not been previously vaccinated and — depending on the FDA’s licensing criteria — whether it should be recommended for boys as well as girls and women. Although a recommendation for routine HPV vaccination should lead to widespread use, it would be substantially different from mandating vaccination. According to Abramson, the committee is not considering the latter approach, nor does it have authority to make such recommendations. Mandating vaccination requires action by individual states.

In addition to the outcome of the FDA review, there are many unknowns about HPV vaccination. One is the duration of immunity, which will have to be determined through follow-up studies. Another is the effect on sexual behavior, which should be learned through monitoring efforts. Nonetheless, Nicole Liddon, a sociologist at the CDC, told the committee in February that it is “unlikely” that routine HPV vaccination will change adolescent sexual behavior: the initiation of sexual activity reflects many factors, including parental and community influences; fear of sexually transmitted diseases has not been a major motivation for adolescents to abstain from sex; and the availability of condoms and emergency contraception has not had measurable effects on the frequency of unsafe behavior.

The acceptance of the HPV vaccine — by physicians, parents, preteens, and the public at large — is also uncertain. As with many issues related to sex, people may have strong views. Increased acceptance is likely to require ongoing discussion and educational efforts. At the February ACIP meeting, the conservative Family Research Council, which promotes abstinence before marriage and fidelity within marriage as the best way to prevent sexually transmitted diseases, distanced itself from suggestions that it opposed HPV vaccines. Calling such reports “false,” the council said it “would oppose any measures to legally require vaccination or to coerce parents into authorizing it” and that “there is no justification for any vaccination mandate as a condition of public school attendance. However, we do support the widespread distribution and use of vaccines against HPV.”

Finally, the epidemiology of cervical cancer highlights the need to provide HPV vaccines to persons who may never or rarely be screened, as well as to improve cervical-cancer prevention programs so that they will reach the women with the highest risk of disease. The HPV vaccine is likely to be considerably more expensive than many recommended vaccines, and its benefits will not be fully apparent for decades. It will be far easier to recommend routine vaccination than to provide the resources for its routine use, in the United States and throughout the world.

Dr. Steinbrook is a national correspondent for the journal.


Heart Sounds
Katharine Treadway, M.D.

The second-year students are learning about the cardiac exam today. They file into a large classroom, where they will first learn about heart murmurs — their location, quality, and meaning. Then, as part of their session, they will have the opportunity to work in small groups examining several patients who have good examples of “classic” murmurs. As they listen to each patient, they will be guided by a fellow in cardiology. They are excited to be able to listen to real patients’ hearts instead of just each others’.

Over the years, I have watched my students examine these patients, many of whom are my own, who have so kindly offered their hearts for an afternoon of student education. When the students are introduced to their first patient, they are unfailingly polite, concerned about the patient’s comfort, grateful for the opportunity to listen to a real heart. Then they settle into the process of performing the exam: observing the chest wall, feeling for the apical impulse, trying to understand its character and what it might tell them about the heart they are about to hear. Finally, using their stethoscopes, they listen to the sounds beneath. They are awk-

PERSPECTIVE

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ward and nervous as they listen, brows furrowed in concentration. Suddenly, their faces light up: they have recognized the mitral regurgitation that, until that moment, had been a mere description in a textbook, a manufactured sound on a simulator. Over and over again throughout the course of the afternoon, they will greet patients and then eagerly bend over their hearts, listening intently.

A few years ago, after one of these sessions, I had an office visit with one of my patients who had graciously volunteered to let my students examine her. I thanked her again for her time. She said, “Kate, tell me, how bad is my heart?” This woman is in her 70s now, but I have known her since I was an intern. She has had severe mitral regurgitation for years and, remarkably, has never been symptomatic. I follow her with periodic echocardiograms and discuss the possibility of a valve replacement in the future — an option she has vehemently resisted.

“Why do you ask?” I said.

“Well, when one of the students had listened to my heart, she turned to the cardiac fellow and asked, ‘How can she live if her heart is that bad?’”

There it was. The moment when, in her enthusiasm and intense interest in the problem before her, the student forgot there was a patient. How easy it was for her health, talked with her about her patient as a person provides a comforting connection for both of us — the doctor and the patient facing the fears and managing the problems together. I know this alliance is at the heart of our calling, of why we went to medical school all those years ago.

As I look out at the earnest, eager students in front of me with their shiny stethoscopes around their necks, I think about the hearts they will hear and the hearts they will touch — including their own.

Dr. Treadway is in the department of medicine at Harvard Medical School and Massachusetts General Hospital, Boston.