North Carolina Insight

$6 May 1992 Vol. 14, No. 1

HEALTH CARE IN NORTH CAROLINA: PRESCRIPTION FOR CHANGE

PART II

■ Health Status of N.C. Citizens ■ Nursing Home Care ■ Who Makes Health Policy?

N.C. Center for Public Policy Research

The North Carolina Center for Public Policy Research is an independent research and educational institution formed to study state government policies and practices without partisan bias or political intent. Its purpose is to enrich the dialogue between private citizens and public officials, and its constituency is the people of this state. The Center's broad institutional goal is the stimulation of greater interest in public affairs and a better understanding of the profound impact state government has each day on everyone in North Carolina.

A nonprofit, nonpartisan organization, the Center was formed in 1977 by a diverse group of private citizens "for the purpose of gathering, analyzing and disseminating information concerning North Carolina's institutions of government."

It is guided by a self-electing Board of Directors and has individual and corporate members across the state.

Center projects include the issuance of special reports on major policy questions; the publication of a quarterly magazine called *North Carolina Insight*; joint productions of public affairs television programs with the University of North Carolina Center for Public Television; and the regular participation of members of the staff and the Board in public affairs programs around the state. An attempt is made in the various projects undertaken by the Center to synthesize the thoroughness of scholarly research with the readability of good journalism. Each Center publication represents an effort to amplify conflicting ideas on the subject under study and to reach conclusions based on sound rationalization of these competing ideas. Whenever possible, Center publications advance recommendations for changes in governmental policies and practices that would seem, based on our research, to hold promise for the improvement of government service to the people of North Carolina.

NORTH CAROLINA INSIGHT is a quarterly magazine published by the North Carolina Center for Public Policy Research, Inc. (a nonprofit, tax-exempt corporation), Suite 701, 5 W. Hargett St., P.O. Box 430, Raleigh, N.C. 27602. Telephone (919) 832-2839. Annual membership rates: Individual, $36; Organizational, $50; Supporting, $100; Corporate, $200; Full-Service, $250; Supporting Corporate, $500; Patron, $1000; Benefactor, $2000. Third class postage paid at Raleigh, N.C. Graphic design by Carol Majors. Production by PUBLICATIONS UNLIMITED. Printed by Theo. Davis Sons, Inc., Zebulon, N.C. The Center is supported in part by grants from the Mary Reynolds Babcock Foundation and the Z. Smith Reynolds Foundation, as well as by 120 corporate contributors and 750 individual members across the state. The views expressed in this publication are those of the authors and are not necessarily those of the Center's Board of Directors or staff. Published May 1992. Printed on recycled paper with soy ink.

Cover design: Carol Majors

Printed on Recycled Paper

PRINTED WITH SOY INK

North Carolina **Insight**

Vol. 14, No. 1 May 1992

FEATURES

DEPARTMENTS

Editor
Mike McLaughlin

Associate Editor
Tom Mather

Graphic Design
Carol Majors

Production
PUBLICATIONS UNLIMITED

The Center gratefully acknowledges grants by The A.J. Fletcher Foundation and The Kathleen Price and Joseph M. Bryan Family Foundation in support of this issue of *Insight* and this project on the roles of the state in health care policy in North Carolina.

Karen Tam

How Healthy Is North Carolina's Population?

by Ken Otterbourg

How healthy is North Carolina's population? The answer depends on which statistics you consider, but in the main the state's population has never ranked among the healthiest. Tar Heels exceed the national averages in deaths from heart disease, cancer, injuries, and infant mortality. What can the state do about its relatively poor showing in health?

> The only Business here is of raising Hogs, which is manag'd with the least Trouble, and affords the Diet they are most fond of. The Truth of it is, the Inhabitants of N Carolina devour so much Swine's flesh, that it fills them full of gross Humours. For want too of a constant Supply of Salt, they are commonly obliged to eat it Fresh, and that begets the highest taint of Scurvy. . . .
>
> — WILLIAM BYRD, 1728

It's been a good long while since scurvy has shown up as one of North Carolina's most pressing health problems, but the fact is that the overall health of the state's people is still not what it should be. The state's mortality rates—deaths per 100,000 population—exceed the national average on 10 key indicators: all causes, heart diseases, strokes, cancer, diabetes, pneumonia, pulmonary diseases, liver disease and cirrhosis, motor vehicle accidents, and all other kinds of injuries (see Table 1, p. 4).

Still, North Carolina's rankings are nowhere near the worst in the land. Two years ago, a Minneapolis-based insurer began a new ranking of the states. Northwestern National Life Insurance Co. compiled health statistics in 17 categories for each state, then tallied up the results. The states with the healthiest citizens: Hawaii, Minnesota, New Hampshire, and Utah. Those with the least healthy citizens: Mississippi, New Mexico, Alaska, and West Virginia.[1] North Carolina? In the middle of the pack at number 32 in 1990, but moving up two notches in the 1991 survey to 30, well behind Virginia, but ahead of most other states in the South Atlantic (see Table 2, p. 5). The state exceeded the national average in only three categories: access to prenatal care; unemployment rate (the jobless are less likely to have health care coverage); and number of acute illnesses per resident.

Being number 32 out of 50 isn't much for the state to brag about, but just how healthy are North Carolina's residents? Dr. Georjean Stoodt, director of the Division of Adult Health at the North Carolina Department of Environment, Health, and Natural Resources, couches it this way: "My baseline for comparison is what is demonstrably achievable, and are we there? And the answer is no."

As proof, she points to the state's high rate of preventable deaths and unenviable status as a sort-of buckle in the "stroke belt," a stretch of territory that takes in much of the southeast United States.[2]

Not everyone believes the state is making a poor showing in health care. "If we do rank 32nd among the states, as the Northwestern National Life study suggests, I can argue that we are making a strong showing, given the state's relative income, health care resources, and expenditures on health care," says Duncan Yaggy, chief planning officer at Duke University Medical Center. "A study I saw last week ranked North Carolina 44th in expenditures per capita for health care. If we ranked 32nd in health and 44th in expenditures for health care, doesn't that suggest that we are making a good showing?"

Adds Dr. Ronald H. Levine, state health director, "Compared to ourselves, we are healthier than ever before. Compared to the United States, we are not as healthy as we should be."

Another answer might be found in how North Carolinians rate themselves. A Carolina Poll conducted in March 1991 by the School of Journalism and Mass Communication and the Institute for Research in Social Sciences at UNC–Chapel Hill surveyed 509 adults. More than four-fifths, 81 percent, rated their health as excellent or good as opposed to fair or poor.[3] By comparison, a national survey in 1989 found that about 91 percent of the people polled rated their health as excellent, very good, or good.[4]

Generally speaking, younger, better-educated, wealthier people living in *urban* areas of North Carolina see themselves as healthier than do older, less-educated poor residents living in *rural* sections of the state.[5] There was also a difference based on race. Eighty-three percent of the *white* people surveyed said their health was excellent or good, while only 71 percent of *non-whites* felt the same way.

Compared to ourselves, we are healthier than ever before. Compared to the United States, we are not as healthy as we should be.

— DR. RONALD H. LEVINE
STATE HEALTH DIRECTOR

Ken Otterbourg is Raleigh correspondent for the Winston-Salem Journal.

Table 1. Mortality Rates for U.S. and N.C., by Cause, 1979–88

Mortality Rates per 100,000	1979		1981		1984		1986		1988	
	U.S.	N.C.	U.S.	N.C.	U.S.	N.C.	U.S.	N.C.	U.S.	N.C.
All Causes	587.4	644.5	568.2	609.1	545.9	571.2	541.7	574.3	535.5	570.8
Specific Causes										
Diseases of the Heart	203.0	223.7	195.0	211.7	183.6	193.9	175.0	185.5	166.3	173.1
Cancer	133.4	132.0	131.6	129.6	133.5	126.8	133.2	130.6	132.7	134.7
Cerebrovascular Diseases (Stroke)	42.5	55.0	38.1	49.0	33.4	41.6	31.0	38.3	29.7	37.7
Motor Vehicle Accidents	23.9	26.9	21.8	25.2	19.1	23.3	19.4	26.2	19.7	23.9
Other Accidents and Adverse Effects	19.7	24.5	18.0	21.4	15.9	19.0	15.7	19.1	15.3	20.1
Chronic Obstructive PulmonaryDiseases (Lung Disease)	14.8	14.7	16.3	15.6	17.7	16.2	18.8	18.6	19.4	19.7
Pneumonia and Influenza	11.1	12.6	12.3	14.5	12.2	12.7	13.5	14.7	14.2	14.8
Diabetes Mellitus	9.9	11.3	9.8	10.0	9.5	10.0	9.6	10.0	10.1	13.0
Suicide	12.0	12.5	11.5	12.6	11.6	12.6	11.9	11.3	11.4	10.9
Chronic Liver Disease and Cirrhosis	12.3	12.7	11.4	10.5	10.0	8.7	9.2	8.8	9.0	9.2
Homicide/Legal Intervention	10.6	12.3	10.4	10.7	8.4	8.5	9.0	9.1	9.0	8.8
Nephritis/Nephrosis (Kidney Disease)	4.5	6.1	4.5	5.9	4.7	5.5	4.9	5.1	4.8	4.3
Atherosclerosis	5.6	5.9	5.2	5.0	4.2	4.2	3.7	4.0	3.4	2.8

Source: N.C. Center for Health and Environmental Statistics, Department of Environment, Health, and Natural Resources
Table prepared by Seth Blum, Center intern and Duke Univ. law student
Shaded areas indicate years when N.C. rates were lower than national average.

The overall breakdown in the Carolina Poll is about the same as the results from a survey conducted in 1981, 1983, and 1984 by the North Carolina Citizen Survey through the state's Office of State Budget and Management. In that poll, between 78 and 83 percent of the state's residents surveyed rated their health as good, very good, or excellent.[6]

Perceptions vs. Reality in Health Care

It's clear that most North Carolinians consider themselves to be in pretty good health—but do the facts give us a more accurate x-ray of the health status of North Carolina's population? How do you accurately and objectively measure health? In Northwestern National's ranking, the insurance company used a number of subjective categories, such as percent of high-school graduates in the adult population, and then boiled down the statistics to a single ranking.

In reality, the picture is much more complicated than that. The health status of the Tar Heel state isn't so much a uniform blanket as it is a patchwork quilt of black, white, and several shades of gray. That reflects the state's diversity. North

"For as a result of the pain, there are some who are born, others grow, others die . . ."

— CÉSAR VALLEJO
"THE NINE MONSTERS"

Carolina has grinding poverty tucked amid prosperous cities. It has nationally recognized medical schools and rural counties with no doctors. And the state has gleaming medical centers and as many as 1.2 million people who lack the health insurance they need to gain easy access to these facilities. [7]

The *mortality* rate is the most widely used indicator of health because it is among the simplest. That's because when people die, their death certificates state their cause of death, their age, their race, and address. At the end of the year, the numbers are collected and analyzed by the Division of Statistics and Information Services at the Department of Environment, Health, and Natural Resources.

The ease of data collection for deaths contrasts with the difficulty health officials have in compiling information on diseases, known in medical jargon as *morbidity*. At this point, good morbidity data—whether for diabetes or ulcers—just aren't available. The exceptions are for communicable diseases, such as tuberculosis, syphilis and, of course, Acquired Immunodeficiency Syndrome (AIDS).

The North Carolina Medical Database Commission, a branch of the Department of Insurance, collects information on hospital discharges, but its published statistics don't take note of a patient's age, sex, or race. And if patients never get admitted to a hospital, but rather find relief at the doctor's office, they're not recorded.

Even when considering death statistics, health officials urge caution in comparing counties on raw data. The reason is that while death might seem random in individuals, it follows a pattern for the population as a whole. *Generally speaking, the more non-whites, males, and elderly that live in a county, the higher the death rate.*[8]

The state's *unadjusted death rates* show these outcomes. In much of northeastern North Carolina, in the counties along the Virginia border, blacks make up a majority of the population and

Table 2. Comparative Rankings of Health Status in 1990 and 1991.

Rank 1990	Rank 1991	State
4	1	Hawaii
1	2	Minnesota
3	3	New Hampshire
1	3	Utah
7	5	Wisconsin
5	5	Nebraska
5	7	Connecticut
7	8	Iowa
10	8	Kansas
10	10	Colorado
7	11	Massachusetts
12	11	Maine
15	11	Virginia
12	14	Vermont
17	15	Rhode Island
16	15	New Jersey
12	17	North Dakota
20	18	Indiana
19	19	Ohio
20	19	Pennsylvania
18	19	Montana
22	22	California
30	23	Washington
23	23	Maryland
25	25	Wyoming
23	25	South Dakota
25	27	Oklahoma
25	28	Michigan
25	28	Delaware
32	**30**	**North Carolina**
30	30	Texas
25	32	Missouri
34	32	Illinois
34	32	New York
33	35	Idaho
34	36	Georgia
38	36	Kentucky
34	36	Tennessee
43	39	Oregon
39	40	Arizona
39	40	Arkansas
44	42	Florida
39	42	Alabama
39	44	South Carolina
47	44	Nevada
45	46	Louisiana
47	47	Mississippi
45	47	New Mexico
50	49	Alaska
49	50	West Virginia

Source: Northwestern National Life Insurance Co.

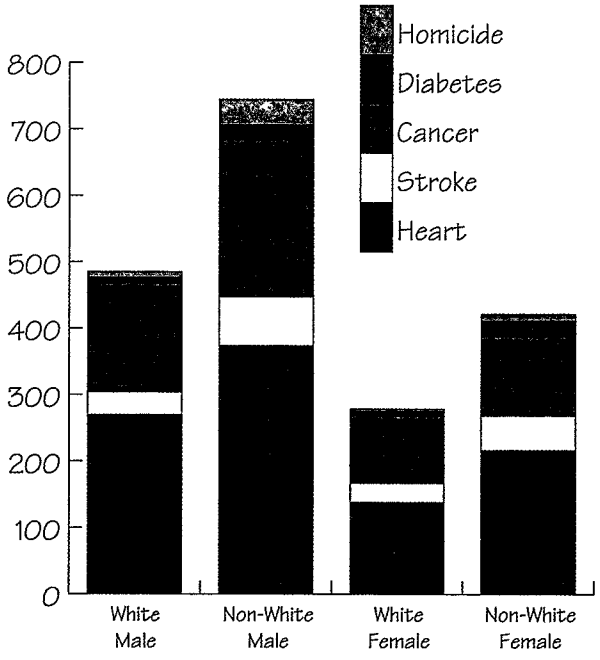
the death rates are higher than the state average (see Table 3, p. 6 for a comparison of white and non-white mortality rates for various causes.) By contrast, Onslow County is home to Camp LeJeune and has a disproportionate percentage of young people, especially healthy young U.S. Marines and their families. Its death rate is the lowest in the state.

But when statisticians account for these differences in demographics by adjusting for age, race, and sex, that pattern collapses. The county that ends up with the worst *adjusted death rate* is Avery County, a small mountain county. The reason: an unusually high rate of heart disease, despite a population that has few blacks.

So which batch of statistics is the right one to use? On national comparisons, health officials generally adjust death rates only for age. For in-state purposes, there's some debate. Dr. Thad Wester, the state's deputy health director, says, "If we want to compare North Carolina with other states, then adjustments should be made so that the populations compared appear similar. For example, you cannot compare North Carolina with Utah without adjusting for the marked differences in non-white populations. On the other hand, you must avoid the trap of allowing the non-white statistics—which are almost twice that of the white rate—from becoming an accepted norm within the state. This is because there is little reason to believe that the differences are racially determined. It is more likely that the higher rate is caused by being disadvantaged rather than by being non-white."

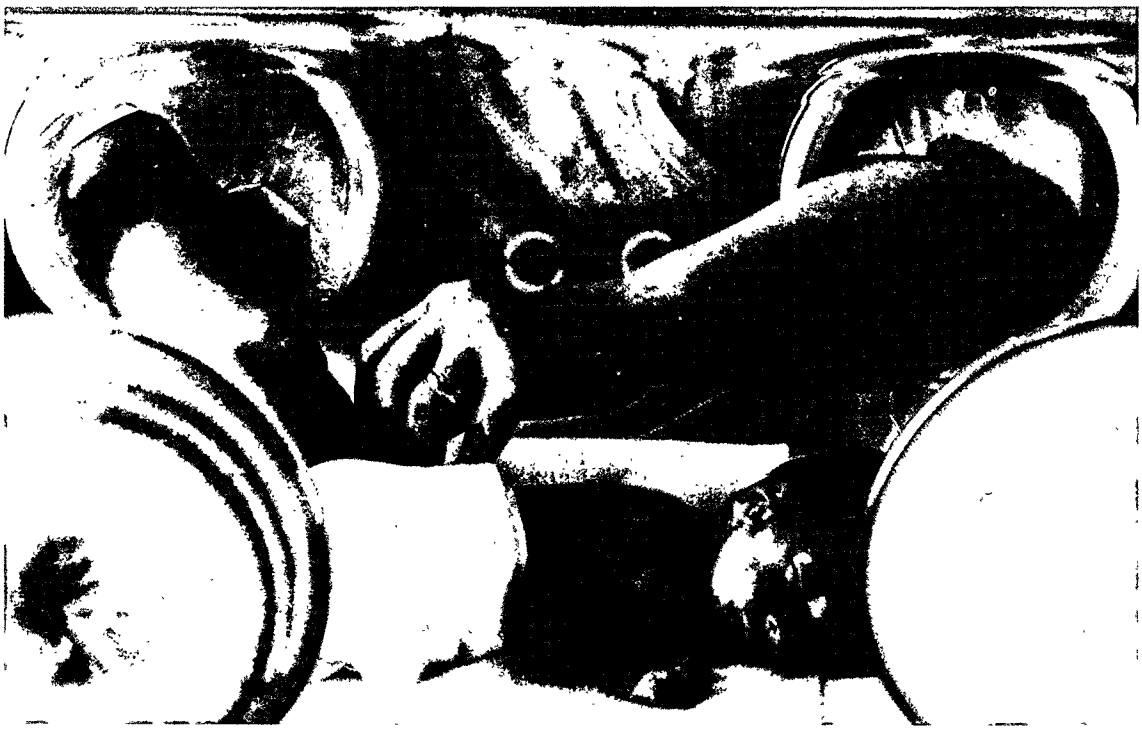
Wester, a former public health director in Robeson County, points out another reason Utah's citizens are healthier than North Carolina's: Utah, unlike North Carolina, has a large number of Mor-

Table 3. N.C. Average Mortality Rates per 100,000 for Race and Sex by Various Causes, 1986–1990



White Male	Non-White Male	White Female	Non-White Female
Homicide			
8.3	38.0	3.0	9.7
Diabetes			
9.8	24.0	8.3	25.3
Cancer			
163.5	235.7	100.8	118.7
Stroke			
35.0	73.2	28.2	51.6
Heart Disease			
270.0	374.0	138.5	216.6

Source: N.C. Center for Health and Environmental Statistics, Department of Environment, Health and Natural Resources



Wake Medical Center

Nurse cares for premature infant in isolette at intensive care nursery.

mons, whose religious teachings urge them to avoid tobacco, caffeine and alcohol.

In 1989, the last year for which state figures are available, 57,438 people died in North Carolina, about 870 people for each 100,000 residents. Nationally, the mortality rate is 880 per 100,000. When adjusted for age, the state's rate drops to 571 per 100,000. But the U.S. rate drops to 536 deaths per 100,000, even though the nation's population, on average, is slightly older than that of North Carolina (see Table 1, p. 4).

The state's top killer is heart disease, accounting for nearly a third of all deaths in North Carolina. Rounding out the top 10, in descending order, are cancer, stroke, unintentional injuries, lung disease, pneumonia, diabetes, suicide, liver disease, and homicide. Four-fifths of the state's deaths each year can be attributed to these 10 diseases.

Delton Atkinson is the director of DEHNR's statistics division. He says his job is to get beyond the numbers. "What do they mean?" he asks. "This information ought to be of use to policymakers."

Infant Mortality:

Take North Carolina's well-publicized battle against infant mortality. Any death of an infant less than one year old counts toward the state's infant mortality rate. Taken together, these deaths would rank eighth in number each year, just ahead of suicide.[9]

For the past decade, the state's infant death rate dropped steadily, but in 1987 and 1988 it took a turn for the worse. North Carolina ended the year with the highest infant mortality rate of any state and a black eye in the local and national press. The legislative and executive branches scrambled into action, convening task forces and targeting additional state dollars—nearly $40 million since 1989—towards various forms of prenatal care.[10] In mid-1991, Gov. James G. Martin was able to announce dramatic results—the infant death rate had dropped for 1989 and 1990. In trumpeting the decline, Martin praised several state and private-sector programs, as well as his Commission on Reduction of Infant Mortality, established in December 1989.

Yet despite the state's gains, one grim fact stands out: the infant mortality rate for non-whites is still nearly twice as high as the rate for whites. Along with race, the other key indicator for infant mortality is a baby's low birth weight. That, health officials assert, tends to "occur more fre-

quently among non-whites and persons of lower socio-economic status.... Infant mortality cannot be separated from its broader context of underdevelopment and poverty."[11]

But Atkinson and his staff still don't know either what caused the two-year hike in the rate in 1987 and '88 or what caused it to subside in 1989 and '90. "Do Medicaid and state dollars make a difference and under what conditions do they make a difference?" he wonders. "You can't say whether one thing did it or a combination of things did it."

Even Walter Shepherd, executive director of the commission, isn't sure what accounts for the drop. He said better medical technology might hold the answer. "It would be nice to say that the programs put in place would have an impact, but it's too early to say," he says.

Answers to those questions can be elusive, whatever the illness. Similar question arise about other causes of deaths and illnesses that prevail in North Carolina, and what policy makers are doing about them.

Heart disease:

Although it causes a third of all deaths, heart disease currently accounts for a smaller percentage of deaths in North Carolinians than in earlier years. In 1979, 223.7 people per 100,000 died from heart disease. In 1988, the last year for which comparable statistics are available, the rate was down to 173 per 100,000. The national rate—203 deaths per 100,000 in 1979—had fallen to 166 deaths per 100,000 by 1988.

Those statistics bear good news and bad. The state's death rate from this disease has dropped, but it still exceeds the national average.

Dr. Fredric Romm, an associate professor of family and community medicine at Wake Forest University's Bowman Gray School of Medicine in Winston-Salem, is coordinating North Carolina's participation in a national survey on heart disease. His suspicion is that heart disease's decline relative to other causes of death is caused partly by lifestyle changes but also by the rise of advanced medical care for heart disease.

Romm is one of four field coordinators for a heart-disease study called Atherosclerosis Risk in Communities, or ARIC. In four communities—Forsyth County, N.C.; suburban Minneapolis, Minn.; Hagerstown, Md.; and Jackson, Miss.—researchers hope to track about 16,000 middle-aged persons over several years and record changes in their heart conditions. From that information, they hope to gain insight into the onset and preven-

Technologists study film of cardiac catheterization at Wake Medical Center.

Wake Medical Center

tion of heart disease. "One of the reasons we're doing this study is there's been a decline in deaths in heart disease, and we don't know why," says Dr. Romm.

Cigarette smoking is the leading cause of heart disease and lung cancer, according to the U.S. Department of Health and Human Services.[12] But the public health crusade against smoking isn't quite as simple in North Carolina as it might be in other states. Tobacco is North Carolina's largest cash crop and a linchpin of the state's rural economy, despite efforts to shift the agricultural economy to other commodities. Cigarette making remains a leading high-wage industry in the urban Piedmont.

So not surprisingly, the state's policy makers on occasion have conflicting opinions about tobacco-related health issues. This shows at the state and local level in three recent instances. North Carolina applied in 1990 to take part in a nationwide program that aims to cut the adult smoking rate from 28 percent to 15 percent by the year 2000. The plan's name is the American Stop-Smoking Intervention Study, or ASSIST. The state's top health officials carefully weighed the grant application's merit, acknowledging that the tobacco industry's heft made the decision a touchy one, but in September 1991, North Carolina was approved for inclusion in the effort.

By contrast, consider what happened in mid-1991 when the Duplin County Board of Education tried to ban smoking in the county's schools. After the board's initial vote endorsing the ban, angry tobacco farmers threatened to derail a $30 million school bond referendum, and the board backed down. A brochure prepared that same summer publicizing recommendations of Lt. Gov. Jim Gardner's Drug Cabinet warned pregnant women not to drink or use drugs but made no mention of smoking.[13] The resulting brouhaha was publicized in newspapers across the state and wound up on the pages of the *Journal of the American Medical Association.*

Still, despite the widespread impact of tobacco and the state's traditional position as the largest cigarette manufacturer in the world, one ranking showed about 32 percent of North Carolina's adults smoke, compared to 28 percent for the nation. The highest rate: Nevada, with 35.7 percent. The lowest: Utah again, at 14.1 percent.[14]

While cigarette smoking is the leading cause of heart disease, it is by no means the only cause. Other contributors include: hypertension or high blood pressure, high cholesterol, obesity, and sedentary lifestyles.

Among the early findings of the ARIC research supervised by Romm is that nearly a fourth of the blacks and about a fifth of the whites participating in the Forsyth County study have high cholesterol levels. And half the blacks have high blood pressure, while slightly less than a third of whites also show hypertension.

Death from heart disease is highest in the rural southwest and rural northeast sections of the state (see Table 4, p. 10 for a county-by-county breakdown of death rates by cause). The clusters have mainly to do with age and race. Many of the eastern counties have large minority populations, and non-whites smoke more often than whites. Many of the western counties have a higher percentage of the elderly.

Cancer:

As heart disease has dropped as a cause of death, cancer has risen. It's the only major illness that causes more deaths now than 40 years ago. Part of the reason is modern medicine's success in treating *other* diseases relative to its ability to cure cancer. Another reason is that what the experts know about preventing and detecting cancer isn't always put into practice.

Overall, North Carolinians die of cancer at about the same rate as the nation as a whole, but certain segments of the population do not share in that status. In North Carolina, as elsewhere, blacks die of cancer at a greater rate than whites. In Chowan County, for example, the mortality rate from *prostate cancer* is three times the state average.

According to a state publication on mortality, "Blacks in certain regions of North Carolina have some of the highest prostate cancer mortality rates in the world. The high rate among blacks may be related to genetic or environmental factors as well as to health care access or quality issues."[15]

Cancer strikes at many organs. And the news is better for cancer in some parts of the body than for others. A bleak spot in the state's war on cancer is *lung cancer.* As a cause of death, it's increasing in both sexes and blacks and whites, with white females showing the greatest increase. With extremely low cure rates (less than 5 percent) for lung cancer, health officials say prevention is the most effective way to combat the disease. This is where the issue of access to health care enters the debate. In 1987, North Carolina had one doctor for every 565 residents. The national average

—continued on page 12

Table 4. 1990 North Carolina Deaths by Cause and by County

County	* County Rank	Population	Cancer	Diabetes	Heart Disease	Stroke	Pneumonia/ Influenza	Chronic Obstructive Pulmonary Disease	Chronic Liver Disease/ Cirrhosis	Unintentional Injuries & Adverse Effects	Suicide	Homicide	** Total Deaths
Alamance	37	108,427	257	41	362	87	32	50	8	41	17	17	1104
Alexander	83	27,608	49	3	69	17	14	7	2	12	1	2	221
Alleghany	10	9,590	22	1	37	7	7	5	2	8	3	1	113
Anson	35	23,421	58	5	83	19	14	12	3	7	2	6	242
Ashe	20	22,206	59	5	75	26	7	11	1	4	4	2	245
Avery	51	14,878	23	3	56	4	10	11	4	10	3	0	141
Beaufort	18	42,331	112	21	154	42	22	19	3	15	3	4	473
Bertie	6	20,372	60	10	76	24	9	5	2	20	4	1	257
Bladen	22	28,616	61	6	105	31	10	5	3	24	4	5	311
Brunswick	62	51,365	132	4	146	26	22	21	5	35	5	4	467
Buncombe	31	175,173	466	30	529	129	89	77	27	79	22	11	1821
Burke	78	75,815	149	19	224	39	19	22	9	33	12	10	648
Cabarrus	73	99,256	222	25	306	45	43	20	11	28	14	9	868
Caldwell	82	70,789	149	16	166	53	16	21	3	30	13	15	572
Camden	80	5,906	10	1	12	9	2	4	0	3	2	0	49
Carteret	58	52,854	122	5	144	35	13	21	11	28	11	3	487
Caswell	51	20,695	45	7	64	14	7	7	4	9	5	0	196
Catawba	70	118,742	237	20	332	70	45	42	9	67	17	11	1049
Chatham	66	38,893	75	6	124	32	11	9	3	18	7	4	345
Cherokee	31	20,200	47	5	83	18	11	4	2	3	3	1	211
Chowan	8	13,530	32	4	46	16	15	5	6	3	0	1	162
Clay	28	7,168	17	0	38	5	3	1	0	2	2	0	75
Cleveland	43	84,748	173	31	311	68	23	28	12	39	10	16	838
Columbus	24	49,549	111	10	190	45	18	12	5	29	5	9	536
Craven	92	81,715	136	7	206	40	16	23	9	32	12	10	616
Cumberland	97	276,791	370	45	541	98	36	66	28	100	28	39	1624
Currituck	51	13,800	24	3	39	10	12	6	0	9	2	0	131
Dare	94	22,980	43	2	53	8	7	2	2	9	3	2	166
Davidson	91	127,038	224	22	344	61	28	33	13	69	16	9	968
Davie	78	27,941	57	6	90	14	10	7	2	15	7	3	238
Duplin	28	39,976	98	6	129	50	19	18	4	17	6	6	420
Durham	92	182,585	310	32	415	97	42	37	13	59	15	22	1376
Edgecombe	20	56,602	157	12	178	64	21	15	6	40	7	11	620
Forsyth	73	266,443	527	58	695	199	84	86	28	91	47	33	2331
Franklin	41	36,675	80	9	122	30	8	12	6	31	3	4	369
Gaston	62	175,410	358	24	631	94	45	62	17	76	23	17	1594
Gates	27	9,317	17	0	35	9	1	3	0	11	4	0	100
Graham	64	7,195	16	3	16	5	3	1	2	5	1	0	65
Granville	43	38,510	83	9	131	23	25	14	4	16	8	7	382
Greene	87	15,397	18	1	44	6	4	7	0	12	2	1	118
Guilford	76	348,187	724	63	923	267	97	104	51	110	48	33	2998
Halifax	7	55,572	143	17	235	61	15	28	10	35	4	10	670
Harnett	66	68,033	140	26	194	39	12	19	2	44	12	12	603
Haywood	22	46,950	113	8	202	28	21	25	4	16	7	8	512
Henderson	10	69,551	192	7	298	59	33	39	14	33	10	6	821
Hertford	4	22,504	59	5	96	21	9	10	5	8	2	4	290
Hoke	87	22,857	47	1	51	15	7	7	5	9	1	5	175
Hyde	2	5,399	12	2	29	6	4	6	0	4	1	1	75
Iredell	70	93,193	177	17	262	69	26	28	13	54	17	10	818

County	* County Rank	Population	Cancer	Diabetes	Heart Disease	Stroke	Pneumonia/ Influenza	Chronic Obstructive Pulmonary Disease	Chronic Liver Disease/ Cirrhosis	Unintentional Injuries & Adverse Effects	Suicide	Homicide	** Total Deaths
Jackson	66	26,884	40	8	83	15	15	8	1	18	3	0	239
Johnston	58	81,580	156	11	296	51	25	23	11	44	11	8	747
Jones	58	9,407	18	2	33	3	4	4	0	4	0	1	87
Lee	55	41,490	97	10	120	20	15	17	7	29	6	9	388
Lenoir	18	57,206	134	13	227	52	16	22	9	25	11	10	643
Lincoln	87	50,517	105	6	148	31	8	6	6	28	4	2	389
McDowell	48	35,696	79	8	134	24	13	16	4	20	4	4	349
Macon	24	23,545	79	6	77	17	6	13	6	8	4	0	255
Madison	43	16,966	28	7	46	18	13	8	2	10	3	1	168
Martin	13	25,056	70	12	73	23	8	12	4	16	5	5	292
Mecklenburg	95	514,056	869	87	1023	267	97	114	58	168	69	98	3599
Mitchell	28	14,433	40	2	50	12	10	5	2	11	1	1	152
Montgomery	56	23,342	57	3	64	23	3	4	1	12	3	3	217
Moore	35	59,228	159	9	194	60	31	18	7	34	10	6	608
Nash	49	76,916	142	15	240	62	27	31	15	37	16	13	746
New Hanover	73	120,691	303	26	296	97	19	44	16	42	20	4	1052
Northampton	10	20,758	56	8	81	19	11	10	2	15	3	1	245
Onslow	100	150,744	136	11	158	27	15	28	10	43	22	11	579
Orange	98	94,283	137	14	140	42	15	20	3	24	17	11	539
Pamlico	8	11,396	29	0	49	12	5	3	0	6	3	0	137
Pasquotank	41	31,368	81	5	118	21	9	11	5	8	5	3	318
Pender	66	29,022	56	7	76	29	8	11	4	12	5	3	258
Perquimans	13	10,471	28	0	34	14	5	4	1	5	4	1	122
Person	31	30,206	77	4	99	30	9	11	2	22	2	5	314
Pitt	83	108,380	204	28	237	69	29	18	16	55	12	9	865
Polk	1	14,452	50	7	73	22	8	7	4	7	1	2	227
Randolph	80	106,928	214	18	286	71	22	38	12	50	12	6	891
Richmond	37	44,502	96	11	152	42	10	16	6	25	9	10	454
Robeson	70	105,280	163	37	308	72	32	32	7	69	15	16	924
Rockingham	43	86,131	202	23	273	77	29	33	13	47	8	10	852
Rowan	43	110,886	260	20	383	97	44	34	8	49	18	9	1103
Rutherford	37	57,018	130	11	229	47	16	27	3	18	6	6	579
Sampson	17	47,242	100	12	182	55	14	21	5	30	10	4	535
Scotland	86	33,790	55	12	85	22	4	7	3	21	4	3	263
Stanly	64	51,851	92	16	184	41	16	11	5	25	7	2	467
Stokes	83	37,321	65	4	98	32	12	11	5	22	5	0	297
Surry	49	61,760	128	12	215	51	17	30	11	27	14	7	601
Swain	3	11,287	30	3	48	9	10	5	1	8	1	1	149
Transylvania	56	25,562	75	4	82	11	11	10	6	7	1	3	239
Tyrrell	5	3,853	15	0	15	0	2	3	1	4	0	0	49
Union	87	84,562	138	17	226	45	27	12	5	32	8	10	647
Vance	16	38,950	94	9	162	40	24	13	3	22	8	6	451
Wake	99	426,212	603	57	694	201	60	68	22	116	53	30	2419
Warren	13	17,291	46	2	71	18	6	9	0	14	3	3	202
Washington	37	13,973	31	3	53	6	9	1	1	6	2	2	143
Watauga	96	37,074	48	1	73	13	13	12	3	22	9	2	239
Wayne	76	104,836	222	28	289	61	14	42	9	37	8	18	903
Wilkes	58	59,414	106	8	173	44	30	26	7	34	9	3	546
Wilson	24	66,145	153	26	219	64	24	18	11	33	13	15	712
Yadkin	31	30,543	57	6	110	19	17	12	2	16	3	0	317
Yancey	51	15,432	32	3	50	14	3	6	1	7	2	0	147
Total		**6,648,6891**	**13198**	**1315**	**18520**	**4446**	**1937**	**2042**	**719**	**2896**	**927**	**762**	**57175**

* *1 = highest death rate after adjusting for population size*

** *Includes all causes, not just causes included in this table, so row total does not equal total deaths.*

was one doctor for every 467 people. But within the state, there are vast disparities in the availability of *primary care* physicians, a vital first rung on the health care ladder.

