BEYOND THE WHITE COAT

At What Price Stewardship?

It is the frequent juxtaposition of very disparate items that makes medical ethics both outrageously frustrating and ironically amusing. Does one hand of the health care system really have a clue about what the other hand is doing?

Take, for instance, three articles in the March 17, 2011, issue of the New England Journal of Medicine. An op-ed piece by Dr. Sean Palfrey bemoans how, because of a variety of incentives, the practice of modern American medicine has become a high-tech, unaffordable endeavor. Clinicians have abandoned judgment in favor of testing and treating everything imaginable. I agree with his clarion call for practice guidelines that would reduce excessive testing and comparative effectiveness research to eliminate extravagant therapies. But, I also agreed with those very same ideas when they were being advanced by public health policy analysts 25 years ago. The wasteful clinical decision making Dr. Palfrey describes has only gotten worse (N. Engl. J. Med. 2011;364:e21).

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The cost of health care in the United States is rising uncontrollably. Medical technology progresses, but is it really advancing? On the whole, does new technology do more, or cost less? In the past 25 years, computer technology has advanced so that today for $100 I can buy a device that will back up 1,000,000 times more data than the $100 device I used back then, and it will do it faster. In contrast, medical progress generally tends to increase the cost of diagnosis and treatment.

For instance, in the same edition of the New England Journal, there is an article by Dr. William W. Busse and his associates about the use of a monoclonal antibody to treat asthma for an inner-city pediatric population (N. Engl. J. Med. 2011;364:1005-15).

The novel therapy does produce slightly better results, but little mention is made in the article about the cost of this medication, which would be about 10 times more expensive per year than current controller therapy is and, in absolute terms, cost more than the median household income of the patient population included in the study. Dr. Palfrey pleads that "we need to incorporate more realistic clinical, scientific, and financial information into practice." But the asthma article, while full of informative scientific graphs, doesn't provide any of the financial information needed to address Dr. Palfrey's ambition.

In the 15 years after Medicare was established, health care costs doubled from 5% of the Gross Domestic Product (GDP) to 10% in the 1980s. The pundits of a quarter century ago projected dire economic consequences as those costs, already considered detrimental to the economy, would rise past 12%, then 15% of the GDP. By 2010, U.S. health care costs exceeded 17% of the GDP and the upward trend continues. Other countries have achieved equal or better health outcomes for a lot less money.

The past 25 years have seen various attempts by economists to elicit physician participation in restraining this rise in health care costs. The New Jersey experiment with Diagnosis Related Groups (DRGs) in 1980 gave way to proliferation of Health Maintenance Organizations (HMOs), then Preferred Provider Organizations (PPOs) with physicians as gatekeepers, then the never-implemented 1994 Clinton plan for Regional Health Alliances, followed by expansion of Managed Care Organizations (MCOs) and now, the yet to be defined Accountable Care Organizations (ACOs). Despite 3 decades of alphabet soup, costs continue to rise.

For the past year, each edition of the New England Journal has had about as many feature articles on health care finance as it has had on new medical science. This mix of articles is quite appropriate given the challenges facing U.S. health care. The March 17 article by Jeroen N. Struijs, Ph.D., and Caroline A. Baan, Ph.D., looks at bundled cost reimbursement, a concept very similar to the old New Jersey DRGs. The article seeks to glean lessons from the Netherlands' efforts to affect clinical decision making by aligning financial incentives to reward cost efficiency (N. Engl. J. Med. 2011;364:990-1).

Wise use of resources requires integrating ethical, scientific, and financial perspectives. The New England Journal managed to get three articles, each emphasizing one of these three facets, into the same magazine. Alas, each article stayed in its own silo, quite oblivious to the ideas a few pages away. The task before modern medicine is blending these three facets together. Can we get clinical decision makers, medical researchers, and economists into dialogue?

I strongly believe that physicians must view controlling health care expenditures as a professional duty. Either we embrace that stewardship or we will continue to find that cost control measures will be thrust upon us. Currently, that control occurs in the form of a clerk with a large book telling us whether or not a surgical procedure is preapproved or whether that hospital admission was, in retrospect, covered by insurance. Surely, highly educated professionals can do better than this.

Learning to be good stewards will take education, new tools, and practice. I suggest starting with low-hanging fruit. The Food and Drug Administration and Medicare recently approved a novel, individually tailored immunotherapy for prostate cancer that adds, on average, 4 months of life to an elderly patient at the price of $93,000. Perhaps it is an example of Lewis Thomas's halfway technology. But as low-hanging fruit goes, that looks like a watermelon. ■

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SUBSPECIALIST CONSULT

Helping Your Patient With a Bee Sting Allergy

Although diagnosis of a bee sting allergy is often straightforward, it's important to go through the history. Ask when the children were stung, what type of reaction they had, and how soon after the sting they experienced symptoms.

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A large local reaction can be impressive in size, but it may not be as serious as the child who presents with systemic symptoms such as hives or difficulty breathing.

Immediately direct a child experiencing acute anaphylaxis to emergency care. Acute effects will be seen right away, generally within 15-30 minutes. The parents of a child with a known sensitivity to bee stings, in particular, will know to head to the emergency department right away, especially after self-administration of epinephrine by an autoinjector.

It is more likely that a patient will come to you with a less severe reaction or for advice on how to manage a potential allergy. In general, local reactions are no larger than 10 cm, and you can treat the area with ice or cold compresses in your office. Typical local reactions are a little bump, a local hive, or an indurated area of swelling that is warm or hot.

Take photos of the allergic reaction. This can be very helpful if you later refer the child to a specialist. It helps us immediately see the size and location of the reaction.

Check to see if the stinger is still in place when a flustered child (or parent) comes in right after a bee sting. Although most people remove it immediately, some patients come in with the stinger still in the skin. You want to scrape or brush across the skin with a credit card or coin to remove the stinger. The removal technique is important because honey bees can leave both their stinger and venom sac behind as a last defense. If you just try to pull out the stinger, unintentional squeezing of the venom sac can mean more venom gets injected into the allergic child.

Consider referral to a pediatric allergy specialist if a child has a history of adverse or severe reactions to bee stings. The risk of future severe reactions, including anaphylaxis, will be elevated in a patient who has already spent any time in the emergency department, for example. When you refer, include a list of any local or systemic symptoms and any medications the child is taking.

Each subsequent exposure to bee venom increases the risk of a more severe reaction. One question I always get is: "I've been stung 15 times before. How come this time I developed an anaphylactic reaction?" I explain that a person needs to be stung only once before the body can develop an allergy, and any exposure after that may trigger a serious or life-threatening reaction.

You can perform allergy testing in your primary care office, but the question is what to do with the results. Such testing prior to referral does not tend to help us a lot. We often perform a more comprehensive evaluation. For example, as a general rule I order IgE protein-specific tests for the five common flying insect venoms, because most children cannot tell if a wasp, hornet, or bee stung them.

The good news is that if an individual meets criteria and is treated with immunotherapy or allergy shots, he or she has a success rate of about 98%. Even so, I recommend that a child with a history of bee sting adverse reactions carry an autoinjectable epinephrine device and practice bee avoidance measures.

You can teach children how to stay away from bees. Tell them not to play in or around woods, for example. Make sure they know not to provoke or aggravate any bees they encounter, and that bees are attracted by bright-colored clothing, perfume, and cologne. I tell patients to avoid drinking cans of soda outdoors. Bees attracted to the sweet soda will fly into these cans and, unfortunately, it is not uncommon for people to be very surprised and get stung in the mouth, on the tongue, or on the lips this way. ■

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