



THE CONSORTIUM OF
EVIDENCE-INFORMED
PRACTICE EDUCATORS

The Savvy Practitioner

A bulletin for practitioners and teachers of evidence-informed practice.

Help your students understand how to read, understand and use the results from research studies.

Target audience this issue:

- ✓ Administrators
- ✓ Classroom faculty
- ✓ Clinicians
- ✓ EIP core instructors

Ron LeFebvre DC
Executive Director CEIPE
University of Western States

7/7/20
Issue 17

Training Clinicians & Classroom Faculty

The goal of evidence-informed practice (EIP) is to deliver care to our patients and clients that is informed by our experience, collective expertise, patient values, and, where appropriate, the results of clinical research. Research evidence can often result in improved outcomes, persuading us to embrace new interventions and abandon those that prove ineffective. However, providers need the skills to find good research evidence and properly understand its implications and limitations. Providers must be able to sift through the available body of clinical research and separate out the good from the bad and identify that which is not yet ready for translation into practice. Why is this so critical? Ioannidis (2005) warns us that “research findings from underpowered, early-phase clinical trials would be true about one in four times, or even less frequently if biases present.” In other words, the provider must be a discerning consumer of the research literature when deciding what to incorporate into patient care. A 2019 editorial in *Physical Therapy* further warns health care providers about another pitfall called “publication spin,” where the presentation of research results is distorted to appear to be more effective (or occasionally *less* effective) than is actually the case (Jette, 2019). Today’s provider needs a level of critical sophistication to detect the health care equivalent of fake news.

Classroom Faculty

As EIP educators, our goal is to impart to our students the skills necessary to access, understand, assess, and apply the results of clinical research in an effective manner. Depending on their discipline, every faculty member may not need to acquire the same level of expertise. But they should be comfortable enough to incorporate EIP content and terminology into their regular teaching *where appropriate*, including basic EIP concepts such as likelihood ratios, relative risk, odds ratios, number to treat, the concept of clinical significance, confidence intervals, number needed to treat or harm, etc.

And, of course, today’s faculty must have and use rudimentary EIP skills to filter what clinical research evidence they wish to include in their courses. They have an obligation to ensure that their course content is up-to-date, relative to their discipline. Those who teach primarily assessment courses may need to have good skills in assessing the diagnostic test literature and understanding prevalence, likelihood ratios, and diagnostic probabilities. On the other hand, those who teach courses that include management would need to be able to read and apply the research literature in therapy—which requires a somewhat different EIP knowledge base. Faculty should not only present the research evidence they have incorporated into their courses but should *characterize the quality of these recommendations to their students*. Not all research findings are equally trustworthy, and students should be encouraged to be critical thinkers.



Registration for the PIE conference is now open

Visit www.PIE2020.org

Submit applications
for a travel stipend
by April 15.

Want handouts for your
students?

Consult the Educator's
Exchange!

Lost your link to the
Educator's Exchange?

Try <http://bit.ly/CEIPE>.

You will need your password
and user name.

Don't have access to the
Educator's Exchange?

To sign up for this closed
website, just contact
rlefebvre@uws.edu and you
will be sent an invitation to set
a username and password.

Clinicians/Clinical Supervisors

Clinical supervisors may need even broader skills than individual classroom faculty! They certainly must have greater competency in finding evidence fast, knowing their way around the pre-appraised literature, and being able to do a very rapid "sniff test" of the quality of the information retrieved regarding patient care.

Although not all supervising clinicians will attain the same level of expertise, they need to be comfortable enough to also direct interns to do literature searches, do a preliminary assessment of the quality of the evidence, and decide whether there should be an impact on patient care. They should model the art of balancing research evidence with their own clinical experience and with the needs of a specific patient. This is not something that can easily be recreated in a traditional classroom course. Clinicians need not be as expert as the core course EIP instructors, but over the years, they should become comfortable in modeling these behaviors relative to the large array of clinical questions that can arise in patient care.

The two skill sets that all faculty should *minimally* have are to be able to find trustworthy sources of pre-appraised literature and push services and be able to read and understand the outcomes that are reported in research studies.

Of course, the challenge at both the individual and institutional level is to develop faculty that can acquire this knowledge base and can deliver the goods within their specialized teaching roles. Many faculty, if not most, have not been sufficiently trained in EIP skills and understandably feel intimidated by the knowledge required. These skills are not acquired quickly or easily.

Recognizing these needs, the Consortium for Evidence-Informed Practice Educators (CEIPE) was born in 2014, in part, as a result of several chiropractic and CAM schools receiving NIH training grants. CEIPE's mission is to continue the training of health care providers developed with these grants. CEIPE provides leadership, training, and support to member institutions and their faculty in preparing future providers with the skills, knowledge, and attitudes necessary to deliver evidence-informed health care. CEIPE, a completely voluntary organization, is here to support you by offering services such as circulating the *Savvy Practitioner* to its members and posting free teaching and learning materials on its website, the *Educator's Exchange*. It also hosts a biannual training program as part of the Process of Integrating Evidence (PIE) Conference.

The next PIE conference is being hosted by Parker University on August 14-16, Dallas, Texas. It is designed to help basic science instructors, chiropractic and clinical course instructors, and supervising clinicians/providers develop their EIP skills as well as their EIP *teaching* skills. Patterned after successful workshops at McMaster's and Oxford, it is based not on large group lecture, but rather on small group learning pods, appropriate for both early beginners and those wishing to deepen and strengthen their own skill sets. Note that travel stipends are available for faculty in North American chiropractic educational programs.

Ioannidis JPA, Why Most Published Research Findings Are False. *PLoS Medicine*. August 2005, 2(8), e124 www.plosmedicine.org

Jette AM. Protecting against "publication spin" in clinical trials. *Physical Therapy* 2019;(99)9:118-119