRE) guidelines.¹

WHY WE STARTED

This project began in 2010 when Sandra Binford, MAEd, and I (DH) carried out a small pilot project to analyze a handful of NAs written by various authors and collected from several sources, including clients and an AMWA roundtable. At the time, Sandra and I were both active members of the Alliance for Continuing Education in the Health Professions (Alliance) as well as AMWA. Out of respect for confidentiality agreements with our clients, we did not investigate or exchange proprietary information. Nonetheless, we noticed a great deal of variation among NAs, especially in the sources of evidence used by the writers, how writers presented this evidence, and how they cited it in reference lists. Writers varied in their decisions regarding whether to interview experts or to include charts and graphs, and which reference style to use—American Medical Association, American Psychological Association, or a hybrid reference style. We found all of this variability interesting because effective continuing education begins (Figure 1) with a high-quality NA.²

Other quality improvement (QI) initiatives, both inside and outside the health care industry, have involved efforts to understand sources of variation in key work processes and to reduce unwarranted variation as much as possible. Pioneers of quality improvement in health care studied what appeared to be haphazard tonsillectomy rates first in England and Wales, and then in Vermont.^{3,4} W. Edwards Deming, considered by many to be the father of quality improvement in American manufacturing, became famous for using statistical process controls to reduce shoddy workmanship along Japanese assembly lines after World War II.^{5,6}

WHAT WE DID

In 2014, fellow AMWA member Ruwaida Vakil, MS, and I (DH) carried out our first survey regarding practices related to writing NAs. We used SurveyMonkey and limited the instrument to 10 questions. We asked respondents to tell us how long they had been writing NAs, what sources of evidence they used to assess practice gaps, and how they presented the evidence.

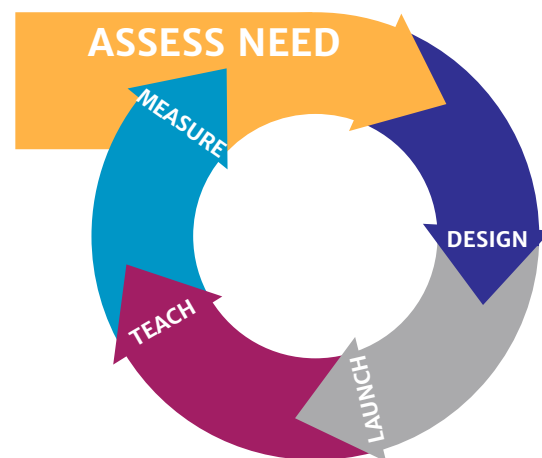


Figure 1. Continuing education cycle.

AMWA and the Alliance both helped us promote the survey by providing a link to their members via email and social media. The survey opened September 3, 2014, and closed September 19, 2014. Raw survey results were promised to everyone who completed the questionnaire. We received 109 responses; 6 were from people who had never written an NA. The adjusted sample size was 103. A few questions allowed respondents to briefly elaborate on their answers. We supplemented these quantitative data with qualitative data from a virtual focus group via Google Hangouts and a live focus group over dinner at a restaurant in Newtown, Pennsylvania.

In 2015, both authors (DH and NT) carried out the second survey. We again used the free version of SurveyMonkey and limited the instrument to 10 questions: 5 from the initial survey to track trends and 5 new ones to attract repeat participants and incorporate additional ideas. AMWA helped us promote this survey to members, but the Alliance did not. However, we did receive promotional support from the Mid-Atlantic Alliance for CME (MAACME), which encouraged members to participate. The survey opened September 13, 2015, and closed October 12, 2015. Raw results were again promised to participants. We received 67 responses, from which we subtracted 5, from people who had never written an NA, leaving an adjusted sample size of 62. We supplemented these survey data with telephone interviews conducted by 3 volunteers. A third survey is planned for September 2016.

WHAT WE FOUND

Year 1 results were presented in a poster at AMWA's 2015 national meeting in Texas. In brief, the results from Year 1 indicated that the majority of respondents had been writing NAs for 5 years or more, followed a template provided by the client or their employer, included at least 1 chart or table, and considered a review of the medical literature to be the most essential type of evidence for inclusion.

In Year 2, approximately two thirds of respondents (68%) had written their first NA more than 5 years previously. About half (47%) told us that in the previous 6 months they had written NAs as a staff employee. Approximately one third (34%) told us they were freelancers during that period. A medical literature review was again the most common response (69%) to the question asking respondents for the type of data their clients or employers considered essential to include in a first-rate NA (Figure 2).

