Tens of thousands of people across the country, their kidneys ruined by Type 2 diabetes, have been forced into the grim routine of dialysis care, and in New York, those patients routinely receive some of the worst treatment, government records show.

At New York dialysis centers, those being treated are more likely to suffer from anemia and are less likely to have enough impurities and excess fluid removed from their blood, allowing more damage to their bodies, according to the records.

Experts say the disparity is caused in part by the fact that New York is dominated by small dialysis providers, many of them run by people with little background in medicine who entered the business to meet the surging demand.

Many of the smaller centers provide good care, experts say, but a lot also lack the money and staff training to compete on a quality-of-care basis with the national dialysis chains that dominate the market across the rest of the country.

Newly released patient data show that people who receive their dialysis from a national chain generally fare better than those treated by an independent provider.

But the chains are largely blocked from operating in New York by a state law that effectively bars publicly traded companies from owning health care facilities in the state.

"With the need for dialysis on the rise, the department is questioning whether it makes sense not to allow these large corporations to participate," said Jeffrey W. Hammond, a Department of Health spokesman.

In 1980, fewer than 50,000 people in the United States needed dialysis to do the work of their kidneys; today, there are more than 350,000, including roughly 24,000 in New York. In 1980, diabetes was the primary cause of kidney failure for fewer than 6,000 dialysis patients; today, the figure is about 150,000.

Survival for them is an ordeal, at best.

At a typical dialysis center, patients come in three times a week, typically for four hours at a time. They sit in rows of recliners, dozing, watching television — anything to take their minds off the machines, needles and tubes that siphon blood from their bodies, clean it of impurities like urea, and pump it back in. It is surprisingly quiet; patients are so beset by side effects like fatigue, cramps or thirst, that mere conversation seems like an effort.

For all but a few, holding a job is out of the question. Most will never be healthy enough to qualify for a transplant that would free them of this burden, and there are far too few donated kidneys, anyway.

New drugs and dialysis techniques have improved their chances of survival since the 1980s, despite the fact that patients today are older, heavier and sicker. Even so, the average dialysis patient spends 15 days a year hospitalized, and the death rate is about one in five each year.

"I want to say it's a rough life, but it hardly is a life," said Denise Bembury, a dialysis patient who lives in Brooklyn. "I wouldn't put this on anybody."

Across the country, five companies own or operate almost two-thirds of the 4,800 dialysis units. Two of them, Fresenius Medical Care and DaVita, have more than half the market. But in New York, the big five run about 20 percent of the roughly 250 centers, by far their lowest share in any state.

The State Department of Health has helped the national chains work around the law that bars publicly traded companies from owning health facilities. This has allowed them to open some centers here, but the companies say the approval process remains long and difficult, dampening their interest.
The ownership restriction, in place for at least 50 years, state officials said, was enacted when there was no such thing as a dialysis center, and was intended to ensure that hospitals are responsive to local concerns, not to far-flung shareholders. Though the Health Department talks of changing the law, no one has made it a priority, and not even the large chains have pushed the issue in Albany.

Recent reports on the quality of dialysis care by the federal Centers for Medicare and Medicaid illustrate New York's cause for concern. The centers examined a sampling of Medicare patients' dialysis records in each of 18 regions, one of them New York State.

Medicare pays for almost 90 percent of dialysis in this country, and in the reports, for 2003 and 2004, New York ranked worst in all three of the most commonly used quality measures. Those measures are how likely patients are to have enough excess fluid like water removed from their blood during dialysis, how likely they are to have enough impurities like urea removed, and how likely they are to be anemic or severely anemic because of the treatment.

Those scores have improved in New York over the last decade, but not as quickly as they have nationwide, and New York's numbers were actually worse in 2004 than in 2003.

The federal agency does limited comparisons of individual dialysis centers, which show that nationally, 4 percent of them have unusually poor patient survival rates, defined as at least 20 percent below average. In New York, 12 percent do. Federal officials caution against putting much stock in any one center's numbers, but they say the regional picture clearly shows a problem.

The federal data do not draw any conclusions about the cause of the disparity. But experts said they believed the quality of care was affected by the high number of smaller, less experienced providers in the New York market. In fact, in New York City, one-fifth of the centers operating earlier this year had existed for less than five years.

A recent report by the United States Renal Data System Coordinating Center, a quasi-governmental agency that compiles the records of most dialysis patients, shows that patients at the major chains were less likely to die than those treated by smaller companies.

