in feeds, as the FDA proposes, would bring an improvement in the environment which is not measurable at a cost which is both measurable and highly specific. Hays estimates that the FDA's regulations could add an expense of about $2 billion a year to the "national food budget"—an ill-defined concept that includes costs borne by farmers and consumers. The figure is disputed, but there is no question but that the policy would give the meat industry and the drug producers some major logistical problems, if nothing else. They are lobbying to prevent action.

Then, too, enthusiasm for taking action is dampened by the fact that feeds and feedlots are such a small part of the problem. At least half the antibiotics used in the country are given directly to humans. It is known that when people regularly consume these drugs, as they do in hospitals, a direct threat to public health is created. The resistant strains of bacteria bred in hospitals are known to prey on humans. But there is no simple way to attack this more serious aspect of the problem.

Thus inertia prevails even in the face of a potentially great threat. And it may be a very long time before we know whether the FDA's estimate of the potential is correct.—ELIOT MARSHALL

NMC Thrives Selling Dialysis

Controversial company may become the AT & T of proprietary medicine

Constantine Hampers, chairman of the board of National Medical Care (NMC), says he never intended to go into proprietary medicine. "It just happened," he recalls. But now he is in it with a vengeance as founder and head of a company that is beginning to invoke the same sort of mixture of fear and respect in the medical community as AT & T does in the telecommunications industry.

NMC is a company rich enough to hire John Sears, Ronald Reagan's former campaign manager, as its lobbyist and to retain the best legal help available. When the company went public in 1971, its sales were $9 million and its profits zero. Its net income and revenues have since grown exponentially. Its profits in 1979 were $19 million and its revenues were $190 million. The company and stock analysts foresee continued growth that should be unaffected by any downturns in the economy.

This is the first of two articles on the politics, economics, and sociology of dialysis.

The story of NMC begins in the 1960's, when Hampers and Edward Hager, now chairman of the company's executive committee, were in charge of artificial kidney machine treatments at Peter Bent Brigham Hospital in Boston. These machines could keep patients with kidney failure alive by cleansing their blood of the toxins ordinarily removed by the kidneys. But the costs were prohibitive—close to $40,000 a year for each patient—and there were few machines available. Hampers and Hager found themselves in the uncomfortable position of deciding with their staff which patients should be given the treatments and which allowed to die.

It was apparent to Hampers and Hager that more dialysis facilities were needed. They asked the Brigham to expand its facilities but were refused. They then asked the state to support expanded facilities but were refused again. "Ted and I were discouraged, we had almost given up," Hampers relates.

Then, in 1966, a patient whom they had treated for years (although not for kidney failure) asked Hampers and Hager to be medical directors of a for-profit extended care facility that he was establishing. The two doctors requested and were granted permission to include artificial kidney machines in the facility. "It worked beautifully," Hampers says, and from that beginning grew NMC, a company that now owns 120 proprietary dialysis centers treating 17 percent of the nation's 48,000 dialysis patients. It also owns a subsidiary, Erika, that makes dialysis supplies and equipment, and a clinical laboratory, Lifechem, that does all the laboratory tests for NMC patients. The company is branching out into obesity control centers, psychiatric care centers, and respiratory therapy, and it continues to explore the possibility of opening dialysis centers overseas. But NMC has become as controversial as it is successful.

The phenomenal growth of NMC is due to the largess of the federal government, which in 1972 decided to pick up the costs of medical care for patients with kidney failure. This is done as part of Medicare under the End Stage Renal Disease (ESRD) program, and it has created a vastly expanded market for dialysis by guaranteeing payments for treatments. The program itself now costs $1 billion a year, and although the ESRD patients are only 0.2 percent of the total Medicare population, they account for 5 percent of Medicare funds.

In the past 8 years, the number of dialysis patients has increased more than eightfold to 48,000, and it is estimated that the dialysis population will plateau at about 90,000 patients. The government set a fee that averages out to about $28,000 a year for each patient treated in an outpatient center. Medicare pays 80 percent of that fee; the rest is paid by the states or private insurance carriers or is absorbed by the centers. The proprietary centers owned by NMC have flourished under this reimbursement scheme because the company is vertically integrated and makes a fetish of being efficient.

