



# Perspective

## Daring to Practice Low-Cost Medicine in a High-Tech Era

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A child with chest pain or tics, a toddler who is limping, a 12-year-old girl with abdominal pain or headaches, an infant whose fever does not respond to antibiotics — these are age-old challenges that

pediatricians face. I have been teaching pediatrics to residents and medical students for more than three decades, but over the past few years, as I've watched trainees at work, sitting at their computers, and ordering and monitoring tests, I've grown worried that the practice of medicine has tipped out of balance.

Recent advances in scientific knowledge and technology have resulted in the development of a vast array of new tests, new pharmacologic agents, and new diagnostic and therapeutic procedures. These are so accessible to us in the United States that few of us can resist using them at every opportunity. By being impatient,

by mistrusting our hard-earned clinical skills and knowledge, and by giving in to the pressures and opportunities to test too much and treat too aggressively, we are bankrupting our health care system. Ironically, by practicing this way, we are perpetuating serious economic and racial disparities and have built a health care system that rates in the bottom tier among all developed countries in many categories of children's health outcomes.

Most doctors are intensely risk-averse. We don't tolerate uncertainty. Not wanting anything bad to happen, we reflexively overtreat and overtreat in order to protect our patients — and ourselves. We

feel judged by everyone — ourselves, our colleagues, our patients, the health care system, and the lawyers. The meaning of “first do no harm” has changed for us. We feel that “doing everything” is the best practice and the way to prevent harm, and we believe that it will shelter us from blame. We order tests and treatments because they are available to us, well before their importance has been established, their safety has been determined, and their cost-benefit ratio has been calculated.

The evaluation of a child with fever and cough is a good example. There are many possible causes, and we have a huge battery of available tests that might give us potentially relevant information. But why should we no longer trust our physical exam, our knowledge of the possible causes and their usual courses,

and our clinical judgment? How much will we gain by seeing an x-ray, now, and how likely is it that the result will necessitate a change in our management? How dangerous would it be if we chose to perform certain tests later or not at all? Might our residents not learn more by thinking, waiting, and watching? Who is actually benefiting when we order a test — the patient, the laboratory, the drug company, the health plan administrators, or their investors? And who is losing health care as we spend these dollars? We need to ask these questions of ourselves and our residents at every step of the clinical process.

I believe that we must rediscover the value of clinical judgment and relearn the importance of the personal, intellectual, scientific, and administrative thought that is central to the best practice of medicine. We need comparative-effectiveness research, as well as cost-benefit and long-term-benefit analyses, to inform us how to integrate traditional clinical skills with the use of new tests and therapies. Our time and attention have been diverted to the task of sorting out data instead of sorting out what is important to our patients, their families, and the community at large. This new style of test-avid, cover-all-possibilities practice is bankrupting our health care system and depriving many families of access to health care and a medical home. Not having a medical home can be as devastating as not having a physical home. If children have no primary care,

we have no way to prevent their asthma attacks, poisonings, obesity, or suicides, and if they are unimmunized, they may spread vaccine-preventable illnesses to their young siblings and aged grandparents. Society as a whole is the loser.

We as clinicians must change our practice patterns, but first the medical community, through standard-of-practice guidelines, must give us permission (or better yet, encourage us) to practice in a less costly way, so we don't feel we are expected and incentivized to order expensive tests or treatments. Similarly, clinician-teachers must develop the confidence (or be given the imperative) to teach students, residents, and fellows how to practice in the most knowledge-based, least invasive, most frugal fashion possible and to seek input from physicians with more clinical experience when they feel the urge to order a test or initiate a treatment.

Education of the public is also critically important. We need to admit to our fellow citizens that the United States, despite its wealth, technology, and research expertise, is 21st in the world in terms of many indicators of health, and we must convince them that population-wide changes designed to improve health outcomes would be in everyone's best interest. We need to teach our patients that more medicine is not better medicine, that it is poor health care for doctors to order too many tests or too many interventions, and that costly efforts do not equal better health care. As we

address their personal needs, we need to explain to our patients that we have to use new medical technology with care and wisdom. Indiscriminate health care spending is not fiscally sustainable at a national level and actually hampers the achievement of many universal health benefits.

Every participant in our health care system must focus on ways to optimize health while decreasing cost, at every step of the process. We need to change the financial incentives currently embedded in health care reimbursement systems that reward the use of tests, procedures, consultations, and high-cost therapies. And finally, the legal system needs to be more restrained about pursuing lawsuits when a difficult diagnosis is missed or a treatment fails, to diminish the pressure on health care providers to practice expensive, defensive medicine at every turn.

These are major changes, but today we are far from providing good care for all our citizens and far from achieving health care equal to that in many other countries. We need to incorporate more realistic clinical, scientific, and financial information into practice in order to bring our health care practices, and our health care system, back into balance.

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