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FROM THE EDITOR:

Defining the scholarship of Clinical Decision Science

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I've been an avid consumer of evidence-based medicine publications for over 20 years. I remember reading the *JAMA* series, "User's Guide to the Medical Literature" when it was contemporaneously published.[1,2] That series of publications helped launch the evidence-based medicine endeavor. I learned years ago how to critically appraise a clinical research article, always asking medical learners, "But what is the strength of the evidence?"[3,4] My mental schemata for making clinical decisions has always been based on probabilities, not categories.[5] I authored a book outlining the process of searching for, appraising, and applying clinical research literature.[6] I have also written about the limitations of evidence-based medicine.[7]

I have been active in the clinical care of patients for twenty-five years and none of the skills described above help me to use clinical evidence when I'm in an exam room, trying to help a patient decide what is best for them. Don't get me wrong—I am quite comfortable appraising and applying evidence, and I'm certain many other physicians are, too. Yet, I have no idea how those other physicians accomplish these tasks. I have difficulty teaching how to do it. There is a knowledge gap about how to describe physicians' cognitive processes and behaviors that connect patients with evidence.

We have decided to use the label Clinical Decision Science to describe the scholarship needed to understand that knowledge gap. Information Mastery[8] is necessary but insufficient to explore the ability to collect and evaluate evidence and apply it for the use of a specific patient, with specific needs. That decision making happens within the doctor-patient relationship.[9]

Clinical decision science explores how the complex interacting aspects of clinical care are described, understood, shared, and explained. This includes both biomedical and medical social sciences[10], in addition to other ways of understanding human experience. This is a unique area of scholarship that has not previously been recognized, explored, studied, or published.

Since its inception, this journal has published papers that describe the use of clinical research in the decision-making process for a specific patient. By including an individual patient, we came to realize that the social context of the patient is equally as important to clinical decision-making as the actual results of clinical research. Clinical decision science incorporates the "critical appraisal" of what is commonly known as "Evidence-based Medicine" (EBM), but is much more expansive in its scope of inquiry. We hope to achieve the original intent of the Evidence-based Medicine movement by extending it into the realm of clinical practice.[11-14] In clinical practice, doctors must discern the meaning of clinical evidence for a specific patient; the same evidence means different things to different patients. Evidence learned from a population of patients must be applied in the specific clinical context of a single patient.

We readily admit that Clinical Decision Science is in its infancy. Like all new areas of scholarship, we start with rich descriptions—case reports. We do not publish case reports of rare diseases; we hope to publish case reports that illuminate how clinical decisions are made. In addition to case reports, we use narrative to illustrate how to talk to patients in our "Informed Consent" publications. In this issue, John Geddes points out that Clinical Decision Science changes the research questions necessary to understand the informed consent process.[15] We encourage reflections on the experiences of clinical decisions.[16]

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In this issue, we've taken the next step in advancing this area of scholarship: publishing an original research article that uses descriptive data to differentiate "Clinical Decision Science" from "Evidence-based Medicine."[17] We intend to continue exploring the scholarship of Clinical Decision Science with all types of scientific inquiry.

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