Biomedicine: Not Exactly a Banner Year

Nineteen seventy-three was not a very good year for the biomedical community in either research or the delivery of medical care. It is, by now, an old story that things began to decline in 1968, when the federal largesse upon which everyone counted began to diminish. It was then that biomedical scientists, who used to talk about science, began talking about politics and money all the time. It was then that predictions of a gloomy future became commonplace, although it is not clear how many people truly believed in that future.

Nearly everyone does now because this was the year when many of the "bad" things people feared would happen actually, finally did. And this was the year that many members of the biomedical community reluctantly concluded that the chasm between them and the members of the Nixon Administration is so great that it cannot be bridged.

Whether one is talking about biomedical research or social programs designed to deliver medical care, the presumption behind it all has been that only the federal government can afford to maintain such efforts and that it is the government's duty to do so. Then, along came Nixon. Little by little, it dawned on those who subscribe to this philosophy that the President and his men have a different point of view altogether.

If it had not been clear before, it became clear in 1973 that the scientists and the Nixon politicians are asking two totally different questions. The scientist asks *how much* support the government should give to this program or that. The President's men ask *whether* it is the proper business of government to support a program at all. In many cases, they find the answer to be a resounding "No." Although it remains to be seen whether a few individuals in the White House, the Office of Management and Budget (OMB), and the Department of Health, Education, and Welfare can work their will against the will of the Congress and that of the people—to the extent that the biomedical community is representative—the odds are that they can. Indeed, one other reality that became all too clear, in some persons' eyes, in 1973 is the extent to which the government is trying to consolidate and centralize its power—platitudes about returning decision-making to the people notwithstanding.

The First Skirmishes

With the release of the President's budget for fiscal 1974, it became known that the Administration had asked whether it should continue to support a series of medical care delivery programs, including hospital construction under the Hill-Burton Act, community mental health centers, and regional medical programs. It answered, "No." Congress, unwilling to go along with this decision, voted to continue some of the programs for 1 year, during which they would be reassessed. Even though a number of persons with a fairly intimate knowledge of these programs agreed with the Administration's decision to discontinue federal support, they were not terribly vocal about it, whereas those opposed to the Administration were. In a sense, the Administration lost the skirmish on some of these issues, but it has by no means lost the battle. It is virtually certain that, when the budget for fiscal 1975 comes out in January, the programs marked for "zero funding" last year will be so designated again.

Then the Administration questioned whether it should be training biomedical scientists. Again it answered, "No." The biomedical community was stunned —even though the government had been asking questions about training programs as far back as the Johnson Administration. A slew of rather unconvincing arguments were put forth in defense of federal support of young scientists who were left standing at the door, and in the end the OMB and HEW capitulated—*a little*. The government agreed to spend $30 million a year to train biologists (instead of $130 million a year), but it agreed to do so with strings, which are prima facie evidence of the extent to which the Administration, rather than the scientific community, is conducting scientific business. "The awards will be made for advanced training in research-specified shortage areas in biomedical and health-related sciences only," an HEW document declares. If you want to go into research in some area other than one officially designated as a "shortage" area, you will have to pay for your training yourself, and, with only $30 million to go around, you may have to, regardless.

What happened to biological research trainees in 1973 may happen to medical students in 1974—the warning has already been given. The Nixon Administration is giving serious thought to the wholesale abandonment of federal support of medical education. Basically, the idea is this: During the 1950's and 1960's, the government got into the business of supporting medical schools because of a perceived shortage of physicians. Now, some "experts" claim that we are soon to have a glut of M.D.'s, although not necessarily a redistribution of medical talent from cities to rural areas and so forth. Administration officials believe it is proper, therefore, to reassess the entire concept of federal support of medical education, especially, the reasoning goes, because doctors are so rich.

Research Funds Really Down

Nineteen seventy-three was no better for research than it was for future researchers. For the last 5 years, the research budgets of most of the categorical institutes of the National Institutes of Health have been going down, not always in terms of absolute dollars, but in terms of buying power once inflation is taken into account. Only the funds of the National Cancer Institute and the National Heart and Lung Institute have been visibly increasing, amid promises that these fields would not be allowed to grow at the expense of other areas of research. Well, in 1973 the inevitable happened. All areas of biomedical research other than cancer and heart disease saw their resources drop by a couple of million dollars or more, without taking inflation into account. One cannot, of course, prove that the new money going to cancer and heart disease would go to other fields if these two had not been singled out for special treatment. In fact, it is quite likely that it would not have; nonetheless, the situation has not created many happy feelings.

