quality of care but do not substantially reduce costs among a broad array of patients.[3-5] As more empirical evidence comes in, it may become easier to identify specific ways to reduce costs; for now, the possibility and scope of the savings remain unclear.

One approach that might improve the cost-effectiveness of disease-management and care-coordination strategies involves more accurately targeting these efforts toward the patients who would benefit the most. Indeed, the concept of better targeting is inherent in all the options considered here, from enhanced research on treatments to the designing of financial incentives. As medicine moves toward increasingly targeted therapies, the options for shifting insurance designs in the same direction merit consideration as policymakers grapple with the serious financial challenges faced by our public and private health insurance programs.

An interview with Dr. Orszag can be heard at www.nejm.org.

Dr. Orszag is the director of the Congressional Budget Office (CBO), where Dr. Ellis is a senior analyst. CBO is a nonpartisan agency that provides budgetary and economic analyses to Congress.

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Climbing through Medicine's Glass Ceiling

Nancy C. Andrews, M.D., Ph.D.

Earlier this year, I was named the first female dean of the Duke University School of Medicine, an event that National Public Radio summed up in the headline: "Andrews Makes History at Duke Med School." Why should the appointment of a woman dean still be big news in 2007? Perhaps because, with a few localized exceptions, there has been little change since the 1970s in the barriers to women's full participation in academic medicine.

I happen to believe strongly that diversifying all levels of academic medicine is not only politically correct, it is also the way to make our institutions better. The history of Harvard University, for example, where I spent many years before moving to Duke, is one of gradually increasing diversity, which I see as a necessary ingredient of an outstanding institution. When the university was young, 300 or so years ago, its faculty and students were Puritan men from good local families. Over the centuries, the Harvard community gradually became diversified in terms of geographic origin, religion, socioeconomic background, sex, race, nationality, and other personal characteristics. It has always seemed to me that it was only by choosing to recruit the individual scholars whom it viewed as the best, regardless of such characteristics, rather than limiting itself to a narrow circle of candidates, that Harvard was able to build a world-class faculty and student body worthy of the reputation it now enjoys. After all, brilliance and ability are not restricted to certain groups, so it seems logical that if they draw from the widest possible talent pool, the very best institutions will naturally have diversity at all levels.

And yet most do not, despite efforts to begin with a diverse population of students. Given that the proportions of men and women in medical school classes have been similar for some time, it seems puzzling that there are not more women in leadership positions in academic medicine. I suspect that some of the reasons for this disparity are the same as those that apply at the entry level for physician-scientists — concerns about balancing work and family, perceptions that women need to be better than men at their professions in order to be considered equal, and a dearth of female role models.[1] But I also believe that if we are to have more female deans, we must be able to envisage female deans.

There was a riddle that was

popular not too long ago that took advantage of listeners' failure to consider the possiblity that a patient's mother might be a surgeon. It would not stump as many people now as it once did, but it continues to be true that we do not expect women to hold certain positions in society or medicine. Recently, I witnessed firsthand the persistence of such expectations, when my husband, our children, and I went to visit a school in North Carolina where Duke staff members had made an appointment for the family of the new dean of the medical school. As we entered the school, its principal vigorously shook my husband's hand and welcomed him, saying, "You must be the man of the moment." Unfortunately, it is quite understandable that it wouldn't have crossed his mind that I might be the "woman of the moment" instead.

The principal had the odds with him. Only 14 of 124 U.S. medical school deans are women. Deans are often former department chairs, most frequently chairs in internal medicine. But in the United States, only 10 medicine department chairs are women — that pipeline is almost empty. Strikingly, only 9% of the chairs of all clinical departments are women, and many schools have no female department chairs at all. Since these leadership positions turn over slowly, the situation will not change anytime soon.

If institutions are to accelerate the emergence of more female deans, then they will need to consider women who have not stepped on every rung of the traditional academic career ladder. Never having served as a division chief or a department chair, I was a somewhat atypical dean candidate. Interestingly, Duke has recently appointed a whole cadre of new deans who have had unusual careers — not only for its medical school, but also for its business school, its law school, and its Nicholas School of the Environment and Earth Sciences. I think that taking a creative view of leadership will enrich academic medicine.

To accelerate the emergence of female deans, institutions will need to consider women who have not stepped on every rung of the traditional academic career ladder.

