

Pilot Studies and Their Suitability for Publication in *Physiotherapy Canada*

Each year *Physiotherapy Canada* receives a number of submissions titled “Pilot Study.” Few are published. This editorial note reviews (1) the purpose of a pilot study, (2) a common shortcoming of many studies submitted under this heading, and (3) when the results from pilot studies are likely to be of interest to an audience beyond those who conducted the study.

Pilot studies play a pivotal role in the planning of large-scale and often expensive investigations. As small-scale dress rehearsals, they provide important information concerning the feasibility of the proposed methods. Goals of pilot studies are (1) to evaluate eligibility criteria and recruitment methods, (2) to refine protocol procedures, such as equipment operation and measurement procedures, (3) to evaluate protocol adherence by both clinicians and patients, (4) to test data-collection procedures and data quality, and (5) to examine safety issues and adverse events.¹ Pilot studies are also useful for providing estimates of effect and variation that can be used to calculate sample size for larger studies, particularly when this information is not available in the literature.

A feature common to most “pilot studies” rejected by *Physiotherapy Canada* is their focus on hypothesis testing. Although the rationale for this practice is not clear, it would seem that the authors of these submissions have inadvertently equated small-sample studies with pilot studies or, perhaps, have attached the name “pilot study” to an under-powered study, believing that doing so enhances the study’s credibility. This is not the case. True pilot studies consider the goals mentioned above. Thus, if the primary intent of the small-sample study is not to provide insights into the feasibility of a proposed larger-scale study, authors should avoid the term “pilot study.” We are not suggesting that *Physiotherapy Canada* is uninterested in well-conceived and well-executed small-sample studies. Examples of such studies include case reports, single-subject research designs, case series,

and small-sample investigations supported by *a priori* power calculations, all of which are welcomed by *Physiotherapy Canada*.

If you are considering submitting a pilot study to *Physiotherapy Canada*, ask yourself the following questions:

1. Are your study’s goals consistent with the true intent of a pilot study?
 - Was the primary intent of your study to examine feasibility issues?
 - Was the primary intent of your study to estimate the requisite sample size for a subsequent large-scale investigation?
2. Are your results likely to be of interest to an audience beyond your team of investigators?
 - What is novel about the findings from your pilot study?
 - Why are your findings of potential interest to others?

Pilot studies serve an important purpose for research teams and may at times be of interest to a wider audience. The challenge for investigators and editors is to determine at what point and in what form the results of such an inquiry are likely to interest a wider audience.

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REFERENCE

1. Lancaster GA, Dodd S, Williamson PR. Design and analysis of pilot studies: recommendations for good practice. *J Eval Clin Pract.* 2004; 10:307–12.

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