

# N OF 1

William W. Bakken, M.D., FAAFP  
LG Health Physicians Family Medicine Abbotsville



**Editor's note:** This article by Dr. William Bakken, a family physician and long-term member of the LGH medical staff, is the latest in a category we label "Perspectives." This intermittent series provides authors a forum in which to express personal views on various aspects of medical practice.

We encourage our readers to submit such articles for consideration whether the opinion expressed reflects a minority view or a mainstream one. It doesn't matter if most readers will agree or disagree; it does matter that the opinion is expressed vigorously and unambiguously.

Recently I had a short discussion with an academic physician about the pros and cons of PSA testing. The conversation could have been about several other topics, but on that day, it centered on prostate cancer screening. During our brief discussion, I related the story of a patient of mine who had not been routinely screened with PSA testing and presented with advanced metastatic disease, which ultimately claimed his life. My example was dismissed off hand because my experience was "an N of One," and our conversation was ended.

This encounter has caused me to consider the concept and importance of "N of One."

Throughout medical history numerous advances have been made because of an outlier, or an "N of One." From the discovery of X-rays or penicillin, to the treatment of childhood leukemia or peptic ulcer disease, often it is the single exception that leads to innovation. Today, the scientific process makes for much more structured studies, but I daresay that even now, being alert to outliers can be insightful and productive.

But apart from research, how and where does the concept of the "N of One" affect me as a practicing Family Physician? It affects me every time I interact with any patient. The patient I am treating is truly an "N of One" and I should be concentrating on their issues and health exclusively.

The late Tip O'Neill once said, "All politics is

local." I would extrapolate that maxim to medicine, and say that all day-to-day medicine should be focused on the patient in front of you right now. As family physicians, our task is primarily to take care of one patient at a time. That care requires an understanding of their condition and the latest medical research. That care requires us to educate our patients and present them with options going forward. That care requires that we listen to our patients. Finally, that care requires us to involve them in the medical decision making process. In other words, we should allow our "N of One" to guide their medical care.

More and more we are being challenged to practice population medicine. Population medicine certainly has its place in our everyday world, but numbers and dashboards should not minimize the importance of the single patient that we are dealing with right now. If population medicine was the end all and be all, we would not need an extensive differential diagnosis, nor would we ever worry about uncommon medical conditions. Cookbook medicine would prevail. Still, uncommon conditions and illnesses do occur, and the physician who concentrates on his or her "N of One" is more likely to properly diagnose such a patient than the physician who plays the percentages.

We must not lose sight of the importance of the one patient that we are treating right now, at this moment in their life. Their concern is not about averages or percentages, but rather about the health and well-being of themselves or their loved ones.

At a time when physician burnout is accelerating, I would argue that this burnout is fueled in large part by the demands of population medicine that cause us to lose sight of the importance of that "N of One." Ask practicing physicians where they find the most joy in their professional day, and you will almost universally get the response: "when I walk into the exam room and interact with my patient."

I am not an academician or a scholar, but I have been a practicing, board-certified family physician

for almost 40 years. I have seen trends come and go. What hasn't changed over those 40 years is the importance and uniqueness of every single patient. I would plead with the teachers of the next generation of family physicians not only to educate them on the most current medical knowledge and the importance of staying grounded in facts while

seeing the big picture, but also to make sure they don't lose sight of the small picture: the one patient they are treating or counseling in that moment. As physicians, we should be focused on our patient's health, well-being, concerns, and fears or lack thereof.

Each patient is our "N of One."

---

William W. Bakken, M.D.  
Family Physician  
LG Health Physicians Family Medicine Abbeyville  
101 Abbeyville Road  
Lancaster, PA 17603  
717-291-5991  
wwbakken@lancastergeneral.org

---



**Big Sur, California**

*Lawrence I. Bonchek, M.D.*

Readers are invited to submit their scenic photographs to the *Journal*, which we may publish when space is available. Photos must be of high quality with a resolution suitable for printing.