

# How to Critically Evaluate a Poster



BY  
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**P**osters are a highlight of a conference as they raise our awareness of our peers' work. In a recent issue of *Wound Care Canada* in an article on how to develop a poster, it was stated that posters provide "an opportunity for researchers, clinicians, educators, and policy-makers to share ... their latest passion, burning questions, innovative practices or new paradigms for delivering care."<sup>1</sup> Many posters are very well prepared and professional, and they contain good content. Posters at wound conferences usually present research reports, educational information, public policy issues, and clinical practice tips and reports. Some are prepared by wound-care companies either to report on research that supports their products or to market their latest product.

Conference attendees may have a difficult time distinguishing a good poster with relevant and recent information from one that is not so good or is purely for marketing. How would one know?

Consider the following:

**Authors.** Who are the authors and what are their credentials? If you don't know them, ask your colleagues. Have you seen this poster at a conference before? Is it old material being flogged?

**Abstract.** The poster's abstract is a good place to start; it might be included on the poster or it will be in the conference syllabus. It will give you the two-minute version of the poster and will help you determine if the poster is of interest to you. The abstract should address four key questions:<sup>2</sup>

1. What was the problem?
2. How did the authors solve the problem?
3. What was discovered?
4. What can be learned from the experience?

**Appearance.** If it's a mess or hard to read, why should you bother reading it? How does it look? A poster's appearance should be professional but not flashy. Sometimes posters look great but have no substance or contain a pitch. There should be a natural flow to the purpose, methods, results and conclusions. It seems obvious but you'd be surprised what people do especially if there are charts, photographs, etc. Posters take time and thought; sometimes people rush to finish their posters by a deadline, and often it shows. Is the poster complete? Look for all the content elements indicated below.

**Content.** If your interest is piqued by the reputation of the authors, the abstract, and the appearance, you will want to evaluate the content of the poster and ask yourself if you believe it. To do this, one could use the CRAP tool.<sup>3</sup> The items listed in the CRAP tool are intended for evaluating abstracts but apply equally well for detecting bias in the content of reports and posters. The wording has been changed (see sidebar on next page) to make it more generic to posters of any type. For




## Questions to Ask about the Content of a Poster

Are the **title** and **objectives** stated clearly and in terms of PICO (population, intervention, control, and outcome)? Perhaps not all the PICO items are relevant for a particular poster, but you, the reader, want to know specifically what the poster is about.

Does the **background** information provide good rationale for whatever was done? Does it allow you, the reader, to understand usage or potential application? Does it grab your interest?

Are the **methods** clear and complete? The methods will differ depending upon the poster type. (See CRAP tool.) In general, you will want to have confidence that you understand what was done and agree with the approach. If details are missing, you cannot assume a project was done well. Is the intervention or educational program appropriate to achieve the desired outcome? Is it clearly explained with sufficient detail to be reproducible? Is it feasible?

Do the **results** correspond with the study objectives, and are the details specified?

Do the **conclusions** relate to the objectives? Have the limitations of the work been considered? Are the results generalized appropriately (e.g., to patient populations and clinical or educational situations)? Are the project outcomes and benefits clearly stated and pertinent?

Have **conflict of interest** and/or study sponsorship been disclosed? This point is important because there are different reasons why companies sponsor and otherwise get involved in projects. If employees of a company have prepared the poster, you the reader, need to decide if it is purely a marketing device. If one company's product is being promoted at the expense of that of another company, you must decide if those results are biased. If the poster has been sponsored, you need to decide the extent to which you think the sponsor has influenced the content of the poster or if the authors have been free to voice their own opinions.

specific types of posters, refer to the CRAP tool.

Perhaps one of the most important ways to evaluate the credibility of a poster is to talk to the poster presenters, who will help you understand their approach. Most conferences allocate a time when the poster authors are available and eager to discuss their findings. You will get more information and you can help them by giving feedback about your impressions.

In summary, sometimes it is difficult to evaluate the information provided in posters. One needs to have a critical eye and take a systematic approach. Consider the authors, abstract, appearance and content. Let's discourage our colleagues from presenting the same posters at multiple conferences. Perhaps we should

date them as publications are dated. Let's also encourage good quality studies that promote our own efforts but not at the expense of the work of others. ☺

### References

1. McNaughton V, Christensen D, LeBlanc K. How to develop a poster. *Wound Care Canada*. 2006;4(2):32-37. Available online at [www.cawc.net/open/wcc/4-2/mcnaughten.pdf](http://www.cawc.net/open/wcc/4-2/mcnaughten.pdf).
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3. McNaughton V, Woodbury MG, Houghton PE. The Critical Review of Abstract Presentations (CRAP) Tool. *Wound Care Canada*. 2005;3(2):28-31. Available online at [www.cawc.net/open/wcc/3-2/mcnaughton.pdf](http://www.cawc.net/open/wcc/3-2/mcnaughton.pdf).

This year, the CAWC is expecting up to 100 poster submissions for the annual conference in London, Ontario, November 1-4.

Copies of the CRAP tool will be available to enhance attendees' critical evaluation of posters.