In Orange County, home to the University of North Carolina's medical center, there was one such doctor for every 316 people in 1990—the lowest ratio of population to primary care physicians in the state.[16] In Stokes County in the northwest, each primary care physician serves, on average, 6,204 people, the highest ratio in the state. Other counties with high ratios are: Camden, 5,904; Montgomery, 5,837; and Greene, 5,128.

Other indicators also point to the inability of many North Carolinians to gain access to health care. Most critical is the lack of health insurance. Nearly one in every eight persons in North Carolina lacks health insurance on any given day, and as many as 1.2 million citizens are uninsured at some point over the course of a year.[17]

There's a large segment of North Carolina's population that likes its buttered grits and red-eye gravy and bacon.

— Dr. Joseph Konen
Director of Community Medicine
Bowman Gray School of Medicine

In the treatment of cancer, ready access to health care can be the difference between life and death. Take *cervical cancer,* which is often successfully treated if detected early. While the mortality rate for this form of cancer is dropping, nonwhites still die at three times the rate of white females. "This wide differential probably involves late access to health care and perhaps socioeconomic and sexual activity factors often associated with the disease," according to a 1988 state publication on mortality.[18]

"I don't think there's rank discrimination here," state health director Levine told *The News & Observer* of Raleigh. "I think it's inadvertent discrimination. The lack of access to resources is an indirect form of discrimination that needs to be addressed."

How do you give more people access to health care? In the 1991 session, the General Assembly approved two pieces of legislation that address parts of the problem through the existing health insurance structure. The first law requires health insurers to pay for annual mammograms and pap smears for women.[19] Mammograms are a screening procedure to detect *breast cancer,* while pap smears detect cervical cancer. The idea behind the legislation is to remove virtually all financial disincentives to women using these diagnostic tests.

But there's a catch. The law only covers women who have health insurance. Dr. Wester applauds the spirit of the law, but says there's something not quite right with a law that gives wealthier women access to a potentially life-saving procedure while denying it to poor women. Wester attributes the law's limited scope to the budget difficulties that confronted the General Assembly when it convened for the 1991 session. Lawmakers eventually closed a gap of about $1.2 billion using equal parts budget cuts and tax increases, but revenues are projected to be tight for the foreseeable future.[20] "Eventually, I'm sure, these services will be picked up for all," Wester says, "but it's hard to do that when you have a $1 billion shortfall."

The second piece of legislation important to providing access requires health insurers and health maintenance organizations (HMOs) to offer a bare bones insurance policy for small businesses.[21] The law would also limit the annual rate increases insurers could charge. Sponsors and industry lobbyists who pushed for the bill estimate there are about 600,000 uninsured residents who work for or are dependent on someone who works for a small business. While N.C. Department of Insurance officials say it's too early to tell about the success or failure of this program, an optimistic estimate is that 10 percent of these uninsured individuals might gain access to health care coverage.

Diabetes:

Diabetes is both a leading cause of death and a leading disease in North Carolina. An estimated 350,000 residents have the ailment, but about half don't know it.[22] Although the disease can be controlled through diet, exercise, and insulin and other drugs, about 1,372 persons died from diabetes in 1989. Another 3,000 death certificates listed diabetes as an associated condition. Non-whites are more than twice as likely to die from diabetes as whites.

The public and private sector's efforts against diabetes provide a glimpse of a substantial population that is considered unhealthy but still is reluc-

tant to make changes in their lifestyle. Dr. Joseph Konen, director of community medicine at the Bowman Gray School of Medicine, said adult diabetes often appears in a two-step pattern. Certain people are genetically predisposed to the disease, but the ailment's onset is triggered by an inappropriate diet.

The key to preventing diabetes, he said, is identifying high-risk individuals and then helping them make lifestyle changes. And that is often a difficult task. "There's a large segment of North Carolina's population that likes its buttered grits and red-eye gravy and bacon," he says. The people who readily come forward for help, he adds, are not the disadvantaged, but "are the ones who've already bought into changing to a healthy lifestyle."

The Centers for Disease Control have begun a project in the Triad and the Triangle to combat diabetes. The Triad will be the control group, while the Triangle communities of Raleigh and Durham will receive intervention in the form of heavy doses of public education. The goal is to reduce body weight by an average of 5 to 10 percent during the next decade or so, which would reduce the risk of diabetes. One target for these efforts is the black church, where researchers plan to push for dietary changes. "If the community buys into it, there will be a change in the culture," says Dr. Konen, one of the study's coordinators.

These types of early steps are crucial for narrowing the black-white health gap, says Dr. John Hatch, a professor of health behavior and health education at UNC–Chapel Hill. "Intervening at the symptoms is not a long-run solution," he says.

Dr. Stoodt of the Division of Adult Health Services agrees. "Preventing the incidence of diabetes is a pretty new question," she says. The public health emphasis traditionally has turned on keeping the disease in check and preventing its side effects, such as blindness and kidney failure.

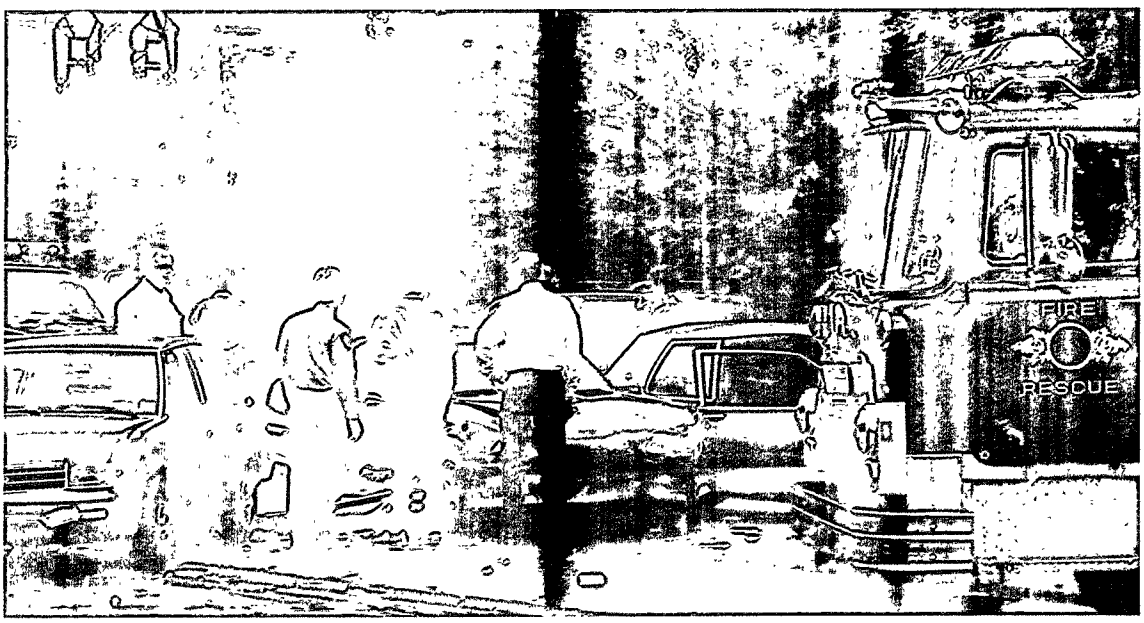
That view still predominates in state policy decisions. Using federal money, North Carolina spends nearly $220,000 to staff diabetes control programs at three local health departments in rural eastern North Carolina. The goal is to reduce the complications, disabilities and premature deaths caused by diabetes. According to the grant application for the Triad and Triangle project, "The emphasis is on increasing self-care in the management of the disease and in controlling complications."[23] Dr. Stoodt adds, "Managing diabetes on a daily basis is largely the individual's responsibility."

Injuries:

Not so long ago, fatalities from car wrecks, drownings, and fires were called "accidents." Now they're called "injuries." This isn't an Orwellian attempt at double-talk or news-speak. Instead it reflects the growing recognition that many accidents aren't as accidental as they seem.

When North Carolina abandoned the term "accident" in 1990, health officials wrote, "The connotation of accidents as random events beyond

Traffic accidents are a leading cause of death and injury in North Carolina.



Karen Tam

Wake Medical Center

reasonable human control is considered an impediment to the prevention of injuries in North Carolina."[24]

In 1989, the last year statistics are available, 4,752 people died from injuries. A third of those deaths are considered "intentional" injuries, such as *suicide* and *homicide*. The rest are called "unintentional."

Compared to the nation, North Carolina's rates of murder and suicide are slightly lower. (In past years, they've been slightly higher.) And the state considers "accidents" from drowning, falls, poisoning, and fire enough of a problem to have a Governor's Task Force on Injury Prevention.[25]

But overall, the incidence of death from unintentional injuries is higher than the national average. This is particularly true in *motor-vehicle accidents*. Generally, residents in the state's rural areas die more often in car wrecks than in other types of injuries.[26]

"I attribute it to a lack of manpower for traffic law enforcement in rural areas of the state versus urban areas," says Alfred C. Warlick III, deputy director of the Governor's Highway Safety Program. Warlick says young people who like to drive fast tend to seek out rural areas where they are "less likely to be caught."

But the biggest cause of the state's 1,384 traffic deaths in 1990 had little to do with city streets or country roads. It was abuse of alcohol. According to reports from the state's medical examiners, more than half the drivers in single-vehicle crashes were legally intoxicated. Overall, 44 percent of all fatal accidents were alcohol-related.

The Safe Roads Act is the cornerstone of the state's attack on drunk-driving. Enacted in 1983, it imposed stiffer penalties for convictions of driving-while intoxicated.[27] But it's not easy to trace the act's direct or indirect impact on the number of traffic fatalities. The state's rate of vehicle deaths actually increased in the years immediately after the legislation was passed, but then began dropping again in 1986. "I attribute the declining fatality, injury, and accident picture in the years following the Safe Roads Act to a combination of stiffer penalties, increased adjudication, and more concentrated enforcement," says Warlick. "These factors, combined with a higher percentage of larger cars and a 60 percent-plus safety belt use rate account for a large portion of our improved collision picture."

North Carolina's child seat belt laws were enacted in 1982 and 1985.[28] The adult version took effect in 1987.[29] Now drivers and front-seat passengers of any age must wear a seat belt and children up to age 6 must be restrained whether they are riding in the front or back. But according to the UNC Highway Safety Research Center, which monitors seat belt use statewide, compliance has dropped since the early days, from 78 percent in the first year to just over 60 percent in 1991.[30]

States measure traffic fatality rates two ways: the number of deaths per 100,000 population and the number of deaths for each 100 million miles driven. With either method, North Carolina, along with other South Atlantic states, is above the national average, although its rate for each measure is lower than it was a decade ago.[31]

"How literary . . . streets thick with the details of impulsive life as the hero ponders the latest phase in his dying."

— DON DELILLO
WHITE NOISE

On the job, North Carolinians appear to be relatively healthy, despite the tragic poultry processing plant fire that claimed 25 lives in Hamlet, N.C., in September 1991. A total of 182,103 private sector *work-related injuries* were reported in 1988, according to the N.C. Department of Labor.[32] While a greater share of the state's workers draw their paychecks from manufacturing jobs than in any other state,[33] North Carolina's private-sector injury rate is still lower than the nation's. There were 8.2 injuries for every 100 full-time Tar Heel workers in 1988, the last year figures are available. Nationally, 8.6 injuries were reported for every 100 workers.

Injuries are the leading cause of death for Americans aged 1–44.[34] Health statisticians use a measurement called "years of potential life lost" to gauge the impact of these accidental deaths. The calculation multiplies each death by the number of years before the victim turned 65. A 25-year-old who drowned would be given 40 years of life lost, while a 63-year-old who died from stroke would only receive two years. The years lost from injuries in North Carolina exceed the years lost from

cancer or heart disease. In 1988, health officials estimated the economic cost of death by injury in the state at $1.5 billion a year.

Sexually Transmitted Diseases:

One of the fastest-growing health problems in North Carolina is STD, the acronym for Sexually Transmitted Diseases. Once known euphemistically as "social diseases," STDs include gonorrhea, syphilis, chlamydia, and AIDS (Acquired Immunodeficiency Syndrome). "A relentless increase in gonorrhea and syphilis cases in North Carolina is worrying public health experts who fear that the trend foreshadows a surge in AIDS," *The News & Observer* of Raleigh reported in November 1991.[35] Health officials are worried that the dramatic increases in syphilis and gonorrhea mean that increases in HIV infection—the virus linked to AIDS—won't be far behind (See Table 5 for a 10-year look at trends in sexually transmitted diseases).

As late as 1986, there were no reported cases of congenital syphilis, an STD passed from mother to child at birth. In 1990, there were 30 cases of the disease, spread from infected mothers to their babies. "That means syphilis is rampant," says Dr. Rebecca A. Meriwether, the director of the communicable disease division of the Department of Environment, Health, and Natural Resources.

Indeed, in 1990, reported cases of syphilis jumped by nearly 40 percent in North Carolina, according to preliminary figures compiled by the American Social Health Association. Based on the 1990 figures, the state's infection rate now tops the national rate. For gonorrhea, the other major reported sexually transmitted disease, the infection rate is already well above the national average, although not increasing, according to state-produced statistics.

Dr. Meriwether blames drug use and budget cuts for the increase in syphilis. "Whenever resources for partner notification go down, rates go up," she said. This past year, the General Assembly approved hiring 10 additional people to conduct partner notification for people infected with syphilis or AIDS.

North Carolina's AIDS infection rate, now at 9.0 per 100,000, is increasing steadily, although it's still about half the national average and below most other states in the South Atlantic region. "We're catching up," warns Dr. Meriwether. Of particular concern to public-health officials is the disease's steady tilt toward non-whites and poor people. That would follow a pattern of other sexually transmitted diseases. Syphilis and gonorrhea, the state's most common STDs, are both most prevalent in counties with large minority populations.

Mental Health:

Although perhaps not as obvious as heart disease or diabetes, mental illness is a serious and widespread problem in North Carolina. Estimates vary on the number of mentally ill, but including substance abuse, as many as 900,000 North Carolina citizens may suffer some form of mental illness at any one time, according to the state Mental Health Study Commission.[36] A report issued in July 1988 by the Division of Mental Health, Mental Retardation, and Substance Abuse Services in the N.C. Department of Human Resources estimated more than 1.2 million North Carolinians had suffered

Table 5. Cases of Sexually Transmitted Diseases in N.C., 1980–90

	AIDS	Syphilis	Gonorrhea	Chlamydia
1980	0	908	41,707	
1981	0	1,165	41,825	
1982	4	1,311	43,835	
1983	17	1,532	39,441	
1984	28	1,516	37,447	
1985	91	1,289	39,162	
1986	142	1,094	38,031	
1987	282	1,416	31,958	2,210
1988	346	1,655	29,418	
1989	474	2,057	30,922	8,740
1990	474	2,867	33,377	10,500

Source: N.C. Communicable Disease Information Office, HIV/STD Branch

some mental disorder in the previous year.[37] That included everything from major depression to a simple fear of wide-open spaces.

For severe and persistent mental illness, a narrow definition of serious cases, the study estimated that about 85,000 residents, or 1.76 percent of the adult population, were afflicted. Another 1.15 percent have schizophrenia. Leaders of the study commission suggested earlier this year that the state needed to add $600 million during the next decade to the existing $645 million budget to fight mental illness and substance abuse and expand existing programs. They received only $15.3 million in new money, and only $6 million of that had been part of the study commission package. Sen. Marvin Ward (D-Forsyth), a member of the study commission, said, "For a year like this past one [when tax revenues were short], we're glad to have anything."[38]

The Challenge

If North Carolina is to improve its health, the challenge is to make the next generation healthier than the previous one. The experts say the solution lies in fostering better eating habits, a regular exercise program, and avoidance of alcohol and drugs, including tobacco.

The most recent survey of North Carolina lifestyles revealed that 11 percent of residents between the ages of 18–24 are *obese*. More than half do little or no *exercise*. A fifth *smoke*. More than a fifth *drink* heavily (See Table 6, p. 18 for more).

What to do? Much of the energy and money for this task will be directed through the state's public schools. "My whole spiel is pay now or pay later," says John P. Bennett, chief consultant for the Healthful Living Section in the Department of Public Instruction. "You always have to remember that kids think they are immortal, but as elementary kids their eating patterns are set for life."

Health education is being slowly broadened to emphasize lifetime health habits instead just of hammering home hygiene and the four food groups. This includes studying nutritional weight management and learning lifelong sport and fitness skills.

North Carolina's students must complete a one-unit health and physical education course to graduate from high school. Bennett wants more but understands the school day is already stretched thin. "My best guess is that expansion in this area won't occur," he notes.

Less than half of North Carolina's 133 school systems have a health education coordinator or director. Shellie Pfohl is the director of the Governor's Council on Physical Fitness, an agency designed to promote fitness and help communities develop local fitness councils, which teach and encourage lifetime health skills. She says the nation as a whole is basically unfit. "We're definitely not at the rear end, but we're not at the forefront either," she adds.

To date, five counties—Buncombe, Davidson, Forsyth, Mecklenburg, and Wake—are establishing these local fitness councils. Pfohl said another 20 counties have expressed serious interest in forming a council. For the most part, the counties moving forward in this area are larger and more urbanized. It's not that rural counties don't care, says Pfohl. But their dispersed population makes it more difficult to galvanize community support.

At least one area of health education has produced modest success: the humble school lunch, which is undergoing a subtle transformation at cafeterias across the state. In the Mooresville City Schools in Iredell County, for example, the old cafeteria was ripped up and replaced with a layout that resembled a fast-food restaurant more than a cafeteria. Pat Currin, the system's child nutrition director, says, "The average junior high school and high school diet is very poor. They want French fries, pizzas, hot dogs, and hamburgers."

At Mooresville, however, the pizza has low-fat cheese. The French fries are processed in canola oil and fried in soybean oil. And school administrators say about a fifth of the kids chow down at the salad, potato, and taco bar. More kids want fresh fruit with lunch, says Currin, but whole-grain breads still go over like extra homework. "Many of those Southern kids won't eat that," says Currin. Still, there are signs that even this last bastion of Southern culture—the bad diet—may be crumbling. Witness Woody Durham, the venerable voice of UNC athletics. Durham, long an endorser of down-to-earth products, now tells listeners along the Tar Heel Sports Network he has dispensed with white bread and has his bologna on whole wheat smeared with Grey Poupon.

Levine, the state health director, says the statistics compiled over the years show that North Carolinians generally "are enjoying better health than ever before. Compared to a decade ago or longer, we are living longer; are experiencing declines in overall mortality as well as some of the leading causes of mortality such as heart disease,

Table 6. Percentage of North Carolinians with *Reported* Risks by Race and Sex, Age, Income, and Education Level

	Current Smokers	Current Hypertensives	Sedentary Lifestyles	Obesity	High Cholesterol	Chronic Drinkers	Acute Drinkers	Drinking & Driving	Lack of Seat Belt Use
Total N.C. Population	28.0	18.0	60.5	28.8	11.7	2.5	9.1	1.5	15.8
Race and Sex									
White Male	32.4	15.0	58.8	27.5	11.2	5.1	15.8	3.3	21.4
White Female	27.4	18.1	56.4	23.7	15.8	0.3	3.5	0.4	12.5
Nonwhite Male	23.4	16.5	67.8	32.3	1.6	4.1	15.1	1.0	15.4
Nonwhite Female	21.0	27.8	71.8	45.6	9.0	0.8	3.5	0.5	9.9
Age									
18–24	20.9	1.5	57.3	11.1	3.1	5.6	16.9	3.6	21.1
25–34	39.6	6.1	55.3	23.9	5.8	3.2	16.0	3.2	17.4
35–44	29.4	10.2	60.1	34.5	12.1	1.9	8.9	1.0	16.0
45–54	31.0	24.3	62.2	39.6	18.3	1.5	4.5	0.5	18.8
55–64	27.9	39.4	63.7	37.5	18.7	1.6	2.4	—	10.8
65+	13.4	39.2	68.9	30.0	17.1	1.2	1.2	—	9.1
Income									
Less than $10,000	22.4	33.5	74.9	38.4	11.2	2.5	6.2	0.4	17.1
$10,000–14,999	29.1	17.0	65.3	35.0	10.1	3.4	10.3	2.0	19.3
$15,000–19,999	34.8	20.3	58.2	25.6	11.0	3.4	10.4	2.3	19.2
$20,000–24,999	32.1	16.7	55.6	26.2	12.2	3.0	7.6	1.8	14.6
$25,000–34,999	30.6	10.3	55.0	21.6	11.4	2.3	8.8	0.9	15.5
$35,000–50,000	28.1	13.2	56.5	30.8	15.1	3.5	14.0	2.7	12.0
$50,000+	20.3	9.1	43.7	23.1	16.2	0.9	11.2	1.3	13.6
Education Level									
<9th Grade	23.2	40.4	79.4	43.1	8.8	1.4	1.8	0.8	16.0
Some High School	33.2	23.7	78.1	34.4	8.2	1.5	6.9	1.2	18.2
High School Grad.	31.2	16.4	62.0	27.2	11.7	2.5	10.3	1.4	19.0
Any Tech. School	38.7	7.4	58.4	24.2	10.2	3.2	10.4	—	13.0
Some College	28.9	10.6	48.8	27.8	13.5	3.7	12.2	2.4	14.7
College Graduate	17.4	15.4	44.8	23.0	13.8	3.2	9.4	2.1	9.5
Post Graduate	20.2	12.3	48.1	19.4	17.5	1.2	9.9	—	8.7

Definition of Risk Factors

Current Smokers—Have smoked 100 cigarettes in life and smoke now.

Current Hypertensives—Persons told blood pressure was high more than once, or who are on medication, or report their blood pressure is still high.

Sedentary Lifestyles—Persons who do not get at least 20 minutes of aerobic exercise at least three times a week.

Obesity—Persons at or above 120 percent of ideal weight—as defined by the 1959 Metropolitan Height-Weight Tables.

High Cholesterol—Blood reading greater than 200 milligrams per deciliter.

Chronic Drinkers—Persons who have an average of 60 or more alcoholic drinks in a month.

Acute Drinkers—Persons who had five or more drinks on one occasion in a month.

Drinking and Driving—Persons who drive after having too much to drink.

Lack of Seatbelt Use—Any reported seat belt use that is less than always.

Source: N.C. Department of Environment, Health, and Natural Resources, Division of Adult Health. These data are based on annual telephone interviews with more than 1,700 persons and adjusted for age, race, and sex to reflect the demographic makeup of the North Carolina population. The results are published in a brochure titled, "Risky Business—A Fact Sheet on the Behavioral Risk Factors of North Carolinians."

cerebrovascular disease, and injuries; and are experiencing declines in infant mortality." The median age at death has increased from 28.1 years in 1914 to 72.9 years in 1989, Levine says.

But he adds, "While the past century has been marked by outstanding progress toward saving lives and promoting health, we are still challenged. North Carolina continues to be far below the comparable U.S. rates for a number of the health indicators. Minorities and low-income persons in this state have rates far exceeding those for whites and the moderate-to-high-income groups. Our citizens continue to die from causes too early or needlessly. Problems such as lack of health care access, poor health habits [and] behavior, and inadequate health education requiring extraordinary efforts by health officials must be resolved before the relative health of North Carolinians can improve."

FOOTNOTES

[1] The Northwestern National Life State Health Rankings: Results, Methodology and Discussion, 1990 Edition and 1991 Edition, Minneapolis, Northwestern National Life, pp. 1–8.

[2] Robert A. Hahn, *et al.*, "Excess Deaths from Nine Chronic Diseases in the United States, 1986," *The Journal of the American Medical Association,* Vol. 264, No. 20, Nov. 28, 1990, pp. 2654–2659. See also "The Stroke Belt: Stroke Mortality by Race and Sex," National Heart, Lung and Blood Institute, October 1989, pp. 1–4.

[3] See Thad Beyle, "North Carolinians and Health: It Is a State of Mind," Department of Political Science, UNC–Chapel Hill, June 1990, pp. 1–4. See also The Carolina Poll, March 1991, School of Journalism and Mass Communication and the Institute for Research in the Social Sciences, UNC–Chapel Hill. The poll's margin of error, based on sample size, is plus or minus 4 percent. Respondents were asked, "Would you say your own health, in general, is excellent, good, fair, or poor?"

[4] *Health United States 1990,* National Center for Health Statistics, U.S. Public Health Service, March 1991, p. 123.

[5] For more on health care in rural areas, see Jeanne M. Lambrew and Jack Betts, "Rural Health Care in North Carolina: Unmet Needs, Unanswered Questions," *North Carolina Insight,* Vol. 13, No. 3–4 (November 1991), pp. 66–92.

[6] "North Carolina Citizen Survey: A review of survey data from 1976 to 1984," Management and Information Services, Office of State Budget and Management, Raleigh, N.C., December 1985. The poll is no longer being conducted, although the North Carolina Center for Public Policy Research has recommended that it be revived.

[7] For a full discussion of inadequate health insurance as an access barrier, see Chris Conover and Mike McLaughlin, "Spreading the Risk and Beating the Spread: The Role of Insurance in Assuring Adequate Health Care," *North Carolina Insight,* Vol. 13, No. 3–4, November 1991, p. 21.

[8] *Leading Causes of Mortality: North Carolina Vital Statistics, 1989, Vol. 2,* N.C. Center for Health and Environmental Statistics, February 1991, Chap. 1, p. 1 through Chap. 7, p. 1.

[9] See Pam Silberman, "State's Infant Mortality Rate Among the Nation's Worst," *North Carolina Insight,* Vol. 11, No. 2–3 (April 1989), pp. 131–133 for more on this topic.

[10] The legislature appropriated a total of $10.3 million in new money for the fight against infant mortality in the 1991–93 biennium. In the 1989–91 biennium, $28.5 million in additional funds were appropriated to battle infant mortality, according to the legislature's Fiscal Research Division.

[11] *Leading Causes of Mortality: North Carolina Vital Statistics, 1988, Vol. 2,* N.C. Center for Health and Environmental Statistics, June 1990, Chap. 8, p. 4.

[12] "Reducing the Health Consequences of Smoking: 25 Years of Progress," a report by the U.S. Surgeon General, U.S. Department of Health and Human Services, 1989.

[13] A spokesperson for the Department of Environment, Health, and Natural Resources says smoking was omitted because the brochure focused on illegal drugs and tobacco is legal.

[14] Northwestern National Life State Health Rankings (See footnote 1).

[15] *Leading Causes of Mortality,* Center for Health and Environmental Statistics, Department of Environment, Health, and Natural Resources, Volume 2, 1988, Chap. 5, p. 31.

[16] "North Carolina Health Manpower Databook," Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, October 1990, pp. 7–13. Primary care physicians are defined as those concentrating on family practice, general practice, internal medicine, pediatrics, or obstetrics and gynecology.

[17] Conover and McLaughlin, p. 22. See also Pam Silberman, "Health Care for the Poor: Adequacy, Availability, Affordability," *North Carolina Insight,* Vol. 11, No. 2–3 (April 1989), pp. 122–137 for more on gaps in health care coverage.

