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A Threat to Biomedical Research

Joseph B. Martin

The extraordinary success that this country has enjoyed in advancing biomedical research is well known and justly appreciated. What is not as widely appreciated is the interdependence of medical school finances and hospital finances in the subsidization of biomedical research. The academic medical center that knits these entities together varies widely in its structure. In some cases, the hospital is owned by the university, or the hospitals may be independent. A third category is the freestanding independent hospital, where affiliation with a medical school is less direct and yet the commitment to research is strong.

Whatever the relationship between school and hospital, the subsidy of research from hospital-based revenues or faculty practice plans has been essential to the nation's biomedical research enterprise. This is now in great jeopardy as the financial impact of managed care is compounded by the Balanced Budget Act (BBA). Each year for the next three years, the noose will tighten more acutely, both through cuts in service reimbursement and in steep reductions in payments designed to subsidize the special missions of teaching hospitals.

"The subsidy of research from hospital-based revenues...is now in great jeopardy..."

More than half of the National Institutes of Health's (NIH's) $15.6 billion budget this year will pay for research at medical schools and their affiliated teaching hospitals. Nearly a billion dollars of that will go directly toward research at independently funded teaching hospitals. However, NIH funding alone will not keep the physician-scientist productive at our teaching hospitals. On average, major teaching hospitals directly subsidize 10 to 15 percent of the research carried out in their institutions, and that support does not include all of the indirect subsidies for facilities and equipment. A major role of the direct subsidy is the funding of the early-stage creative ideas that only later can earn NIH grants. Much clinical research benefits from such subsidies as well. A study published in the *Journal of the American Medical Association* earlier this year showed that half of researchers at academic medical centers said their research received some funding from the clinical revenue of their teaching hospital or faculty practice.

That opportunity to subsidize research is vanishing rapidly. Teaching hospitals have been hit by the triple threat of managed care, the BBA, and indigent care. Many managed care plans have forced teaching hospitals to offer services at dramatically reduced margins. Nearly half of the savings of the BBA come from Medicare, with a disproportionate share taken from teaching hospitals. Teaching hospitals that are members of the Association of American Medical Colleges are expected to lose $14.7 billion in revenue during the 5 years of the act. Other federal policies and health care market trends are rapidly increasing the number of uninsured. This dramatically affects teaching hospitals, because even though they represent only 6 percent of the nation's hospitals, they provide 44 percent of all charity care.

We are only in the second year of the BBA, and its impact is already being felt as many major teaching hospitals around the country have begun reporting operating losses because of this "last straw" for their already weakened budgets. The University HealthSystem Consortium, an alliance that includes many of the most research-intensive teaching hospitals, recently surveyed 14 of its members and found a 48 percent drop in operating income over the past 3 years. Here in Boston, losses at Massachusetts General Hospital and Brigham and Women's Hospital have forced the withdrawal of $10 million in annual contributions to research at those two institutions. These two hospitals project that the BBA will reduce their revenues by $264 million over its 5 years.

If our health care system continues to allow the number of uninsured to grow, the safety net role of teaching hospitals must receive more support. It is also time for NIH to consider using some of its increased funding to support the research infrastructure that is currently subsidized by clinical revenue. Without some set of these actions, a vital part of our nation's biomedical research enterprise will be severely damaged, and the health of the nation's economy and its people will decline.

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