In 2014, respondents told us they used charts or tables to show alignment of gaps, objectives, and outcomes. In 2015, respondents indicated that the most frequent column headings for these charts were (in descending order) "Learning Objective," "Practice Gap," and "Desired Outcome," though many variations on these terms were used. Professional experience told us that including perspectives from patients in NAs is becoming more common, so we included a new question on this topic as a way to set a baseline for future measurement. Figure 3 shows responses to this question.

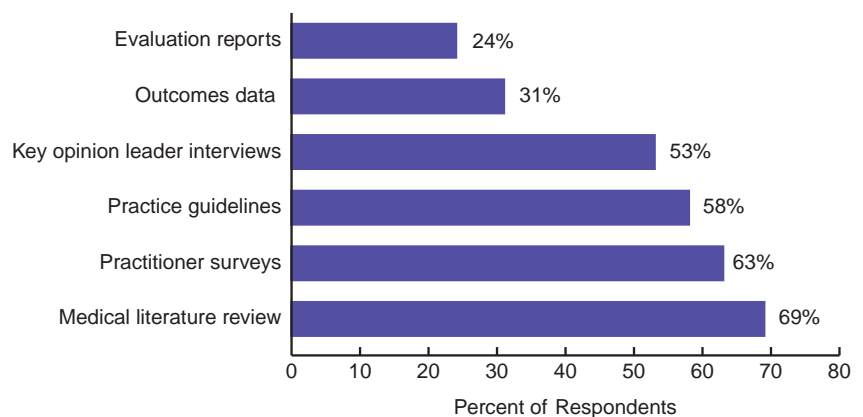


Figure 2. Respondents' assessment of data types preferred by clients/employers for a first-rate needs assessment. (N=62).

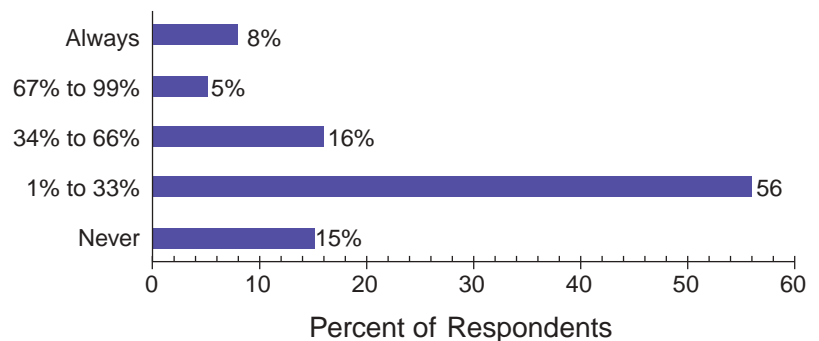


Figure 3. Respondents' estimates of how frequently their needs assessments include perspectives from patients or their care partners. (N=60).

We devoted 2 questions to gauging the relative importance of performance improvement in continuing medical education (PI-CME)⁷ to QI (QI-CME).^{8,9} While these terms may seem similar to people outside our industry, CME practitioners widely regard PI-CME to be more demanding and difficult to execute. (See Box 1 for definitions.) When asked whether they agreed with the statement "QI-CME methodologies are changing the way I write my NAs," 44% agreed. When asked

Box 1. PI-CME and QI-CME

Accepted by the American Medical Association (AMA) in 2004 as an approved learning format, PI-CME activities are defined by the AMA as “a process by which evidence-based performance measures and quality improvement (QI) interventions are used to help physicians identify patient care areas for improvement and change their performance.”⁷

PI-CME consists of 3 stages: 1) comparing one’s current practice against recognized, evidence-based standards and assessing one’s current performance to identify performance gaps and discover opportunities for improvement; 2) developing and implementing a practice-improvement plan; and 3) reassessing one’s practice to evaluate the effects of the improvement plan.

QI-CME is defined as “a systematic, formal approach to the analysis of practice performance and efforts to improve performance.”⁸ QI-CME is designed to reveal clinicians’ practice gaps as determined by quality measures and offer a solution, through education intervention, to meet their individual educational needs.

whether they agreed with the statement “PI-CME methodologies are changing the way I write my NAs,” only 21% agreed.