[18] *Leading Causes of Mortality: North Carolina Vital Statistics 1988, Vol. 2,* Chap. 5, p. 11.

[19] Chapter 490 (HB 347) of the 1991 Session Laws.

[20] For more on the budget shortfall and its implications for the future, see Mike McLaughlin, "North Carolina's Biennial Budget: Oil Change or Overhaul?" *N.C. Insight* Vol. 13, No. 2 (June 1991), pp. 2–19.

[21] Chapter 630 (HB 1037) of the 1991 Session Laws.

[22] Estimates are from the Diabetes Control Program, Division of Adult Health Services, Department of Environment, Health, and Natural Resources.

[23] See "Diabetes Control Program Proposal FY 1991–1992," Division of Adult Health Services, N.C. Department of Environment, Health, and Natural Resources, undated, p. 1.

[24] *Leading Causes of Mortality, 1988, Vol. 2,* Chap. 7, p. 3.

[25] Established by Executive Order No. 78, issued by Gov. James G. Martin, Nov. 1, 1988.

[26] "N.C. Traffic Accident Facts 1990," Division of Motor Vehicles, N.C. Department of Transportation, 1991, pp. 4–6.

[27] Chapter 435 of the 1983 Session Laws, codified as G.S. 20-179.

[28] G.S. 20-137.1.

[29] G.S. 20-135.2A.

[30] See "Increased Seat Belt Use Through Police Action," N.C. Highway Safety Research Center, Publication No. A-144, 1990–90 and 1990–91, forthcoming.

[31] "1990 State Statistics," National Highway Safety Transport Association, Washington, D.C., 1991, pp. 11–12.

[32] "Occupational Injuries and Illnesses in North Carolina, 1988," N.C. Department of Labor, undated, p. 31.

[33] As of December 1991, 26.7 percent of the state's nonagricultural work force held jobs in manufacturing, according to the Employment Security Commission of North Carolina.

[34] Draft, 1989 Edition, Behavioral Risk Factor Surveillance System, Division of Adult Health, Department of Environment, Health, and Natural Resources, dated 1989, unnumbered sheet provided by department.

[35] Rachele Kanigel, "Gonorrhea, syphilis on rise in N.C.," *The News & Observer* of Raleigh, Nov. 6, 1991, p. 1B.

[36] See Remarks by Sen. Kenneth C. Royall Jr., co-chair, Mental Health Study Commission, Jan. 29, 1991, p. 1.

[37] Prevalence of Mental Disorders in North Carolina, N.C. Division of Mental Health, Mental Retardation and Substance Abuse Services, N.C. Department of Human Resources, July 18, 1988, p. 14.

[38] See Comments For Sen. Marvin Ward, member, Mental Health Study Commission, Jan. 29, 1991, pp. 1–2.

Karen Tam

Nursing home resident Rachel Taylor.

Carrots, Sticks, and North Carolina's Nursing Homes: Regulatory Program Satisfies Few

by Tinker Ready

This article explains how nursing homes are regulated, with a particular focus on the penalty process administered by the state Division of Facility Services. It documents the number and amount of fines levied against nursing home operators from January 1988 through July 1991, and takes a close-up look at the problems confronting nursing home care providers.

The state has beefed up its enforcement of nursing home regulations in recent years, with fines assessed for rule violations increasing from 101 total fines in 1987 to 383 in 1990. Many of these fines were assessed against the same homes for multiple or repeat offenses, but 52 percent of the 290 homes included in the Center analysis received some level of fine during the three-and-a-half-year period studied.

Nursing home operators say they are up against two separate sets of rules—state and federal—that are continually changing. And they complain of a regulatory system that offers not so much as a thank-you for a job well done. Yet some say the state still isn't tough enough on chronic offenders. Seven of the state's nearly 300 homes accounted for almost a third of the fines assessed during the period studied, but only two licenses were revoked.

How far should the state go to assure that nursing home residents receive high quality care? Are further reforms needed, or has the balance already shifted toward too much regulation? These are among the questions policymakers must wrestle with as they chart a course for the future for a financially strapped industry that must be depended upon to serve more and more North Carolina citizens.

When Hampton Woods Board and Care nursing home opened in Northampton County early in 1990, its operators, a nonprofit community-based group, had all the best intentions. They wanted to provide high quality care to the elderly residents of a poor, rural county.

They had no corporate parent or group of investors to answer to. They had a brand new building and a well-trained and highly committed staff. But by September 1990, the state Division of Facility Services in the Department of Human Resources refused to grant the home a permanent license and fined the operators $400 for a series of technical violations of the state's nursing home regulations.

Hampton Woods was only one of 74 nursing homes that drew a penalty from the state Division of Facility Services in 1990 for violating health and safety standards. And while inspectors are less likely to find problems at nonprofit homes like this one, no particular type of home—from those owned by large chains to family-run operations—has a perfect record.

Since 1988, more than half of the state's nearly 300 nursing homes have been fined for violations ranging from sloppy paperwork to elderly abuse, according to an analysis by the North Carolina

---

Tinker Ready covers health care issues for The News and Observer *of Raleigh. N.C. Center intern and law student Paul Barringer provided extensive research for this article.*

Center for Public Policy Research.[1] The Center research project examined how nursing home care has been monitored since sweeping legislative reforms were enacted by the 1987 General Assembly.

Using annual reports, Penalty Review Committee minutes, and other Division of Facility Services documents, the Center tabulated the number and amount of fines assessed against nursing homes from January 1988 through July 1991 (See Table 1). The Center also looked at which homes were the most frequent violators and examined fines by ownership type to see if there was a difference in the number and amount of fines assessed against for-profit and nonprofit providers.

Among the findings were these:

- The total number of fines assessed against nursing homes each year increased nearly fourfold over a three year period, from 101 in 1988 to 383 in 1990.
- The average *amount* of each fine assessed dropped during the period, from $327.82 per violation in 1988 to $175.12 per violation in 1990. But the $67,070 in penalties assessed in 1990 still totaled more than twice the amount assessed in 1988. In 1991, average fines began to increase as rules allowing higher penalties for repeat violators took effect.
- Seven homes accounted for nearly a third of the total amount of fines, yet only two licenses were revoked in the entire three-and-a-half year period.
- Homes owned by for-profit providers were twice as likely to be fined during the period studied as their nonprofit counterparts.

New Rules for Nursing Homes

Particularly striking is the increase in the number of fines during the period—an increase that can be attributed to a series of changes in the regulatory system. Still, no one is saying that a high number of fines means the system works well. "The whole system is based on negative features," says Craig Souza, President of the North Carolina Health Care Facilities Association, a nursing home trade group. "The system is there to try to catch you." Many questions remain about the state's capacity to regulate homes in a way that takes into account both the rights of residents and

Table 1. Fines Recommended Against Nursing Homes by Penalty Review Committee, Jan. 1988–July 1991*

Year	Number of Fines	Average Fine	Total
1988	101	$327.82	$ 33,110
1989	174	273.05	47,510
1990	383	175.12	67,070
1991 (1/2)	107	328.69	35,170
Total	765	239.03	182,860

*Includes fines assessed by the Licensure Office and recommended by Penalty Review Committee through July 1991. Figures are not adjusted for results of any appeals because of the difficulty of tracking the results of more than 760 cases. Total includes multiple violations against individual homes.

Table by Paul Barringer, N.C. Center intern

the rights of home operators.

Until 1987, the state's authority to fine nursing homes was limited to $10 per patient per day. But advocates for the elderly felt regulators needed a bigger stick and lobbied for changes in the regulatory system. Souza says industry, too, felt there was a need for wholesale changes and pressed for reforms. "Everyone in the process agreed this was an antiquated system," says Souza. "It was a $10 fine for a paperwork violation or for poor care." As a result, the current system—approved by the General Assembly in 1987—allows fines of up to $5,000 for a single violation.[2]

The new system has been in place for more than four years, and despite constant efforts to fine-tune it, the debate over the state's nursing home review process continues. Nursing home reformers remain unsatisfied because they believe the state is still unwilling to take strong action against problem homes. At the same time, home operators feel beleaguered by a system that they say stresses paperwork compliance over the actual care provided to patients.

Marlene Chasson, the head of Friends of Residents of Long Term Care—a statewide reform group based in Raleigh—is frustrated with the process. Serious breaches in health and safety standards are met with relatively small fines, she says, and problem homes are allowed to continue operating.

When it comes down to the home's word against the inspector's, she says the home always gets the benefit of the doubt with the state. "I think they bend over backwards to accommodate the facility," Chasson says. "Compromises have resulted in residents' rights being undermined."

Nursing home operators agree that there have been cases in which the state has failed to take action against homes with long-term problems. But they also argue that homes with good records are often fined for relatively minor violations of the standards.

Souza says some nursing home inspectors take a Barney Fife approach to their work, their pencils poised to cite the least violation. "I do think at times inspectors are motivated to cite deficiencies," says Souza. "In some instances, that's their nature. With homes that have a history of substantial compliance, and have a breakdown, they are pretty quick to recommend penalties." And the state fails to recognize this, he says. "It's very hard for DFS [the Division of Facility Services] to buck one of their employees, for management to overrule their staff," he says, adding that some homes feel "they are not getting what they consider to be a fair review."

> ***Odds are, there is going to be a breakdown, and the system's got to allow for that.***
>
> — Craig Souza, President
> N.C. Health Care Facilities Association

Nursing homes face a wide range of requirements, including serving special diets, providing medical care, monitoring complex drug regimens, keeping patients clean and groomed, and offering various kinds of therapy. With that broad charge, there is no way any home can avoid isolated violations of state standards, Souza says. "Odds are, there is going to be a breakdown, and the system's got to allow for that," he says. "For some of the advocates out there, we couldn't please them if we had an RN [registered nurse] in every room."

Lynda McDaniel walked into the middle of this debate in November 1990, when she was appointed chief of the licensure section of the state Division of Facility Services and became responsible for enforcing nursing and rest home regulations. "I thought perhaps we had not come down hard enough on those homes that really had serious problems," says McDaniels, who has since been promoted to deputy director of the Division of Facility Services. "But on the other end of the spectrum, I can see some things that were nitpicking on the lower end of the scale."

How the Process Works

There are two primary layers of nursing home regulation—federal and state. A total of 26 state inspectors focus on licensing and complaints investigations, while 53 certification surveyors visit the homes a minimum of once a year and usually twice or more to monitor their compliance with federal rules and certify them for participation in the Medicaid-Medicare program. Yet another team of inspectors focuses on the physical plant, conducting safety inspections and making sure systems such as heat, air conditioning, and back-up generators are operating properly.

The *certification* process—performed by state employees under contract with the federal government—is crucial to most North Carolina nursing

Karen Tam

Francies Richardson claims a seat by a window at Hampton Woods nursing home in Northampton County.

homes because about three-quarters of the state's nursing home residents are Medicaid patients. Teams of surveyors spend hours in each facility examining nearly every aspect of its operation.

Surveyors typically observe such operations as medication administration and treatments and meal preparation, as well as examining charts on patient care, interviewing patients, and commenting on nearly every aspect of the nursing home's operations. Shortcomings are recorded as deficiencies, and the operator is required to address how those deficiencies will be met. A thorough financial audit also is required of homes participating in the Medicare-Medicaid program.

Homes with particular problems may be subjected to return visits, and information about problem homes is often shared with the *licensure* office in the Division of Facility Services. This office not only performs inspections for initial licensing but investigates the hundreds of complaints received against nursing homes each year. Of 26 state inspectors, 18 investigate complaints. The federal government picks up half of the cost of these complaint investigators, and they look for violations of state and federal rules. An additional eight perform a full survey which is required for initial licensing and survey problem facilities as scheduling permits. Neither certification and licensure surveys nor complaint investigations are announced to nursing home operators in advance.

Every time a nursing home licensure or complaint inspector finds a violation at a home and proposes a fine, it lands in the licensure office, which is part of the Department of Human Resources. The agency acts as a middleman by collecting information from both the home and the inspectors in an attempt to put the cited problems in context.

The agency's staff completes a follow-up investigation and determines whether the home should receive an A or B penalty and the amount the home should be fined. If the home faces a B penalty, it may pay the fine and end the process. A B violation is defined by statute as a violation "which presents a direct relationship to the health, safety, or welfare of any resident, but which does not create substantial risk that death or serious physical harm will occur."[3] Homes rarely agree to pay fines without contesting them, however, for fear that this will be seen as an admission of guilt in any future civil action. (For more, see "A Road Map to North Carolina Nursing Home Regulation," pp. 25–28.)

Any contested penalties and *all* A penalties—those creating "substantial risk that death or serious physical harm to a resident will occur"[4]—are sent to the Penalty Review Committee. The nine-person committee was created in 1988 to make

non-binding recommendations on proposed fines against homes. Although recommended penalties can be appealed by homes, they are generally upheld in the administrative process and ultimately paid, says Ken Hamilton, deputy chief of licensure for the Division of Facility Services.

The committee is required by statute to include representatives of the nursing and rest home industries, a public representative, a nurse, and a pharmacist.[5] It also includes officials from the divisions of Aging, Social Services, and Facility Services, and a representative of the Secretary's Office in the Department of Human Resources.

The types of problems inspectors cite at nursing homes vary from minor paperwork violations to serious cases of abuse and neglect. Often, homes are cited for poor record-keeping. For example, staff must make note each time they give medication to a resident. They also must record any change in a resident's condition, such as the appearance of a bedsore or a significant weight loss.

In other cases, homes are cited for poor housekeeping or for failing to have enough staff on duty. And since many residents are on special diets, food service is another commonly cited area.

The most serious violations involve the actual care and treatment of patients. Homes have been fined for failing to reposition residents to prevent bedsores or for improperly restraining difficult patients. Or, they are cited for allowing confused residents to wander from the home. In several cases, the state has fined homes for failing to call a doctor to examine ill patients, some of whom later died.

The Penalty Review Committee is the target of many of the reformers' complaints. While nursing homes can appeal an unfavorable PRC decision, there is no such avenue for patients, family members, or advocates. But former committee member Robert Byrd, the administrator of the nursing home at Alamance Memorial Hospital in Burlington, says most people don't understand that many of the cases that come before the committee are "not clear-cut" and require a judgment call.

In some instances, resident rights groups want

—continued on page 28

A Road Map to North Carolina Nursing Home Regulation

As Americans live longer than ever before, more and more people can expect to spend time in a long-term health care facility. Some will enter rest homes that offer only residential and personal care, but many will enter nursing homes, which provide convalescent care and medical supervision.[1]

One study predicts that 43 percent of those people who turned 65 in 1990 will enter a nursing home before they die.[2] The authors conclude that health care resources will have to shift more toward nursing homes in the future as more and more people wind up in long-term care. Other research has focused more on quality of care. A study published in the Feb. 27, 1991, edition of the *Journal of the American Medical Association* found failure to adequately diagnose and treat depression increases by 59 percent the likelihood that a patient will die within the first year of admission to a nursing home.[3]

And a massive study by the federal government showed nursing homes in North Carolina to be below the national average on six of 32 performance indicators applied to 15,000 nursing homes nationwide.[4] In introducing the report, Gail Wilensky, administrator of the Health Care Financing Administration, wrote that it represented "neither the final, definitive word on nursing home performance nor a comprehensive guide to the selection of a nursing home." Still, the study suggests the need to pay careful attention to the quality of care provided in North Carolina's long-term care facilities.[5]

The state is likely to have an especially large number of aged patients in such facilities, as its elderly population is growing at a rate

—continued

nearly twice the national average.[6] In 1990, 12.13 percent of the state's population was over 65 years old compared to 12.7 percent of the population for the nation as a whole, says Bill Lamb, a planner in the Division of Aging. By 2000, the state's population over 65 is projected to have nearly caught up with that of the nation as a whole, reaching 12.93 percent compared to 13 percent nationally. And the state's 65-and-over segment is projected to surpass the national average soon thereafter.

But Lamb says growth in the North Carolina population over 85 is projected to take place at a much faster pace, from 1.06 percent of the state total in 1990 to 1.57 percent in 2000—a growth rate of 65.53 percent. "The fastest growing segment of folks is those over 85, and those are the people at most risk of nursing home care," says Lamb.

As of Jan. 1, 1992, there were more than 300 nursing homes operating in North Carolina, with a total bed count in excess of 30,000, according to the Licensure Section in the Division of Facility Services. The occupancy rate in these homes is high—over 91 percent in 1990.[7]

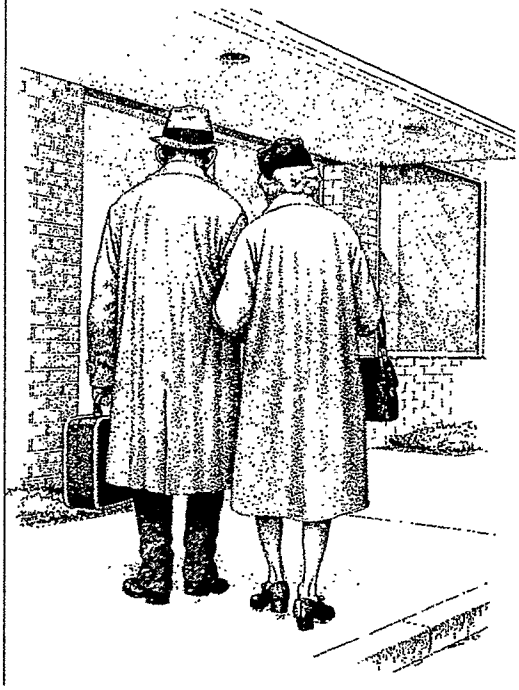
While more than 98 percent of North Carolina nursing homes are privately owned and managed, government at both the state and federal levels plays a major role in determining how nursing homes operate. First, the federal government requires that all facilities technically classified as nursing facilities provide a certain level of care. Since the Oct. 1, 1990, implementation of the Omnibus Budget Reconciliation Act, commonly known either as OBRA or the Nursing Home Reform Act, all nursing homes have been required by law to have a registered nurse on staff, and a licensed practical nurse on duty all the time.[8]

Second, the federal government's Medicaid program plays a major role in setting standards for nursing home operation. Medicaid pays the bills for about three-quarters of the state's nursing home patients. In order to receive these funds, all homes with Medicaid patients must conform to federally mandated requirements. Because such a high percentage of long-term care patients depend on Medicaid to pay for their care, these federal standards significantly affect the way facilities operate.

Like all other states, North Carolina has a great deal of regulatory responsibility within this federal framework. The state's regulatory vehicle is the Division of Facility Services in the Department of Human Resources. From its main office in Raleigh and branch offices in Black Mountain and Greenville, the Division of Facility Services regulates nursing homes across the state. Three sections within the Division of Facility Services—Certification, Licensure, and Construction—carry out inspections of nursing homes to ensure that regulations are being followed.

Construction Section officials perform a wide range of duties, including: checking building systems such as heat and emergency generators to make sure they are operating properly; conducting fire safety inspections; and reviewing plans for new facilities. *Certification* inspectors determine whether a given home may receive federal funds for Medicare and Medicaid patients. After passing the initial inspection, homes are subjected to annual certification inspections.

Licensure Section officials, among other duties, administer the most controversial component of nursing home regulation—the state's penalty process. Every nursing home must



have a state license issued by Facility Services before it can accept patients. To obtain a license, each home must pass an inspection by licensure inspectors, who decide whether the facility has the capability to provide services.

If an initial inspection reveals no problems, inspectors issue the home a full license. Thereafter, licensure inspectors visit facilities to respond to complaints about potential violations of state or federal law and to assess the quality of care provided. One group of 18 investigators works to investigate complaints, and another group of eight inspectors surveys the homes on a routine basis. These survey inspectors work in teams which always contain a nurse, and, frequently, a pharmacist or a dietician.

A nursing home that has violated North Carolina laws may be subject to administrative censure from Facility Services. When inspectors discover problems in a facility, the home has 10 days to correct the problem or to submit a plan for correcting it to Facility Services. If inspectors later find that the home hasn't corrected the problem, Facility Services may give the home a provisional license and suspend its right to accept new patients.

Facility Services may also assess financial penalties. Until October 1, 1987, all nursing home penalties were assessed at $10 per day per patient, regardless of the nature of the violation. Serious violations by a few homes, however, gave rise to the current system, which includes two broad tiers of penalties, Type A and Type B, and a wide range of potential fines.

A Type A violation is assessed for a situation that "creates a substantial risk that death or serious physical harm will occur or where such harm has occurred." The state assesses a penalty between $250 and $5,000 for each Type A violation.[9] Type A violations during the past few years have been assessed for a failure to notify a physician of a patient's rapidly deteriorating condition, failure to identify and treat bedsores, and inflicting physical and mental abuse on a patient.

Type B violations, on the other hand, are assessed for infractions that threaten the "health, safety and welfare of a resident" but do not "create substantial risk that death or serious physical harm will occur." Facility Services can impose a fine up to $500 for each Type B violation.[10] Type B penalties are administered for offenses ranging from not bathing a patient often enough, to storing medicines improperly, to failing to give a patient a prescribed diet. Both Type A and Type B penalties must be tripled for repeat violations of the same law or rule.

After inspectors cite a nursing home with a violation, they send a written report to the Licensure Section office in Raleigh. These inspectors do not recommend a penalty, but only give a description of the infraction which has occurred. At the central office in Raleigh, this report is examined by an internal review committee, composed of the assistant chief of licensure, one Division of Facility Services branch office head, and the section planner. This committee generally determines the type and amount of penalties after an informal hearing with the home operator and inspectors. It may also decide not to impose a penalty.

When it decides a penalty is warranted, however, the internal review committee makes a recommendation for the type and amount of penalty to the Division of Facility Services' Penalty Review Committee. This committee then reviews reports of the infraction and examines the recommendations of the internal group.

If a home that has not received any penalties for the previous twelve months is assessed a Type B violation, the sanctioned home may pay its penalty without having to go before the Penalty Review Committee. Few homes choose to do this, however, because it could be construed as an admission of guilt, and could be used as evidence in lawsuits brought against them.

State law mandates that the nine-member Penalty Review Committee include representatives from both the domiciliary home and the nursing home industries, a member of the general public, a registered nurse, and a licensed pharmacist.[11] Currently, though this is not mandated by statute, representatives from the Department of Social Services and the Division of Aging, a nursing home administrator, and a Facility Services official also serve on the committee.

—continued on next page

At a meeting open to the public, the Penalty Review Committee reviews the recommendation of the internal review committee, and then decides whether to approve the penalty recommended. While the Licensure Section chief has the authority to overrule the Penalty Review Committee, current policy is to avoid such unilateral decision making.

If a fine is levied by the Division of Facility Services, the home has 30 days to appeal the penalty. In the event that a home decides to appeal a Penalty Review Committee judgment, it argues its case before an administrative law judge. This judge makes a verdict and sends it to the head of the Division of Facility Services, who has final agency approval. If the home still isn't satisfied with the judgment, it can initiate formal court proceedings by appealing to Superior Court. — *Paul Barringer*

FOOTNOTES

[1] There are three types of rest homes, or domiciliary homes. They are homes for the aged and disabled, family care homes, and group homes for developmentally disabled adults. Medical care at these homes is occasional or incidental (G.S. 131D-20(2)). Nursing homes, on the other hand, are for people who need regular medical attention but are not sick enough to require hospitalization (G.S. 131E-101(6)).

[2] Peter Kemper and Christopher Murtaugh, "Lifetime Use of Nursing Home Care," *New England Journal of Medicine,* Vol. XX, No. 1911, p. 595.

[3] "Long-Term Care: Two Studies Gloomy about Nursing Home Care," *Modern Healthcare,* March 4, 1991, p. 22.

[4] Tinker Ready, "Nursing Homes Survey," *The News and Observer* of Raleigh, May 24, 1990, p. 4B.

[5] The introduction also included a section on uses and limitations of the data which noted: information contained in the report comprises the individual judgments of more than 3,000 surveyors in 53 state survey agencies; deficiency findings are not a complete picture of the quality of care rendered by a nursing home; and findings are a snapshot of conditions found in a home at the time of the survey. For more, see "Medicare/Medicaid Nursing Home Information, 1988-1989, North Carolina," U.S. Department of Health and Human Services, Health Care Financing Administration, 1990, pp. I-III. Copies of the study are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

[6] *North Carolina Aging Services Plan,* Department of Human Resources, Division of Aging, 1991, p. 11.

[7] "Health Facilities Data Book, Nursing Home Summary Report—1990 Data, State Center for Health and Environmental Statistics, October 1991, p. 279.

[8] Rules for the Licensing of Nursing Homes, 10 N.C. Administrative Code 3H .0507(d).

[9] G.S. 131E-129(a)(1).

[10] G.S. 131E-129(a)(2).

[11] G.S. 131D-34(h).

to blame the homes for injuries or deaths that are not the homes' fault, Byrd says. "Sometimes, I think certain people are on a witch hunt," he says. "[They think] if there is a bad outcome, a violation must have occurred, but that's not always the case. Outcomes are a factor of many variables, and one of those variables is what the home did or didn't do."

Christine Heinberg, a lawyer with North Carolina Legal Assistance—A Mental Disability Law Project, agrees that some cases require a judgment call. But she also agrees with other residents' advocates who say the committee members tend to make the calls in favor of the home operators. "The people who watch [the committee] think they are more concerned with protecting the rights of the facilities than they are with protecting individual patients," she says.

Souza, however, takes the opposite view. "I absolutely disagree with that," he says. "The Penalty Review Committee almost all the time will take the recommended fine."

Lower Fines, But More of Them

Since 1988, the state has prepared annual reports based on the minutes of the Penalty Review Committee. The Center's examination of the reports and minutes of Penalty Review Committee meetings through July 1991 shows that 149 of the state's 290 homes have been fined since 1988 (See Table 2, p. 30 for more). The remaining 141 homes operated the entire three-and-a-half year period without a single penalty.

The records examined by the Center indicate which homes were fined and by how much. They do not indicate the outcome of any appeal, nor do they reflect informal agreements by homes to pay B-level fines without subjecting themselves to the penalty review process. Still, the number and amount of fines provides a solid indicator of where licensure officials thought there was enough of a problem with a nursing home's operations to institute an administrative penalty.

While the number of fines has risen dramatically during the three-and-a-half year period, from 101 in 1988 to 383 in 1990, the average fine dipped from $327.82 to $175.12 before swinging up again in 1991. One factor in the rising number of fines was new funding from both the state and the federal government in 1989, which boosted the number of nursing home complaint investigators from five to 18 and increased the state's ability to follow up on complaints.[6]

In addition, the state agreed in March of the same year to a settlement in a lawsuit filed by Pamlico Sound Legal Services and Carolina Legal Assistance involving University Nursing Home in Greenville. The suit alleged that the home was not meeting state standards, in part because the state was not enforcing its own standards. The settlement produced a more explicit definition of the standards and a pledge from the state to enforce them.[7]

Hampton Woods administrator Ken Reeb with Resident Annie Branch.

Karen Tam

Table 2. Fines Against Nursing Homes by Ownership Type, Jan. 1988–July 1991*

Type of Home	No. of Homes	No. of Homes Fined	Percent of Total Fined	No. of Fines	Average Fines Per Offender	Total Fines in Dollars	Avg. Fine
Nonprofit	56	14	25 %	43	3.07	$ 7,090	$ 165
Government-owned	5	2	40	2	1	400	200
For-Profit	229	133	57	720	5.41	175,370	244
Total	290	149	52 %	765	5.13	$ 182,860	$ 239

*Includes fines assessed by Licensure Office and recommended by Penalty Review Committee through July 1991. Totals are not adjusted for results of any appeals because of the difficulty of tracking the results of more than 760 cases.

Table by Paul Barringer, N.C. Center intern

The changes appear to have had an impact on the state's ability and willingness to document violations. In 1989, the state confirmed a total of 174 health and safety violations at nursing homes, a 72 percent increase over the 101 fines logged in 1988. The total dollar value of all fines imposed also rose substantially, although the average amount of each separate fine already was beginning to drop. The state levied a total of $33,110 in fines in 1988 and that figure rose to $47,510 in 1989.

Fines totaled $67,070 in 1990, with an average fine of $175.12. Through July 1991, 107 fines had been imposed, but the average jumped to $328.69 as inspectors began to focus more on repeat offenders. "We have tried to put more emphasis on problem facilities," says McDaniel. "That results in doing a few less fines but the average being higher."

A variety of different factors can lead to problems at nursing homes. In some cases, homes fail to meet standards out of sheer incompetence. Or, they have good intentions but simply cannot find and keep aides willing to care for the elderly for little more than minimum wage of $4.25 an hour.

And while a shortage of unskilled labor makes it difficult to hire aides and other service workers, the homes also have trouble attracting nurses. In many cases, they must compete with hospitals that offer the same employees better wages, flexible working conditions, and higher status.

"The two places experiencing the most severe nursing shortage right now are long-term care facilities and public health agencies," says Joy Reed of the North Carolina Nurses Association. Reed says changes in service delivery, such as the increase in home health care, have allowed nurses to become much more selective, and certain sectors have been less able to compete. "Probably a big part of it is that hospitals have been much more responsive in changing salaries and changing conditions in the work setting," Reed says.

Souza acknowledges that nursing homes have trouble competing with other health care providers for staff, both because of reimbursement rates and regulations. "We don't have any control," says Souza. "We have no flexibility." Reimbursement rates are set for individual homes, but are closely tied to operating costs for the industry as a whole. Homes with a high percentage of Medicaid and Medicare patients cannot afford to pay nurses so much that personnel costs outstrip the reimbursement rate for Medicare and Medicaid. Regula-

tions also set strict staffing requirements, so homes cannot hire fewer nurses at higher salaries.

For these and other reasons, many nursing homes are not earning the profits they once enjoyed, according to industry officials. An analysis of 1989 Medicare and Medicaid cost reports—the most recent publicly available—indicated that the median profit margin for nursing homes nationwide was 1.61 percent.[8] Often, industry officials say, these financial pressures translate into patient care problems.

The situation is fueled, in part, by the inability of North Carolina and other states to increase payments under the Medicaid program, the state and federal health plan for the poor that pays the bill for the majority of the nation's nursing home residents. "If a facility has problems, they are going to be tied to one of three things—finances, staffing, or management," says Souza.[9]

Still, Souza says operators *can* provide high-quality nursing home care on the reimbursement rates offered by the state. One way to accomplish this is to mix in private-pay patients at higher rates. Another is through management efficiencies. "We don't equate lack of reimbursement with quality of care," says Souza. "It's not an excuse. We have some reimbursement problems, but we don't apologize for poor care because of lack of money."

Who Owns the Homes?

The state's nursing home industry includes just about every type of organization—from mom-and-pop operations to church-run homes to corporate chains that operate more than five homes. The corporations, including some nationwide chains, operate more than 40 percent of the state's homes, according to DFS records, while so-called mom-and-pop homes, those owned by individuals or partnerships, represent just under 40 percent.

Nonprofit homes, which make up about 20 percent of all the state's homes, garner fewer fines than their for-profit counterparts, but the industry's problems don't discriminate. Nonprofit operators, as in the case of Hampton Woods, also can run afoul of the rules.

When Hampton Woods opened in early 1990, it was a cause for celebration in the community. Even though developers rush to build nursing homes in affluent counties, none seemed interested in Northampton County, where most of the residents would likely be poor and covered by Medicaid.

But the Rural Health Group Inc., a nonprofit health care consortium, saw long term care as an unmet need in the community. The group, which has successfully recruited doctors to the area, decided to build the home itself.