Part of the answer for universities aiming to pursue such benefits is to work harder to identify and recognize women who are leaders. The Rosalind Franklin Society (of which I am a founding member) was recently created to draw attention to leading female scientists, on the premise that "there still exists a prevailing perception that women do not have the same talents and abilities as their male colleagues and that the contributions of women scientists are not as important."[2] The goal of the group, made up of prominent scientists of both sexes, is to ensure that outstanding women are recognized in ways that its namesake, Rosalind Franklin, was not.

It is also important not to make assumptions about what women will and will not do. After my appointment at Duke was announced, many people told me that they'd assumed I would not be willing to move out of Boston — that I would not leave Harvard, that I would not move my children before they finished high school, that I would not uproot my husband. Obviously, all those assumptions were incorrect. My own choices notwithstanding, however, the "two-body problem" — finding a position for a new appointee's spouse — remains a major obstacle to the recruitment of women in particular and of academic leaders in general. Though Duke found a creative solution in my case, many academic institutions do not do as well on this front.

Some of our counterparts in the corporate world may do better, for they are beginning to recognize that women are an undervalued resource. The teaser for a recent *Boston Globe* article began: "Hungry for talent, big companies have started to pursue women who have dropped out of the workforce. How this could redefine the whole notion of a career."[3] The article described a partnership between a large financial institution and a prominent business school designed to recruit gifted women who had taken time off for motherhood. It argued that women (in this case, mothers) are an important, untapped pool of talent. At the moment, it appears that corporate pursuit of profits may be more powerful than academic initiatives in leveling the playing field for women.

As I look to the future, I wonder what my 15-year-old daughter thinks about all the publicity surrounding my new deanship. Until recently, she had been telling peo-

ple that she was interested in medicine, but she's been uncharacteristically quiet of late. Will she end up being a top clinician, a chief, a chair, or a dean someday? Or will she compare academic medicine with other fields that seem more open to women and decide that it's not the right place for her?

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Becoming a Doctor, Starting a Family — Leaves of Absence from Graduate Medical Education

Reshma Jagsi, M.D., Nancy J. Tarbell, M.D., and Debra F. Weinstein, M.D.

Colleagues offered congratulations when Mike and Anya announced that they were expecting a baby — due a few months before their expected graduation from residency programs in radiology and family medicine. Both had plum jobs lined up across the country, where grandparents could help with child care.

Mike's radiology program director told him he could take 8 weeks of parental leave and that the American Board of Radiology would exempt him from making up this time. Mike's fellow residents were relieved that the extra on-call responsibility would not be distributed among them but rather would be covered by moonlighters. Unfortunately, Anya's program director, citing American Board of Family Medicine policy, reported that any parental leave she took would delay her graduation, because she had already taken her vacation for the year. Though he acknowledged that Anya was competent to practice independently, the director stated that she would nevertheless have to make up any time away from the program. To complicate matters, the hospital provided 8 weeks of paid maternity leave but only 2 weeks of paid paternity leave.

To retain their job offers, the couple decided that Anya would return to work just a few days after childbirth. She shouldered extra on-call duties during her second trimester in order to have a lighter schedule later on. Fortunately, the pregnancy and childbirth were uncomplicated and, fighting exhaustion, Anya completed her residency close to the planned date. The couple managed to make ends meet on Anya's salary while Mike cared for their infant.

Mike's colleagues took pride in the "enlightened" policies that allowed a male resident to serve as primary caregiver for his newborn without negative repercussions for his career. Anya's mentors, on the other hand, wondered whether the profession's explicit recognition of family leave had made things better or worse.

Two decades ago, researchers studying pregnancy among women who were training at Harvard teaching hospitals concluded that, though pregnancy and childbearing were "a natural and expected part of all our lives," most Harvard-affiliated institutions "were unprepared for pregnancies among members of the house staff" — as evidenced by the fact that four fifths of the training programs had no maternity-leave policy.[1] Family-leave policies have since been developed at both institutional and national levels. Most teaching hospitals now provide explicit parental leave (often with pay), and the federal government and member boards of the American Board of Medical Specialties (ABMS) have developed relevant regulations (see the Supplementary Appendix, available with the full text of this article at www.nejm.org). Nevertheless, the issues surrounding parenting during training continue to challenge educators and policymakers, as well as residents and fellows. The personal and educational needs of trainees with children often collide with their colleagues' expectations, their hospitals' workforce needs, and the requirements of the ABMS and the Accreditation Council for Graduate Medical Education (ACGME).

With women now accounting for half of all medical students (see graph), and with training in many specialties now extending well into the fourth decade of life, the problems have become more pressing. A study of matriculants at Yale University School of Medicine showed that before