Real Personalized Medicine

In this month’s EIC POTM, Samuels-Kalow et al., explore what patients want out of their asthma treatment. A novel idea in a health care environment where elected officials and thought leaders at the federal level are funding and promulgating the notion that matching drugs to DNA sequences is the key to health. But even though I fully recognize that “Nobody knew how complicated healthcare would be,” I submit that anyone who has ever observed one shift in the emergency department will conclude that without patient adherence, even a super gen-transcript-lip-prote-omic-targeted strategy will unravel like a cheap T-shirt from a vendor at a medical conference. Your Mom knows that patient adherence requires patient buy-in. Using exemplary qualitative methods, the authors conducted three rounds of surveys with patients and Moms and Dads dealing with asthma, ostensibly to get inside their heads to reveal their thoughts, wants and needs. Samuels-Kalow and her colleagues have thus helped to elevate the human condition of people with attacks of asthma that drive them to seek our help. While qualitative methods, such as focus groups and semistructured interviews, have been used for about four decades in social sciences and psychology, these methods have only recently gained traction in emergency care research. This month’s EIC POTM authors provide a methodological template to show us how rigorous qualitative research should be done, including multisite and multistage sampling, and multiple layers of decoding the transcripts by both the authors and the patient participants. The result is a paper that condenses about 100 years’ worth of clinical experience into a 45-minute read. In it, Samuels-Kalow et al., tell us a few simple, humanistic, semi-surprising and semi-predictable goals of patients to drive research and current care of persons with asthma.

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

AEM Associate Editor D. Mark Courtney, MD, Associate Professor of Emergency Medicine and Medical Social Sciences at Northwestern University Feinberg School of Medicine, interprets how the research benefits patients and is relevant to the everyday practice of emergency medicine:

What is the main message?

In this three-phase qualitative study, authors developed a patient reported outcome measurement tool specifically for adult and pediatric ED asthma patients. The detailed methods and granular results describe similarities and differences between pediatric and adult care scenarios, are stratified by health literacy, and also include input from clinical providers. The final synthesis resulted in the following domains as central in outcome assessment: symptom improvement, medication access, correct medication use, and asthma knowledge.

What is novel and important about this work?

Most post-ED outcome "quality" measures focus on operational or administrative outcomes such as 72-hour returns to the ED, hospital readmission, or difficult to accurately evaluate outcomes such as medication compliance. This work uses a patient-centered, qualitative approach and reveals that what matters to patients and parents are symptom reduction and function. In addition to providing guidance on how future post ED asthma outcome can and should be measured, this work also provides rigorous methodological detail on how patient centered outcome tools could be derived for other non-asthma ED relevant conditions.

How might this help patients during times of emergency?
Providers may find focusing on these goals during discharge communication to be productive. Discussion that focuses on attempt to maximize optimal medication use, ensure access to medication, and anticipates gradual return to play, mobility, school, work, and homecare duties may be responsive to patient concerns and reassuring. Failure in these domains can be rightly anticipated to be motivators for return visits.

**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:

When a patient bounces back to the ED after getting what felt like perfect care, it can be perplexing and frustrating. But in truth, how often do we leave our ED shifts not really knowing “how well” the encounter went from a patient perspective? We usually know if we delivered the right medical care, but we don’t know much about what happens to our patients after they walk out the hospital door. Maggie Samuels-Kalow, the lead author of this study, tells me that these gaps helped inform her study. Her findings have already changed the way she discharges patients. “Instead of ‘take this higher dose of albuterol, and here are your prescriptions, and come back if you feel worse’, I now have a more nuanced conversation that includes troubleshooting previously hidden barriers to getting and staying better after the emergency visit.” Dr. Samuels-Kalow emphasizes that this isn’t just about asthma. Indeed. How much better would our care be if we could incorporate patient-reported outcomes into how we designed, tested and implemented all acute care interventions?