Still, Hampton Woods faced the same forces that have left the entire nursing home industry in a slump—low Medicaid payment rates and difficulty attracting and retaining nurses and unskilled workers. Medicaid reimbursement rates are based in part on the direct cost of providing care, but there is a ceiling. The average daily rate for skilled care in a nursing home for the 1991–92 fiscal year is $78.66, with a maximum of $84.64. For intermediate care, the rate averages $59.60 a day with a cap of $63.84. Indirect costs are fixed at $17.92 per patient per day.

Direct reimbursement covers costs such as nurses and nurses' aides, medical supplies, and food. Indirect costs cover land, buildings, other capital equipment, and administrative costs which are not directly related to patient care. The Division of Medical Assistance in the N.C. Department of Human Resources requires annual cost reports for each home. For direct costs, the reimbursement rate is capped at 80 percent of the statewide average. That means a fifth of the state's nursing homes typically have some costs that go unreimbursed. And homes cannot be reimbursed beyond actual direct costs, so most do not receive the maximum reimbursement rate.

The system provides a strong incentive for homes to keep costs in line, without stinting on patient care to provide higher profits. Homes can, however, realize a net gain on their indirect reimbursements.

Costs periodically are refigured for the entire system, and the state makes inflation adjustments each year. Still, the nation has averaged annual double-digit increases in health care costs for more than a decade, and rising personnel costs have helped drive those increases.[10] Because of lingering budget difficulties, the state made a one-year decision for 1991–92 to limit service providers to no more than a 4 percent increase in Medicaid reimbursement.

Souza says personnel costs represent more than 60 percent of direct costs for nursing homes, and nursing homes are more dependent on Medicaid than other health-care providers. The tight reimbursement rate, Souza says, means the homes must be cautious about paying too much. Combined with the rigors of a job that may include such duties as keeping incontinent patients clean and

changing bed pans, the result can be difficulty in attracting and retaining workers.

Since it was fined in September 1990, Hampton Woods has received an additional $900 in penalties but has corrected most of its problems and now has a full license. Administrator Ken Reeb does not fault the state for doing its job, but he attributes the home's problems to the difficulty in attracting workers and the "learning curve" a new home faces while trying to get its protocols down. "It had nothing to do with intent," he says. "My people have put in long hours and stuck to it."

Although state officials are reluctant to say one type of home falls short of the standards more than another, they do admit that the nonprofit homes like Hampton Woods are fined less frequently. The numbers bear that out. Of the 56 nonprofit nursing home operators in the state, 14, or 25 percent, have been fined since 1988. Over the same period, 133, or 57 percent, of the 229 for-profit homes were fined, according to the Center's analysis (see Table 2, page 30 for more). Errant nonprofit homes received an average of 3.07 fines during the period, compared to an average of 5.41 fines for the for-profit offenders.

Hamilton, deputy chief of licensure for the state Division of Facility Services, speculates that it may be easier for the nonprofit homes to retain their staff. "My personal opinion is that it's a better work environment," he says.

Souza takes umbrage at this remark. "For a state official to say the work environment is better in a nonprofit facility is troubling to me," says Souza. "At the least, it indicates a prejudice, and I just think it's inappropriate."

But while for-profit providers clearly are capable of providing high-quality care, there are those who believe nonprofit providers have some advantages. Sarah Shaber, director of the North Carolina Association of Nonprofit Homes for the Aged based in Raleigh, says nonprofit homes have more resources. "Since we don't have to divert a lot of our revenues to profits, all the money goes into patient care," she says. For example, Shaber says many nonprofit homes have higher staffing levels than their for-profit counterparts. "I think that makes a lot of difference in quality," she says. "This isn't an attempt to put down the for-profits. We just have a little more flexibility."

Two researchers analyzing 1985 National Nursing Home Survey data concluded that nonprofit nursing homes pay higher salaries because their staff members typically have stronger qualifications and experience.[11] This could lead to longer staff retention and closer adherence to standards, which would mean fewer penalties.

But Souza of the North Carolina Association of Health Care Facilities, which represents both for-profit and not-for-profit homes, says the discrepancy in penalties may just be coincidental. "I

"He was a small-town doctor, and I have never asked a big-town doctor for his opinion of the small-town doctor's medical explanation. I am sure, though, that no big-town doctor ever said what the small-town doctor said to me next. He said 'You come to see me late tomorrow morning in my office, do you hear? If you don't come tomorrow, I'll charge you for tonight. If you come tomorrow, I won't charge you for tomorrow or tonight. All I want is to know that you are well.'"

—NORMAN MACLEAN
A RIVER RUNS THROUGH IT

Karen Tam

Administrator Ken Reeb with residents at Hampton Woods. At the bingo table are Annie Branch, Robert Boone, and Inez Underdue.

think down the road it would equal out," he says. Souza says even nonprofit homes must generate reserves for operations and expansion. "If it were a for-profit, a lot of that would go to profits," Souza says, adding, "I think the staffing is comparable in qualifications and experience."

The violations at Hampton Woods were minor, mostly involving paperwork. After meeting with the operators, licensure chief McDaniel asked the Penalty Review Committee to consider rescinding the $400 fine.

In a Nov. 14, 1990, memo to the committee, she noted that the home had passed its most recent inspection, had voluntarily limited admissions while addressing problems, and had used the inspection report to alert employees to problem areas. But the committee chose to let the fine stand.

An Operation Gone Awry

McDaniel's request came at a time when the panel was still stinging from the case of Jolene's Nursing Home, which was under indictment for Medicaid fraud and had been fined repeatedly for two years, but allowed to continue operating.

Unlike Hampton Woods, Jolene's—a for-profit, family-owned home—was a case of an operation gone awry. While Hampton Woods was able to correct its problems, Jolene's just kept getting worse. From 1988 until October 1990, when the committee pulled its license, Jolene's racked up 27 fines for a total of $8,395. The home ranked third among all the state's homes during the period for both the number and the amount of its fines. (See Table 3, p. 36 for a list of the state's 10 most heavily fined homes.)

The violations were serious and ongoing. In one case, the home was cited for failing to obtain medical treatment for a resident with an infected wound on her leg. The leg eventually had to be amputated.

At the same time, the home's operators, Cherrathee Hager and her mother, Josephine Weaver, were facing charges of Medicaid fraud. The charges included incidents in which the women charged the program for a babysitter and yard work done at their private home. In the first ever

nursing home fraud case in the state, Hager was sentenced to six months in jail for fraudulently collecting more than $50,000 from the program, and Weaver received a suspended sentence.

Jolene's was a case of bad management that started with small problems and eventually spiraled out of control, says Christopher P. Brewer, the head of the state Attorney General's Medicaid Fraud Unit. "The problem with Jolene's is that they never really got the qualified people in there and tried to do everything themselves," he says. "Toward the end, they crossed the line from bad judgment, to not giving their patients adequate care, to out-and-out stealing from the Medicaid program."

While the operators were dealing with their criminal charges, the quality of care at the home suffered. When the home came before the Penalty Review Committee in August of 1990, it had already been fined twice that year—in one case, for "overall non-compliance with licensure standards." It had been operating on a provisional license for four months, the final step before license revocation—and had been on a provisional license for seven months in 1989. Still, the committee declined an inspector's recommendation that the home's license be revoked. Instead, it temporarily barred the home from accepting new residents and levied $1,500 in fines.

The case of Jolene's marked a major turning point in the state's regulatory process. Before the case came before the committee, advocates charged that the changes in the system and the higher number of fines were doing little to bring problem homes back into compliance. In addition, they were unhappy with the state's reluctance to revoke the licenses of homes with long-standing, uncorrected problems. The Jolene's case, which came at a time when the media coverage of the regulatory system had intensified, gave life to the advocates' complaints and triggered more changes.

After reading news reports about the case, David T. Flaherty, Secretary of the N.C. Department of Human Resources, decided that Jolene's and homes like it had run out of chances. He created a task force to study whether the state was capable of dealing with chronic violators. "That's what really brought it to a climax," says Flaherty. "They had been having problems continuously, and it was never brought to a conclusion so as to protect the patients."

Jolene's, which lost its license in October 1990, was one of seven homes that have racked up more than $7,000 in fines over the past three years. The amount of the fines levied against the seven homes accounted for 32 percent of all the fines collected by the state in that period.

"From the house of pain there come moans so muffled and ineffable and so overflowing with so much fullness, that to weep for them would be too little, and yet to smile would be too much."

— CÉSAR VALLEJO
THE WINDOWS SHUDDERED . . .

From the beginning of 1988 until the state revoked its license, Jolene's was fined $8,395 for 27 cited violations of patient care standards. Two other nursing homes had higher fines than Jolene's during the same period. Autumnfield in Gaston County was fined more than any other home in the state in 1988, and the fines continued into 1989 until the state threatened to revoke the home's license. The home was then sold, the name changed to Royal Crest Health Care, but the problems have continued. The home got $1,450 in fines in 1990 and racked up $7,000 in fines during the first seven months of 1991, for a total of $8,450 since the new management. Souza says a change in ownership or management often obviates the need to revoke the license of a problem home. Still, it doesn't always happen.

A Disturbing Case—And More Changes

Hillhaven-Orange, a Durham home operated by the second largest nursing home chain in the country, racked up more fines than any other home in the state in 1989, with $6,250. In 1990, the home continued to have some problems, with fines totaling $2,150, but seemed to be headed back to compliance.

Then, in December 1990, the home came before the state on a particularly offensive charge—that an aide found maggots in an elderly resident's vagina. When the home drew only a $250 fine from the committee, residents' advocates were

—continued on page 37

Nursing Homes Long a Sore Spot for State Regulators

Nursing home regulation has gotten a great deal of attention in recent years, but it isn't the first time reformers have focused on how the state polices residential care provided its frailest citizens. In response to public pressure for reforms, the legislature in 1978 passed the Nursing Home Patients' Bill of Rights.[1] The statute, which spells out 15 different rights for nursing home patients, forms the bedrock of the state's regulatory system.

But a scant three years after the bill of rights was enacted, State Auditor Ed Renfrow issued a scathing review of how nursing home regulations were enforced. Renfrow's audit pointed to general leniency on the part of the state and a problem with homes breaking the same rules over and over again. "We noticed a definite pattern where nursing homes would be cited for a deficiency during the annual survey," says the audit report.[2] "The deficiency would be noted as corrected on a follow-up visit, but in the next annual survey the same deficiency would be cited again."

Renfrow cited 11 homes as particularly prone to recurring problems, and the names of the homes were later released to the media. At least one of these homes, St. James Nursing Center in Guilford County, was still having problems a decade later. Now named Americas Health, the home ranked fifth in total amount of penalties assessed during the three years and seven months covered by the Center study. It was sold in 1990 under threat of closure after being penalized for such violations as failure to treat bedsores and to provide patients with proper nutrition.

More recently, a Hertford County jury awarded $15 million to the estate of a man who got too little pain medication for prostate cancer while a patient at Guardian Care of Ahoskie.[3] Henry James died in June 1987, but his suffering was intensified by a nurse's decision to substitute Darvocet for the more powerful morphine his doctors prescribed.

Horrified family members complained to state regulators and eventually filed suit.[4] Hillhaven Corp. of Tacoma, Wash., the home's owner, appealed the decision but later settled out of court for an undisclosed amount. Kathy McMahon, administrator at Guardian Care, notes that James' family "never sued the doctor who was responsible for the orders governing the patient's care." She says that James' physician gave nurses discretion about how much pain medication to administer. Hillhaven Corp. is now pursuing claims against the physician as the person responsible for the patient.

In another recent case that troubled nursing home advocates, Hillhaven-Orange Nursing Center in Durham was fined only $250 after maggots were discovered in a resident's vagina. The fine is the lowest allowed for a Type A violation, which must involve "substantial risk that death or serious harm to a resident will occur or where such harm has occurred."

Rita Carter, a former administrator at Hillhaven-Orange and now at another Hillhaven facility, says state regulators never proved there were organisms in the resident's vagina or that there was risk of death or serious harm to the patient. Hillhaven-Orange garnered $8,400 in fines in the three years and seven months studied by the Center—the second highest total of any North Carolina nursing home.

In January 1992, a case involving a maggot infestation again hit the news—this time at Britthaven of Wrightsville nursing home. New Hanover County social workers lodged a number of complaints against the home, one of them that the home failed to treat a bedsore on a resident's foot, which became infested with maggots and later had to be amputated.[5] The home was later inspected by the state but not penalized. A state inspector said the allegations were "blown out of proportion."[6]

Problems came to a head in February 1992 at Americas Health Care in Cumberland County.

—continued

The federal Health Care Financing Agency cut the home's Medicaid certification and the state Licensure Section began proceedings to revoke its license. A January inspection found a range of problems, including patients with infected bedsores and patients lying on soiled bed linens. The facility ranked fourth in total amount fined in the Center study, at $8,365.

— Mike McLaughlin

FOOTNOTES

[1] G.S. 131E-117.

[2] Ed Renfrow, "State Administration and Regulation of Nursing Homes," Operational Audit, Department of State Auditor, April 1981, p. 43.

[3] Tinker Ready, "Nursing Home is Fined—$15 Million Award Largest Ever in N.C.," *The News and Observer* of Raleigh, Nov. 27, 1990, p. 1B.

[4] Anne C. Roark, "One Man's Pain Brings Verdict on Nursing Home," *The News and Observer* of Raleigh, Dec. 12, 1991, p. 10B.

[5] The Associated Press, "Agency Alleges Neglect at New Hanover County Nursing Home," *The News and Observer* of Raleigh, Jan. 28, 1992, p. 6B.

[6] Tinker Ready, "'Pure Negligence' Blamed for Lost Leg" *The News and Observer* of Raleigh, March 22, 1992, p. 1A.

Table 3. Nursing Homes in North Carolina Receiving the Highest Dollar Amount in Fines, Jan. 1988–July 1991*

Nursing Home	County	Rank by $	Total Penalized	Number of Fines	Avg. Fine
Royal Crest Health Center (formerly Autumnfield)	Gaston	1	$8,450	16	$528.12
Hillhaven-Orange	Orange	2	8,400	29	289.65
Jolene's Nursing (now Brightmoor)	Rowan	3	8,395	27	310.92
Americas Health Care	Cumberland	4	8,365	23	363.69
St. James Nursing (now Americas Health)	Guilford	5	8,000	29	275.86
Louisburg Nursing Center	Franklin	6	7,830	34	230.29
High Point Care Center	Forsyth	7	7,700	17	452.94
Autumnfield of Lowell (now Royal Crest Health Care Center)	Gaston	8	5,200	7	742.85
Medical Park Nursing	Guilford	9	4,765	19	250.78
Blue Ridge Manor	Wake	10	4,700	16	293.75
Total			**$71,805****	**217**	

*Includes fines assessed by the Licensure Office and recommended by Penalty Review Committee through July 1991. Figures are not adjusted for results of any appeals because of the difficulty of tracking the results of individual cases.

**This figure represents 39.3 percent of all fines recommended against the 290 homes for the three-and-a-half year period analyzed by the Center.

Table by Paul Barringer, Center intern.

outraged. Operators of the home, on the other hand, still dispute the state's findings. "It was never proven what, if any, organisms were found in the resident's vagina," says Rita Carter, an administrator with the Hillhaven chain. Nonetheless, the case, like Jolene's, brought more changes.

By that time, the task force had completed its report and forwarded it to Flaherty. They had recommended a system that would make it harder for state officials to impose fines for violations cited by their own inspectors. But when the maggot allegation hit the news, Flaherty sent the panel back to the drawing board and asked for stronger recommendations.

The final report included a number of changes that nursing home reformers felt would strengthen the review process. It recommended that DFS begin seeking higher fines for facilities that have a history of significant compliance problems and consider using *suspension of admissions* more frequently as a means of protecting patients from substandard care. In addition, the report recommended revocation action for homes that have been operating on a provisional license for nine months with no significant improvement in conditions.[12]

It also retained its initial recommendations aimed at preventing the chief of the licensure from making unilateral decisions regarding fines proposed by inspectors.[13] That change, which has been implemented, addresses a major complaint of advocates and inspectors—that Darius Wells, the former head of the licensure section, would meet privately with home operators and then reduce fines, without seeking input from the home inspectors who had recommended the penalties.

Wells, who says he changed proposed fines to assure consistency in each case, left his position in October and was replaced by McDaniel. The new system seeks to assure that one person, the chief of licensure, does not set fines without consulting inspectors.

Now, inspectors cite the type and severity of the violation and gather documentation to back their recommendation. Before the fine amounts are set, the inspector and the home operators are invited to meet with an internal review committee made up of three state officials—the assistant chief of licensure, the section planner, and a representative of either the nursing home or rest home compliance branches. Following the meeting, the internal committee decides whether the home should be fined. For repeat offenses and A-level violations, the committee's recommendation goes to the Penalty Review Committee. B penalties can be paid without review.

Low Medicaid Payments and Low Wages

While the state has taken action to respond to advocates' complaints, it has done less to address a major complaint of nursing home operators—low payments from Medicaid. Most homes can't rely solely on Medicaid payments, so they open with the hope that they can attract enough private-paying patients to make up for slim payment from the government program, says Ellen E. Lentz, a Raleigh nursing and rest home consultant. But increasingly, she says, that's getting harder.

In North Carolina, nearly 75 percent of the state's nursing home residents are on Medicaid, compared to about 60 percent nationwide. Bill Lamb, a planner in the Department of Human Resources Division of Aging, says the higher percentage probably reflects the fact that North Carolina has a higher percentage of elderly residents in poverty than the nation as a whole.[14] "Most farm states are like that," says Lamb. "Also, we're a low-wage manufacturing state. When those folks retire, they don't become rich. They have limited reserves. At the point you hit a catastrophic illness, you exhaust your assets pretty quickly."

Combined with the shortage of employees willing to work for nursing home wages, the lack of private-pay patients is leaving many homes scrambling just to meet basic standards. "You can't get the private-pay patients, and there is not enough reimbursement from Medicaid to get qualified staff," Lentz says.

Up until 1988, the six homes op-

I don't think I could find a job that's harder than being an aide in a nursing home. There are job opportunities at McDonald's and Hardee's that are more pleasant.

— Nolan Brown
Owner of Six Nursing Homes

erated in North Carolina by Triad Medical Services of Yadkinville were able to operate with little problem, even though many of their residents were covered by Medicaid. Then, according to owner Nolan Brown, the labor shortage hit. Not only did he have a hard time attracting unskilled aides, but at some of his homes, he had to compete with nearby hospitals for nurses. "For years, we were able to do an adequate job and have a low-cost operation," Brown says. "All at once we couldn't control our costs, and it caused a lot of problems."

"They scanned and probed in room after room, each cubicle appearing slightly smaller than the one before it, more harshly lighted, emptier of human furnishings. Always a new technician. Always faceless fellow patients in the mazelike halls, crossing from room to room, identically gowned."

— DON DELILLO
WHITE NOISE

The problems started at his Pinehurst Nursing Center, which drew $1,260 in fines in 1988. Brown also began having problems at Louisburg Nursing Center that year. These problems were brought under control only to re-emerge in 1990.

In 1990, the Louisburg home had to pay over $7,000 in fines, more than any other home in the state that year. In April of 1990, Brown had three homes—in Louisburg, Roxboro, and Southport—come before the Penalty Review Committee at the same time, while a fourth was under investigation.

In two cases, the home was cited for failing to notify doctors of patients with medical problems. In Roxboro, inspectors found "heavily soiled and stained" sheets on some made-up beds and in Louisburg, an inspector found that 19 patients had not been bathed regularly. In Pinehurst, a surprise inspection found staff tying the doors shut with sheets because the lock was broken. The home's fire alarm was not working at the time.

Brown blamed his problems on the labor shortage, which sometimes left his homes understaffed, and the subsequent financial burden it created for his company. "I don't think I could find a job that's harder than being an aide in a nursing home," he says. "There are job opportunities at McDonald's and Hardee's that are more pleasant."[15]

Because he was forced to increase his wages, Brown says his costs rose far faster than his reimbursement level from Medicaid. Since 1988, the company has lost $1 million, he says. Brown's homes have since been awarded a payment increase from Medicaid and he thinks his operation is back on track. Still, through July 1991, two of his homes already had been fined.

Brown says he is doing his best under difficult circumstances. "Perfect care is not available and if it were, I don't think the society could afford it," he says. "I don't think I can do any better."

Better Monitoring by the State?

McDaniel is confident that state is now prepared to monitor problem homes more effectively. Since the recent changes went into effect, she's been meeting with industry groups to bring them up to speed. "I think they're all on notice," she says. "They realize that there is a focus and determination on our part to try to take care of the problem facilities."

In addition to the changes on the state level, new federal regulations went into effect in October of 1990 for nursing homes, which, among other provisions, require training for nurses' aides and limit the use of restraints at the homes.[16] Nurses' aides must now receive 75 hours of training and pass a competency test before they can work in a home. But the changes have done little to bring about agreement between resident advocates and the nursing home industry.

Souza, of the nursing homes association, says the new system has not been in place long enough for him to gauge its effectiveness. But, he feels that the state officials are reluctant to question inspectors who may have been overzealous. "I do get frustrated when I see a nursing home that has never been penalized get a $50 or $100 fine for something that is an isolated incident," he says.

Chasson says she is not unsympathetic to the problems faced by the industry. For example, she realizes that the homes are having a hard time finding qualified staff. She also agrees that some residents' family members are too demanding. But she disagrees that the inspectors are too aggressive.

And despite the recent changes, she still feels that the system is not adequately punishing problem homes. "Part of the problem with the new system is that they are not implementing it like they should," Chasson says.

Her group plans to continue pushing for more aggressive action from the state. They want a system to allow the state to revoke a home's license and send in a temporary manager, thus avoiding the problem of moving residents to a new home. This idea has won the support of both Flaherty and the nursing home industry, although a bill that would have created it, SB 731, stalled in committee during the 1991 session of the General Assembly.

In addition, advocates want the ombudsmen —federally funded nursing home monitors who operate in 18 regions that cover the entire state— to have more input into the penalty process. In the meantime, Chasson has a new motto—"no more task forces."

State officials don't seem to share her urgency. McDaniel says it is unfair to judge the state's ability to weed out problem homes by the number and level of fines.

In many cases, she thinks the state should use a carrot rather than a stick and help homes resolve their problems before they ever make it to the penalty stage. "My philosophy is, if a home is basically doing a good job and providing essentially good care and has a minor problem, then we need to work in a consulting role to try and help them take care of that and not race in there with a penalty," she says. "Negative reinforcement is not the best way to change behavior."

—footnotes/recommendations begin on page 42

Turning Around an Ailing Home: The Fritts Prescription

In 20 years as an Air Force pilot, Allen Fritts learned to make snap decisions and live with the consequences. But Fritts says leading a squadron of KC135-A Tankers on a mission to refuel supersonic jets over the North Atlantic is nothing compared to the challenge of running a North Carolina nursing home.

"This is a lot more challenging," says Fritts. "There's nothing repetitive about being a nursing home administrator. It's something new every day. You learn something every day. If you don't, you're getting behind."

If your orientation is toward providing quality of life things for your patients, I don't think you can help but succeed.

— ALLEN FRITTS

But the task Fritts has taken on is a difficult one, even by nursing home standards. In November 1990 he worked out a lease-purchase agreement to take over Jolene's Nursing Home in Salisbury. The owners had been convicted of Medicaid fraud and were facing revocation of their license by the state. By April 1991, Fritts and partner Linda Howard had assumed full ownership of the ailing home.

The challenge was to transform Jolene's from a problem spot for state regulators to a place where residents

—continues

could live out their last days with as much peace and comfort as possible. The changes were as basic as a new name, Brightmoor, and as complex as the thick, black notebook Ronnie Hawkins, the on-site administrator and a registered nurse, developed to reorient nursing staff to appropriate policies and procedures.

But Fritts says it all boils down to a basic philosophy about how to operate a nursing home. "If your orientation is toward providing quality of life things for your patients, I don't think you can help but succeed," says Fritts. "Of course there's the business side, but in order to be successful you have to take care of people, and I think that's where the orientation has to be."

Putting that philosophy into practice meant major changes at Brightmoor, and heavy losses during the first year of operations. Staffing has been increased by 50 percent, and Fritts has added two rehabilitation therapists. The goal is to get people who are physically able up and out of their rooms. Residents who are active physically and socially tend to be healthier and happier, Fritts says. "We try to convince them they want to be involved in the activities," he says. "We try to provide a wide range of activities. All of that leads to a healthier, happier resident in the facility."

One measure of how active patients are is whether they go to the dining room at meal time. When Fritts and Hawkins took over, only about a quarter of the home's patients were going to the dining room to eat. Now the count is as high as 95 percent, and illness is the only acceptable excuse for absence. "The previous owner tried to keep them as quiet as possible," says Fritts, "in bed and out of sight."

Fritts had retired from the military and taken over as administrator of his parents' nursing home in Lexington under a lease arrangement when he learned of the opportunity at Jolene's. He wanted to expand his holdings and saw an opportunity at Jolene's, despite the well-documented problems the home was having.

Quality of care had slipped to unaccept-

Allen Fritts, co-owner of Brightmoor nursing home.

Mike McLaughlin

ably low standards while the owners were on trial for fraud. The instances that led to potential license revocation were basic examples of poor care—like untreated bedsores and patients lying on dirty bed linens. General management had deteriorated, and because of staff shortages, the home had to rely on nursing pools for temporary employees. "No matter how qualified they are, you're probably not going to get the same commitment as you would from people working here day in and day out," says Fritts.

Part of the problem is the sheer volume of work that must occur to keep a nursing home operating properly. For example, many nursing home patients are incontinent. In some instances, bed linens might have to be changed up to 10 times a day, says Hawkins, so it may not be that unusual for an inspector to find dirty bed linens.

The best case scenario is to get dedicated staff on board who come to know the residents and care about them, but with job requirements like bathing patients and changing bedpans, retaining staff is not easy even at well-run homes. To keep workers on the job at Jolene's, Fritts says, salaries had been swollen to above-market rates. The result was a deep hole that Fritts had to address immediately by seeking an increase in Medicaid reimbursements and cutting salaries by approximately 2 percent.

Fritts also put the home on a purchasing diet. For example, one name brand nutritional supplement was costing the home about $1.50 per serving. Hawkins was able to purchase a different brand of the same beverage for only 62 cents. "My philosophy is, 'If you need it, use it, but don't waste it," says Hawkins, who started at the home as director of nursing and later was promoted to administrator.

Still, there were areas where additional money *had* to be spent. Medical supplies were low, and there was the need for new equipment such as reclining geriatric chairs for the patients. "We had to order COD when buying groceries because the home was behind in paying its bills," says Fritts.

There also were structural changes to make the operation more efficient, such as merging two laundry operations into one and consolidating two separate kitchens. Still, the new owners finished the year about $100,000 in the red. "We've paid attention to quality of care, rather than the bottom line," says Fritts.

Fritts is hoping that by running an efficient home that puts the needs of patients first, the bottom line will take care of itself. So far he seems to be on the right track. Although the certification team cited several deficiencies in its initial inspection after the takeover, Brightmoor is fully certified and licensed and has not been penalized in more than a year of operations. Before the ownership change, the home had received $8,395 in penalties in three-and-a-half years, the third highest total in the state (see Table 3, p. 36 for more).

The turnaround reflects a major investment of both resources and energy. It also represents successful negotiation of the rules and regulations governing nursing homes. Fritts says he doesn't mind strict rules regarding patient care. "I understand that you have to regulate to the worst facilities," he says.

Still, he finds frustration in the way the state-federal partnership works out in practice. Federal certification requirements and state licensing regulations should be dovetailed so that they do not contain different guidelines for the same practice or procedure, Fritts says. "A lot can be combined to make things simpler," he says. For example, federal certification requires doctor visits at 30, 60, and 90 days after admission of a patient and every 60 days thereafter. The state only requires doctor visits every 90 days.

Fritts also suggests that the state needs to find a way to reward homes for exemplary performance and not just point out the problems. "The negative things are always pointed out," Fritts says. "They could have a little less emphasis on some of those things. Right now there's a mindset that no matter how well you do, they're going to come and find something wrong."

— Mike McLaughlin

FOOTNOTES

[1] Through July 1991, 290 nursing homes were operating in North Carolina. In January 1992, the number exceeded 310.

[2] G.S. 131E-115.

[3] G.S. 131E-129(a)(2).

[4] G.S. 139E-129(a)(1).

[5] G.S. 131D-34.

[6] A complaint investigation might result in several penalties against the same home, so the total number of fines is larger than the total number of homes cited.

[7] *Frank House et al. v. Hillhaven Inc. and the State of North Carolina,* 86CVS528, Pitt County Superior Court, final settlement agreement, March 16, 1989, p. 3.

[8] Figures are taken from "The Guide to the Nursing Home Industry," Health Care Investment Analysts, Inc. and Arthur Andersen, Baltimore, Md., 1992, p. 14. The median profit margin for investor-owned homes was slightly higher, at 1.82 percent.

[9] For more on the role of Medicaid in financing nursing home care, see Robert Conn, "Long Term Care for the Elderly: What Promise for the Future?" *North Carolina Insight,* Vol. 8, No. 1, September 1985, pp. 60–78.

[10] For more on ballooning health care cost increases, see Nina Yeager and Jack Betts, "Health Care Cost Containment: Does Anything Work?" *North Carolina Insight,* Vol. 13, No. 3–4 (November 1991), pp. 48–66.

[11] Alphonse Holtmann and Todd Idson, "Why Nonprofit Nursing Homes Pay Higher Nurses' Salaries," *Nonprofit Management & Leadership,* Vol. 2, No. 1, Fall 1991, pp. 3–12.

[12] *A Task Force Study of Enforcement Practices and Procedures Related to Domiciliary and Nursing Homes,* North Carolina Division of Facility Services, April 1991, pp. 13–14.

[13] *Ibid.*, p. 10.

[14] Lamb says many of the state's elderly were self-employed farmers who did not have to pay into Social Security taxes for the bulk of their earning years. North Carolina also has consistently ranked near the bottom among the 50 states in manufacturing wages. These are two key reasons that 1990 Current Population Survey estimates put the state's poverty rate at 20.6 percent for people over 65 compared to an 11.4 percent rate for those 65 and over in the nation as a whole, Lamb says.

[15] A 1990 survey by the North Carolina Association of Long Term Care Facilities found a turnover rate in domiciliary homes of 242.45 percent, with fast food the third most frequently cited source of employment competition.

[16] 42 CFR 483.70–483.75

A clean, well-lighted nursing home.

Karen Tam

Recommendations

Many of the problems facing North Carolina's nursing home industry are similar to those facing homes across the nation, including tight Medicaid budgets and difficulties in attracting and retaining workers. Burdensome regulations only add to the difficulties of nursing home operators trying to remain viable on limited resources. In some cases, the sheer volume of rules may even be counterproductive.

Clearly, with the depth and breadth of rules governing nursing home operations, there will be violations from time to time, particularly when homes have to serve two masters—the federal certification teams and the state's licensure inspectors and complaint investigators. The vast majority of nursing home operators are working hard every day to provide high quality care for residents. Indeed, more than 140 homes operated without a single penalty over the three-and-a-half years the Center studied, and seven homes accounted for nearly one-third of the total amount of fines. It is incumbent upon the state to make sure that the rules are followed, but the evidence suggests that more and higher fines won't solve the problems of most nursing homes.