When writing NAs to justify education for physicians and nurses, medical writers often inquire about barriers to effective practice. We asked a similar question. When respondents ranked a list of barriers in terms of their importance to professional practice, “clinical practice guidelines out of date or do not exist” received the top score of 7.1 on a scale of 1 (low) to 10 (high). “Not enough lead time to do adequate research” came in a close second with a score of 7.0. “Few published data on topic” came in third at 6.3 (Figure 4).

WHAT IT MEANS

We have distilled key information from both surveys into a set of 3 “recipes” for quality needs assessments (Box 2). These recipes differ according to the ingredients they contain, as well as the time and money needed to produce them. In addition, we would like to note that the lack of up-to-date practice guidelines underscores the importance of CME, and, by extension, the work of all medical writers who develop programs aimed at helping clinicians stay abreast of

changes in their specialties. Despite PI-CME’s origin as a pilot project of the American Medical Association’s Division of Continuing Professional Development, its relevance with respect to how NAs are written may be waning in favor of QI-CME, with its closer links to manufacturing. This, along with the rise of managed care in the 1970s and the current federal mandate in favor of electronic health records, could be interpreted as one more sign of physicians’ lost professional autonomy.¹⁰ The patient’s perspective has gained prominence in CME, but whether this prominence grows or shrinks remains to be seen. Clearly, if we wish to use best practices when designing a chart to show alignment between key program components, our charts must have the column headings described above. Finally, survey respondents have told us 2 years in a row that the medical literature review remains the single most important type of evidence. Unless some other type jumps to the top of the list in our next annual survey, it seems clear that training programs aimed at equipping future NA writers with basic skills should include instruction on how to carry out a first-rate review of the medical literature. Since needs assessments are also an important part of publication planning, this skill could be beneficial to other types of medical writers as well.

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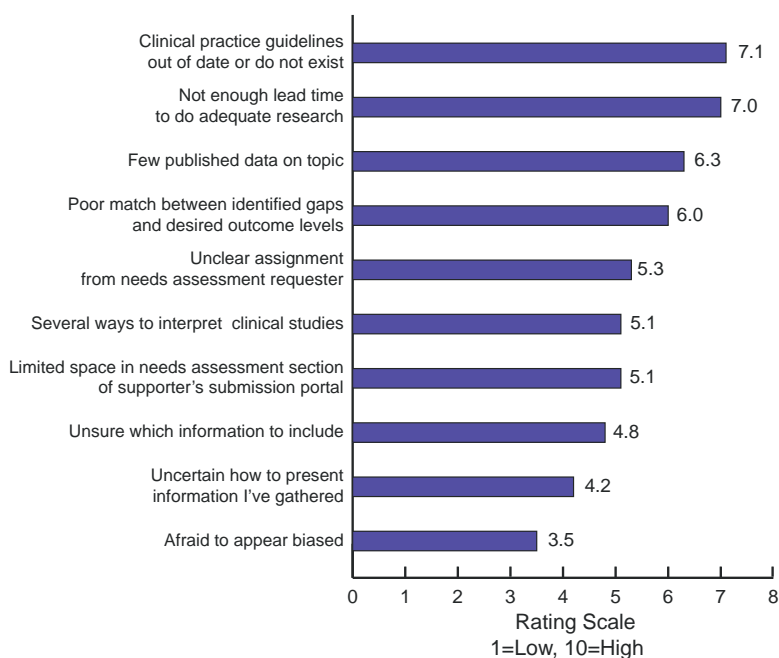


Figure 4. Respondents’ mean ratings of relative importance of barriers to professional practice. N=60.

Box 2. Recipes for Quality Needs Assessments

Here is a list of ingredients to include in needs assessments produced to support requests for commercial funding of continuing medical education. The “better” and “deluxe” recipes assume more resources are available for production. The list was developed based on 2 years of survey data.

STANDARD Needs Assessment*

1. Medical literature review
2. Practitioner survey
3. Reference to clinical practice guidelines
4. Key opinion leader interview(s)
5. Alignment chart with columns labeled
 - “Learning Objective”
 - “Practice Gap”
 - “Desired Outcome”

BETTER Needs Assessment

6. Perspective from a patient or patient advocacy group regarding patient-level gaps
7. Text or chart showing outcomes data*
8. Evaluation reports from participants in previous activities**

DELUXE Needs Assessment

9. Reference(s) to national health care quality standards***
10. Evidence of change measured against a validated quality benchmark***

* Recipes are cumulative.

** Some practitioners consider these to be part of a standard NA.

*** Published by National Quality Forum, Agency for Healthcare Research and Quality, Patient-Centered Outcomes Research Institute, or similar agency.

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