The Health Care Financing Administration, suspecting that it may be overpaying for dialysis, is now preparing a new reimbursement scheme that is expected to result in decreased payments to dialysis providers. But no one expects NMC to be put out of business. Instead, say both NMC and its critics, the squeeze will be put on dialysis centers that are barely making it under the current reimbursement scheme, thereby allowing NMC to purchase these centers. "I tell our stockholders that as long as the government rewards efficiency to bear with us for we are efficient," says Hampers.

The company, as well as other dialysis providers, also is in the enviable position of being protected from economic down-

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turns. NMC recently explained to its stockholders that, "Recent severe increases in the prime rate of interest and threats of an economic recession will not materially affect the company's operations as none of the company's debt is subject to prime rate fluctuations, and our business operations are not affected to any great degree by outside economic conditions."

But its protected status and its efficiency are not the only reasons NMC is thriving. A key reason NMC has been so successful, Hampers believes, is that it has many of the nation's best nephrologists on its side. And the reason these physicians have joined NMC, according to Hampers, is that he and Hager are well-known pioneers in dialysis: they grew up in dialysis and they understand it. Even more important, however, they understand academia.

When the company was getting started, Hampers relates, he and Hager used their relationships with academics to their advantage. They had a network of contacts from their previous association with Harvard Medical School and from their pioneering work in dialysis and kidney transplantation at the Peter Bent Brigham.

"Our strategy was to go to the most prestigious academic institutions and get them to support us," Hampers says. When NMC enters a new area, he explains, "We tell the academics, 'You pick a medical director [for an NMC center] or we'll pick him together. But you always have to be satisfied that he's adequate. We cannot impose a doctor on the facility.' "

Hampers explains that companies that are unaware of how to deal with doctors and are ignorant of the politics of academia have expressed amazement at his strategy. They would have tried to choose their own doctors for the dialysis facilities in order to have control over how the facilities were run. But such a strategy would never have worked, according to Hampers. The dialysis centers depend for their existence on patient referrals from local doctors and hospitals and on the good will of state health planning agencies that authorize new facilities. It would be impolitic, to say the least, to alienate the local medical community.

In addition to ensuring NMC's acceptance by physicians, Hampers' strategy is a virtual prescription for gaining political power in the medical community. Once NMC comes into an area it is difficult for local doctors to oppose it, for it is backed by the most influential nephrologists in town.

The doctors who join up with NMC are offered the enticement of being free to practice medicine as they think best. "That is our strength. Their [the doctors'] independence," Hampers says. They also are offered the enticement of money. The director of an NMC facility is paid a large salary and also shares in the facility's profits. Robert Greenspan, a nephrologist formerly associated with an NMC unit in suburban Washington, says the director of that unit makes on the order of $400,000 a year.

Not unexpectedly, some doctors who were approached by NMC declined offers of directorships because they were put off by the idea of proprietary dialysis. Eli Friedman of Downstate Medical Center in Brooklyn, for example, says he refused to join NMC because, "I felt I would have a conflict of interest in prescribing and delivering health care. It would be like the physician who owns a drug store." Yet he can understand why others may have succumbed to temptation. "I was offered astoundingly good terms. We're talking about very big dollars. I sometimes wonder what it would have been like to be a millionaire," he says.

In fact, NMC has been extremely successful. It has centers in all but a few states and controls the dialysis market in a number of major cities including Boston, Washington, Dallas, and Miami. Each year it acquires more dialysis centers and each year its subsidiary, Erika, gains a larger share of the dialysis supply market—a market that has so far been characterized by intense competition, cost cutting, and innovations. In the past year, NMC increased the number of its centers by 20 percent and Erika increased its sales by 40 percent.

To hear NMC's critics talk about it, one would think the company was an invading army. "We've kept them out of Washington State but only because of our unity and determination," says Belding Scribner of the University of Washington. "I would like to keep them out of Mississippi but I think we haven't heard the last of them. No one can hold out against them," says John Bower of the University of Mississippi. Other nephrologists, who say they fear being quoted by name because of NMC's political and economic power, already sound defeated. "They're big guys and they play hard ball" and "They can get nasty" were some of the comments heard.