In the face of public outcries about leniency, the state has toughened its enforcement of nursing home regulations in recent years. The dollar amount of fines imposed against nursing homes more than doubled in the three-and-a-half year period that was the focus of the Center's study. In 1988, fines levied against nursing homes totalled $33,110, compared to $67,070 in 1990. The trend was toward fewer but higher fines in 1991 as the state began focusing on the most serious offenders. This decision seems appropriate. With a limited number of inspectors, the wisest course is to focus on the worst cases—those representing serious risk to the life and health of patients.

Still, advocates argue convincingly that the state has been slow to act against problem homes—those that are cited repeatedly but never seem to straighten out their operations. This problem was pointed out by the state auditor in 1981 and remains a problem in 1992. During the period studied by the Center, the state initiated only two license revocation proceedings, one of them against a home neglecting patients while caught up in an unsuccessful fight against Medicaid fraud charges.

The state more recently moved to revoke the license of against another problem home, Americas Care of Cumberland County, when the federal government acted to cut off its Medicaid funds in February 1992. With such a high percentage of penalties being levied against only a handful of homes, it's clear that the state could move more aggressively against these problem homes.

But state enforcement officials say they are handcuffed by a serious dilemma. If they move to shut down a problem home, they must find something to do with the patients. Moving nursing home patients is traumatic, and a tight supply of beds means there may be no place to move them.

Clearly, the state needs another enforcement tool to complete a range of sanctions that serve notice on bad operators that cutting corners at the expense of residents' health will not be tolerated. To promote constructive dialogue between regulators and operators while providing a practical means of policing the worst providers, the Center offers the following four recommendations:

(1) Licensure officials should use the discretion afforded them under state statutes to avoid fining a home for a minor violation if the homes can show the violation did not have an impact on patient care. Many B-level penalties cover important areas of care, such as keeping patients clean and groomed. Others form the threads of a tightly woven regulatory straitjacket. These include rules about administration that require extensive documentation and paperwork. And they also include rules that touch on patient care, but in a minor way. For example, a home could be cited because an aide left a pile of dirty towels in the corner of a shower room to respond to a patient emer-

—continued

gency, or for leaving certain documentation out of a personnel file.

Operators argue persuasively that some of the energy channeled into following the letter of the law might be more appropriately expended on patient care. According to state statutes, licensing officials *may* impose a $500 penalty for each Type B violation.[1] Some state officials apparently have read *may* as *must* in the past. Lynda McDaniel, deputy director of the Division of Facility Services, says this runs counter to the current philosophy of the licensure office, which is to help homes work out their operating difficulties in the interest of providing better care. Still, it may be that some state officials need a reminder.

While no one would advocate leniency, licensure officials should exercise the discretion allowed them under the law. That means allowing nursing home operators the opportunity to make a good-faith effort to come into compliance before slapping them with a penalty.

The legislature may also want to consider implementing guidelines that would help licensure officials determine penalties more systematically. One such system is known as a *scope and severity matrix.* It would require inspectors to weigh both the magnitude of a violation and whether it represented a pattern or an isolated occurrence before recommending a fine. It might also bring a measure of consistency to what are now judgment calls on the part of state officials.

(2) The legislature should allow nursing homes to apply fines for minor violations toward the cost of hiring independent consultants who would help them solve their operating problems. Nursing home regulations are formulated with the highest and best intent—protecting the health and well-being of residents. But the complexities of these rules sometimes make them difficult to apply in practice. Homes sometimes are fined for minor breakdowns such as problems with paperwork or neatness. It may be that the state could serve a more constructive purpose by allowing homes to use penalty money to pay for a private consultant to help straighten out these problems.

Homes might need consultation in a wide range of areas—from meeting the dietary needs of patients, to sorting out complex drug regimens, to developing staffing patterns that will help them to operate efficiently. Although the state already serves in a consulting role, its regulatory responsibilities absorb the bulk of staff time and resources. Using penalties for minor violations to pay for independent consultants may help homes provide better care, as opposed to the current approach, which is purely punitive.

(3) The Division of Facility Services should use its existing licensing authority more aggressively to bring problem homes into compliance with regulations. Problem homes are those that keep getting fined year after year and never seem to clean up their acts. They represent only a small percentage of the state's nursing homes, and yet they give the entire industry a bad name. The state already has the authority to issue provisional licenses and even suspend admissions "where the conditions of the nursing home or domiciliary home are detrimental to the health or safety of the patient or resident."[2] Licensure officials should be quick to use this authority when patients' health is at risk.

Of course regulators face a tricky balancing act. If a home's problems are caused by lack of money, issuing provisional licenses and suspending admissions will only make it worse. Still, patients deserve swift, strong action when their health and safety is at risk.

The law currently requires that a provisional license be posted in a prominent place to alert consumers and family members that the home is having problems. And by its very nature, a nursing home cannot stay in business long without admitting new patients.

How a home responds to these strong administrative actions will provide a quick indication to regulators as to whether it remains a viable operation. But one final enforcement tool is needed for homes which have proven they can no longer handle the responsibility of caring for the frailest and most vulnerable members of society.

(4) The legislature should pass a law allowing the courts to appoint a temporary manager to operate homes which fail to correct their problems and represent a serious threat to residents. The ability to deal adequately with failed nursing homes is the major missing piece in the regulatory puzzle. At least 16 states and the District of Columbia now have such authority.[3]

There is ample evidence that North Carolina should join these states and enact a law allowing temporary management of failed nursing homes.

The analysis by the North Carolina Center for Public Policy Research found seven homes accounted for nearly a third of total fines against nursing homes for the three-and-a-half years studied. And the top 10 violators accounted for nearly 40 percent of the fines assessed. In 1981, when the Department of State Auditor studied state administration and regulation of nursing homes, the report's authors came to a similar conclusion of "a definite pattern" in which a few nursing homes "would be cited for a deficiency during the annual survey; the deficiency would be noted as corrected on a follow-up visit, but in the next annual survey the same deficiency would be cited again."[4]

The auditors also offered a similar recommendation—that the state needed a way to assume temporary management of problem homes.[5] Regulators, industry officials, and advocates alike agree that this is a problem that should be addressed. Indeed, this is one of the few areas for which all parties are in agreement.

A bill that would provide for temporary management was introduced in the Senate during the 1991 session of the General Assembly but stalled in committee. The bill (SB 731) should be resurrected and enacted by the 1993 General Assembly.

Seizing control of a problem home through a court order and appointing a temporary manager represents drastic action by the state. It should be undertaken only under the most serious of circumstances and only when other means have been tried and have failed. Still, it's clear that the state needs this enforcement tool to push a few bad actors into providing the quality of care that good conscience alone should dictate.

A temporary manager could assure the safety of residents until the home's problems were resolved or until it was sold to a responsible operator. By placing the appointment of a temporary manager under the jurisdiction of the courts, the bill assures that due process is observed. It is a carefully crafted compromise and represents an essential final step in the regulatory process.

By embracing these four recommendations, the state could take a major step toward improving the way nursing homes are regulated in North Carolina. Still, it's clear that more avenues of reform should be explored. The state, for example, should examine whether it can do more to merge its own rules with those of the federal government to streamline the regulatory process. Steve White, Certification Section chief in the Division of Facility Services, says his surveyors have become much more "outcome oriented" in response to changes in federal law.

As opposed to state inspectors, who are inclined toward making sure that every "i" is dotted and every "t" crossed, White says the federal teams look much more to whether patients are as healthy and happy as they might be, whether the food tastes good and is prepared under sanitary conditions and so on.

The state also could work through vocational programs in the public schools and the community colleges to promote the nursing home industry as an attractive place to spend one's career. Still, much is incumbent on industry itself. To the extent that providing long-term care for the elderly is perceived as dirty work for low wages, the industry will have trouble attracting and retaining workers. And staff longevity is an important quality of care issue.

Operators must keep pressing to make their homes attractive work places and must push wages for nurses' aides well beyond those offered in the fast food industry if they expect their workers to remain on the job. Meanwhile, the state must make sure Medicaid reimbursements are sufficient to keep the industry healthy.

Residents' advocates also have a strong role to play in monitoring the regulatory process and assuring that standards are met. Nursing home residents are among the state's most vulnerable citizens, and they often are too infirm to look out for their own best interests. The least they deserve is a bath, clean bed linens, and a bit of human dignity. The unfortunate fact is that these basic needs have not always been met in some North Carolina nursing homes.

— Mike McLaughlin

FOOTNOTES

[1] G.S. 131E-129(a).

[2] G.S. 131E-109(c).

[3] Legal Services of North Carolina Resource Center.

[4] Ed Renfrow, "Operational Audit: State Administration and Regulation of Nursing Homes," Department of State Auditor, April 1981, p. 43.

[5] *Ibid.*, p. 52.

UNC Hospitals

Who Makes Policy in Health Care?

A Fistful of Dollars and a Few Dollars More

by Mike McLaughlin and Ellen Breslin

North Carolinians spend more on health care every year, and so does their government. In the tables that accompany this article, the Center lists state government programs that have health care as a primary focus. The tables include information on where programs are located in state government—the department, agency, and so on; what each program attempts to do; its authorization in state law; and the amount of money spent on the program, including local, state, federal, and other dollars such as foundation grants. The dollars are totaled to arrive at an estimate of how much government money is spent on health programs in North Carolina. The answer? More than $3.6 billion.

How much government money is spent on health care in North Carolina every year? A lot. More, in fact, than the Gross National Product of some Third World countries.

To find out just how much, the North Carolina Center for Public Policy Research contacted agencies throughout state government in the summer of 1991 and asked them for program descriptions, authorizations, and spending totals for the 1990–1991 fiscal year—July 1, 1990, through June 30, 1991. When spending for all of these programs was lumped together, the result was an eye-popping $3.63 billion—this without even considering Medicare, the federal program that provides health care coverage for citizens over 65.

Of that amount, the *state* spent at least $1.19 billion, while the *federal* government spent at least $1.52 billion.[1] The remaining $914 million is made up of *local* spending and *other* revenue sources such as foundation grants.[2]

The Center found 163 programs with health care as their central focus, as well as 40 boards and commissions with authority to make rules, set policy, and otherwise offer guidance on a range of health care issues. Most of these programs are lodged in the Department of Environment, Health, and Natural Resources, or the Department of Human Resources, although the departments of Agriculture, Public Education, and Labor also have a number of entries. And no single agency has

Mike McLaughlin is editor of North Carolina Insight. *Ellen Breslin is a former Center intern and a graduate student in the Duke University Institute of Policy Sciences and Public Affairs.*

overall responsibility for coordinating all these efforts or formulating state policy on health care.

Health programs operating in North Carolina can be divided into four broad areas: (1) programs serving special populations; (2) programs addressing certain diseases; (3) environmental and occupational health and safety programs; and (4) health care policy, regulation, and planning programs.[3]

Programs Serving Special Populations

Health care programs serving special populations comprise programs for adults, the elderly, children and adolescents, women, migrant workers, and the disabled (See Section I, Tables I–VI, pp. 50–69). Medi*caid,* at more than $1.85 billion, accounted for the bulk of spending in these areas. The program pays for medical care for financially needy aged, blind, and disabled citizens, as well as for poor pregnant women and children and Aid to Families with Dependent Children recipients.

Among other major programs are Child and Adult Mental Health Services at a total cost of more than $113.67 million and the state's four psychiatric hospitals in Butner, Goldsboro, Morganton, and Raleigh, which had a budget of more than $167 million after subtracting Medicaid spending.

Excluding the federal Medi*care* program and spending for the elderly through Medi*caid,* the most expensive program for the elderly is the

Wake Medical Center

North Carolina Special Care Center in Wilson. The center provides nursing home care for patients referred from the state's psychiatric hospitals at a cost of more than $9 million annually. In fiscal year 1990–91, the center served 226 people, two-thirds of whom were 65 or older. The next most expensive program provides transportation to medical care for elderly citizens at a cost of some $638,400.

At least 31 programs operating in the state provide services exclusively for *children and adolescents.* Among these are four programs providing and promoting good dental care at a cost of almost $4 million annually. Well over five times that amount is spent on children with special health needs. A $10.86 million program, Children's Special Health Services, provides diagnosis and treatment of children with chronic illnesses and disabilities. An additional $10.26 million was spent in 1990–91 for 18 developmental evaluation centers which provide clinical evaluation, treatment, and case management for children with developmental disabilities.

Services targeted to *women* include a $10.7 million program to provide prenatal care and more than $16 million for family planning. There is also a relatively small appropriation that generally winds up in the middle of a large controversy each year at budget time—the $424,000 state abortion fund. Until it runs out of money, the fund pays for abortions for women who are indigent or eligible for Aid to Families with Dependent Children. The fund also was set at the same amount in fiscal year 1992. By April 15, 1992, the fund had been depleted. It is restricted to eligible minors and to women whose pregnancies are the result of rape or incest and those instances in which the woman's health is impaired by pregnancy.

The most expensive of programs targeted to women is WIC, the supplemental food program for women, infants, and children at nutritional risk. The program cost $61.9 million in 1990–91, although most of these dollars were federal.

The roughly $4.05 million spent on health care for special populations provides various health services for *migrant workers and refugees.* Health care programs for the *disabled* include five state-operated mental retardation centers in Black Mountain, Butner, Goldsboro, Kinston, and Morganton, which cost $179 million to operate in 1990–91 and provide education, training, and health services. There is also an $11.2 million vocational rehabilitation program for mentally and physically disabled persons who may be able to return to work.

"I don't know who this woman could be to this sick man, who kisses him and cannot heal him with her kiss, who looks at him and cannot heal him with her eyes, who talks to him and cannot heal him with her word."

— César Vallejo
"The Windows Shuddered"

Programs Addressing Certain Diseases

The Center also looked at a second area, health care programs addressing certain *diseases* (see Section II, pp. 70–73). There were 14 such programs operating in North Carolina in 1990–91 at a total cost of nearly $19 million. These include programs for cancer, renal disease, arthritis, diabetes control, tuberculosis, and a program to prevent the spread of AIDS.

A third grouping of health care programs falls under the category of *environmental and occupational safety and health* (see Section III, pp. 74–79). Most of these programs aim to prevent accidents and illness rather than to treat disease. Examples are environmental programs such as milk and shellfish sanitation and mosquito management, and occupational programs like the elevator inspection and work-place compliance programs.

The Compliance Bureau operates under the Department of Labor's Occupational Safety and Health Division, which had a budget of $4.75 million in 1990–91. The bureau enforces occupational safety and health standards and conducts health and safety inspections of North Carolina work places, although it doesn't inspect *all* work places.

A fourth major area of health programs falls under the rubric of *policy, regulation, planning, and training* (See Section IV, pp. 80–89). Counted among these are programs as varied as pesticides control in the Department of Agriculture and nursing programs in the state's community colleges. *Data gathering agencies* also are represented, such as the State Center for Health and Environmental

—continued on page 95

Section I: Health Care Provided to Populations
Table 1. Health Care Services for Adults

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health, and Natural Resources		
	Office of Local Health Services	
	Local Health Departments	Provide a broad range of health services at 87 local agencies, including immunizations, clinical care, inspection of food and lodging facilities, on-site wastewater disposal services, and approval of wells for drinking water.
	Division of Adult Health	
	Health Care Section	
	Health Care Services in the Home Demonstration Project	Provides skilled medical and related home health services to prevent unnecessary hospitalization or institutionalization.
	Home Health Program	Provides in-home health care to low-income individuals to help persons avoid lengthy stays in hospitals or institutions.
	Division of Maternal and Child Health	
	Women's Health Section	
	Sudden Infant Death Syndrome Grief Counseling	Provides counseling to families on the loss of an infant from crib death and other conditions; and training and information about Sudden Infant Death Syndrome.
	Division of Dental Health	
	Office of Dental Health Education	
	Dental Health Education for Adults	Provides dental health training to targeted adults who influence the oral health of children, such as teachers, parents, and health care providers.
Department of Human Resources		
	Division of Medical Assistance	
	Community Alternatives Program for Disabled	Medicaid-funded program of in-home services available to eligible disabled adults at risk for skilled nursing or intermediate care facility.
	Medicaid	Pays for medical care for qualified financially needy aged, blind, and disabled citizens, as well as for pregnant poor women and children and AFDC recipients.
	Prepaid Health Plan Services	Medicaid-funded program offering prepaid health services to eligible Medicaid recipients. Allows certain families to elect HMO coverage and Medicaid will pay their HMO premium.
	Division of Mental Health, Developmental Disabilities, and Substance Abuse Services	
	Mental Health Services	Community-based mental health services for children & adults.
	Adult Mental Health Services (Community-based)	Provides periodic, day/night and 24-hour services through a network of 41 area mental health developmental disabilities and substance abuse authorities. Services include, but are not limited to, prevention and intervention, evaluation and assessment, outpatient, case management, day treatment,

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T

**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A,P,T	G.S. 153A-247	[Dollars tracked at the local level]				
A,P,T	15A NCAC 16A .0700	0.00	0.00	973.70	0.00	973.70
A,P,T	15A NCAC 16A .0200	30.93	3,431.00	0.00	0.00	3,461.93
T	G.S. 130A-124	0.00	30.21	10.04	0.00	40.25
P	G.S. 130A-366	0.00	300.00	0.00	0.00	300.00
P,T	G.S. 108A-55	1,523.10 [Also included in total Medicaid spending.]	8,631.20	20,430.60	0.00	30,584.90
P,T	G.S. 108A-55	91,764.60	520,027.30	1,238,564.10	0.00	1,850,356.00
P,T	G.S. 108A-55	87.50 [Also included in total Medicaid spending.]	495.60	1,169.40	0.00	1,752.50
P,T	G.S. 122C-101 G.S. 122C-115 G.S. 122C-116 G.S. 122C-131 G.S. 122C-141	Not Avail.	92,635.00	18,098.00	2,942.00	113,675.00 [Total dollars for adult and child mental health services/community based.]

Section I: Health Care Provided to Populations
Table 1. Health Care Services for Adults, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Human Resources		
		partial hospitalization, psychosocial programs, emergency services, residential and inpatient treatment. Services are available to the primary consumer as well as family members and are provided in the least restrictive setting practicable.
	Psychiatric Hospitals	Four state-operated regional psychiatric hospitals provide continuous treatment for individuals with psychiatric disorders. Hospitals offer patients intensive treatment in a hospital setting; services include, as appropriate, supportive nursing psychological services, medical diagnosis and treatmen psychotherapy, occupational therapy, and other primary and support services. Serve children and adults.
	Substance Abuse Services	Community-based substance abuse services for children and adults.
	Adult Substance Abuse Services (Community-based)	Provides periodic, day/night and 24-hour services through a network of 41 area mental health, developmental disabilities and substance abuse authorities. Specific services include, prevention and early intervention, screening and evaluation, screening and evaluation, intensive outpatient treatment, outpatient treatment, day treatment, halfway houses, residential treatment, and inpatient treatment.
	Alcohol & Drug Abuse Treatment Centers (ADATC)	Three state-operated alcohol and drug abuse treatment centers provide services on a statewide basis to adults in need of treatment for alcohol or drug abuse. Residential treatment and rehabilitation are provided in a structured setting and may also include medical services and detoxificatio as needed. Located in Black Mountain, Butner, and Greenville.
	Division of Social Services Family Services Section Supportive Services	Helps individuals and families obtain care and services under Medicaid, Medicare, maternal and child health programs, and other public and private agencies or providers of health services. Alcohol and drug abuse, and limitations resulting from aging, disability, or handicap are of particular concern.
	Special Health Needs	Pays for items not paid for by Medicaid, Medicare, or other third-party payers, including ostomy supplies, oxygen, bandages, orthopedic, and other appliances needed by aging and disabled.
	Transportation	Provides for health-care-related transportation.
	TOTAL FOR HEALTH CARE SERVICES FOR ADULTS:	

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T

**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
T	G.S. 122C-101 G.S. 122C-131 G.S. 122C-181	Not App.	121,346.00	65,211.00	21,682.00	208,239.00
		[Medicaid dollars in the amount of $41,161,164 are included in the total.]				
		Not Avail.	16,235.00	17,946.00	594.00	34,775.00
		[Total dollars for adult and child substance abuse services/community based.]				
P,T	G.S. 122C-101 G.S. 122C-115 G.S. 122C-116 G.S. 122C-131 G.S. 122C-141					
T	G.S. 122C-101 G.S. 122C-131 G.S. 122C-181	Not App.	9,940.00	328.00	745.00	11,013.00
		[Medicaid dollars in the amount of $203,296 are included in the total.]				
T	G.S. 143B-153	2.86	0.00	8.58	0.00	11.44
T	G.S. 143B-153	27.97	0.00	83.94	0.00	111.91
T	G.S. 143B-153	373.60	0.00	1,120.80	0.00	1,494.40
		93,810.56	**773,071.31**	**1,363,944.16**	**25,963.00**	**2,256,789.03**

Section I: Health Care Provided to Populations
Table 2. Health Care Services for the Elderly

Department	Division and Program	Responsibilities and Activities
Department of Human Resources		
	Division of Aging	
	Adult Day Health	Provides health care services and program activities during the day in a community setting to support an adult's personal independence.
	Comprehensive Health Screening	Provides general medical testing, screening, and referral for the elderly to promote early detection and prevention of health problems.
	Health Promotion	Provides services to maintain and improve the health and well-being of the elderly. Services promote exercise, physical fitness, nutritional diets, drug management, accident prevention, smoking cessation, and stress management.
	Home Health Services	Provides health care in the home to an older adult in need of medical care prescribed by a physician.
	Medical Transportation	Provides transportation to medical care for elderly citizens.
	Division of Mental Health, Developmental Disabilities, and Substance Abuse Services	
	Mental Health Section N.C. Special Care Center	Provides nursing home care for patients referred from the state psychiatric hospitals. Also serves adults under age 65.
U.S. Department of Health and Human Services		
Social Security Administration		
	Medicare Program	Provides health insurance coverage for persons over the age of 65.

TOTAL HEALTH CARE SERVICES FOR THE ELDERLY: .....

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T

**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
T	G.S. 143B-181.1	2.07	32.11	12.08	0.00	46.26
P,T	G.S. 143B-181.1	6.43	26.98	30.88	0.00	64.29
P,T	G.S. 143B-181.1	2.79	18.75	6.39	0.00	27.93
T	G.S. 143B-181.1	13.92	30.70	94.59	0.00	139.21
T	G.S. 143B-181.1	57.32	252.38	328.70	0.00	638.40
T	G.S. 122C-101, -131, -181	Not App.	1,994.00	6,032.00	1,033.00	9,059.00
		[Medicaid dollars in the amount of $6,023,876 are included in the total.]				
.....		**82.53**	**2,354.92**	**6,504.64**	**1,033.00**	**9,975.09**

Section I: Health Care Provided to Populations
Table 3. Health Care Services for Children and Adolescents

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health and Natural Resources		
	Division of Dental Health	
	Dental Disease Prevention Section	
	Community and School Water Fluoridation Program	Provides financial and technical assistance to school systems and communities to promote and monitor water flouridation programs.
	Dental Care Services	Provides screening and referral of elementary school children with emphasis in kindergarten, second, fourth, and sixth grades. Provides pit and fissure sealants and promotes their use.
	Weekly Fluoride Mouth-rinse	Provides weekly fluoride mouth-rinse for children.
	Office of Dental Health Education	
	Dental Health Education for Children	Provides education to children on oral hygiene practices, appropriate dietary habits, injury and disease prevention, dental care, and consumerism.
	Division of Maternal and Child Health	
	Child Services Section	
	Child Health Supervision	Performs health assessments including physical examinations, developmental and nutritional assessments, screening for early detection of disabilities, immunizations, anticipatory guidance for parents, and referral and follow-up.
	Nutrition	Provides assistance to local health departments for planning, organizing and implementing, and managing nutrition-related activities for the maternal and child population.
	Title XIX Nutrition Funds	Pays for nutrition counseling of financially eligible individuals who are part of target populations.
	Pediatric Primary Care Program	Provides pediatric health care to children.
	School Health Program	Plans school health service delivery; continuing education for teachers and nurses; appraisal, referral and follow-up of school children with suspected health problems; and screening programs.
	School Health Fund	Pays for prevention, diagnosis, and treatment of chronic remediable defects in eligible school children.

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
P	G.S. 130A-366	0.00	400.00	155.00	0.00	555.00
P	G.S. 130A-366	0.00	1,900.00	0.00	0.00	1,900.00
P	G.S. 130A-366	0.00	120.00	3.13	0.00	123.13
P	G.S. 130A-366	0.00	1,150.00	0.00	0.00	1,150.00
P,T	G.S. 130A-124	0.00	2,500.00	5,000.00	0.00	7,500.00
P	G.S. 130A-361	0.00	420.00	360.00	0.00	780.00
P	G.S. 130A-361	0.00	0.00	120.00	0.00	120.00
T	G.S. 130A-124	0.00	394.70	0.00	0.00	394.70
P,T	G.S. 130A-124	[Included in Child Health.]				
A,P,T	G.S. 130A-124	0.00	830.70	0.00	0.00	830.70

Section I: Health Care Provided to Populations
Table 3. Health Care Services for Children and Adolescents, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health and Natural Resources, continued		
	Office of Prevention	
	Lead Screening and Follow-up	Screens children who are at increased risk of lead ingestion, absorption, or toxicity.
	Services for Persons with Special Needs	
	Child Service Coordination Program	Identifies children at risk and provides necessary services to the children and their families.
	Children's Special Health Services	Provides diagnostic and treatment services for children with certain chronic illnesses and disabilities that may hinder the achievement of normal growth and development. Care is provided through a network of specialty clinics that offer diagnostic services to all children, and treatment services to financially eligible children.
	Developmental Evaluation Centers Program	Provides clinical evaluation, treatment and case management services for children with known or suspected developmental disabilities at 18 centers. Special emphasis is placed on services to infants and pre-school children.
	Discharge Planning Services	Identifies infants and children with special needs, coordinates child services for eligible infants, and plans timely discharges.
	Genetic Health Care	Provides screening, diagnosis, treatment, and follow-up supportive services through medical centers and community satellite clinics to reduce the occurrence of physical and mental disorders. Newborns are screened for phenylketonuria, hypothyroidism, galactosemia, and non-whites for sickle cell.
	Hemophilia Assistance Plan	Reimburses five medical centers for persons with hemophilia who are on home care regimens.
	Intensive Care Nursery	Provides neonatologists and nursing care to infants who have life-threatening illnesses such as respiratory distress syndrome, extreme prematurity and conditions requiring surgery.
	Sickle Cell Syndrome Program	Provides educational services; voluntary testing, and newborn screening for sickle cell disease; counseling of persons with abnormal test results; and case management services that include reimbursement for care for eligible patients.

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
P	G.S. 130A-124	0.00	21.40	71.00	0.00	92.40
P	G.S. 130A-124	0.00	2,458.00	325.00	0.00	2,783.00
T	G.S. 130A-124	0.00	8,502.00	2,318.00	42.00	10,862.00
T	G.S. 130A-124	0.00	8,301.00	1,389.00	570.00	10,260.00
P,T	G.S. 130A-124	7.39	0.00	262.50	0.00	269.89
P,T	G.S. 130A-124	0.00	1,188.80	348.00	0.00	1,536.80
T	G.S. 130A-124	0.00	150.00	0.00	0.00	150.00
T	G.S. 130A-124	0.00	0.00	138.00	0.00	138.00
A,T	G.S. 130A-124	0.00	1,585.00	0.00	0.00	1,585.00

Section I: Health Care Provided to Populations
Table 3. Health Care Services for Children and Adolescents, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health, and Natural Resources, continued		
	Women's Health Services	
	Adolescent Pregnancy Prevention Projects	Aims to reduce the number of adolescent pregnancies. Projects include services which promote abstinence from sexual activity, target the adolescent male, promote school health services, and encourage parental involvement.
	Division of Epidemiology	
	Communicable Disease Control Section	
	Immunization Branch	Provides immunization and related services to children and adults.
Department of Human Resources		
	Division of Mental Health, Developmental Disabilities, and Substance Abuse Services	Community-based developmental disability services for children and adults.
	Developmental Disability Section	
	Child Developmental Disability Services (Community-based)	Provides periodic, day/night, and 24-hour services through a network of 41 area mental health, developmental disabilities, and substance abuse authorities. Services include, but are not limited to, prevention and early intervention, assessment and evaluation, developmental day care, respite, and residential services. Services are available to the child as well as family members and are provided in the least restrictive setting practicable.
	Substance Abuse Section	
	Child Substance Abuse Services (Community-based)	Provides periodic, day/night, and 24-hour services through a network of 41 area mental health, developmental disabilities, and substance abuse authorities. Adolescent substance abuse services are also provided to youthful offenders in both detention facilities and training schools. Specific services provided in the continuum include, but are not limited to, prevention and early intervention, screening and evaluation, case management, intensive outpatient, day treatment, halfway houses, residential treatment, and inpatient treatment.
	Mental Health Section	
	Child Mental Health Services (Community-based)	Provides periodic, day/night, and 24-hour services through a network of 41 area mental health, developmental disabilities, and substance abuse authorities. Services include, but are not limited to, prevention and early intervention, evaluation and assessment, case management, outpatient, day treatment, residential treatment, and inpatient treatment. Services are available to the child as well as family members and are provided in the least restrictive setting practicable. (Includes Willie M Services.)

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
P	G.S. 130A-124	0.00	357.00	983.00	445.00	1,785.00
P	G.S. 130A Art. 6	0.00	302.55	1,017.00	0.00	1,319.55
		Not Avail.	62,633.00	5,680.00	0.00	68,313.00
P,T	G.S. 122C-101 G.S. 122C-115 G.S. 122C-116 G.S. 122C-131 G.S. 122C-141	[Dollars for children are included in the total for developmental disability services/community-based.]				
P,T	G.S. 122C-101 G.S. 122C-115 G.S. 122C-116 G.S. 122C-131 G.S. 122C-141	[Dollars for children are included in the total for substance services/community-based.]				
P,T	G.S. 122C-101 G.S. 122C-115 G.S. 122C-116 G.S. 122C-131 G.S. 122C-141	[Dollars for children are included in the total for mental health services/community-based.]				

Section I: Health Care Provided to Populations
Table 3. Health Care Services for Children and Adolescents, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Human Resources, continued		
	Wright School and Whitaker School	Two schools for emotionally disturbed children and adolescents requiring both psychological and educational services. Medical services are arranged on an as-needed basis for residents. Located in Butner and Durham.
	Division of Medical Assistance	
	Baby Love Program (Program is a joint endeavor with the Division of Maternal and Child Health.)	Offers traditional medical services to pregnant women, and childbirth and parenting classes.
	Community Alternatives Program for Children	Serves medically fragile children up to 18 years.
	Healthy Child and Teens Program	Provides preventive health care for Medicaid-eligible children and youth under age 21.
	Division of Social Services	
	Family Services Section	
	Adoption Assistance	Provides monthly cash payments, reimbursements, and services for adoptive children who are physically or mentally handicapped or otherwise hard to place for adoption because of their special needs.
	Child Medical Evaluations	Provides specialized medical or psychological evaluations for children reported to be abused or neglected.
	Medical Vendor Payments	Provides treatment or services for the condition(s) specified at the time handicapped child is determined eligible for adoption assistance or which occurs later as a result of previously specified condition. Payments to providers for medical or medically-related services for services or treatment not covered by medical insurance or Medicaid, as well as for specialized medical services up to a maximum of $1,200 per year.
Department of Public Instruction		
	Division of Student Services	
	Pre-School Screening/ Health Assessment for Kindergarteners	Screening and referral services for pre-kindergarteners and kindergarteners.

