PERSPECTIVE A 21ST-CENTURY HEALTH IT SYSTEM

recent survey, a majority of physicians indicated that they were very or extremely likely to buy apps extending their EHR system's capabilities.5 Furthermore, whereas the Meaningful Use program applied only to CMS payments, we encourage private payers to also provide incentives for a standard open API as a mechanism for integrating decision-support apps to drive best practice and allow documentation of outcomes and value. App developers could ask their customers to allow integration with health system data through a standard API, rather than through expensive one-off projects.

If we make it our goal for a

given app to be able to run on any EHR in the U.S. health care system, we minimize the risk that the 21st Century Cures Act will produce only local successes and scores of balkanized, disparate apps. We also maximize the opportunity for the United States to become a leader in developing new health care applications for clinicians and patients with varying needs and ensuring the safe and timely flow of information for patients, care providers, and researchers.

Disclosure forms provided by the authors are available at NEJM.org.

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Letter to a Young Female Physician

Suzanne Koven, M.D.

This past June, I participated in an orientation session during which new interns were asked to write self-addressed letters expressing their hopes and anxieties. The sealed envelopes were collected and then returned 6 months later, when I'm sure the interns felt encouraged to see how far they'd come.

This exercise, in which the intern serves as both letter writer and recipient, both novice and veteran, offers a new twist on an old tradition. In 1855, James Jackson published Letters to a Young Physician Just Entering Upon Practice. More recent additions to this epistolary canon include Richard Selzer's Letters to a Young Doctor, which appeared in 1982, and Treatment Kind and Fair: Letters to a Young Doctor,

which Perri Klass published in 2007 on the occasion of her son's entry into medical school.

When I started my internship 30 years ago, I wasn't invited to share my hopes and anxieties in a letter — or anywhere else, for that matter. In fact, I recall no orientation at all, other than lining up to receive a stack of ill-fitting white uniforms, a tuberculin skin test, and a hasty and not particularly reassuring review of CPR.

Perhaps the memory of my own abrupt initiation explains my response as I sat at the conference table watching the new interns hunched earnestly over their letters: I was filled with longing. I wanted so much to tell them, particularly the women — more

than half the group, I was pleased to note — what I wished I'd known. Even more, I yearned to tell my younger self what I wished I'd known. As the interns wrote, I composed a letter of my own.

Dear Young Female Physician: I know you are excited and also apprehensive. These feelings are not unwarranted. The hours you will work, the body of knowledge you must master, and the responsibility you will bear for people's lives and well-being are daunting. I'd be worried if you weren't at least a little worried.

As a woman, you face an additional set of challenges, but you know that already. On your urology rotation in medical school, you were informed that your pres-

ence was pointless since "no selfrespecting man would go to a lady urologist."

There will be more sexism, some infuriating, some merely annoying. As a pregnant resident, I inquired about my hospital's maternity-leave policy for house officers and was told that it was a great idea and I should draft one. Decades into practice, when I call in a prescription, some pharmacists still ask for the name of the doctor I'm calling for.

And there will be more serious and damaging discrimination as well. It pains me to tell you that in 2017, as I'm nearing the end of my career, female physicians earn on average \$20,000 less than our male counterparts (even allowing for factors such as numbers of publications and hours worked)1; are still underrepresented in leadership positions, even in specialties such as OB-GYN in which we are a majority²; and are subjected to sexual harassment ranging from unwelcome "bro" humor in operating rooms and on hospital rounds to abuse so severe it causes some women to leave medicine altogether.3

But there's also a more insidious obstacle that you'll have to contend with — one that resides in your own head. In fact, one of the greatest hurdles you confront may be one largely of your own making. At least that has been the case for me. You see, I've been haunted at every step of my career by the fear that I am a fraud.

This fear, sometimes called "imposter syndrome," is not unique to women. Your male colleagues also have many moments of insecurity, when they're convinced that they alone among their peers are incapable of un-

derstanding the coagulation pathway, tying the perfect surgical knot, or detecting a subtle heart murmur.

I believe that women's fear of fraudulence is similar to men's, but with an added feature: not only do we tend to perseverate over our inadequacies, we also often denigrate our strengths.



A 2016 study suggested that patients of female physicians have superior outcomes.4 The publication of that finding prompted much speculation about why it might be so: perhaps women are more intuitive, more empathic, more attentive to detail, better listeners, or even kinder? I don't know whether any of those generalizations are true, but my personal experience and observations make me sure of this: when women do possess these positive traits, we tend to discount their significance and may even consider them liabilities. We assume that anyone can be a good listener, be empathic — that these abilities are nothing special and are the least of what we have to offer our patients.

I have wasted much time and energy in my career looking for reassurance that I was not a fraud and, specifically, that I had more to offer my patients than the qualities they seemed to value most.

Early on, I believed that displaying medical knowledge the more obscure the better would make me worthy. That belief was a useful spur to learning, but ultimately provided only superficial comfort. During my second-year clinical skills course, an oncologist asked me to identify a rash. "Mycosis fungoides!" I blurted out, since it was one of the few rashes whose name I knew and the only one associated with cancer. My answer turned out to be correct, causing three jaws to drop at once — the oncologist's, the patient's, and my own - but the glow of validation lasted barely the rest of the day.

A little further on in training, I thought that competence meant knowing how to do things. I eagerly performed lumbar punctures and inserted central lines, and I applied for specialty training in gastroenterology — a field in which I had little interest — thinking that I could endoscope my way to self-confidence.

My first few years in practice, I was sure that being a good doctor meant curing people. I felt buoyed by every cleared chest x-ray, every normalized blood pressure. Unfortunately, the converse was also true: I took cancer recurrences personally. When the emergency department paged to alert me that one of my patients had arrived unexpectedly, I assumed that some error on my part must have precipitated the crisis.

Now, late in my clinical career, I understand that I've been neither so weak nor so powerful. Sometimes even after I studied my hardest and tried my best, people got sick and died anyway. How I wish I could spare you years of self-flagellation and trans-

port you directly to this state of humility!

I now understand that I should have spent less time worrying about being a fraud and more time appreciating about myself some of the things my patients appreciate most about me: my large inventory of jokes, my knack for knowing when to butt in and when to shut up, my hugs. Every clinician has her or his own personal armamentarium, as therapeutic as any drug.

My dear young colleague, you are not a fraud. You are a flawed

and unique human being, with excellent training and an admirable sense of purpose. Your training and sense of purpose will serve you well. Your humanity will serve your patients even better.

Sincerely,

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