Close observers such as Christopher Blagg of the Northwest Kidney Center in Seattle, John Sadler of the University of Maryland Medical School in Baltimore, Scribner, and Bower say they fear that NMC will soon have a monopoly on dialysis in this country. The company allows its medical directors to decide whether their centers will be "open," meaning that qualified physicians can practice there, or "closed," meaning that it is up to the director who can practice. The criteria for privileges in a dialysis center can be completely arbitrary. For example, the director of an NMC unit in suburban Washington allows only himself and one part-time physician to treat patients there. It is entirely possible that physicians who do not join NMC will be barred from its centers.

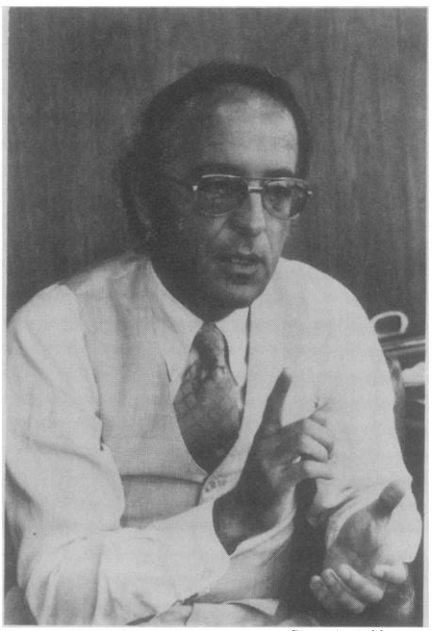


Photo by I. Massar

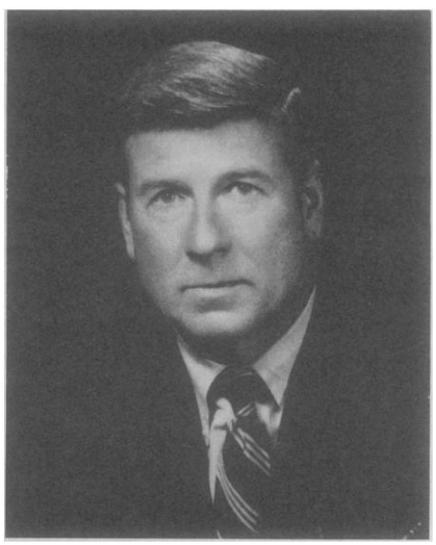
Constantine Hampers

No one, however, criticizes the medical care NMC provides in its centers and no one can fault the company for being efficient. But a number of physicians are concerned about what Scribner calls "the inherent conflict of interest" in NMC's for-profit operations.

The conflict of interest charge is often made by proponents of home dialysis, who say that NMC does not encourage this form of treatment. A home dialysis debate has arisen and has become symbolic of all the critics fear and dislike about the company. A group of nephrologists, including Blagg, Scribner, Bower, and Friedman, are convinced that patients should be trained to do dialysis at home, with the help of a family member or friend, if at all possible. Home dialysis is cheaper than dialysis in an outpatient center—it costs only about half as much, in part because the family members or friends are unpaid. Moreover, say the home dialysis proponents, patients who are sent home are less dependent, more

likely to be rehabilitated, and better adjusted psychologically. But every patient sent home means less money for an outpatient center.

Blagg frequently points out that when the government started paying for dialysis, the proportion of patients sent home fell steadily from more than 40 percent in 1973 to less than 10 percent today. In part, this was because there were some financial disincentives to home dialysis in the ESRD program. Home dialysis patients, for example, had



Edward Hager

to pay for supplies such as medications, syringes, alcohol wipes, Betadine, and underpads as well as additional water and utility bills. When patients submitted bills for their expenses to their insurance companies, they often encountered delays and red tape. But Hampers, for one, thinks that those disincentives were not sufficient to discourage use of home dialysis in most cases.

A more significant factor in the decline in home dialysis is that the patient population is older and sicker today than it was in the 1960's and early 1970's, when resources were so scarce that only the youngest and healthiest patients were treated. Old and very sick patients are often poor candidates for home dialysis. Also, the proportion of patients at home in those days may have been artificially high because a number of physicians were forced by lack of funds to send nearly everyone home.

