Data is power: resistance is futile

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RÉSUMÉ : Le mouvement d'ACQ (amélioration continue de la qualité), avec l'aide d'Intel et de Microsoft, fera de la prochaine décennie l'ère des données. Les départements d'urgence à travers le pays travaillent présentement à mettre sur pied des systèmes de collecte de données pour surveiller les profils de gravité des cas des patients, les temps d'attente, les durées de séjours à l'urgence, les habitudes de demandes d'épreuves, les pourcentages de demandes de consultation, l'utilisation des lits et les taux d'hospitalisation, et ce, pour chaque médecin. Mais ces données sont-elles fiables? Ou valables? Comment seront-elles utilisées pour juger le travail des médecins? Quelle sera la pénalité pour le médecin si sa surface sous la courbe tend à remonter? Peut-on quantifier les soins aux patients à l'aide d'un graphique? Et y a-t-il une corrélation directe ou une corrélation inverse entre la rapidité du médecin et la qualité des soins? L'ère de l'information est arrivée, mais les données feront-elles de nous de meilleurs médecins?

I just received in the hospital mail an envelope marked "confidential." Inside are three bar graphs derived from data generated in our emergency department, but there is no accompanying letter of explanation. The graphs are not clearly labelled, so it takes some time to figure out what is displayed. I think the graphs show the following: the number of patients I saw over three months, the time from triage to physician encounter, and a different graph showing physician time. There are 19 bars that I assume represent the full-time and some part-time physicians. There is a red dot on one that I assume indicates me. Hmm, now what?

If I interpret this correctly, I am in the slower half of the group. Although the differences are not that large between bars, patients wait longer for me after triage than they do for some of the other physicians in my group. That is bad, right? Or is it? Maybe by chance I always work on the busy days. Maybe I spend more shifts in the slow track instead of the fast track. What about the recidivism rates? Where are they? What about teaching time? Gee, maybe some data is missing. I check but, nope, the envelope is empty except for these three graphs.

I hastily draw the conclusion that I am working too slowly. In the setting of an overcrowded ED, I am not carrying my weight. Patients are suffering, my colleagues and nursing staff — although smiling to my face — are probably rolling their eyes every time I turn my back. I am a failure! But wait! Before I book my psychiatry appointment, maybe I should ponder this data more carefully. What does it really mean?

I realize that these data, used in isolation, are confusing and perhaps useless. Like most Canadian EDs, we have an unsophisticated information system that provides only part of the picture. But until the new system arrives, we gather the data we can and attempt to give it meaning. Time to see a physician. Time to x-ray. Number of tests ordered. Time to disposition. Time spent in the bathroom. All are easy to measure, easy to manipulate, and, with the right program, one can create some really fine-looking graphs. But are these crude numbers (derived often from practitioners' memories when they write up their charts) *meaningful*? And are they used in a creative and progressive way? How are these audits used, and do they reflect practice or affect patient care?

The quality of emergency medicine practice cannot be measured by a few bar graphs. What affects the triage-to-physician time (the graphs in question)? First, there are dozens of variables between triage and me that I cannot control. A sudden flood of patients, new triage staff, computers freezing at the registration desk, seasonal illnesses, new learners, and other process problems. Second, I am a

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https://doi.org/10.1017/S1481803500004395 Published online by Cambridge University Press

teacher as well as a clinician; medical students and residents are with me on many shifts. To complicate matters, I have spent part of my "academic" time at the Simulated Patient Program where we teach and test (and I have relearned) basic clinical skills. I think my history and physical exam skills may have actually stopped decaying — and even improved. I know about the many communication errors physicians make (although I probably still commit them). I can demonstrate the examination of the respiratory, cardiovascular, or neurological systems to trainees. Sometimes I even try my newly discovered skills in the ED. Maybe the stethoscope is not just costume jewellry after all. But according to the graphs, extra time talking to patients or performing careful examinations may move my dot into the "slow zone." Uh oh!

The reality is, EDs are busier and patients sicker than they were 10 to 15 years ago. Complex patients with multiple chronic medical problems are surviving longer. We no longer have the luxury of thinking, of asking trainees questions, of observing them while they gather data. Now, as one of my nursing friends says, we have to "move the meat." Another experienced nurse recently noted that the "good docs" are the ones who discharge patients quickly. Does she know on which bar MY red dot sits?

Every year, as it gets busier and more chaotic, we modify our practices a few more degrees to keep pace. We refer patients earlier and discharge sooner — and somehow we accept the extra risk. We pass procedures onto our consultant friends, because if we stop to do them, the department backs up. We invent chest pain, abdominal pain, and headache evaluation units as a necessary evil, because we are information overloaded, our cerebral RAM is full, and we cannot take the time to sort out and make decisions on individual patients.

Perhaps it's time to say, "Whoa!" This is my chosen career but it's a non-sustainable lifestyle. Working in the midst of chaos for 8 to 12 hours, facing angry patients who have waited 4 to 8 hours to see a doctor, and stepping over admitted patients lying in hallways is not what I signed up for. How do I convince trainees that what I do for a living is the greatest job on earth? If I don't believe it myself, what kind of role model or teacher am I?

Emergency physicians need to regain control of the "system" that, increasingly, puts too many patients in our path. We need to maintain our compassion, insight, skills, and scientific inquisitiveness. The ED is the health care system's safety net, which is fine. It is also a unique, specialized area of medical practice where some of the brightest physicians in Canada are redefining injury prevention, prehospital care and emergency medical practice — making changes that will ultimately save money and improve health care. We need to work at a pace that is safe and comfortable. Measuring clinician performance and improving efficiency is critical, but the data we take to hospital administrators, health boards, and provincial health departments must be meaningful if they are to support and strengthen our programs. Why is health care provision so different from running a corporation — where a CEO would never accept the rudimentary information we collect to measure performance?

Wait! Hold on! Gosh! Looking at those graphs again, I realize I was reading them backwards. I'm actually one of the fast guys. Gee, I guess that makes me one of the "good docs." Forget everything I said. It must be the other physicians who are the problem.

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https://doi.org/10.1017/S1481803500004395 Published online by Cambridge University Press