According to the center, the numbers were adjusted to account for differences that might affect patients' risk, like age and sex, whether they had an underlying disease like diabetes and how long they had been on dialysis. The independents were defined as not being part of a major chain or a hospital.

Four of the five largest chains had adjusted death rates 7 percent to 10 percent lower than the independents had as a group in 2004, and one chain had higher rates, according to the center's most recent annual report. Since then, two major chains, including the one with the highest death rate, have left the business, and two new ones have been formed.

Patients at the small companies were much more prone to infections that led to hospitalization or death. The small companies also lagged in nondialysis care that dialysis centers usually take over, like ensuring that patients get vaccinations for influenza, pneumonia and hepatitis B. Their diabetic patients were less likely to have tests that monitor blood sugar control.

Some independent operators say that large companies can "cherry pick" healthier clients. But the government's figures show that the national chains' patients are actually sicker when they begin dialysis -- more anemic, more overweight, and with more advanced kidney disease.

Researchers and state and federal officials say they have known, or at least suspected, for years that patients fare better at the major chains, but they cannot be sure why.

One factor believed to play a role is that the average Medicare reimbursement rate for a dialysis session, $140 to $150, has changed little since the 1970s, making it difficult for the smaller operators who cannot realize economies of scale. Tight operating margins have left fewer small providers nationwide, although their numbers have grown in New York, where the chains have not been able to operate freely.

Dr. Allan J. Collins, director of the United States Renal Data System Coordinating Center, said: "We do know that the large organizations have an enormous advantage in resources because they can demand discounts from suppliers on drugs and equipment, and that can translate to better staffing, better training. The chains also tend to be more systematic and standardized in their procedures."
Michael Paget, executive director of the National Renal Administrators Association, which represents large and small dialysis companies, said he was not familiar with the Coordinating Center’s research that indicates one group performs better than the other. The center first included those comparisons in a report last year, and first included the mortality and hospitalization breakdowns this year.

"I don't think you can generalize about the independents, and there are many that do an excellent job," outperforming even the best of the major chains, he said. But he acknowledged that bigger companies probably had an edge in training.

The federal government and most states, including New York, do not set training or educational standards for dialysis technicians, the workhorses of a dialysis center. (Federal rules require only that the centers have full-time or part-time doctors, social workers and nurses on staff.)

National chains customarily provide technicians and other staff members with months of initial training and occasional re-training, instruction that can boost the quality of care and that independent companies, with their tighter operating margins, have a hard time affording, experts say.

Ms. Bembury, 44, uses an independent center, Nephrocare, a three-year-old unit on Atlantic Avenue, in the Weeksville section of Brooklyn. She goes there, she said, because her doctors referred her there. Like many patients, she has no idea how it compares with other centers, or how to find out.

Until earlier this year, she was a social worker and an avid cook. Now, she is on disability, and her companion of more than 30 years prepares meals. They have six children, and she wonders how the four youngest, all teenagers, will manage.

"I'm thirsty all the time, and tired," she said.

Nephrocare was one of a few dozen centers in New York with an abnormally high death rate in 2004, though not in 2005, and in both years, it had an unusually high number of patients with uncontrolled anemia, Medicare records show. An administrator at Nephrocare said that none of the owners or staff would be interviewed, and several other large, independent centers around the city gave the same response.

There are no rules as to who can own or manage a dialysis center. Doctors control some. Others are run by people with no background in health care. State officials say they conduct a "character and competence" review, and look at owners’ finances.

Under Medicare rules, states must inspect most centers every three years, though troubled centers are visited more often. Even when there are persistent problems, regulators would rather coax a center into improving than shut it, even temporarily, because the dialysis supply barely keeps up with demand.

State officials said they could recall only one center being forced to close this decade, and Medicare gave that order, not the state. The experience was painful, they said, as patients had trouble finding other centers nearby with spaces, or stations, available.

"We had 403 people who had to find other stations in New York City," said Mr. Hammond, the department spokesman, "and that is not something we encourage or want to happen."

Photos: At top, a staff meeting at the Bronx Dialysis Center on Eastchester Road, where Theo Walters, 41, above, has dialysis. Of the roughly 250 centers in the state, many are run by people with little background in medicine. (Photographs by Librado Romero/The New York Times)(pg. B6)

Chart: "Comparing Dialysis Care"

New York’s dialysis centers, which provide treatment for kidney failures, are among the worst in the country, according to a national ranking.

Graph tracks percent of patients who received inadequate dialysis care (New York and U.S. average) for 2003 and 2004.

(Source by Centers for Medicare and Medicaid Services)(pg. B6)