Francisco Gonzales of Louisiana State University Medical School in New Orleans, for example, says he had no choice in the 1960's but to send home virtually all of his dialysis patients at Charity Hospital in New Orleans. These included patients who were illiterate and who were so poor that they had no running water—only cisterns on the roofs of their houses. Bower recalls Gonzales boasting that he could train anyone for home dialysis.

Now Gonzales is director of an NMC facility that sends only 10 to 15 percent of its patients home. Looking back, he says that many of the patients he sent home in the days before the ESRD program would have done better if they could have been dialyzed in an outpatient center.

Those who do believe in home dialysis for large numbers of patients tend to be almost evangelistic about it, explaining that if doctors or medical staff convey even the slightest ambivalence, patients will opt for dialysis in centers. These promoters of home dialysis send a substantial proportion of their patient population home. Blagg sends more than 70 percent, Friedman more than 30 percent, and Bower, who deals with the rural poor of Mississippi, sends 50 percent home. Most NMC units, in contrast, send far fewer patients home. In the Washington, D.C., area, for example, NMC dominates the dialysis market, and virtually no patients are dialyzed at home. Hampers estimates that on the average, NMC sends about 15 percent of its patients home.

Hampers explains that NMC does not have an official policy on home dialysis and that it is up to the medical directors to decide on treatment. He does think, however, that Blagg's reported 74 percent 3-year survival rate for home dialysis patients in his program is too low, and he believes this low rate is a direct consequence of the number of patients sent home. Blagg disagrees, saying that his survival rate is entirely in line with those of similar patients in dialysis centers. But the argument over whether home dialysis is safe for the majority of patients cannot be resolved because the Health Care Financing Administration, which handles the information on the ESRD program, has made a mess of its medical information system. The administration cannot pull out of its computers such data as the percentages of patients dialyzed at home and at centers and their relative mortality rates, to say nothing of data on the age and sickness of patients treated by the two methods.

Whether or not NMC has an official policy on home dialysis, it did hire Reagan's former campaign manager Sears to lobby against provisions in a bill before Congress in 1978 that would set a national quota, later amended to a national goal, of 50 percent of patients on home dialysis. The bill also proposed to remove the financial disincentives to this form of treatment. The bill was meant to encourage home dialysis, and was introduced largely because having more patients dialyzed at home would cut costs of the ESRD program.

Edmund Lowrie, director of the Kidney Center, an NMC unit in Boston, testified before Congress that even a national goal for home dialysis should not be set and that sending too many home can be dangerous. As evidence, he said that Blagg's patients have too high a mortality rate. The implication, he explained, is that Blagg sends too many home. (Lowrie was not yet associated with NMC at the time of his testimony.) Other physicians who strongly favor home dialysis wanted a goal but not a quota. Lowrie explained that it is his belief that the government would interpret a goal as a quota and that it is unwise to set rigid guidelines telling doctors how to practice medicine. This is especially true, he says, when it is unclear whether most patients would benefit from being sent home.

The bill that was eventually passed eliminated the financial disincentives for home dialysis but no longer had any mention of goals. Instead, it declared that, "It is the intention of Congress that the maximum practical number of patients who are medically, socially, and psychologically suitable candidates for home dialysis should be so treated." Richard Rettig of the Rand Corporation, who is an historian of the ESRD program, describes the final language of the bill as "National Medical Care's revenge."

Critics of NMC are disturbed by what they see as the company's enormous influence on federal policy. They say that even Blagg, Scribner, Bower, and Sadler, who are among the most political and outspoken of NMC's opponents, cannot compete with NMC's unity, its cadre of prestigious physicians, its money, and its legal staff. Moreover, they fear that NMC's political influence may grow even greater since Hager is now running for the U.S. Senate in New Hampshire on the Republican ticket.

Hampers agrees that NMC is coming to dominate the dialysis field and that it may come to dominate other health care areas as well. "But what's wrong with efficiency and free enterprise?" he asks, explaining that "From an administration standpoint, we're back to AT & T. There's a mechanism for handling these things. One becomes a utility. You need to judge us on our quality and efficiency and work out ways to control us if we get too large."

—GINA BARI KOLATA