Linking biomedical research to health care

We are in the midst of a vitally important discussion on health care. This debate has provided insights into who we are as Americans and what we value. We clearly value our health and our health care. We believe that health and access to quality health care are a human right. As physicians, many of us have worked in impoverished areas in this country and abroad, and we've seen that the poor can often be deprived of such rights. We have had the privilege of providing medical care to people who otherwise would not be able to get it. The number of health care professionals eager to serve is impressive, and so is the amount that can be accomplished. And so, our efforts as physicians to advocate for health as a human right, to reduce Americans' vulnerability, and to care for those in need must be heard.

Another insight is obvious to those who engage in biomedical research, but the message is likely underappreciated by the American public. Biomedical research provides the basis for progress in health and health care. Basic discoveries, translation to clinical medicine, and implementation into medical practice have been the story line of medical advances for decades. And the vast majority of basic discoveries have been funded by the National Institutes of Health through taxpayers' investment in biomedical research. So why isn't NIH-funded research mentioned more in our health care discussion? We know the likely causes: it is difficult to draw a straight line between NIH-funded research and improvements in health care; many basic science advances take decades before being fully developed into therapeutics and fully implemented into medical practice; and reporting of medi-

cal advances rarely includes attribution to NIH funding. But this is a very special time for our biomedical community. We are the recipients of approximately \$10 billion of American Recovery and Reinvestment Act (ARRA) funds, and we can use the health care discussion as an opportunity to articulate (a) our gratitude for the enormous investment made

The physician's voice

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by the American public in the biomedical research enterprise; (b) how ARRA-supported research will accelerate medical progress by helping to deliver new treatments and prevention strategies to reduce disease; (c) the synergy among university, academic health centers, and NIH support for training the next generation of physician-scientists and biomedical leaders; and (d) the current and future scientific opportunities that will empower the biomedical research community.

Knowledge gained from important fields of NIH-funded research will contribute significantly to our progress in achieving affordable and high-quality health care for all Americans. Comparative effectiveness research, for example, involves conducting and synthesizing research comparing the benefits and harms of different interventions and strategies to prevent, diagnose, treat, and monitor health conditions in real-world

settings. The goal of this research is to improve health outcomes by developing and disseminating evidence-based information to patients, clinicians, and other decision makers about which interventions are most effective for which patients in specific circumstances. The NIH has a long and rich tradition of comparative effectiveness research and is well positioned to play a major leadership role in continuing to fund this research. We understand that patient-centered health research is vital to effective health care, and the results of comparative effectiveness research can direct the right treatment to the right person in the right setting at the right time. Other areas in which NIH-funded research will inform the health care discussion include health economics, health systems research, health disparities, and personalized medicine, to name a few.

As physicians, we carry within us a belief that health and access to quality health care are a human right; that when the health system does not serve many of our fellow Americans well, we must change it. Biomedical research offers hope to improve vaccines, therapeutics, devices, and health system approaches that will bring health and security to our fellow Americans. Our health care discussion is not solely about our nation's health; it is also a statement about what we value.

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Reflections on health care

What do we need? Not what we have: a health care system whose costs are spiraling out of control, that fails to provide care for almost 50 million Americans, and that ranks far from the top in terms of infant mortality and adequate health care for our adult population. Ideally, we need a single-

payer, universal health care structure. To paraphrase Ted Kennedy, why shouldn't all Americans have access to the kind of health care that is offered to our congressmen and senators? Failing that, health insurance companies should go away or agree to compete on an equal footing with govern-

ment-sponsored health care in a truly free market economy.

Built into that system, though, must be the recognition that we cannot afford to spend such a large proportion of our health care dollars on the final few months of life. It is agonizing to watch hundreds of thou-

sands of dollars being spent on ICU care for an elderly, desperately ill patient who, if he/she could voice an opinion, would ask, in contrast to Dylan Thomas's poem, to be allowed to "go gentle into that good night." It is a form of abuse to insist on intervention when it is not wanted and not justified. Those dollars need to go into preventive medicine, drug benefits, and social programs that teach healthy living skills to avoid chronic, preventable diseases like obesity, diabetes, and smoking-related lung cancer, not into respirator care for a 96-year-old man with aspiration-induced pneumonia who has begged to be allowed to die in peace. What happened to the old saying that pneumonia is an old man's best friend? The availability of sophisticated technologies doesn't mandate their use. Hard choices do need to be made — is an expensive biological therapeutic that may at best extend a life for six to eight weeks warranted for any patient when those dollars could instead be spent on well-baby clinic visits? The answer may be yes when the patient involved is a