TOTAL HEALTH CARE SERVICES FOR CHILDREN AND ADOLESCENTS: .....

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
T	G.S. 122C-101 G.S. 122C-131 G.S. 122C-181	Not App.	2,881.00	40.00	93.00	3,014.00
P	G.S. 108A-55	3,330.20	18,871.90	44,888.90	0.00	67,091.00
		[Expenditures are for services rendered under Sixth Omnibus Budget Reconciliation Act of 1986; funds are also included in total Medicaid spending.]				
T	G.S. 108A-55	55.00	311.90	738.00	0.00	1,104.90
		[Also included in total Medicaid spending.]				
P.T	G.S. 108A-55	268.20	1,520.10	3,600.60	0.00	5,388.90
		[Also included in total Medicaid spending.]				
A,T	G.S. 108A-50	190.56	191.11	768.89	0.00	1,150.56
P,T	G.S. 7A-544	0.00	92.99	128.96	0.00	221.95
T	G.S. 180A-50	18.01	0.00	43.94	0.00	61.95
P	G.S. 115C-364	Not Avail.	287.00	0.00	0.00	287.00
		3,869.36	**117,370.14**	**68,378.92**	**1,150.00**	**190,768.43**

Section I: Health Care Provided to Populations
Table 4. Health Care Services for Women

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health, and Natural Resources		
	Division of Maternal and Child Health	
	Maternal and Child Care Section	
	Nutrition Services Section	
	Women, Infants and Children Supplemental Food Program (WIC) and others	Provides nutrition education and supplemental foods to financially eligible pregnant and lactating women, infants, and children up to 5 years of age who are at nutritional risk.
	Women's Health Section	
	High Risk Maternity Clinics	Provide prenatal services for women at medical risk for poor pregnancy outcome.
	Maternity Care Coordination	Provides a psychosocial assessment, development of a service plan, and monitoring and follow-up of pregnant women who request assistance in obtaining prenatal care related services.
	Preconceptional Health Services	Assesses a woman's medical status and health behaviors before she becomes pregnant to determine if she is at risk of a poor pregnancy outcome. Women who are assessed as being at risk are provided counseling and educational materials.
	Prenatal Care	Provides services to pregnant women such as baseline history, physical examination, routine laboratory tests, nutritional assessment, and counseling, and makes referrals in high-risk pregnancies.
	Regional Perinatal Care Centers	Provide medical care at 10 centers for pregnant women with life-threatening illnesses such as diabetes, hypertension, fetal distress, preterm labor, and fetal congenital anomalies; provide medical care for newborns with life-threatening illnesses such as respiratory distress, extreme prematurity, and congenital defects requiring intensive care.
	Reproductive Health Services	Provides medical, educational, referral, and social services to help people exercise personal choice in family planning.
Department of Human Resources		
	Division of Social Services	
	Family Services Section	
	State Maternity Home Fund	Pays for care in a licensed maternity home for eligible individuals.
	State Abortion Fund	Pays for abortions for indigent or AFDC women who must be either a victim of rape or incest, mentally retarded, in danger of having health impaired by pregnancy, or be an eligible minor.

TOTAL HEALTH CARE SERVICES FOR WOMEN: .....

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T

**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
P	G.S. 130A-361	0.00	1,202.65	60,675.04	0.00	61,877.69
P	G.S. 130A-124	0.00	545.00	1,017.00	0.00	1,562.00
P	G.S. 130A-124	0.00	397.00	0.00	3,176.00	3,573.00
P	G.S. 130A-124	[Funding is included in the Reproductive Health Services Program.]				
P	G.S. 130A-124	0.00	3,229.00	3,365.00	4,136.00	10,730.00
T	G.S. 130A-124	0.00	0.00	0.00	0.00	0.00
P	G.S. 130A-124	6,864.40	1,381.20	6,706.40	1,104.00	16,056.00
T	G.S. 143B-153	0.00	112.17	336.52	0.00	448.69
T	G.S. 14-45.1	0.00	424.00	0.00	0.00	424.00
.....		**6,864.40**	**7,291.02**	**72,099.96**	**8,416.00**	**94,671.38**

Section I: Health Care Provided to Populations
Table 5. Health Care Services for Special Populations

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health, and Natural Resources		
	Division of Adult Health	
	Health Care Section	
	Migrant Health Program	Provides outpatient care directly at special health department-based migrant health clinics or pays for care provided by other health and medical care providers. Outreach workers locate migrants in need of services.
	Refugee Health Program	Facilitates an initial health assessment and helps refugees understand and gain access to health care in the U.S.
Department of Human Resources Division of Social Services		
	Family Services Section	
	Refugee Cash and Medical Assistance Program	Provides cash and medical assistance to newly arrived refugees who qualify.
	State Legalization Impact Assistance Program	Provides health care services for eligible migrant workers.

TOTAL HEALTH CARE SERVICES FOR SPECIAL POPULATIONS: .....

Table 6. Health Care Services for Disabled Populations

Department	Division and Program	Responsibilities and Activities
Department of Human Resources		
	Division of Services for the Deaf and Hard of Hearing	
	Medical Services	Medical services provided to deaf and hard-of-hearing students at three schools in Greensboro, Morganton, and Wilson.
	Division of Services for the Blind	
	Medical Eye Care	Provides eye examinations, eyeglasses, surgery and other procedures such as low vision aids to blind or partially sighted persons who are ineligible for Medicaid and qualify economically for the medical eye care program. Provides eye screening services regardless of income.
	Personal Care Services	Provides in-home medical and nutritional services to visually impaired persons who are Medicaid recipients.

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A,P,T	15A NCAC 16A .0100	17.69	592.20	550.00	0.00	1,159.89
A,P,T	G.S. 130A-223	0.00	60.20	63.90	0.00	124.10
T	G.S. 143B-153	1.26	0.00	844.45	0.00	845.71
T	45 Code of Fed. Regs. 402.10 (a-c)	0.00	0.00	1,937.38	0.00	1,937.38
		18.95	**652.40**	**3,395.73**	**0.00**	**4,067.08**

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
T	10 NCAC 23A .0707	0.00	337.90	0.00	0.00	337.90
T	G.S. 111-8	0.00	1,733.00	0.00	0.00	1,733.00
T	G.S. 111-8	0.00	0.00	1,282.86	0.00	1,282.86
		[These dollars are included in the total for Medicaid.]				

Section I: Health Care Provided to Populations
Table 6. Health Care Programs for Disabled Populations, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Human Resources, continued		
	Divison of Services for the Blind, continued	
	Vocational Rehabilitation	Provides medical services or equipment for persons demonstrating potential to return to work.
	Division of Medicaid	
	Community Alternatives Program for Mentally Retarded/Developmentally Disabled	Provides services to Medicaid recipients, including purchase of medical equipment, home mobility aids, respite care, homemaker services, and case management.
	Title XIX Medical Transportation	Arranges transportation services for Medicaid clients who require access to medical care.
	Division of Mental Health, Developmental Disablities, and Substance Abuse Services	
	Adult Developmental Disability Services (Community-based)	Provides periodic, day/night, and 24-hour services through a network of 41 area mental health, developmental disabilities, and substance abuse authorities. Services include, but are not limited to, assessment and evaluation, adult development activity programs, supported employment, respite, and residential services. Services are provided in the least restrictive setting practicable.
	Mental Retardation Centers	Five state-operated regional mental retardation centers provide education and training to center residents, with the corresponding provision of medical services as necessary. Residents' medical services may range from routine visits with doctors or nurses to the need for tube feeding and other significant medical needs. Located in Black Mountain, Butner, Goldsboro, Kinston, and Morganton. Serve children and adults.
	Division of Vocational Rehabilitation	
		Provides medical rehabilitation services to eligible mentally or physically disabled persons whose conditions are long-term and chronic in nature but who exhibit potential employability.

TOTAL HEALTH SERVICES FOR DISABLED POPULATIONS: .....

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	**State**	**Federal**	**Other**	**Total**
T	G.S. 143B-157 G.S. 111-28	0.00	418.16	1,672.65	0.00	2,090.81
		[These dollars are included in the total for Medicaid.]				
T	G.S. 108A-55	406.40	2,303.30	5,454.90	0.00	8,164.60
		[These dollars are included in the total for Medicaid.]				
T	Exec. Order 9 *Blue v. Craig*	505.58	0.00	1,018.18	0.00	1,523.76
		[Also included in total Medicaid spending.]				
P,T	G.S. 122C-101 G.S. 122C-115 G.S. 122C-116 G.S. 122C-131 G.S. 122C-141	[Dollars for adult developmental disability services/community-based included in Table III, p. X.]				
P,T	G.S. 122C-101 G.S. 122C-131 G.S. 122C-181	Not App.	9,476.00	161,431.00	8,135.00	179,042.00
		[Medicaid dollars in the amount of $161,238,321 are included in the total.]				
T	G.S.143-545, -546	204.09	3,027.76	7,434.84	547.24	11,213.93
		1,116.07	**17,296.12**	**178,294.43**	**8,682.24**	**205,388.86**

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health, and Natural Resources		
	Division of Adult Health	
	Health Care Section	
	Cancer Control Program	Educates and screens adults for cancer through local health departments, reimburses medical providers for diagnostic and treatment services to persons ineligible for any third-party reimbursement, and funds dysplasia clinics that serve women with abnormal Pap smears.
	Epilepsy and Neurological Diseases Program	Helps persons with epilepsy and neurological disorders obtain medical care, pays for anticonvulsant medications, and educates the public and providers about these disorders.
	Home and Community-Based Human Immunodeficiency Virus Health Services Program	Provides home and community-based HIV health services to financially eligible patients through local health departments and other public and private agencies.
	Organ and Tissue Donation	Provides educational workshops, public service announcements, and donor cards at driver license stations to increase the number of organ donors.
	Renal Disease Program	Provides treatment and related services to low-income patients with end-stage renal disease through kidney dialysis centers, hospitals, and pharmacies. Supports prevention activities through selected local health departments.
	Health Promotion Section	
	Adult Health Program	Provides services to adults to reduce death and disability from heart disease, strokes, cancer, and diabetes. Services include health assessment, screening, education, and counseling, and referral for diagnosis and treatment.
	Statewide Health Promotion Program	Provides services to adults to reduce leading risk factors for heart disease, stroke, cancer, and injuries through risk factor assessment, behavior change, education, and community intervention.
	Arthritis Program	Provides services to reduce disabilities from arthritis through health assessment, screening, patient education, nutritional counseling, referral, self-care skills, or provision of medical care to persons with arthritis.

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A,P,T	G.S. 130A-205 15A NCAC 16A .0400	0.00	1,531.00	92.40	0.00	1,623.40
A,T	G.S. 130A-223	0.00	224.80	0.00	0.00	224.80
A,T	15A NCAC 16A .0800	0.00	0.00	61.00	0.00	61.00
A	G.S. 130A-413	0.00	1.50	0.00	0.00	1.50
A,P,T	G.S. 130A-220 15A NCAC 16A .0300	33.90	1,205.10	0.00	0.00	1,239.00
A,P,T	G.S. 130A-223	2,417.00	2,994.20	0.00	0.00	2,994.20
A,P	G.S. 130A-223	1,219.00	731.60	904.20	0.00	2,854.80
A,P,T	G.S. 130A-222	19.78	154.80	0.00	0.00	174.58

Section II: Health Care Programs Addressing Certain Diseases, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health, and Natural Resources, continued		
	Division of Adult Health, continued	
	Diabetes Control Program	Provides services to adult diabetics to reduce death and complications for diabetes through health assessment screening, patient education, and nutritional counseling, self-care skills, and referral to medical care.
	Hypertension Program	Provides services to adults to reduce risk factors for death and disability from hypertension through health and risk factor assessment, screening, education, and referral for diagnosis and treatment. Also includes behavior change and community intervention.
	Division of Epidemiology	
	Communicable Disease Control Section	
	HIV/Sexually Transmitted Disease Control Branch	Provides training for HIV antibody testing, counseling, and referral. Provides prevention education, surveillance, and field services for HIV and other sexually transmitted diseases.
	Tuberculosis Branch	Works to prevent and control the spread of tuberculosis. Provides TB diagnostic and treatment services at the local level.
	Division of Laboratory Services	
	Cancer Cytology Section	Examines cervical Pap smears for abnormal cells.
Department of Public Instruction		
	Division of Curriculum and Instruction	
	Healthful Living Section	
	HIV Prevention and Education Program	Provides federal funding for HIV/AIDS prevention and education.

TOTAL HEALTH CARE PROGRAMS ADDRESSING CERTAIN DISEASES: .....

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T

**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A,P,T	G.S. 130A-221	3.14	0.00	156.90	0.00	160.04
A,P,T	G.S. 130A-223	189.84	240.20	573.70	0.00	1,003.74
P	G.S. 130A, Article 6	0.00	968.78	3,681.70	321.94	4,972.42
P	G.S. 130A, Article 6	0.00	3,388.46	260.64	36.04	3,685.14
P	G.S. 130A-88	0.00	1,197.03	0.00	0.00	1,197.03
P	42 U.S.C. 241 (a) NCGS 115C-81(a)(2)	0.00	0.00	245.44	0.00	245.44
		3,882.66	**12,637.47**	**5,975.98**	**357.98**	**20,437.09**

Section III: Environmental and Occupational Health Safety
Table I: Environmental Programs

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health, and Natural Resources		
	Division of Environmental Health *Environmental Health Services Section*	
	Public Swimming Pool Program	Inspects all public swimming pools to ensure they are constructed and operated in a manner that prevents transmission of disease and injury.
	Mass Gatherings Program	Ensures that at a mass gathering of 5,000 or more persons, organizer provides bathroom facilities and meets sanitary conditions.
	Food and Lodging Sanitation Branch	Ensures that food, lodging, and other public facilities are sanitary through local inspection programs.
	Institutional Services Branch	Inspects and licenses all institutions—such as rest homes, hospitals, orphanages, and private colleges—to ensure that facilities are sanitary.
	Milk Sanitation Branch	Inspects dairy farms, milk processing plants, and single service plants to determine if milk has been produced under sanitary conditions and pasteurized, and if the containers are sanitary.
	Shellfish Sanitation Branch	Ensures that shellfish are processed under sanitary conditions and samples shellfish waters for bacteriological quality.
	On-Site Wastewater Section	Ensures that septic tank systems are installed properly to prevent disease through the sewage system. Inspections are carried out by local health departments.
	Public Health Pest Management Section	Identifies pest problems and makes recommendations to improve and manage pest problems to avoid transmission of vector-borne diseases.
	Coastal Mosquito Management Branch	Advises local governments and developers on appropriate methods of mosquito control and provides funds for spraying and control.
	Sleep Products Branch Sleep Products Program	Inspects and licenses facilities which sell bedding to protect the public health.

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
		0.00	2,433.64	0.00	0.00	2,433.64
		[Total dollars for the Environmental Health Services Section and On-site Wastewater Section.]				
P	G.S.130A-230-232					
P	G.S. 130A-251-258					
A,P	G.S. 130A-247-250					
A,P	G.S. 130A-235-237					
A,P	G.S. 130A-274-279					
A,P	G.S. 130A-230-231	0.00	632.04	0.00	0.00	632.04
A,P	G.S. 130A-333-343					
P	G.S. 130A-346-347	[Dollars for this section are included in the Coastal Mosquito Management Branch.]				
P	G.S. 130A-346-349	0.00	971.22	0.00	0.00	971.22
		[Dollars include the Public Health Pest Management Section.]				
A,P	G.S. 130A-261-273	0.00	344.23	0.00	0.00	344.23

Section III: Environmental and Occupational Health Safety
Table I: Environmental Programs, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health, and Natural Resources, continued		
	Public Water Supply Section	Ensures that drinking water provided by public water supplies is safe for human consumption and meets state and local drinking water standards.
	Revolving Loan and Grant Program	Provides loans and grants to communities for public water supply systems.
	Division of Epidemiology	
	Environmental Epidemiology Section	
	Environmental Epidemiology Branch	Assesses the human risk of potential exposure from toxins and chemicals.
	Division of Laboratory Services	
	Environmental Sciences Section	
	Environmental Microbiology Branch	Tests water and performs coliform analysis for counties in the state.
	Environmental Inorganic Chemistry Branch	Analyzes all inorganic substances, such as arsenic and metals.
	Environmental Organic Chemistry Branch	Analyzes and tests the impact of pesticides, hazardous waste, and chemical spills.
	Environmental Radiochemistry Branch Radiochemistry Program	Tests drinking water, soil, and shellfish for radiation.
	Laboratory Certification Branch	Certifies milk and water laboratories to determine if milk laboratories are in conformance with Food and Drug Administration rules and regulations; and if water laboratories are in conformance with the federal Safe Drinking Water Act.
Department of Labor		
	Right-To-Know Division	Ensures that all users of hazardous chemicals in quantities of at least 55 gallons provide information to local fire chiefs on chemicals and that the public has access to this information.

TOTAL FOR ENVIRONMENTAL HEALTH PROGRAMS: .....

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A,P	G.S. 130A-312	0.00	1,330.82	1,231.50	0.00	2,562.32
A	G.S. 159G-15	[Public Water Supply Section includes dollars for loan and grant program; amount in fund fluctuates.]				0.00
P	G.S. 130A-5	0.00	687.57	17.28	0.00	704.84
P	G.S. 130A-315 G.S. 130A-88	0.00	1,720.08	95.14	0.00	1,815.22
		[Total spending for all branches in Environmental Sciences Section except for Laboratory Certification Branch.]				
P	G.S. 130A-315 G.S. 130A-88					
P	G.S. 130A-315 G.S. 130A-88					
P	G.S. 130A-315 G.S. 130A-88					
P	G.S. 130A-315	0.00	56.42	0.00	0.00	56.42
A,P	G.S. 95-173	0.00	185.41	0.00	0.00	185.41
		0.00	**8,361.41**	**1,343.92**	**0.00**	**9,705.34**

Section III: Environmental and Occupational Health Safety
Table 2: Occupational Safety Programs

Department	Division and Program	Responsibilities and Activities
Department of Labor		
	Boiler and Pressure Vessel Division	Comprehensive regulation of boiler and pressure vessels.
	Elevator and Amusement Device Division	To ensure safety, inspects elevators, escalators, dumbwaiters, passenger tramways, ski lifts, handicapped lifting devices, and amusement devices.
	Mine and Quarry Division	Enforces work place safety regulations in mines and quarries and encourages safe operations.
	Occupational Safety and Health Division	
	Compliance Bureau	Enforces standards protecting the employees from exposure to occupational safety and health hazards. Conducts health and safety inspections, but does not inspect all N.C. work places.
	Consultative Services Bureau	Provides consultations to employers on correcting safety and health hazards in the work place.
	Education, Training, and Technical Services Bureau	Publishes safety and health guides, operates schools, and conducts seminars on safety and health topics.
Department of Environment, Health, and Natural Resources		
	Division of Epidemiology	
	Occupational Health Section	[This section includes the Industrial Hygiene Consultation Branch and the Asbestos Branch.]
	Asbestos Program	Inspects public buildings for asbestos and enforces federal and state asbestos laws and regulations in all public buildings.
	Dusty Trades Program	Aims to protect workers in mining and granite quarries exposed to asbestos and other substances such as silica.
	Industrial Consultation Hygiene Program	Monitors industry to ensure employee safety.
	Occupational Health Nursing Program	Prevents illnesses and promotes healthy lifestyles by working with industry and consulting with the occupational health nurses in industry.

TOTAL FOR OCCUPATIONAL SAFETY PROGRAMS: .....

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A,P	G.S. 96-68.8	0.00	0.00	0.00	639.52	639.52
A,P	G.S. 95-105 95-110.1 95-111.1	0.00	562.32	0.00	437.22	999.54
A,P	G.S. 74-24.1	0.00	471.16	52.24	0.00	523.39
		0.00	2,223.74	2,531.60	0.00	4,755.34
		[Total dollars include Compliance, Consultative Services, and Education, Training and Technical Services Bureaus.)				
A	G.S. 95-126	[Included in total for Occupational Safety and Health Division.]				
P	G.S. 95-147	[Included in total for Occupational Safety and Health Division.]				
P	G.S. 95-147	[Included in total for Occupational Safety and Health Division.]				
		0.00	389.06	0.00	0.00	389.06
		[Total dollars for this section include funds for the Industrial Hygiene Consultation Branch, but no funds for the Asbestos Branch.]				
A,P	G.S. 130A Article 19	0.00	177.67	11.52	538.29	727.48
A,P	G.S. 97 & 130-5(5)	[Funds are included in the total for the Occupational Health Section.]				
A,P	G.S. 130A-5(5)	[Funds are included in the total for the Occupational Health Section.]				
A,P	G.S. 130A-5(5)	[Funds are included in the total for the Occupational Health Section.]				
		0.00	**3,823.94**	**2,595.36**	**1,615.03**	**8,034.32**

Section IV: Health Care Policy, Regulation, Planning, and Training

Department	Division and Program	Responsibilities and Activities
Department of Agriculture		
	Food and Drug Protection Division	
	Food, Drug, and Cosmetics Program	Inspects food establishments and tests food products.
	Pesticide Control Program	Seeks to protect consumers, the environment, and the public by ensuring product quality and responding to pesticide-related incidents.
	Veterinary Division	
	Animal Disease Diagnostic Laboratory Program	Diagnoses diseases of livestock, poultry, and other animals to protect the public health and prevent outbreaks of foreign animal disease.
	Meat and Poultry Inspection Program	Operates inspection program to ensure that all meat and poultry is wholesome, properly labeled, packaged, packed, and fit for human consumption.
Department of Community Colleges		
	Allied Health Professional Programs	Administers curriculums that prepare students for licensure, certification, or registration in their field.
	Nursing Programs	Administers 48 associate degree nursing programs, and 24 practical nursing progams.
Department of Environment, Health, and Natural Resources		
	State Center for Health and Environmental Statistics	Collects, analyzes, and publishes health-related data.
	Division of Dental Health	
	Dental Public Health Residency Program	Provides professional training in dental public health.
	Prevention Services Program	Helps health departments develop and conduct preventive programs.

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A,P	G.S. 106, Art. 12	0.00	2,389.47	91.10	0.00	2,480.57
A,P	G.S. 143, Art. 52	0.00	1,954.19	350.63	0.00	2,304.82
A,P	Ch. 106, Arts. 34,49,49E,49F & 58	0.00	4,915.34	42.47	0.00	4,957.81
A,P	Compulsory Meat Inspection Law G.S.106, Art. 49B & 49C NC Poultry Products Inspection Law, G.S. 106, Art. 49D	0.00	2,470.20	2,546.80	0.00	5,017.00
A	G.S. 115D 23 NCAC 2E .0200	417.46	11,262.02	0.00	0.00	11,679.48
A	G.S. 115D 23 NCAC 2E .0200	1,132.32	18,314.29	81.19	0.00	19,527.80
A	G.S. 130A-90 G.S. 130A-208 G.S. 130A-371	0.00	2,242.00	167.00	0.00	2,409.00
A	G.S. 130A-11	0.00	10.00	0.00	0.00	10.00
A,P	G.S. 130A-366	0.00	30.00	0.00	0.00	30.00

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health, and Natural Resources, continued		
	Division of Epidemiology	
	Communicable Disease Control Section	
	General Communicable Disease Branch	Tracks communicable diseases.
	Surveillance Program	Collects statistics to report to the U.S. Center for Disease Control as part of national surveillance on general health of the population.
	Immunization Branch	Provides immunization and related services to children and adults.
	Environmental Epidemiology Section	
	Environmental Epidemiology Program	Assesses the human risk of potential exposure from toxins and chemicals.
	Pesticides Program	Works to prevent human pesticide poisoning and ensure that pesticides are used in an acceptable manner.
	Veterinary Public Health Program	Provides consultation on animal bites and on rabies.
	Injury Control Section	
	Driver Medical Evaluation Branch	Evaluates the effect a person's medical condition may have on driving ability.
	Injury Prevention Branch	Works to prevents injuries at the local level and offers injury-prevention grants to health departments.
	Post-Mortem Medicolegal Examination Division	Oversees operation of statewide medicolegal death investigation program to ensure identification of and proper certification of all deaths due to external causes.
	Pathology Section	Performs medicolegal autopsies to determine cause and manner of death.
	Toxicology Section	Performs postmortem testing of samples collected during medicolegal examinations to certify cause and manner of death.
	Statistical and Records Section	Disseminates reports of examinations generated by medical examiners and pathologists and prepares yearly statistics for surveillance and research purposes.
	Office of Public Health Nursing	Addresses legal public health nursing practice issues; sets standards of public health nursing practice and provides training and continuing education for public health nurses. [Folded into the DEHNR's Administrative Section for FY'92.]

—continued

Key Code to Type of Program: Administration*.... A Prevention..., P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A	G.S. 130A-134, -141	0.00	3,550.80	0.00	0.00	3,550.80
A	G.S. 130A-134, -141	[Figures are included in the total for the General Communicable Disease Branch.]				
P	G.S. 130A-149, -157	0.00	2,719.54	3,735.05	0.00	6,454.59
P		0.00 [Funds are included in the total for the Environmental Epidemiology Section.]	687.57	17.28	0.00	704.84
A,P	G.S. 130A-5	[Funds are included in the total for the Environmental Epidemiology Section.]				
A,P	G.S. 130A-184, -200 (rabies)	[Funds are included in the total for the Environmental Epidemiology Section.]				
A	G.S. 20-9, G.S. 143-10	0.00	26.60	0.00	337.09	363.70
A,P	G.S. 130A-29	0.00	0.00	317.82	189.66	507.48
A	G.S. 130A-377, -394	0.00 [State dollars include all local reimbursements received.]	2,222.00	0.00	0.00	2,222.00
A,T	G.S.130A-377, -394					
A,T	G.S.130A-377, -394					
A,P	G.S. 130A-377, -394					
A	G.S. 130A-366					

Section IV: Health Care Policy, Regulation, Planning, and Training, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Human Resources		
	Division of Aging	
	Medicare Partners Program	Encourages physicians to accept assignments for Medicare patients at 200% of the federal poverty level.
	Division of Facility Services	
	Certificate of Need	Reviews the need for certain health facilities and services identified under State Medical Facilities Plan and issues CONs if needed.
	Emergency Medical Services	Conducts training and certification for emergency medical personnel, inspects ambulances, and designates trauma centers.
	Facilities Finance Program	Issues bonds to finance health care facilities.
	Federal Certification	Certifies and inspects health care facilities participating in the Medicaid/Medicare program. Reviews and evaluates the appropriateness of care provided to Medicaid recipients.
	Licensure Program	Reviews, inspects, and licenses health care and domiciliary facilities.
	Medical Facilities Planning	Produces State Medical Facilities Plan, which provides projections of need for health care facilities and services.
	Regulatory Services	Licenses nursing pools to ensure that nursing staff meet all state regulations and standards.
	Division of Medical Assistance	
	Carolina Access Program	Operates cost containment program to link eligible Medicaid recipients with doctors who manage their care.
	Division of Mental Health, Developmental Disabilities, and Substance Abuse Services	
	Substance Abuse Section	
	Regulatory Branch Controlled Substance Regulatory Program	Conducts reviews and inspections of the records of approximately 1,400 facilities that dispense medications.
	Office of the Secretary	
	Office of Rural Health and Resource Development	Strengthens rural health services by providing technical and grant assistance to community-based health care centers, technical assistance to small rural hospitals, and physician recruitment services to rural and underserved communities.

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T

**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A		[No direct state resources associated with the program.]				0.00
A	Ch. 131E, Art. 9	0.00	0.00	0.00	736.75	736.75
A	Ch. 131E, Art. 7	0.00	2,994.83	252.15	246.18	3,493.16
A	Ch. 131A	0.00	0.00	0.00	331.30	331.30
A	Sec. 1864, 1874 of federal Soc. Sec. Act	0.00	287.99	4,509.15	0.00	4,797.14
A	Ch. 131E, Art. 5,6,8, &10 Ch. 108A, Art. 6 Ch. 122C, Art. 2	0.00	1,845.83	610.49	74.30	2,530.62
A	G.S.131E, Art.9	0.00	274.04	0.00	7.17	281.21
A	Ch. 131E, Art. 6, Part E	0.00	17.36	0.00	0.10	17.46
A	Ch.689, Sec. 93, 1991 Session Laws	0.00	12.40	24.60	0.00	37.00
A	G.S. 90-101 to 103	[Funds not tracked separately; expenditures included in overall substance abuse administrative budget.]				
A	H.B. 1237 (1973) Chap. 627, 1973 Session Laws	4,748.72	2,428.89	465.90	0.00	7,643.51

Section IV: Health Care Policy, Regulation, Planning, and Training, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Insurance		
	Seniors' Health Insurance Information Program (SHIIP)	Provides consultation to older citizens on Medicare, Medicare supplement, and long-term care insurance.
	Financial Evaluation Division	Licenses, regulates, and controls all Health Maintenance Organizations.
	Life and Health Division	Approves forms and rates for all regulated health insurance policies, including approval or disapproval of insurance company rates.
	Market Conduct Division	Monitors the market practices of HMOs and ensures that HMOs are using the proper forms and rates and meeting other standards such as staffing ratios.
Department of Public Instruction		
	Division of Curriculum and Instruction	
	Healthful Living Section	
	Nutrition Education and Training Program	Provides federal funding for nutrition education curricula for children.
Department of State Treasurer		
	Teachers, State Employees, and Retirees Comprehensive Major Medical Plan	Sets policy and oversees and administers the health plan for more than 438,000 state employees, retirees, teachers and dependents of these workers.
University of North Carolina		
	Allied Health Professional Programs	Two schools of allied health (East Carolina University and Western Carolina University) a Department of Medical Allied Health Professions located at UNC-Chapel-Hill, and various individual allied health programs at other campuses. Programs include clinical laboratory science, medical record administration, cytotechnology, occupational therapy, physical therapy, speech/language pathology and audiology, radiologic sciences, and rehabilitation counseling.
	School of Dentistry	One school of dentistry located at UNC-Chapel Hill.
	Schools of Medicine	Two schools of medicine responsible for educating physicians to meet the health care needs of the state and the nation. Schools consist of many different departments, including departments of pathology, family medicine, pediatrics, and medical allied health professionals. Schools are located at UNC-Chapel Hill and East Carolina University in Greenville.

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A	Ch. 143A, Art. 1&9	0.00	157.16	0.00	0.00	157.16
A	Ch. 58, Art. 67	0.00	2,024.57	0.00	0.00	2,024.57
A	Ch. 58	0.00	573.58	0.00	0.00	573.58
A	G.S. 58-2-131 -132	0.00	1,116.44	0.00	0.00	1,116.44
A	PL 101-147	0.00	0.00	171.58	0.00	171.58
	G.S. 135-37, - 135-40.14	0.00	0.00	0.00	507,000.00	507,000.00
A	G.S. 116-4	0.00	9,000.32	960.46	1,106.07	11,066.85
A	G.S. 116-4	Not App.	13,326.44	4,460.41	4,378.63	22,165.48
A	G.S. 116-4, G.S. 116-40.4	Not App.	101,471.47	72,458.27	157,302.47	331,232.21

Section IV: Health Care Policy, Regulation, Planning, and Training, *continued*

Department	Division and Program	Responsibilities and Activities
University of North Carolina, continued		
	UNC School of Medicine Area Health Education Centers Program	Statewide network of nine centers which works in partnership with the university health science centers and the community. Provides education and training to meet health manpower needs by working in collaboration with educational and service institutions.
	Schools of Nursing	Nine schools of nursing in the state and several nursing programs.
	School of Pharmacy	One school of pharmacy located at UNC-Chapel Hill.
	School of Public Health	One school of public health located at UNC-Chapel Hill.
	University of North Carolina Hospitals at Chapel Hill	A multi-disciplined tertiary care facility. Primary teaching facility for schools of medicine and nursing at UNC-Chapel Hill. Also provides regional and statewide coordination of neonatal intensive care admissions, aeromedical transportation services, organ transportation, and cancer research and treatment.

