READERS of my column know that I am a founding member of the Thomas Jefferson University Hospital Pharmacoeconomics and Cost Effectiveness (PEACE) Committee (see “Give PEACE a Chance” in the April 2005 issue of P&T). I am also approaching my 20th anniversary at Jefferson, a milestone of which I am quite proud. This occasion and my membership on the PEACE committee recently came together for me as I was reviewing our current “high-cost medication list.”

Each year, the PEACE committee carefully reviews the acquisition costs of our top 15 or so drugs in our formulary, which has undergone a dramatic evolution in the past two decades. When I arrived at Jefferson in the winter of 1990, antibiotics filled every single slot in our top 15 drugs according to their acquisition cost. Over time, practices in our university hospital have changed. Like many other academic medical centers, we have seen a dramatic growth in our inpatient care of persons with cancer, AIDS, solid-organ and bone-marrow transplantation, and other quaternary services (e.g., information services, research and development).

As a reflection of these services, our top 15 list in 2008 contained only one antibiotic, namely Wyeth’s piperaclilin/tazobactam (Zosyn). Zosyn appeared midway down the list as a popular first-line antibiotic, often given in conjunction with vancomycin (Vancocin, Viro Pharma) for patients with sepsis associated with an unknown etiologic agent. That is, we give Zosyn until we know what we are treating.

Other drugs in the top 15 in 2008 included, for the first time, the low-molecular-weight heparins, for example, enoxaparin (Lovenox, Sanofi-Aventis). Enoxaparin was our second-highest drug by acquisition cost right behind intravenous immunoglobulin (IVIG). This leaves me to surmise that we have a very busy inpatient neurological practice in which our leading neurologists on the faculty are treating many patients with chronic demyelinating polyneuropathies with an inpatient dose of IVIG. I also presume that we are slowly adopting the enoxaparin-type model for deep-vein thrombosis (DVT) prophylaxis, probably stimulated, in part, by the national heparin recall.

Also at the top of our list last year was recombinant coagulant factor VIIa (NovoSeven, Novo Nordisk). I have written about this amazing product before, but we need to exercise great caution here. I recently learned that we poured literally thousands of dollars into the abdomen of an incurable patient as trauma surgeons desperately tried to stem the bleeding from a massive abdominal wound. Like you, I am intrigued by the evidence that leads us all to believe that using NovoSeven in special cases might be able to limit the transfusion burden facing some cardiac patients during open-heart surgery, but it’s too soon to tell how this might turn out.

Rounding out the bottom of the list in 2008 was Amgen’s epoetin alfa (Epogen). Surely we are all aware of some of the safety problems and other controversies swirling around the use of this agent. As a result, we’ve done a better job of teaching our house officers and attending physicians to carefully check the hemoglobin and hematocrit and to understand what a target hemoglobin ought to be. This is all part of our ongoing and exhaustive efforts to practice more closely in line with the evidence rather than use the old model of autonomous physician decision making.

From this double decade of drivers of pharmaceutical costs, I also learned that arcane contract pricing comes into play and helps to determine which drugs make it into the top 15 and which drugs fall off the list. I can’t possibly do justice to this dark world of pharmaceutical pricing in this space. I do know, however, that every academic medical center and community hospital also faces ever-changing contractual fees that, regretably, probably drive a good deal of clinical decision making, but these fees might not be obvious to the average clinician. I plan to write more about this in a future column.

“A double decade of drug drivers” has convinced me that our high-cost list is a witch’s brew created by the prescribing habits of attending physicians and house officers; voodoo medicine; contract-based competition; and a pinch of evidence-based practice. Certainly, we can do a better job in managing our expensive drugs. How might we tackle this problem?

Every institution owes its patients assurance that it is using accepted benchmarks to establish best practices. We vigorously compared our top-15 list against the formularies of similar institutions, especially those at the University HealthSystem Consortium in Illinois. We regularly analyze all of our contracts and strive for transparency in our dealings with the industry. The PEACE Committee meets frequently and does its best to promote evidence-based practice, to implement guidelines, to improve our computerized physician order entry (CPOE) programs, and in short, to tackle these matters all of the time.

In terms of clinical practice, 1990 now seems like ancient history. Who knows what a medication list will look like two decades from now? Does your P&T committee regularly review your top 15 medications? What is your experience? I’d like to see how we can learn what goes on within the walls of our institutions by carefully evaluating a double decade’s worth of drug drivers.

As always, I’m interested in your views. You can reach me at my e-mail address, david.nash@jefferson.edu. I hope you’ll also visit my blog at http://nashhealthpolicy.blogspot.com.

David B. Nash, MD, MBA