

Academic Emergency Medicine Editor-in-Chief Pick of the Month

Science Trumps Empiricism (Humans Are Bad at Math)

February's pick of the month, (Access to Federally Qualified Health Centers and Emergency Department Use Among Uninsured and Medicaid-insured Adults: California, 2005 to 2013 by Nath, et al.), shows the importance of "showing your work" when it comes to imagined math in health policy. This paper explores the errant public perception that more primary care equals fewer unecessary emergency department visits. I chose this paper because it shows that the make-believe reality created by our puny human brains so often get trounced by actual data. I mean, of course, every educated voter knows the health services mathematical equation: more money (\$9 billion as pointed out by Nath, et al.) for more Federally Qualified Health Centers (FQHCs) and therefore more primary care access = fewer of those low income patients with their trifling complaints inhabiting my emergency department. But humans are so bad at math. From 2008-2013 (for your slide deck, please copy Table 2), Nath, et al., found no mathematical relationship between the density of FQHCs and emergency department visits for either Medicaid or uninsured patients. This finding prompts difficult questions

about *what* taxpayers are getting for their billions, and the underlying *why* behind <u>Table 2</u>. For more on the *why*, please read on to the narrative that follows by Dr. Zachary F. Meisel.

Best wishes,
Jeffrey A. Kline, MD
Editor-in-Chief, Academic Emergency Medicine

Narrative Summary

Zachary F. Meisel, MD, associate professor of emergency medicine at the Perelman School of Medicine at the University of Pennsylvania, places the EIC Pick into perspective in the emergency setting:

I have a physician friend who, not long ago, served as the chief medical officer for a cluster of Federally Qualified Health Centers in a large city. She spoke about two of them in vastly different ways. One was a beautiful new construction, but staffed with grumpy, burnedout providers who would go the minimum distance for their patients. The other was grungy and falling apart, but was directed by one of her favorite doctors. As you might expect, the first was (despite the gleaming facility) widely disparaged in the community and underused. The other was overflowing with patients willing to wait to be seen in the crumbing building by the beloved staff. When I reflect on Nath and colleagues' counterintuitive and important study, showing that increased access to these primary care clinics does not translate into lower rates of emergency department use, I am not surprised. People have real (and legitimate) reasons for seeking care where they go, especially Medicaid enrollees who are sicker than others. I often think about an excellent study published six years ago called "Understanding Why Patients Of Low Socioeconomic Status Prefer Hospitals Over Ambulatory Care." The authors found that

patients perceive the hospital (and the ED) to be more accessible, and of higher quality than ambulatory care. Maybe the paternalistic approach to keeping patients out of the ED – which assumes that patients don't know what is best for them – is misguided.