

nature medicine

VOLUME 3 • NUMBER 4 • APRIL 1997

The bottom line

The biomedical enterprise in the United States is often described as the envy of the world. It is large, financially well-supported and remarkably intellectually productive. It is also a deceptively complex structure, ostensibly held together by the National Institutes of Health, which currently spends \$13 billion a year on research. In reality, the system that supports the research enterprise is as convoluted and difficult to explain as the US tax code — and as much in need of simplification and reform.

Cries that biomedical research is “in crisis” have been heard throughout the land for the past quarter of a century. Indeed, the notion that “The research enterprise is in crisis” has become something of a mantra, but year after year skillful lobbying on behalf of the NIH budget has averted the impending crisis. When all the votes were in, the budget actually increased. Relatively speaking, Congress and both Republican and Democratic presidents have been good to the NIH and, therefore, good to biomedical science.

Yet the mantra of crisis persists, with good reason. The biomedical enterprise is rooted in the belief that research, education (whether MDs or PhDs), and the care of acutely ill patients in the country’s great university hospitals form an essential triad. Further, it was once believed that basic scientists, research physicians, and the government and private institutions that pay patients’ medical bills were equally committed to the financial health of the enterprise as a whole. Would that that were true now.

But the advent of managed care, with its emphasis not only on cutting costs but also on allocating them according to a new set of rules, has changed everything, from research financing to politics.

The growth of biomedical research and the institutions in which it is both taught and carried out has depended on money from several sources, of which NIH was only the most visible. Hospitals routinely charged patients who held private medical insurance a premium, in the form of higher rates, that covered some of the cost of medical education and clinical research. Medicare, the federal insurance for persons 65 years and older, explicitly paid re-

75 percent of the base cost of a grant.

The enterprise is under financial siege on all fronts. As a result, there is dissension within the ranks. No longer is it simply scientists against the federal budget-cutters. Now, basic biomedical researchers are on one side; physician-scientists on another. Medical schools argue that the research hospitals with which they are affiliated are failing to support them. Research hospitals that are losing money for patient care say they cannot any longer contribute to medical education and associated research. Health advocacy groups are at odds with one another, claiming variously that breast cancer or AIDS or Alzheimer’s disease is more deserving of research support than the others.

Everywhere one goes, the split within the research community is evident, and dangerous. In trying to cope with the challenges of the 1990s, medical schools across the nation continue to give legitimacy to the saying: “If you’ve seen one medical school, you’ve seen one medical school.” That is, institutions are solving problems as best they can, one by one, without common ground or common focus. This approach may be good for scientific experimentation but cannot help maintain a research enterprise that can rightly be considered an international treasure. Listening to biomedical leaders of all stripes confirms the impression that everyone wants to receive and no one wants to give, despite the fact that everyone admits that is not the road to salvation. It is time that medical schools, research hospitals, insurers, state and federal governments and other financial stakeholders recognized the public’s interest in the preservation and strength of the entire biomedical enterprise, not just its separate parts.

— Barbara J. Culliton

BIOMEDICAL RESEARCH IS A HOUSE DIVIDED AND A HOUSE DIVIDED CANNOT STAND.

search hospitals a substantial bonus to cover the cost of training medical residents (see page 372). Even NIH funding served multiple needs as grants paid for the direct costs of research, including faculty salaries, as well as generous so-called “indirect” costs to maintain the infrastructure of administration, libraries, and even heat and light that kept institutions going.

Now, all of that is in jeopardy. It is only in the past few years that profit-oriented Managed Care Organizations, or Health Maintenance Organizations, became the source of medical insurance for millions of people. As these bottom-line insurers negotiated tough, low rates for medical services, all the slack was taken out of that part of the system. In turn, government programs such as Medicare are reducing their contribution to education and training by calling for a reduction in the number of residents. And Congress is once again taking a hard look at indirect cost payments, which can run as high as 60 to