From the Editors' Desk: Renewing the Call for Innovations in Medical Education

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We are pleased to announce the launch of a new JGIM feature, Innovations in Medical Education (IME). We recognize the need to share ideas with potential to transform health professions education, and hope that IME will encourage authors to disseminate their pioneering education efforts. IME evolved from the previous Education Innovations category, but has been reconceptualized to reflect the higher standards of scholarship now expected of medical education research.¹ We wish to take this opportunity to elaborate on what we look for in an IME article.

First, we use Glassick's² criteria for the assessment of scholarship, namely clear goals, adequate preparation, appropriate methods, significant (important, not necessarily statistically significant) results, effective presentation, and critical reflection. We refer readers to our previous commentary on these criteria¹ for a further discussion. Second, we subscribe to the adage that guides decisions for all submissions to JGIM:³ Is it new (have others done this)? Is it true (are the conclusions valid, as evaluated using appropriately rigorous methods)? Will it change what we do (how will this change educational practice)? In the following paragraphs, we explain how these questions apply to IME.

IS IT NEW?

As noted in the Instructions for Authors, "The hallmark of an innovation is that the idea is new and fills an important gap in medical education." True innovation is a necessary requirement of an IME. Unfortunately, while manuscripts submitted as IME nearly always describe good ideas, many fail to account for previous related work and fall short of the scholarly approach to development, implementation, and evaluation required of an IME publication. New approaches to education challenges will generally fare better than existing approaches applied to new topics or new learner groups. For example, problem-based learning applied to a new topic, or an existing curriculum for residents now applied to medical students,

would receive lower priority than an entirely new approach to teaching (e.g., enhancing physical diagnosis skills through art appreciation⁴).

Authors must demonstrate the existence of an ongoing need—namely, a problem that needs to be solved through an education innovation (such as resident clinic redesign⁵). This problem must be relevant to other institutions/educators, and the solution must be uncertain. The authors should demonstrate a firm understanding of published (and in some cases unpublished) approaches to this problem, highlight limitations of prior work, and clarify the gap between the current and desired states of understanding.

Authors should summarize the innovation's aim(s) (e.g., the instructional objectives) that, if met, will resolve the stated need. The need, the aims, and the solution should logically align; if not intuitive, this alignment should be explicitly explained. However, authors may need to abbreviate detailed course objectives for purposes of publication.

The solution to the problem must be well-grounded in prior work. Effective solutions never appear from thin air, but rather build upon theories, untested ideas, unsuccessful attempts to solve the same problem, investigations in other areas of medical education, and work in other fields (e.g., clinical medicine or non-medical education). Ideally, the innovation will be generalizable and practical such that educators at other institutions can apply it locally. Innovations that use resources (teaching/testing equipment, content expertise, teaching skills, or institutional or community services) not widely available will be viewed more critically than those that can be more readily implemented by others. In the former case, authors should explain how their innovation could be adapted to other settings.⁶ In all cases, authors should describe the solution and its implementation in detail sufficient to enable emulation. We encourage authors to report problems encountered with implementation (and their resolution) as well as successes.

IS IT TRUE?

IME manuscripts must describe more than ideas; the innovation must be tested in practice through implementation and evaluation. In general we prefer objective (rather than self-reported) evidence that aims were met.^{5,7} Highly novel innovations may require less extensive evaluation (e.g., self-reported outcomes alone may at times be acceptable); nevertheless, a thorough evaluation is always preferable. We welcome qualita-

tive analyses, but these should employ sound qualitative research methods.

Most new ideas will not work perfectly the first time they are tried. Thus, we encourage authors to reflect critically upon the activities surrounding the planning, implementation, and evaluation. The report should provide not only judgments of success or effectiveness ("Did it work?"), but also offer suggestions for improving the innovation ("What should we change?").

WILL IT CHANGE WHAT WE DO?

The findings reported in an IME manuscript will rarely if ever be definitive. Thus, the Discussion should look to the future (what's next) more than the past (what was done). Authors should briefly summarize the work, integrate this with previous or ongoing related efforts, and discuss the key limitations.

The manuscript should conclude with a brief, clear, practical, and appropriately circumspect take-home message indicating how this innovation could change educational practice. In some cases this might be a recommendation regarding how the innovation could be applied in new contexts (other institutions, topics, or learners). In other instances, this might be a caution *not* to attempt this (e.g., because it created numerous logistic challenges or did not meet its objectives) or a need for additional investigation to clarify key ambiguities.

OTHER IMPORTANT POINTS

We remind authors to adhere to the Instructions for Authors (available on the JGIM website), which not only detail the manuscript technical requirements, but also provide guidance on structure and content. These currently stipulate limits of 200 words for the abstract, 2,000 words for the main text, and two tables or figures. The Instructions prescribe a specific structure for the main text and a similar (but not identical) structure for the abstract. Authors should not only use the prescribed headings, but also be sure that requested information is provided under each heading. Authors can use online-only appendices to share details of the innovation such as in-depth descriptions of a curriculum, photographs or screen shots of the implemented activities, an

unabridged survey / assessment instrument, or additional evaluation data. The abstract is often neglected in education publications;⁷ we encourage authors to carefully compose an informative abstract. Finally, JGIM's policy on human subjects research applies to medical education research, including IME. Thus, all submissions must include a statement of IRB review or exemption.

IN CONCLUSION

JGIM's Innovations in Medical Education offers a forum for sharing, with a broad audience, novel and practical approaches to important challenges in medical training. We look forward to receiving your manuscripts describing new, true, and practice-changing innovations in medical education.

- The Medical Education Deputy Editors

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