TOTAL FOR HEALTH CARE POLICY, REGULATION, PLANNING, AND TRAINING: .....

Section V: Boards and Commissions

Department	Division and Program	Responsibilities and Activities
Independent Commission		
	N.C. Institute of Medicine	Monitors and studies health matters.
Department of Administration		
	N.C. Alcoholism Research Authority	Researches the causes and effects of alcohol abuse and alcoholism, trains alcohol research personnel
Department of Environment, Health, and Natural Resources		
	Commission for Health Services	Adopts rules and regulations necessary for the promotion and protection of public health and disease control and for sanitary management.
	Governor's Council on Physical Fitness and Health	Promotes interest in physical fitness throughout the state and makes recommendations to the governor on coordinating physical fitness programs.

—continued

Key Code to Type of Program: Administration*.... A Prevention.... P Treatment.... T
**Includes general administrative, educational, training, regulatory, and other planning activities and programs.*

Type of Program	Statutory or Regulatory Authority	Expenditures in NC FY 1990-91 (July 1–June 30) in 1000s				
		Local	State	Federal	Other	Total
A	G.S. 116-4	42,862.00	31,740.00	0.00	79.00	74,681.00
A	G.S. 116-4	0.00	14,018.44	2,855.70	1,569.35	18,443.49
A	G.S. 116-4	Not App.	4,393.96	420.22	2,056.04	6,870.22
A	G.S. 116-4	Not App.	11,696.79	12,755.19	11,322.11	35,774.10
P,T	G.S. 116-37	0.00	34,934.00	0.00	204,695.20	239,629.20
		["Other" category is primarily inpatient and outpatient receipts, including Medicare and Medicaid reimbursements.]				
		49,160.50	**285,108.52**	**107,293.45**	**891,431.43**	**1,332,993.90**

Number of Members	Statutory or Regulatory Authority
100	S.B. 212 (1983) Ch. 923, Sec. 197, 1983 Session Laws
9	G.S. 122C-431
12	G.S. 130A-29
10	G.S. 143B-216.8

Section V: Boards and Commissions, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Environment, Health, and Natural Resources, continued		
	Governor's Commission on Reduction of Infant Mortality	Plans and organizes at the local level to fight infant mortality. Advises state policymakers and indentifies existing programs that can be used as models for other communities. Solicits and distributes funding from the private sector.
	Council on Sickle Cell Syndrome and Related Disorders	Assesses education needs and studies current programs treatment, rehabilitation, payment assistance, discrimination and research for sickle cell syndrome.
	Dental Public Health Residency Advisory Council	Advises the Residency Director on the organization and curriculum of the program and is involved with individual residents' plans and activities.
Department of Human Resources		
	Governor's Council on Alcohol and Other Drugs	Reviews current approaches to the substance abuse problem, makes recommendations regarding the implementation of programs, addresses identified needs in the community, and increases public awareness and involvement in combating substance abuse.
	Human Rights Committees for State Psychiatric Hospitals, Mental Retardation Centers, Alcohol and Drug Abuse Treatment Centers, N.C. Special Care Center, Wright School and Whitaker School	Provide additional safeguards for protecting the human, civil, legal, and treatment rights of residents in these facilities.
	Commission for the Blind	Adopts rules and regulations for the state's medical eye care, independent living, and rehabilitation programs for the blind and for compliance with requirements for federal grants in-aid.
	Emergency Medical Services Advisory Council	Advises the Secretary on emergency medical services system development and on the designation of trauma centers.
	Council for the Deaf and Hard of Hearing	Advises the state on the needs of hearing-impaired individuals and advocates for public services, health care, and educational opportunities.
	Governor's Task Force on Injury Prevention	Works to prevent injury from such causes as drowning, falls, poisoning, and fire.
	Medical Care Commission	Adopts rules on the regulation and licensing or certification of health facilities and services, including hospitals, hospices, free-standing outpatient surgical facilities, and nursing homes. Issues revenue bonds to finance construction and equipment purchases for nonprofit and public hospitals, nursing homes, continuing care facilities for the elderly, and related facilities.

—continued

Number of Members	Statutory or Regulatory Authority
29	Executive Order 99 (1989)
15	G.S. 143B-188
11	G.S. 130A-11
20	Executive Order 23 (1986)
10 each for hospitals and MR centers; 5 each for all other facilities	G.S. 122C-64
11	G.S. 143B-157
21	G.S. 143-510
15	G.S. 143B -216.31 Executive Order 78 (1988)
17	G.S.143B -165, -166

Section V: Boards and Commissions, *continued*

Department	Division and Program	Responsibilities and Activities
Department of Human Resources, continued		
	N.C. State Health Coordinating Council	Prepares the State Medical Facilities Plan
	State Medical Care Advisory Commission	Advises the Division of Medical Assistance on Medicaid and makes policy recommendations to the division.
	Mental Health Study Commission	Develops and provides recommendations to General Assembly and Governor on implementation of long range plans for mental health, developmental disabilities, and substance abuse services, quality of services, and related support services.
	Commission for Mental Health, Developmental Disabilities and Substance Abuse Services	Adopts licensure and other rules for mental health, developmental disability, and substance abuse programs. Reviews Division of Mental Health, Developmental Disabilities and Substance Abuse Services plans and advises the Secretary of Human Resources.
	Penalty Review Committee	Functions as an initial decision-making body for imposition of all administrative penalties imposed by the Division of Facility Services.
Department of Insurance		
	Medical DataBase Commission	Collects data on utilization, price, and quality of health care services from both health care providers and third-party payers. Collects hospital inpatient discharge data used for both statistical and descriptive analyses. Routinely distributes reports to the public and prepares special data compilations upon request.
Department of Labor		
	Safety and Health Review Board	Appointed by the Governor, the Board hears appeals of contested OSHA citations. Issues decisions in each case.
	Mine and Quarry Advisory Council	Assists the Commissioner of Labor in the development of safety and health standards for mines.
	State Advisory Council on Occupational Safety and Health	Advises the Commissioner of Labor on efforts to reduce the number of occupational safety and health hazards at the work place to provide safe and healthful working conditions.
	N.C. Board of of Boiler and Pressure Vessel Rules	Proposes rules and regulations governing construction, installation, inspection, repair, lateration, use and operation of boilers and pressure vessels.
Department of Public Instruction		
	State School Health Advisory Commission	Provides an opportunity for citizen involvement in the development and operation of the State School Health Program and reports annually to State Board of Education.

Number of Members	Statutory or Regulatory Authority
24	Executive Order 13 (1985) Executive Order 93 (1989)
13	G.S. 142-1B
24	Chapter 754 of 1991 Session Laws
25	G.S. 143B-147 to 150
9	G.S. 131D-34; G.S. 131E-29
12	G.S. 131E-213
3	G.S. 95-135
11	G.S. 74-24.6
11	G.S. 95-134
9	G.S. 95-69.13
12 2 ex-officio	G.S. 115C-81e

Section VI: Examining and Licensing Boards

The examining and licensing boards relating to the health care professions have similar enabling legislation. Establish rules and regulations to ensure minimum standards of the profession to protect the public health, safety and welfare of the citizens of North Carolina. Examine, license, certify and serve as disciplinarians, as required.

Board of Chiropractic Examiners	G.S. 90-139
Board of Dental Examiners	G.S. 90-22
Hearing Aid Dealers and Fitters Board	G.S. 93D-3
Board of Medical Examiners	G.S. 90-2
Midwifery Joint Committee	G.S. 90-178.4
Board of Nursing	G.S. 90-171.19
Board of Nursing Home Administrators	G.S. 90-277
Board of Opticians	G.S. 90-238
Board of Optometry	G.S. 90-116
Board of Pharmacy	G.S. 90-85.6
NC Board of Physical Therapy Examiners	G.S. 90-270.24
Board of Podiatry Examiners	G.S. 90-202.4
Board of Sanitarian Examiners	G.S. 90A-50
Board of Speech and Language Pathologists and Audiologists	G.S. 90-303

"If it's nose trouble you have, you're sent to Paris: there they have an important specialist in nasal disorders. You go to Paris and he examines your nose. 'I can only cure your right nostril,' he tells you—'I don't want to have anything to do with your left nostril. It doesn't fall within my area of specialization. But after you've been treated by me, you can go to Vienna. There you will find another specialist who will be able to treat your left nostril.'"

— FEODOR DOSTOEVSKI FROM *BROTHERS KARAMAZOV*

—continued from page 49

Statistics in the Department of Environment, Health, and Natural Resources. The state's Certificate of Need program, which issues Certificates of Need to regulate the construction of certain medical facilities or the purchase of certain equipment, comes under this category as well. The program is designed to control certain health care costs. Also falling under the rubric of policy, regulation, and planning are licensure programs for health care and domiciliary facilities.

The biggest sources of spending under policy, regulation, planning, and training, however, are the state employees' health plan, at $507 million, and two state-funded schools of medicine at East Carolina University in Greenville and the University of North Carolina at Chapel Hill. Together, the schools spent $331.23 million in 1990–91. The University of North Carolina Hospitals at Chapel Hill represent the primary teaching facility for the schools of medicine and nursing at UNC–Chapel Hill. They also provide statewide coordination of neonatal intensive care admissions, aeromedical transportation services, organ transportation, and cancer research and treatment. In 1990–91, the hospitals had a budget of nearly $240 million.

Two final areas of responsibility within the state's health care delivery apparatus are state boards and commissions with advocacy or policymaking functions and professional examining and licensing boards (see sections V and VI). Among the boards and commissions are the Medical Care Commission, which has a broad charge of regulating and licensing hospitals, nursing homes, and other health care facilities. The commission also issues tax-exempt revenue bonds to finance construction and equipment purchases.

Two other important bodies are: the Commission for Health Services, which adopts sanitation rules and rules to protect the public health and control disease; and the State Health Coordinating Council, which prepares the State Medical Facilities Plan with the Department of Human Resources. Licensing boards perform such functions as licensing chiropractors, dentists, and other health care providers.

Prevention, Treatment, Administration, or Something Else?

In soliciting information about state government programs dealing with health care, the Center asked administrators to consider whether the primary purpose of their program was prevention of accident or illness, treatment, or administration.

"I was feelin' real depressed, I was feelin' real low down. I just felt so bad that I could not get my butt up off the ground."

— GUY CLARK
"DOCTOR GOOD DOCTOR"

Of 163 programs, the Center found 37 that could be classified primarily as prevention, 30 with the dominant purpose of treatment, and 35 that principally served an administrative role. Some 61 programs, however, defied this type of classification, and were noted as serving more than one function.

At least one respondent anticipated this kind of difficulty with classifying programs according to function. "Single program activities and responsibilities can concurrently be classified as prevention, treatment, and administration," says Dr. Georjean Stoodt, director of the Division of Adult Health in the Department of Environment, Health, and Natural Resources.

"For example, treating hypertension is preventing stroke. Treating obesity and inactivity is preventing hypertension. Dialyzing a patient with renal failure is preventing further disability or death. Thus, classifying a programs as prevention versus treatment depends on what is being prevented or treated for whom."

FOOTNOTES

[1] These figures have been adjusted to account for the fact that some program administrators were unable to separate Medicaid spending from total program spending.

[2] Figures for local spending and other spending sources likely are underestimated as they are not always tracked at the state level.

[3] For more on policymaking in health-related areas, see: Bill Finger and Anne DeLaney, "From Cradle to Grave, Serving Persons with Disabilities," *North Carolina Insight,* Vol. 6, No. 2–3 (October 1983), pp. 8–27; Michael Matros and Roger Manus, "Services for Disabled Persons: From Institutions to Communities," *North Carolina Insight,* Vol. 7, No. 1 (June 1984), pp. 42–54; Cynthia Lambert and Bill Finger, "'Targeting' Older Persons for Services, an Overview of the 'Aging Network,'" *North Carolina Insight,* Vol. 8, No. 1 (September 1985), pp. 9–31; and Bill Finger and Jack Betts, "Who Makes Environmental Policy?" *North Carolina Insight,* Vol. 10, No. 2–3 (March 1988), pp. 10–39.

Registered Lobbyists in the Health Care Field

Academy of Family Physicians, N.C. ..... G. Peyton Maynard

AEtna Life & Casualty Co. ..... Benjamin F. Seagle, III

AIDS Service Coalition, N.C. ..... Roslyn Savitt

Blue Cross and Blue Shield of N.C. ..... Bradley T. Adcock

Child Advocacy Institute, N.C. ..... John S. Niblock

Coalition on Adolescent Pregnancy, N.C. ..... Marianna M. Day

Dental Society, N.C. ..... William H. Potter, Jr.

Dept. of Environment, Health, and Natural Resources
Division of Health Services ..... Ron Levine

Dept. of Human Resources ..... Bonnie Allred
Division of Social Services ..... Donna Creech
Division of Medical Assistance ..... Daphne Lyon
Division of Facility Services ..... John Syria

Dept. of Insurance ..... Allen Feezor
..... Bill Hale

Health Care Facilities Assn., N.C. ..... J. Craig Souza
..... Rees Jenkins

Health Insurance Assn. of America ..... Michael B. Herman
..... Linville Roach

Hospital Assn., N.C. ..... Steve Morrisette
..... William A. Pully

Kaiser Foundation Health Plan of N.C. ..... Harrison J. Kaplan

Legal Services Resource Center, N.C. ..... Pam C. Silberman

Long Term Care Facilities, N.C. Assn. of ..... William Franklin, Jr.

Medical Society, N.C. ..... Ann L. Sawyer

Mental Health Assn. in N.C. ..... Patricia Prescott

Nurses Assn., N.C. ..... Sindy Barker

Obstetrical and Gynecological Society, N.C. ..... Marvin Musselwhite

Pediatric Society, N.C. ..... Henry W. Jones, Jr.

Public Health Assn., N.C. ..... John W. Jordan, Jr.
..... Henry W. Jones, Jr.

State Council for Social Legislation ..... Barbara K. Armstrong

United Cerebral Palsy of N.C. ..... G. Peyton Maynard

RESOURCES ON HEALTH CARE

Reports on Health Care

Comparing the Performance of For-Profit and Not-for Profit Hospitals in North Carolina, by Marianne M. Kersey et al., N.C. Center for Public Policy Research, 1989.

Emergency! Rising Health Costs in America, 1980–1990–2000, a Families USA Foundation Report in cooperation with Citizen Action, Washington, D.C., October 1990.

Health Care for the Medically Indigent: North Carolina County Profiles, 1990 Update, Duke Center for Health Policy Research and Education, April 1992.

Health Law Bulletin, edited by Anne Dellinger and Jeffrey Koeze, Institute of Government, UNC–Chapel Hill, Chapel Hill, N.C., published as necessary.

Health Manpower Trends for North Carolina: A Ten-Year Profile—1978–1987, prepared by Lise K. Fondren *et al.,* UNC Health Services Research Center, Chapel Hill, N.C., December 1989.

Health Spending: The Growing Threat to the Family Budget, Families USA, Washington, D.C., December 1991. Includes state-level data on health care spending by families and business.

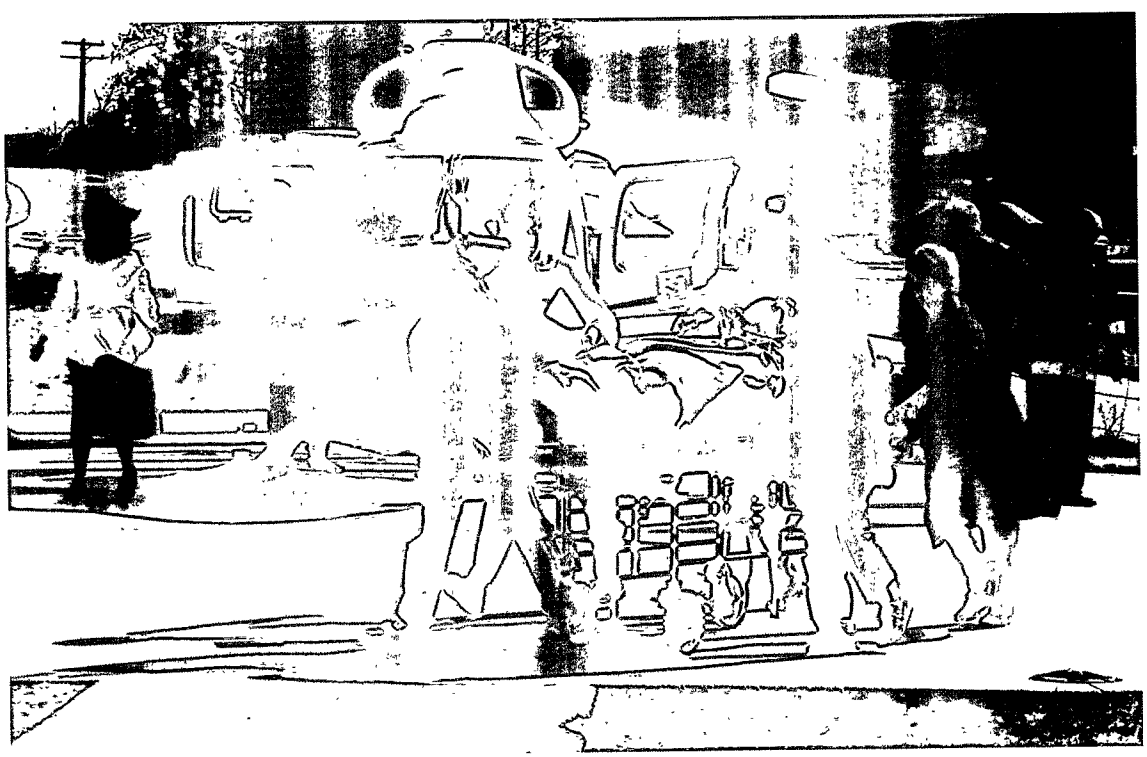
"A History of the Public Health System," *The Future of Public Health,* the U.S. Institute of Medicine, National Academy Press, Washington, D.C., 1988.

Hospital Law in North Carolina, edited by Anne Dellinger, Institute of Government, UNC–Chapel Hill, Chapel Hill, N.C., 1985–present.

Improving the Odds: Healthy Mothers and Babies for North Carolina, Report of the N.C. Institute of Medicine's Task Force to Reduce Infant Mortality and Morbidity in North Carolina, November 1988.

Infant Mortality in North Carolina: An Inventory of Efforts to Reduce Infant Mortality with Recommendations for the Future, Arthur C. Christakos, prepared for N.C. Institute of Medicine, January 1991.

The Investor-Owned Hospital Movement in North Carolina, Elizabeth M. "Lacy" Maddox, editor, N.C. Center for Public Policy Research, 1986.



Duke University Medical Center

Limited Access—Health Care for the Rural Poor, Laura Summer, Center on Budget and Policy Priorities, Washington, D.C., March, 1991.

Making Difficult Health Care Decisions, Vol. 1—The National Survey, Study #874003, Humphrey Taylor, Louis Harris and Associates, June 1987.

Medical Life in North Carolina, an overview of health care in North Carolina and a reference for medical professionals and students, Medical Life Publishing Co., Raleigh, N.C., June 1991.

North Carolina Active Nonfederal Physicians Primary Specialties by State, County, and Selected Regions, a special report on health care resources in North Carolina, prepared by the Cecil G. Sheps Center for Health Services Research of UNC–Chapel Hill, effective October 1990.

North Carolina Health Manpower Data Book, a special report on health care resources in North Carolina, prepared by the Cecil G. Sheps Center for Health Services Research of UNC–Chapel Hill, effective October 1990.

"North Carolina Hospitals: Utilization Trends by Urban-Rural Location and Size," Jeanne M. Lambrew, UNC–Chapel Hill Rural Health Research Program, September 1991.

North Carolina Health Careers, 1992–93, Kathleen Faherty and Frank Dinauro, eds., a biennial guide to careers in health care, North Carolina Area Health Education Centers, UNC–Chapel Hill School of Medicine, in process.

"Rural Hospital Closure: One Hospital's Tactics for Survival," Leo Petit, UNC–Chapel Hill Rural Health Research Program, Chapel Hill, N.C., October 1989.

Strategic Plan to Assist the Medically Indigent [Underinsured] of North Carolina, Report of the N.C. Institute of Medicine's Task Force on Indigent Care, Durham, N.C., July 1989.

"State Innovation in Health Policy," remarks prepared by Deborah A. Stone for the Ford Foundation Conference on the Fundamental Questions of Innovation, Duke University, Durham, N.C., May 3–4, 1991.

Symposium Summary: The Future of Public Health: Recommendations for North Carolina, Division of Community Health Service, School of Public Health, UNC–Chapel Hill, Chapel Hill, N.C., June, 1989.

Symposium Summary: Strategic Plan to Assist the Medically Indigent of North Carolina, North Carolina Institute of Medicine, Durham, N.C., February 1990.

To The Rescue: Toward Solving America's Health Cost Crisis, report of Families USA Foundation in cooperation with Citizen Action, Washington, D.C., November 1990.

Who Will Take Care of Our People?, Report of the North Carolina Academy of Family Physicians' Health Care Manpower Task Force, Raleigh, N.C., March 1991.

Government Reports

Health Care in Rural America, prepared by the U.S. General Accounting Office, Washington, D.C., 1990.

Health Care in Rural America, prepared by the U.S. Congress, Office of Technology Assessment, Washington, D.C., September, 1990.

North Carolina's Health, Kathryn Surles, special report series by the N.C. Department of Human Resources, Division of Health Services, State Center for Health Statistics, 1983.

Physical Health and Health Care in North Carolina: A Review of Survey Data from 1976 to 1984, Office of State Budget and Management, 1985.

Rural Hospitals: Factors That Affect Risk of Closure, prepared by the U.S. Congress, Office of Technology Assessment, Washington, D.C., 1990.

"Rural Hospitals: Federal Efforts Should Target Areas Where Closures Would Threaten Access to Care," prepared by the U.S. General Accounting Office, Washington, D.C., 1991.

Legislative Study Commissions

Commission on Access to Health Insurance: studying access to affordable health insurance for North Carolinians. An interim report is due in May 1992 to the 1992 session of the General Assembly, with a final report to the 1993 session.

Legislative Committee on Employee Hospital and Medical Benefits: reviews health care services and programs provided under the North Carolina Teachers' and State Employees' Comprehensive Major Medical Plan.

Legislative Research Commission on Health Systems Issues: reviews the availability and accessibility of public health services as well as the efficiency and effectiveness of the public health system.

Legislative Research Commission on Medical Malpractice Claims Arbitration: studies use of arbitration and other forms of dispute resolution and their use in the resolution of medical malpractice claims.

State Organizations

Center for Early Adolescence, University of North Carolina at Chapel Hill, D-2 Carr Mill Town Center, Carrboro, N.C. 27510 (919) 966-1148. A multidisciplinary organization formed to promote the healthy development of the nation's 10- to 15-year-olds.

Center for Health Policy Research and Education, Duke University, Erwin Square, Ste. 230, 2200 W. Main St., Durham, N. C. 27706 (919) 286-5528. Promotes and facilitates collaborative interdisciplinary research on clinical and public policy issues.

Duke Center for the Study of Aging and Human Development, Box 3003, Duke University Medical Center, Durham, N.C. 27710 (919) 684-3176. A national resource for information about aging and a training ground for teachers, practitioners, and planners.

Duke Health Administration Program, P.O. Box 3018, Duke University Medical School, Department of Health Administration, Durham, N.C. 27710 (919) 684-4188

Foundation for Alternative Health Programs, 301 Ashe Avenue, Raleigh, N.C. 27606 (919) 821-0485. Serves as a catalyst for demonstration programs to improve the delivery of health care services and control health care costs in North Carolina.

North Carolina Academy of Family Physicians, Sue Makey, CAE, Executive Vice President, P.O. Box 18469, Raleigh, N.C. 27619 (919) 781-6467. Professional organization for family physicians.

North Carolina Area Health Education Centers, C.B. Box 7165, Wing C, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27599 (919) 966-2461. Improves geographic distribution and retention of well-trained health professionals and support personnel to meet the primary medical needs of the people of North Carolina.

Duke University Medical Center

North Carolina Association of County Commissioners, C. Ronald Aycock, Executive Director, 215 North Dawson Street, Raleigh, N.C. 27609 (919) 832-2893. Communicates about public health care issues with county officials, the General Assembly, and the state regulatory agencies.

North Carolina Association of Long Term Care Facilities, William H. Franklin, Jr., Executive Director, 4010 Barrett Drive, Suite 102, Raleigh, N.C. 27609 (919) 787-3560. Trade association for all rest homes licensed in North Carolina.

North Carolina Center for Health & Environmental Statistics, P.O. Box 29538, Raleigh, N.C. 27626-0538 (919) 733-4728. Collects, maintains and analyzes health-related data depicting the health status of North Carolinians and provides statistical support to the divisions of the Department of Environment, Health, & Natural Resources. Maintains various data bases on births, deaths, fetal deaths, marriages, divorces, communicable diseases, cancer incidence, birth defects, and health department services.

North Carolina Child Advocacy Institute, John Niblock, President, 1318 Dale Street, Raleigh, N.C. 27605 (919) 834-6623. A private, nonprofit agency dedicated to the promotion of the health and well-being of children and involved in lobbying, community organizing, research, and special programs.

North Carolina Coalition for Health Care Access, Pam Silberman, Project Director, P.O. Box 27225, Raleigh, N.C. 27611 (919) 821-0081. A coalition of advocacy and consumer organizations that works at the state and national level to promote universal access to health care.

North Carolina Fair Share, P.O. Box 12543, Raleigh, N.C. 27605 (919) 832-7130. A grassroots organization that addresses a range of issues, including the promotion of affordable health care for all citizens.

North Carolina Health Care Facilities Association, J. Craig Souza, President, 5109 Bur Oak Court, Raleigh, N.C. 27612 (919) 782-3827. Trade association representing North Carolina nursing homes and hospitals with long term care units.

North Carolina Hospital Association, C. Edward McCauley, Executive Director, P.O. Box 80428, Raleigh, N.C. 27623 (919) 677-2400. Represents and advocates for the state's hospitals.

North Carolina Institute of Government, John Sanders, Director, Knapp Building 059A, C.B. # 3330, University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27599 (919) 966-4107. Advises state and local government officials on a broad range of issues, including health law; publishes periodic reports, bulletins, and books.

North Carolina Institute of Medicine, E.W. Busse, President, 905 West Main Street, Durham, N.C. 27701 (919) 688-2144. Seeks solutions to statewide problems that impede the improvement of health and the efficient and effective delivery of health care for all citizens of North Carolina.

North Carolina Medical Society, George Moore, Executive Vice President, P.O. Box 27167, Raleigh, N.C. 27611 (919) 833-3836. Professional association for physicians in the state.

North Carolina Physicians Health and Effectiveness Program, Robert C. Vanderberry, M.D., Medical Director, 4700 Six Forks Road, Raleigh, N.C. 27609 (919) 881-0585. Advocates for the rights of North Carolina physicians impaired by alcoholism, drug use, and psychiatric illness.

North Carolina Primary Health Care Association, Steven V. Shore, Executive Director, 975 Walnut Street, Suite 355, Cary, N.C. 27511 (919) 469-5701. A federally funded organization that works with rural and urban health centers providing indigent care and comments on existing policy in order to educate the public.

North Carolina Public Health Association, Inc., 1009 Dresser Court, Raleigh, N.C. 27609 (919) 872-6274. A professional organization that advocates the protection and promotion of public health for North Carolina.

Kate B. Reynolds Health Care Trust, 2422 Reynolda Road, Winston-Salem, N.C. 27106 (919) 723-1456.

Cecil G. Sheps Center for Health Services Research, CB No. 7590, 725 Airport Road, Chapel Hill, N.C. 27599 (919) 966-7120. Researches organization, delivery, and effectiveness of health services, focusing primarily on the underserved, minority groups, and people at high risk of disease and disablement.

UNC School of Public Health, University of North Carolina at Chapel Hill, 1101 McGavran-Greenberg Building, Health Policy and Administration, Chapel Hill, N.C. 27599-7400 (919) 966-7350.

National Organizations

Alpha Center, 1350 Connecticut Ave. NW, Suite 1100, Washington, D.C. 20063 (202) 296-1818. Conducts and disseminates research on health-related topics.

American Association of Retired Persons, 601 E St. NW, Washington, D.C. 20049 (202) 434-

2277. Lobbying and research on health-related issues. Information source on Medicare, Medicaid, and long-term care.

American Health Care Association, 1201 L St. NW, Washington, D.C. 20005. National trade association for nursing facilities.

American Hospital Association, 840 North Lake Shore Drive, Chicago, Ill. 60611. Advocates for hospitals and the patients they serve, provides education and information for its members, and informs the public about hospital and health care issues.

American Medical Association, 515 North State St., Chicago, Ill. 60610 (312) 464-5000. Voluntary service organization of physicians that promotes medicine and the betterment of public health.

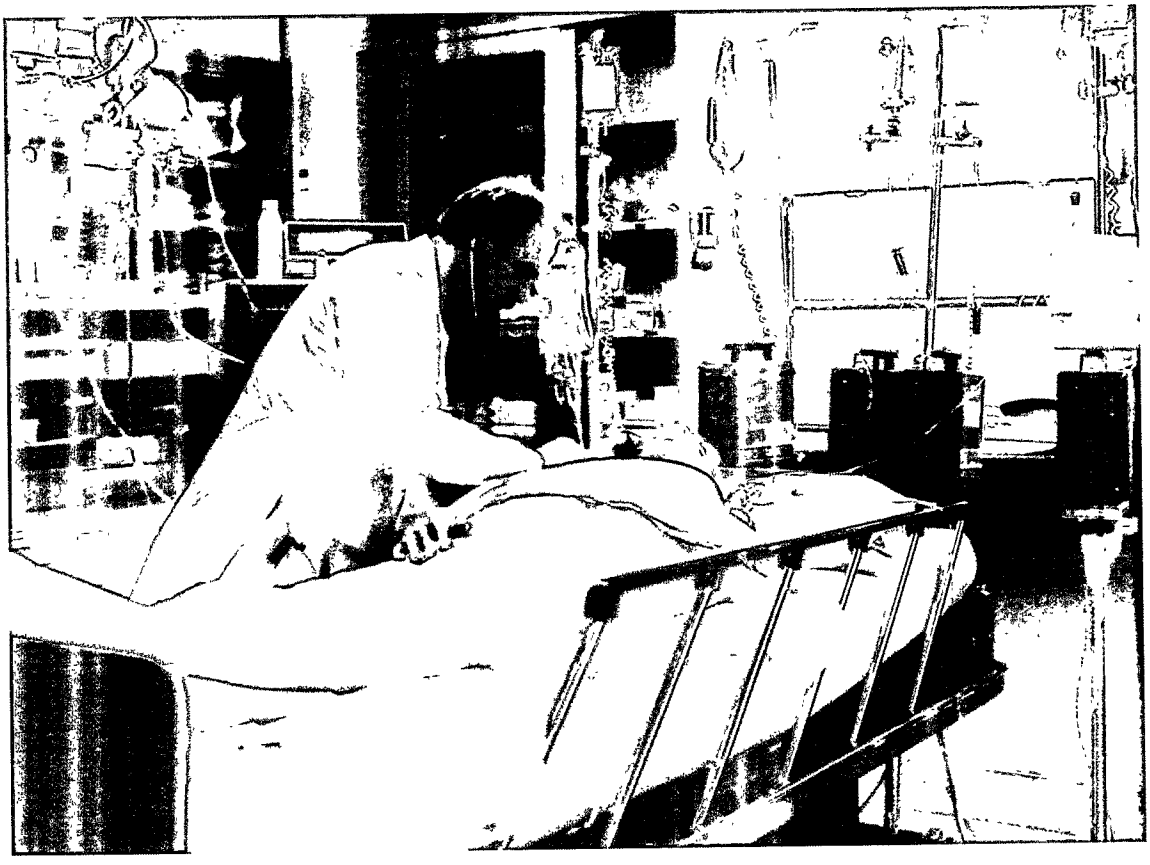
Center for Budget and Policy Priorities, 777 N. Capitol Street, N.E., Suite 705, Washington, D.C. 20002 (202) 408-1080. Studies government spending and the programs and public policy issues that have an impact on low-income Americans.

