Letter to the Editors

The recent theory paper by Viets in HERD 2:2, "Lessons from Evidence-Based Medicine: What Healthcare Designers Can Learn From the Medical Field," advises that the field of medicine, like architecture, has faced many challenges in adopting an evidence-based approach. Dr. David Naylor, who previously served as Dean of the Faculty of Medicine and is now the 15th President of the University of Toronto in Canada, is well known for his analogy, which compares clinicians' attempts to keep up with the medical literature and current evidence to trying to drink water from a fire hose. This image becomes increasingly apt when one considers that the volume of medical literature applicable to a practicing family physician includes the approximately 7,287 articles published monthly in a set of commonly read journals. Physicians trained in epidemiology would spend an estimated 627.5 hours per month to evaluate these articles (Alper et al., 2004). In contrast, the field of evidence-based design has by no means reached a comparable rate of publication; nonetheless, designers' attempts to stay informed can be challenging, and the number of studies will certainly escalate.

What is perhaps more important than the fire hose of information is the application of this knowledge. Many in medicine have asked what causes the gap in the evidence-to-practice puzzle—something designers are beginning to consider. The medical field offers some explanations for these gaps, such as problems with clinical guidelines; challenges with the evidence itself in terms of its compatibility, complexity, and accessibility; or problems with the training, motivation, experience, or simple lack of time of the learner-clinician.

In medicine, it is sometimes tempting to implement locally the exact protocol used in a study. Clinical rotations in hospitals are meant to teach the value of evidence implementation, requiring students to substantiate their care plan decisions, such as which antibiotic to order for an infection based on the studies and evidence available. The facts that often additional evidence on a topic is emerging and that patient populations differ across institutions represent challenges. Clinicians must recognize that patients enrolled in randomized controlled trials are specifically selected and may not reflect their own populations. Similarly, designers must consider the specific vision and staff work culture of each hospital when planning new facilities or renovations.

The *Journal of the American Medical Association* weekly "patient page" is a tool designed for patient reference to explain simply common diagnoses, treatment modalities, and preventative care. Interestingly, evidence-based medicine was featured recently in lieu of a disease, indicating that patients need to be familiar with the phrase to be able to make good healthcare and lifestyle choices with their doctors. Evidence-based design is also becoming a term known to clients, who may ask for this approach having read about its purpose and application. However, even with the development of practice guidelines for the evaluation and treatment of particular

medical conditions, clinicians contribute a humanistic, individualized approach to patients, just as designers aim to do with their projects.

Viets should be commended on a comprehensive piece, which not only provides a timely comparison of the evidence-based approach in medicine and design, but reminds us to gain insights from the rigor of scientific studies while also remembering to consider each situation individually and within context. As high-level evidence in medical planning and healthcare design becomes increasingly available, there will be more opportunities for architects and planners to modify their designs in an effort to promote and improve patient experiences and care outcomes.

Reference

Alper, B. S., Hand, J. A., Elliott, S. G., Kinkade, S., Hauan, M. J., Onion, D. K., et al. (2004). How much effort is needed to keep up with the literature relevant for primary care? *Journal of the Medical Library Association, 92*(4), 429–443.

Diana Anderson, MD, MArch
2008-09 Tradewell Fellow
WHR Architects, Inc.
DAnderson@whrarchitects.com