40-year-old mother of three with breast cancer, but no when it is an 84-year-old man with metastatic prostate cancer. Who should make those decisions? The doctors, the patient, the family, and, if necessary, an institutional review board. Common sense should not be underrated. These issues do not translate into "death panels"; they speak to reality and to fair play — and to dignity at the end of life.

The public perception of medicine and doctors as white knights who are not allowed to fail must also be taken out of the closet, shaken down, dusted off, and revised. Since when did we believe that life is without risk? The reality is that any procedure, any drug is always a risk/benefit proposition. Those risks should be made utterly transparent and abundantly clear. And the inevitable disappointments that ensue when a drug has unfortunate side effects or a procedure doesn't go as hoped for should not translate into medical malpractice suits. That way leads to unnecessary tests and procedures that lead to spi-

raling medical care costs. My elder son, a surgical resident at Massachusetts General Hospital, sees the waste every day. Talk to any doctor and they will tell you they are forced to order expensive tests solely to protect themselves against malpractice suits.

For goodness' sakes, let's give President Obama's plans a chance. Are they perfect? No. Are they visionary and courageous? Yes. Get on board, Republicans and Blue Dog Democrats, because we are headed for disaster with the status quo.

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Research and education in health care reform

To an observer, the periodic national argument over health care reform sounds sadly familiar. Rational discourse has given way to a noisy and dispiriting exchange of sound bites and rigid ideology. Special interest groups, including insurers and drug companies, have already made their deals to preserve their economic advantage, with hospitals and physician groups hoping for similar treatment. The usual goals of health care reform — improved access, improved health care outcomes, and decreased cost — remain elusive, with increased access the only goal likely to emerge from current legislative negotiations. In every previous effort at reform, organized medicine used its considerable influence to undermine improvements in our health care system that would have benefited patients. Now, the more-organized and less-influential profession of medicine seems less able to shape policy or legislation for either the profession's self-interest or the public interest.

In the midst of this disarray, the diminished status of academic medicine and the biomedical research community is notable. The central importance of research and education, and especially their impact on the practice of medicine, does not seem to enter

the debate. Only the exaggerated claims for "comparative effectiveness" research appear to have any meaningful role in ongoing discussions and current policy formulations. Yet it is likely that the success of health care reform will depend more than is now recognized on whether medicine broadly, and internal medicine specifically, can assert its leadership in linking health reform to fundamental changes in clinical education and clinical discovery research.

Nearly every discussion of health care reform emphasizes the need for greater primary care and the more judicious use of health care resources by physicians. Internal medicine is central to achieving both of these goals. For the past 50 years, internal medicine has been the front door to medical care for almost all adult patients; it has been the backbone of education for medical students, residents, and fellows training in the subspecialties; and it is also the engine for the nation's biomedical research programs. Since neither medical schools nor teaching hospitals have been able to focus the health care debate on changes that would have lasting benefit for the health of the public, it falls to the field of internal medicine to reframe the debate in ways that would achieve meaningful reform.

Sadly, the desultory state of education and training in internal medicine illustrates the reasons for the diminished stature of academic medicine more broadly. Medical students unabashedly seek the "ROAD to happiness" with careers in the lifestyle-friendly specialties of radiology, ophthalmology, anesthesiology, and dermatology. While admittedly needed specialties, their disproportionate popularity reflects a shared failure of national health policy (including reimbursement policies), medical school education, and internal medicine training. While changes are desperately needed to deal with the first two failings as part of health care reform, the experience of the last several decades and the current debates suggest that substantive modifications are unlikely. Internal medicine training is the only one for which we in the academic internal medicine community have direct oversight. Yet here too we have failed both our students and the public. What can we do to ensure that the road to happiness for medical students is also the path to renewal for the profession of medicine?

Internal medicine, including its academic departments and professional organizations,