Families USA Foundation, 1334 G Street, N.W., Third Floor, Washington, D.C. 20005 (202) 628-3030. Researches health care issues with a special focus on families and the elderly.

Health Research Group, Public Citizen, 2000 P St. NW, Washington, D.C. 20036 (202) 833-3000. Research and advocacy on health-related topics.

Intergovernmental Health Policy Project, George Washington University, 2011 I Street NW, Suite 200, Washington, D.C. 20006 (202) 872-1445. Research program concentrating on health laws of the 50 states. Provides assistance to state executive officials, legislators, legislative staff, and others who need to know about important developments in other states.

U.S. Institute of Medicine, 2101 Constitution Ave. NW, Washington, D.C. 20418 (202) 334-2169. Studies issues and problems that affect the public health. Promotes the advancement of health sciences and education and improvement of health care.



Duke University Medical Center

Work Place Injury Claims: Beyond Workers' Comp

by Katherine White

This regular Insight *feature examines policymaking by the judicial branch of North Carolina state government. This column focuses on the recent case of* Woodson v. Rowland, *which expanded injured workers' ability to win claims against employers for work place injuries.*

Until the late summer of 1991, families of workers killed or injured on the job because of the reckless acts of their employers knew about what they were worth, dead or alive: $123,000.[1]

But on Aug. 14, 1991, just 22 days before the Sept. 3. 1991 fire at a Hamlet chicken processing plant that killed 25 workers and injured another 78 workers, the law suddenly changed.

On that day the N.C. Supreme Court, in a landmark decision with broad implications for workers and for businesses, greatly expanded workers' power to file claims beyond the strictures of the state's Workers' Compensation Act.[2] This will affect the surviving workers and families of the deceased, among others, who will be able to file for greater compensation. Some applaud the decision, while others say the decision went too far and that the legislature should consider rescinding it since it is based on an interpretation of a statute, not on the state constitution.

Following the lead of a few other state courts, the N.C. Supreme Court not only expanded the rights of some workers who are injured or killed on the job, but also opened the door for multimillion dollar court awards for the injuries.[3] The decision also signals a major policy shift for state standards regarding the way employers should operate. No longer will companies ignore serious OSHA violations and merely pay the fines, because to do so may expose them to massive civil judgments.

Until *Woodson v. Rowland*[4] no one in North Carolina could recover for claims in civil court for injuries caused by the reckless and wanton acts of their employers. They could sue their employer if the employer or a co-worker intentionally did something to harm the employee, such as hit him in the face or shoot him with a gun.[5] For all other injuries, including those based on intentional, unsafe conditions in the work place, workers could recover only by filing a workers' compensation claim where damages are limited to medical expenses and wage replacement benefits tied to salary levels.

A trial court has yet to decide what damages should be awarded for the employee's death in *Woodson,* but had the administrator of his estate simply filed a claim for workers' compensation benefits, the estate would have recovered $60,000. Before Woodson, the exclusiveness of the workers' compensation provisions and the statutorily mandated compensation had been the law in North Carolina since 1929, when the General Assembly adopted the Workers' Compensation Act.

The workers' compensation law traditionally has required a worker to pursue a claim for injuries under the Workers' Compensation Act, and no-

Katherine White, a regular Insight *contributor, is a Raleigh attorney with the firm of Everett, Gaskins, Hancock and Stevens.*

where else. The law attempts to balance competing interests between employers and employees. Injured workers are certain to recover for on-the-job accidents without having their employers raise the defense of contributory negligence where the worker is alleged to contribute through his or her own negligence, or that the employee assumed the risk by knowing of possible harm and doing nothing to notify the employer or mitigate the danger. Employers, on the other hand, gain limits on the amount of money employees can recover and do not have to defend civil actions that could result in larger damage awards.

Until Woodson v. Rowland, _no one in North Carolina could recover for claims in civil court for injuries caused by the reckless and wanton acts of their employers._

The exclusivity of the remedy "is part of the *quid pro quo* in which the sacrifices and gains of employees and employers are to some extent put in balance."[6]

The case involves the death of an employee in a trench cave-in at a Research Triangle construction site. Thomas Sprouse was instructed to work in a 14-foot-deep, four-foot-wide trench which was not sloped, shored, or braced, as required by the Occupational Safety and Health Act (OSHA) of North Carolina.[7] His employer, Morris Rowland Utility Inc., had been cited four times by OSHA in the previous six-and-a-half years for violating regulations governing trenching safety procedures. The administrator of Sprouse's estate sued the employer civilly, electing not to pursue a workers' compensation claim.

The Supreme Court, in a 5–2 decision, concluded that the evidence was sufficient to maintain the action in a trial court because a preliminary showing was made that the employer "intentionally engage[d] in misconduct knowing it [was] substantially certain to cause serious injury or death to employees.[8] The misconduct, wrote Chief Justice James G. Exum for the majority, "is tantamount to an intentional tort, and civil actions based thereon are not barred by the exclusivity provisions of the Act." In other words, the company's disregard for safety made the resulting death not an accident but an intentional act on the employer's part.[9]

Associate Justice Burley Q. Mitchell Jr., in a dissenting opinion with Justice Louis B. Meyer, noted that "the majority's holding represents reasonable and perhaps desirable social policy. . . ."[10] But, citing the Court of Appeals' decision in the same case, he concluded that "a right to bring a civil action 'against his employer, even for gross, willful, and wanton negligence would skew the balance of interests inherent in [the] Act. Changes in the Act's delicate balance of interests is more properly a legislative prerogative than a judicial function.'"[11]

A leading commentator on the subject sides with the minority. Arthur Larson, a Duke University law professor and author of a leading text on workers' compensation law, believes that with the *Woodson* decision, the Supreme Court dove head first into "treacherous waters" and, in so doing, undermined the state's Workers' Compensation Act. In equating willful and wanton negligence with intent to injure, Larson says the courts "still cannot quite accept the non-fault nature of workers' compensation, and have taken it on themselves to change the statutory scheme to conform more closely to their values."[12]

"If every case of gross negligence on the part of the employer is taken out (from the workers' compensation system), it's only a matter of time before the exclusiveness provision is a joke," he said in an interview.

Supporters of the decision say the court properly and narrowly—interpreted the statutory language and improved the workers' lot by providing

[The courts] still cannot quite accept the non-fault nature of workers' compensation, and have taken it on themselves to change the statutory scheme to conform more closely to their values.

—Arthur Larson
Duke Law School

the chance for additional compensation when an employer acts in such a way as to unreasonably place his employees at substantial risk for injury or death.

The Supreme Court used language that has been approved by other state legislatures in an effort to narrow the scope of the decision, said Norman B. Smith, a Greensboro lawyer who represented the administrator of Sprouse's estate. "It's reserved for extremely egregious circumstances," says Smith. "I don't think it will open the floodgates. I don't think it will be the beginning of the end of workers' comp." Commenting on a lawyer who, immediately after the *Woodson* decision, filed 58 civil actions for workers who had injuries from asbestos, chemical burns, and unsafe equipment, Smith said, "That's nuts."[13]

> ***I don't think it will open the floodgates. I don't think it will be the beginning of the end of workers' comp.***
>
> —Norman B. Smith
> Plaintiff Attorney

More important than the allowance of civil claims, Smith said, "The most significant aspect of the case is that it will have the effect of protecting workers in dangerous situations. The employer will take more precautions. That's never been true in the past." Mr. Smith explained that the state's OSHA program has inadequate resources to inspect all work places for safety violations. Further, the penalties are relatively small and encourage violations. It's "more inexpensive to pay the fine and risk an unexpected death or maiming" than to expend funds for safety equipment, he says.

Not only that, but a typical employer's liability insurance policy will not cover intentional wrongs of the employer so companies will have to pay any claims out of their own coffers, an additional incentive for providing a safe work environment.

J. Bruce Hoof, a lawyer for Morris Rowland Utility, disagrees with Smith. He contends that lawyers for workers will have to file civil actions to protect themselves from malpractice claims. "This is the classic case of 'bad facts make bad law,'" he says. "My client made some mistakes, but he didn't mean to kill anyone."

Rowland and Morris Rowland Utility, Inc. relied on earlier Supreme Court decisions in their effort to avoid civil liability. The company and its sole shareholder argued that "The intentional failure to provide a safe place or the knowing violation of OSHA regulations does not constitute an intent to injure. . . .[14] At most, there was an intentional 'toleration of a dangerous condition;' that is, the OSHA violations, particularly the absence of shoring."[15] Citing an earlier Supreme Court case, the employer noted "in any normal use of the words, it cannot be said that this constituted a 'deliberate infliction of harm.'"[16]

The earlier decision, *Barrino v. Radiator Specialty Co.*,[17] involved the death of an employee as the result of an explosion and fire at the factory where she worked. The conditions at the plant included: several violations of OSHA and National Electric Code regulations; meters designed to warn of danger and explosive gas and vapor levels disabled with plastic bags so they would not register; and alarms warning of dangerous and explosive levels turned off.

Rejecting an attempt to seek civil damages as opposed to workers' compensation recovery, the Supreme Court stated: "It is . . . clear from the act itself that such allegations of safety code violations do not remove the claim from the exclusivity of the act. N.C.G.S. 97-12 provides *inter alia* a penalty to the employer of a 10 percent increase in benefits 'when the injury or death is caused by the willful failure of the employer to comply with any statutory requirement or any lawful order of the [Industrial] Commission."[18]

Justice Exum noted in *Woodson* that only two of the four majority justices in *Barrino* agreed with the above language.[19] He and the other justices joining him in the majority decision expressly adopted the views of the *Barrino* dissent.

The court's shift means the issue is alive for General Assembly action. Representatives of N.C. Citizens for Business and Industry (NCCBI) and the North Carolina chapter of the National Federation of Independent Businesses express concern about the case. Anne Griffith, a lobbyist with NCCBI, said some members of her organization were concerned "about how broadly or narrowly the decision will be construed." Griffith explained that often employers simply pay OSHA penalties, whether they agree with them or not, because the

This is the classic case of 'bad facts make bad law.' My client made some mistakes, but he didn't mean to kill anyone.

—J. BRUCE HOOF
DEFENSE ATTORNEY

cost of defending the fines often exceeds the fine itself.

Because OSHA violations now could be determinative of where an employee can sue the employer, she said the companies would begin defending them, which could further stress the N.C. Department of Labor's limited resources. But she also said NCCBI members wanted to make clear that their concerns about the *Woodson* decision did not mean that members were unfeeling toward victims of industrial accidents.

Similarly, House Speaker Daniel T. Blue Jr. wants to address the issue before the Occupational Fire and Safety Study Commission, which began meeting in December 1991 and reports to the 1992 and 1993 sessions. Both sides of the *Woodson* decision are represented on the study commission, which plans "to review the existing regulatory schemes and determine whether there are ways to improve what we're doing," says Alan Briggs, legal counsel to Blue. Beyond considering additional funds for the Labor Department, Briggs said that Speaker Blue wants to use the commission "as a vehicle in a political sense to change attitudes. . . . He feels like all the money in the world and inspectors are not enough if employers are more concerned about theft than fire."

FOOTNOTES

[1] This figure is an estimate. Actual figures vary based on the individual's salary, extent of injury, and number of dependents. The award may go as high as $160,000.

[2] G.S. Chap. 97.

[3] That is, according to an employer's ability to pay. Employees can probably recover only from the employer, because most liability insurance policies exempt from coverage any payment for injuries and death cause by the intentional acts of the employers. The owner of Imperial Food Products, where the Sept. 1991 fire in Hamlet killed 25 and injured 78, apparently has no assets from which victims can recover.

[4] 329 N.C. 330. 407 SE2d 222 (1991).

[5] An employee also could sue a co-worker for reckless negligence. See *Pleasant v. Johnson,* 312 N.C. 710, 325 SE2d 244 (1985).

[6] Arthur Larson, *The Law of Workmen's Compensation,* Section 65.11 (1987).

[7] G.S. 95-126.

[8] *Woodson,* supra, at 340, 407 SE2d at 228.

[9] *Id.* at 341, 407 SE2d at 228.

[10] *Id.* at 362, 407 SE2d at 241.

[11] *Id.*

[12] Larson, *supra* at Section 68.15.

[13] Duke Power Co. settled most of those claims as part of a settlement approaching $10 million in late April, 1992. The settlement covered 108 claims against the utility involving deaths and illnesses from exposure to asbestos. See Joseph Menn, "Duke OKs Asbestos Settlements," *The Charlotte Observer,* April 24, 1992, p. 1D.

[14] Neal Morris Rowland and Morris Rowland Utility, Inc. Defendant Appellees' New Brief at p. 6.

[15] *Id.* at p. 19.

[16] *Id.*

[17] 315 N.C. 500, 340 SE2d 295 (1986).

[18] *Id.* at 515, 340 SE2d at 304.

[19] Justice Meyer, who joined Justice Mitchell in the concurring and dissenting decision of *Woodson,* wrote the *Barrino* decision and is the only justice of the two Justices Exum referred to on the present court. Justice Mitchell concurred in the *Barrino* result but did so on the basis that the plaintiff already had received workers' compensation payments and had, therefore, elected to file under the Workers' Compensation Act, prohibiting any alternative recovery. From his dissent in *Woodson,* however, it would appear that he could have agreed with Justice Meyer at that time but took a narrower approach that for that case, at least, had the same practical result. Justice Harry C. Martin wrote the dissenting opinion and was joined by Justice Exum and Justice Henry E. Frye. The other justices in the *Woodson* majority—Justices John Webb and Willis P. Whichard—were not on the court when *Barrino* was decided.

INDEX TO VOLUME 13

Below is a subject index to *North Carolina Insight,* Volume 13 (1990–91). Following the subject heading is the article title, the author(s), the number of the issue in Volume 13 where it appeared, and the page number in the issue. Vol. 13, No. 1 was published in December 1990; Vol. 13, No. 2 was published in June 1991; and Vol. 13, No. 3–4 (a double issue) was published in November 1991.

Letters to the Editor

Vol. 13, Nos. 3–4
Health Care in North Carolina

The N.C. Center's report on 16 rural hospitals "at risk" for closure or transformation into a health clinic has caused quite a bit of controversy among our members. Since Nov. 18, when the report was released to the public, I and other members of our staff have spent hours and hours talking with rural hospital administrators, hospital public relations staffs, and news reporters concerning the results of the Center's study. Hospital administrators and public relations staffs have, in turn, spent hours and hours talking with individuals and businesses in their communities concerning this report.

I must tell you that we at the North Carolina Hospital Association and our member hospitals are extremely disappointed in the Center's approach to this issue. We are disappointed at the manner in which the study was conducted and at the Center's handling of the issue. Let me explain our concerns about the study.

■ . . . [T]he study data is inconclusive and does not offer a complete picture of rural hospitals' financial health. The study included only inpatient data. It did not include revenues generated from outpatient services, home health agencies, long-term care, hospices, and philanthropic gifts. If inpatient revenues were the only source of revenues for hospitals in North Carolina, 57 percent of all rural hospitals would operate in the red; about 56 percent of urban hospitals would operate at a deficit.

■ It was not clear to us whether or not all the hospitals in the study counted "swing beds." It appeared some may have, some may not. If that is the case, the study compared apples with oranges.

■ The study's data was two years old. Health care is a dynamic field, and a good many things have changed in two years. Hospitals on your list have diversified services. While the Center's report did mention the EACH/PCH program, it did not allude to some of the diversified services these hospitals have offered. Some have opened long-term care units, for example. Others have begun joint ventures with larger hospitals.

. . . [W]e continue to receive calls from potential employees wanting advice on whether they should take jobs at these "at risk" hospitals, calls from administrators who are speaking to local community groups assuring them the hospital will remain open, and calls from administrators who are angry that the Center's story has caused so much confusion for their patients and their employees. On behalf of those hospitals, NCHA asks for an apology.

—Barbara Barnett
Director of Communications
North Carolina Hospital Association

We, the trustees of Beaufort County Hospital, hereby formally express our concern and displeasure over the recent study released by the N.C. Center for Public Policy Research which designated Beaufort County Hospital as being a moderately "at risk" rural hospital.

Drawing such a broad conclusion through the use of just five statistics, all of which measured only inpatient activity, is incredulous at best, and raises serious questions about the "research" being done at the Center. To disregard the impact of the shift to outpatient activity, as well as the omittance of any analysis of financial statistics or indicators from the study is inexcusable.

The negative impact of the report was exacerbated by the distribution of a press release from the Center entitled "NC Center Says 16 Rural Hospitals Are 'At Risk,'" which enticed newspapers to print bold headlines and created concern, particularly among the elderly, regarding the ongoing availability of medical care in our community. The ensuing newspaper article did extensive damage to Beaufort County Hospital's image, public relations efforts, physician recruitment, and reputation.

In the case of Beaufort County Hospital, the conclusion drawn by the study is totally inaccurate. The hospital experienced a banner year in 1991, a year which continued a five year upward trend of strong earnings, financial stability, and facility improvement. Physician recruitment efforts were successful, new services were offered and existing services expanded, and over $1.6 million (almost 9 percent of net revenues) was put back into the facility in the way of renovations and capital equipment expenditures.

Beaufort County Hospital has mirrored the changing face of health care over the years and has metamorphosized into an institution cognizant of its mission. Through planning and a demonstrated ability to change, the hospital has positioned itself to continue to fulfill that mission.

We urge the Center to temper their future efforts at analysis of health care issues with a more thorough understanding of the myriad of factors to be considered in evaluating the viability of a hospital. We also urge that the proper discretion be used in the presentation and dissemination of the findings of such studies.

—The Board of Trustees
Beaufort County Hospital

The Center Responds

The Center received four letters from hospital officials complaining of its analysis of the challenge facing rural hospitals ("Rural Health Care in North Carolina: Unmet Needs, Unanswered Questions," November 1991, pp. 67–92). In addition to the letter from the North Carolina Hospital Association, the other three letters came from hospitals which were labeled "at substantial risk" or "at moderate risk" in the Center study.

Critics make four main points which are reflected in the letters above. Those complaints are: (1) that the study did not provide a complete picture of a hospital's financial health; (2) that it was not clear whether "swing beds"—those used for both long-term and acute care—were counted in the study; (3) that the data were two years old and things have changed in the hospital field; and (4) that the "at risk" designation hurt staff recruitment efforts at hospitals and confused the public.

The Center believes each of these points to be worthy of response, but first we'd like to explain why we undertook this project. The North Carolina Hospital Association in 1989 surveyed its members and found that hospital administrators anticipated that as many as 20 hospitals in North Carolina might close by the year 2000. In an effort to examine the causes of difficulties in the hospital industry, the N.C. Center for Public Policy Research asked researchers at the Department of Health Planning and Analysis and the Cecil G. Sheps Center for Health Services at the University of North Carolina at Chapel Hill to examine rural hospital utilization rates to determine whether some hospitals might be at risk of failing to serve their missions.

The researchers chose five measures of inpatient activity deemed reliable indicators of a hospital's health. But researchers also obtained net revenue figures the hospitals themselves reported to the federal Health Care Financing Administration. These figures are defined to include revenue from *all* sources, so the argument that the Center included only revenue from inpatient activities is problematic.

The fear that we counted swing beds in some hospitals and not in others is groundless. Researchers chose *not* to include swing beds in the study on grounds that use of beds for long-term care would be more a measure of nursing home care than hospital care. Some hospitals wanted swing beds included and provided us with information on their use of swing beds. This would have invalidated comparisons with other hospitals which did not supply the information, and it reinforced our decision *not* to include swing beds.

The project began in January 1991, and the data used were the latest *publicly available.* As is Center practice for all research reports, the results of this research, along with a lengthy narrative article, were sent to more than 55 reviewers statewide. The list of reviewers included *all the rural hospitals mentioned in the report*—including Beaufort County Hospital, top officials of the N.C. Hospital Association, and nearly three dozen more state officials, economists, health professionals, advocates, state legislators, academicians, educators, and other interested parties. *That mailing asked each hospital for a written response.* In addition, the hospital administrators were sent a separate copy of the HCFA information as soon as it became available.

Those mailings were sent to *all* administrators of the rural hospitals on Sept. 13, 1991, and Oct. 2, 1991. The magazine was published Nov. 19, 1991—a full six weeks after the final review. Several hospital administrators took the opportunity to explain how their circumstances had changed, and the Center made every effort to include their responses in the article or to re-evaluate

the risk. One hospital's response resulted in removal of the "at risk" designation. Another hospital administrator was disappointed *not* to be labeled "at risk." The Center found Beaufort County Hospital to be deficient on two of five indicators included in our study. Of particular concern was the fact that the hospital's occupancy rate was 48.2 percent when the statewide average for hospitals with 100 or more beds was 66.9 percent. As a result, Beaufort County Hospital was labeled "moderately at risk of failing to meet its service mission."

A final point was that the labeling of hospitals as "at risk" hurt their image in the community. While the Center regrets any difficulty this may have caused local hospitals, we think that increased discussion of the role of rural hospitals will prove to be beneficial in the long run. We were careful to point out that the "at risk" designation did *not* predict closure for any of the 16 hospitals included—only that these hospitals were at risk of *failing to meet their service mission.*

The research, the *Insight* article and the press release all explicitly stated that *the data do not predict closure,* but instead make it clear that state and local policymakers must focus attention on the needs of rural hospitals if they are to continue as vital links in the health care chain in rural North Carolina. Our purpose in releasing this report was to help state policymakers and the affected communities focus their debate about what health services they need and can afford.

—Ran Coble
Executive Director

More on Health Care

Kudos for the current double issue of *North Carolina Insight.* You've added valuable new information (and insight!) to the mountains of references I've accumulated for our consumer decision-making approach to health care costs.

For whatever it's worth, I do have one comment. In studying the article [on cost containment (Health Care Cost Containment: Does Anything Work?" November 1991, pp. 48–66)], I was surprised to find no mention of the cost of drugs (both prescription and over-the-counter) and medical equipment. I'm not talking just the overcharges . . . —but the profit margin (*after* genuine research and development costs) of both pharmaceutical and medical equipment companies . . . Looking forward to seeing the balance of the story.

Again, many thanks to everyone involved in this mammoth project. You've addressed a monstrously complex issue in a logical, comprehensible manner, and are to be commended for providing both data and human considerations to our public policymakers as they wrestle with the decisions ahead.

—Janice Holm Lloyd
Extension Specialist in
Family Resource Management
North Carolina Cooperative Extension Service

I wanted to thank you for my copy of the November issue of *North Carolina Insight.* It has been interesting reading. I would say it generally reflects the frustration most Americans are feeling about our health care system. After all these years of trying to contain the cost and deliver the services, universally we are spending more to serve too few, too late. Obviously there is a multitude of reasons for this, and no single cure is going to work. I have some ideas of my own, none likely to win me any popularity contests, but I certainly do not have the solution.

—Alice R. Hammond
Assistant Administrator
Randolph Hospital, Inc.

In my new capacity, I just wanted to say what a great job the N.C. Center for Public Policy Research has done on its publication "Health Care in North Carolina: Prescription for Change." The series of articles featured in the November issue of *North Carolina Insight* addresses one of the most serious issues facing our state in a timely, accurate, and informative manner. No doubt the issue will play an important role in educating our state's leaders in the public and private sectors about the impending crisis in health care. The articles were intelligent, balanced, and offered clear explanations of some very complex issues.

I know I will use the information gathered to better educate business and industry statewide about the problems we face—and about some possible solutions.

I salute you and the staff at the Center for Public Policy Research for a job well done! I am proud that the Governor's Commission will soon be joining your board of corporate members.

—Ben Garrett
Coordinator of Business
& Industry Initiatives
Governor's Commission on
Reduction of Infant Mortality

Current Contributors to the N.C. Center for Public Policy Research

Major funding for the North Carolina Center is provided by:

THE Z. SMITH REYNOLDS FOUNDATION
THE MARY REYNOLDS BABCOCK FOUNDATION
THE CANNON FOUNDATION
THE A. J. FLETCHER FOUNDATION
THE JANIRVE FOUNDATION
THE KATHLEEN PRICE AND JOSEPH M. BRYAN FAMILY FOUNDATION
THE JOHN WESLEY AND ANNA HODGIN HANES FOUNDATION
and the
THE HILLSDALE FUND, INC.

Corporate and Individual support for the Center is provided by:

BENEFACTORS

Glaxo, Inc.
Philip Morris, USA
The Broyhill Family Foundation
The Charlotte Observer
Josephus Daniels Charitable Foundation,
funded by The News & Observer
General Electric Company
IBM Corporation
R. J. Reynolds Tobacco Company

PATRONS

ABB Power T&D Company Inc.
Alcoa Foundation
Asheboro Elastics Corporation
AT&T
Branch Banking and Trust Company
Carolina Power & Light Company
Carolina Telephone & Telegraph Company
Ciba-Geigy Corporation
Commercial Credit Corporation
Data General Corporation
Duke Power Company
Ecusta
FG*I
FMC Corporation, Lithium Division
Greensboro News & Record
The Haworth Foundation
HKB Associates
Lorillard Tobacco Company
Lowe's Charitable and Educational Foundation
National Starch & Chemical Company
NationsBank
N.C. Natural Gas Corporation
N.C. Retail Merchants Association
Pepsi-Cola Company
Piedmont Natural Gas Company
Public Service Company of North Carolina
Rhone-Poulenc Ag Company
Southern Bell
Texasgulf, Inc.
Weyerhaeuser Company
Winston-Salem Journal

SUPPORTING CORPORATIONS

Alphanumeric Systems
Bank of Granite
Burlington Industries Foundation
Burroughs Wellcome Company
Centura Banks
Consolidated Diesel Company
CooperTools
The Dickson Foundation
Epley Associates, Inc.
First Citizens Bank
Integon Insurance
Kaiser Foundation Health Plan of North Carolina
Kelly-Springfield Tire Co.
Martin Marietta Aggregates
N.C. Farm Bureau Mutual Insurance Company
N.C. Health Care Facilities Association
N.C. Power Company
Northern Telecom
Nucor Corporation
Parkdale Mills, Inc.
Sara Lee Corporation
The Shelton Foundation
Summit Cable Services
Thomas Built Buses, Inc.
United Carolina Bank
Volvo GM Heavy Truck Corporation
Vulcan Materials Company
Wachovia Bank and Trust Company
WFMY-TV
WTVD-11 Television
Ernst & Young

CORPORATE MEMBERS

AEtna Casualty & Surety Company
Asheville Citizen-Times Publishing Co.
Atlantic States Bankcard Association
B & C Associates, Inc.
BASF Corporation
Bessemer Improvement Company
BNR
C & D Industrial Tools & Supplies, Inc.
Capitol Broadcasting Company
Carocon Corporation
Carolina Physicians' Health Plan
Chesapeake Corporation
Coastal Lumber Company
Cone Mills Corporation
The Daily Reflector of Greenville
Dudley Products, Inc.
E. I. duPont de Nemours & Company
Durham Herald-Sun Newspapers
Eastman Chemical Company
K. R. Edwards Leaf Tobacco Company
Fayetteville Publishing Company
First Commercial Bank
First National Bank & Trust Company
Florida Atlantic University Foundation
Food Lion Inc.
Georgia-Pacific Corporation
Glen Raven Mills
Golden Corral Corporation
Hardee's Food Systems
Hoechst Celanese Corporation
JM Family Enterprises, Inc./ Southeast Toyota Distributors, Inc.
Jones Intercable, Inc.
Lee Iron & Metal Co., Inc.
Liggett Group Inc.
Mallinckrodt Specialty Chemicals Co.
Moore & Van Allen
N.C. Association of Broadcasters
N.C. Association of Educators
N.C. Bar Association
N.C. Beer Wholesalers Association
N.C. Cable TV Association
N.C. Institute of Minority Economic Development
N.C. Restaurant Association
N.C. School Boards Association
N.C. Soft Drink Association
N.C. Textile Manufacturers Association
Oldover Corporation
Peoples Security Insurance
Raleigh Federal Savings Bank
Rosenberg & Associates Advertising, Inc.
Sandoz Chemicals Corporation
Southern National Bank
Spanco Industries
Stockhausen, Inc.
Takeda Chemical Products USA
The Transylvania Times
Trion Charitable Foundation
TRW, Inc.
Union Carbide Corporation
United Guaranty Corporation
United Transportation Union
Universal Leaf Tobacco Company
WSOC Television

SPECIAL DONORS

Eben Alexander
Linda Ashendorf
Thad L. Beyle
Nancy O. Brame
William R. Capps
Phil Carlton
Dan Clodfelter and Elizabeth Bevan
Steve & Louise Coggins
Philip J. Cook
George Daniel
Allyson Duncan
Ann Q. Duncan
Charles Evans
Virginia Foxx
Joyce Gallimore
Karen Gottovi
Lloyd V. Hackley
Darrell Hancock
William G. Hancock
Wade Hargrove
James E. Harrington Jr.
Parks Helms
Bertha M. Holt
V. B. "Hawk" Johnson
Burns Jones
William W. Joslin
William E. & Cleta Sue Keenan
MaryAnn McCoy
Elaine F. Marshall
Charles Meeker
Mr. & Mrs. Robert E. Merritt
Kenneth F. Mountcastle
Edward H. O'Neil
William "Cliff" Oxford
Kathy Neal
Mr. & Mrs. L. Richardson Preyer
Rev. Keith Reeve
Wyndham Robertson
William C. Rustin Jr.
Richard A. Schwartz
Carol Shaw
Margaret & Lanty Smith
Zachary Smith
Robert W. Spearman
Fred Stanback
H. Frank Starr, Jr.
Geraldine Sumter
Margaret Tennille
Frances Walker
Cameron P. West
Ed Williams

North Carolina Center for Public Policy Research
P.O. Box 430
Raleigh, North Carolina 27602

Nonprofit Org.
U.S. Postage
P A I D
Raleigh, N.C.
Permit No. 1121