


2021

Bridging the gap from clinical research done on populations to the care of an individual patient

James Peter Meza

Wayne State University School of Medicine, jmeza@med.wayne.edu

Follow this and additional works at: <https://digitalcommons.wayne.edu/crp>

 Part of the [Medical Education Commons](#), and the [Translational Medical Research Commons](#)

Recommended Citation

MEZA JP. From the editor: Bridging the gap from clinical research done on populations to the care of an individual patient. Clin Res Prac. Oct 13 2021;7(1):eP3009. <https://doi.org/10.22237/crp/1633973391>

This From the Editors is brought to you for free and open access by the Open Access Journals at DigitalCommons@WayneState. It has been accepted for inclusion in Clinical Research in Practice: The Journal of Team Hippocrates by an authorized editor of DigitalCommons@WayneState.

FROM THE EDITOR:

Bridging the gap from clinical research done on populations to the care of an individual patient

JAMES P. MEZA, MD, PhD, Wayne State University School of Medicine, jmeza@med.wayne.edu

One of the most recognized and perplexing problems of evidence-based medicine is how to take knowledge about patient populations from clinical research and apply it to individual patient care.¹⁻⁵ There are many astute clinicians who are extremely well-versed in critical appraisal of research, and undoubtedly have a tremendous fund of knowledge related to evidence-based medicine. However, there has been no systematic study of how these clinicians use that evidence to make clinical decisions. We have only generalized statements such as

“The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research. By individual clinical expertise we mean the proficiency and judgment that individual clinicians acquire through clinical experience and clinical practice.”⁴

Systematic study of this applied clinical experience is the scholarship of Clinical Decision Science and is reflected in the Aims and Scope of this journal. As with other areas of scholarship, case reports become case series, which lead to further systematic study. We have now published multiple case reports that provide insight into the quandary described above. Each of these Clinical Decision Reports examine how scale measures used in the critically appraised research applied to the case presented.⁶⁻¹⁰

Many clinical research studies use subjective questionnaires or scale measurements as outcome variables because of their clinical relevance. Although I’ve been familiar with such measures for many years, I have only recently incorporated them into my own clinical practice. I learned to do that by reading the Clinical Decision Reports we’ve published. The systematic practice of using standardized scales from clinical research in direct patient care is a quality improvement measure that is a direct result of our efforts to promote the scholarship of Clinical Decision Science.

The use of a scale enables the patient’s unique experience to be directly mapped onto the evidence, individualizing the clinical data and using clinical research as context.

A recent example I encountered in clinical practice is the Irritable Bowel Severity Scoring System.¹¹ Not only did my familiarity with this scale help me to critically appraise the literature, but it also gave me a tool to compare the patient I saw in the exam room to the population of patients in clinical research trials.¹² I was able to quantify how much the patient’s symptoms interfered with her life in general and bridge the gap between the research evidence from a population of patients to my own patient with her unique clinical and social context. This is a solution to the problem that has perplexed evidence-based medicine for many years. By comparing scale measurement results from clinical research and patient care, I gained insight into the aphorism, “Evidence means different things to different patients.”

Clinical Research in Practice Editor JAMES P. MEZA, MD, PhD is an Associate Professor in the Department of Family Medicine and Public Health Science at Wayne State University School of Medicine.

This insight is significant enough that we have incorporated it into Author Instructions for Clinical Decision Reports. The next step is to use this insight for designing further steps in the research agenda for Clinical Decision Science. I'm excited that our journal is a vital part of this endeavor.

References

1. Goldman JJ, Shih TL. The limitations of evidence-based medicine--applying population-based recommendations to individual patients. *The virtual mentor: VM.* 2011;13(1):26-30. <https://doi.org/10.1001/virtualmentor.2011.13.1.jdsc1-1101>
2. Horwitz RI, Singer BH. Why evidence-based medicine failed in patient care and medicine-based evidence will succeed. *Journal of Clinical Epidemiology.* 2017;84:14-17. <https://doi.org/10.1016/j.jclinepi.2017.02.003>
3. Wyer P, Silva S. Where is the wisdom? I--a conceptual history of evidence-based medicine. *J Eval Clin Pract.* 2009;15(6):8. <https://doi.org/10.1111/j.1365-2753.2009.01323.x>.
4. Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. *BMJ.* 1996;312(7023):71-72. <https://doi.org/10.1136/bmj.312.7023.71>
5. Stiller K. It's not the evidence, it's the way you use it: is clinical practice being tyrannised by evidence? My experience with the PBAC and evidence-based practice. *Australian health review: a publication of the Australian Hospital Association.* 2008;32(2):204-207. <https://doi.org/10.1071/ah080204>
6. Friedli J, Quick R, Bobh R, Cowing S. Valbenazine has a small but meaningful benefit for tardive dyskinesia. *Clin. Res. Prac.* Apr 22 2020;6(1):eP2104. <https://doi.org/10.22237/crp/1586477040>
7. Yaekle S, Ali H, Baker C. Informed Consent: There is insufficient evidence to recommend bremelanotide for hypoactive sexual desire disorder. *Clin. Res. Prac.* Aug 23 2021;7(1):eP2862. <https://doi.org/10.22237/crp/1622161200>
8. Vaishnav A. Oral bisacodyl is effective and safe for short term treatment of chronic constipation. *Clin. Res. Prac.* Aug 6 2021;7(1):eP2422. <https://doi.org/10.22237/crp/1622160780>
9. Daryani D. Peritoneal dialysis vs. hemodialysis: The choice of modality of dialysis may drastically affect the quality of life of patients initiating dialysis. *Clin. Res. Prac.* 2021;7(2):eP2579. <https://doi.org/10.22237/crp/1625097840>
10. Burdick G. Remdesivir has questionable efficacy in patients with severe COVID-19 receiving high-flow oxygen. *Clin. Res. Prac.* 2021;7(2):eP2522. <https://doi.org/10.22237/crp/1625097660>
11. Francis CY, Morris J, Whorwell PJ. The irritable bowel severity scoring system: a simple method of monitoring irritable bowel syndrome and its progress. *Aliment Pharmacol Ther.* 1997;11:395-402. <https://doi.org/10.1046/j.1365-2036.1997.142318000.x>
12. Staudacher H, Lomer M, Farquahason F, et al. A Diet Low in FODMAPs Reduces Symptoms in Patients With Irritable Bowel Syndrome and A Probiotic Restores Bifidobacterium Species: A Randomized Controlled Trial. *Gastroenterology.* 2017;153. <https://doi.org/10.1053j.gastro.2017.06.010>