The constraints on how what money there is must be spent have not created many happy feelings either. In 1973, arguments over two related issues reached a higher pitch than they had previously, and, in the course of them, the measure of the OMB's control manifested itself anew. The issues are

these: Should research be primarily targeted or left free to chart its own course? Should research be supported primarily through contracts, in which a goal of some sort is explicit, or should funding be primarily through grants, in which a specific goal is often implicit at best? Obviously, this is not an either-or situation, but the Administration's fondness for research by contract is unmistakable. A situation involving the National Cancer Institute is illustrative. The President agreed to the institute's request that its budget be supplemented by about $70 million, part of which would go to the cancer control program, the rest for research. Along with an OK to spend the allotted money came a very short string—all of the money for research should go to contracts, not grants, said an OMB directive. Nobody liked it. The institute director objected. So did the National Cancer Advisory Board, a presidentially appointed body. So did the National Cancer Panel, which is even higher than the board and speaks directly to the White House. But apparently their objections did not matter. The White House said it wanted contracts, not an argument. That was the way advice from scientists often was received in 1973.

Further evidence of the Administration's plain desire to keep a firm grip on things as biomedical scientists loose theirs turned up in a memo proposing that, fiscally speaking, the several national institutes of health be squeezed into one box on the management charts. A single NIH budget, presented to Congress as a package, appeals to the Administration's sense of managerial order. It hasn't happened yet, but 1973 was the first year influential people talked seriously about consolidating NIH. By next year, it will probably be a lot more than just talk.

All in all, it wasn't much of a year for biomedical science, but it was a great year for the OMB.

—BARBARA J. CULLITON

Science Policy: Détente, LDC's Add New Dimensions

When anyone mentions science policy to former presidential science adviser Edward E. David these days, he is likely to wince a little and remind them that the term covers both policy for science and science for policy. The distinction is important and is one that tended to get lost during the salad years of science in the early 1960's. Policy for science at the federal level means decisions which affect the funding of research and development and the training of scientific and technical manpower in universities, government agencies, and industry. Science for policy denotes the scientific and technical components of government policies which also involve economic, social, and political considerations. Energy policy and health policy are two current examples in which the science content is high.

The past year was not a vintage year for science policy, however defined. The buying power of the virtually static science budget was further eroded by inflation, and the spillover effects for science generally of military research and the space program appeared to be drying up. The Administration's determination to curb traditional fellowship and traineeship programs took its toll in 1973, and late in the year came the news that the Administration was rethinking the prevailing expansionary policy on the training of physicians.

Bad for scientists' morale was the decision to relegate the science adviser's post and the science advisory machinery in the White House to the National Science Foundation. This move carried a heavy symbolism for many scientists who felt that having one of their own in the White House was something like having a scientist as a gentleman of the bedchamber at the Sun King's Versailles.

The sensation of a fall from grace has grown familiar to the scientific community, but, more explicitly than in past years, critics place at least part of the blame on the scientists' own doorstep. The critics charge that the scientists' attitude has been that if policy for science is handled in a way favorable to the interests of the scientists, individually and institutionally, science for policy will somehow take care of itself. It has not worked out that way, and budget cuts are viewed as, in part, the recriminatory federal responses. The rift between university scientists and the last two Administrations, of course, has more complex causes—university reaction to the Vietnam war and differences in politics and personalities between university professors and the two most recent incumbents of the White House, certainly contributed. But it seems to be true that many of those at the top in the present Administration suspect the scientific community of egocentricity and feel that the science adviser had become an ambassador from academic science. This feeling seems to have been a major factor in the early exit of the first Nixon science adviser, Lee A. DuBridge. His successor, Edward E. David, worked hard—and some government insiders say effectively—to shatter the stereotype. But reportedly, when David met Nixon on the occasion of David's resignation, the President thanked him for his help and said that David had ably represented his community. That hurt.

As for the state of science for policy, the shortcomings have been brought home this year by the furors over energy, food, and transportation. Ironically, the analyses and recommendations that might have forestalled or buffered these problems were in the files. The difficulties now being encountered over energy supply and demand, for example, were rather fully forecast during DuBridge's tenure in the White House.

The failure to act on such recommendations can be traced, of course, to plenty of solid, practical reasons. The rivalry between Congress and the Executive, particularly when controlled by different parties, inhibits national commitments to projects with long-term goals and risks. The single-year appropriations rule is a decided hurdle to such projects. And the diversion of substantial amounts of money into future solutions of present problems is difficult to manage in the face of heavy demands for current expenditures when the budget is in deficit.

The atom bomb project and the moon landing program are often invoked as models for the massive deployment of manpower, money, and other resources; and in fact there are